



HALCYON TECHNOLOGY
PUBLIC CO., LTD.

**ANNUAL
REPORT 2018**

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General Information

Halcyon Technology Public Co., Ltd. and subsidiaries engage in the business of manufacturing and distribution of customized cutting tools including polycrystalline diamond (PCD), monocrystalline diamond (MCD), polycrystalline carbon boron nitride (PCBN) and special carbide cutting tools for productions of high-precision parts to serve the manufacturers of hard disk drive (HDD) parts, automotive parts, aerospace parts, and other mechanical related industries domestically and overseas. The Company also manufactures and distributes tool holders and other high-precision metal fabricated products to serve customer's needs. The Company has manufacturing plants in Thailand, the Philippines, and Vietnam; and subsidiary distribution offices in six countries across the ASEAN region in Thailand, Philippines, Singapore, Malaysia, Vietnam, and Indonesia. General information for the Company and its subsidiaries are as follows:

Company Details

Company Name	HALCYON TECHNOLOGY PUBLIC COMPANY LIMITED
Registration No.	0107551000096
Type of Business	Manufacturing, customized production and distribution of PCD, MCD, PCBN and special carbide cutting tools for high-precision parts to serve the manufacturers of electronic parts, automotive parts, and other mechanical related industries domestically and overseas.
Company Address	41 Moo14 Bangchan Industrial Estate Soi 6, Serithai Road, Minburi, Bangkok 10510
Telephone	02-906-3242-50
Fax	02-906-3251
Website	www.halcyon.co.th
Registered Share Capital	THB 300,000,340 (Paid-up THB 300,000,340 divided into 300,00,340 common shares at par value of THB 1 per share)
Registrar	Thailand Securities Depository Co., Ltd. 93 Ratchadapisek Road, Din Daeng, Din Daeng, Bangkok 10400 Telephone: 02-009-9999
Auditor	Miss Jintana Mahavanich, CPA Registration No. 4687 C&A Accounting Firm Co., Ltd. 53 Narathiwasrathanakarin, Chongnonsi, Yannawa, Bangkok 10120 Telephone: 02-678-0750-4 Fax: 02-678-0661

Details of Subsidiaries

Company Name	HALCYON METAL COMPANY LIMITED
Type of Business	Manufacturing, customized production and distribution of metal fabricated products including Cutting Tool Holders, Jigs & Fixtures, and other High Precision Parts
Company Address	41 Moo 14 Bangchan Industrial Estate Soi 6, Serithai Road, Minburi, Bangkok 10510 Tel. 02 906 3242 / Fax 02 906 3251
Registered Share Capital	THB 50,000,000 (Paid-up THB 50,000,000 divided into 50,000,000 common shares at par value of THB 1 per share)

Company Name	FDM TECHNOLOGY COMPANY LIMITED
Type of Business	Marketing and distribution of customized PCD/carbide cutting tools and standard carbide, ceramic, PCD and PCBN cutting tools in Thailand
Company Address	888/3 Srinakarintara Rd. Pattanakarn Sub-District, Suan Luang District, Bangkok 10250 Tel. 02 347 6255 / Fax 02 347 6256
Registered Share Capital	THB 10,000,000 (Paid-up THB 10,000,000 divided into 1,000,000 common shares at par value of THB 10 per share)

Company Name	HALCYON TECHNOLOGY (PHILIPPINES) INC.
Type of Business	Manufacturing and distribution of customized cutting tools made of PCD, PCBN, Carbide, and Natural diamond, and Jigs & Fixtures and metal fabrication parts to customers in the Philippines.
Company Address	Orient Goldcrest Building 6, Unit 1, Lot 3281-J, Phase 6, Laguna Technopark, Biñan, Laguna, Philippines Tel. +63 (49) 502 2295 / Fax +63 (49) 502 2296
Registered Share Capital	PHP 145,000,000 (Paid-up PHP 58,000,000 divided into 58,000 common shares at par value of PHP 1,000 per share)

Company Name	ATEK PRECISION TOOLS INC.
Type of Business	Marketing and distribution of standard carbide cutting tools in the Philippines
Company Address	CJRS Parkview Bldg., Level 2 Rodeo Drive Laguna Bel-Air 2, Santa Rosa, Laguna, Philippines Tel. / Fax +63 (49) 544 0520
Registered Share Capital	PHP 10,000,000 (Paid-up PHP 10,000,000 divided into 10,000 common shares at par value of PHP 1,000 per share)

Company Name	HALCYON TECHNOLOGY SINGAPORE PTE. LTD.
Type of Business	Marketing and distribution of customized PCD and carbide cutting tools, and standard carbide, ceramic, PCD & PCBN cutting tools in Singapore
Company Address	114 Lavender Street, #05-84, CT Hub 2, Singapore 338729 Tel. +65 6841 3900 / Fax +65 6841 3906
Registered Share Capital	SGD 825,000 (Paid-up SGD 825,000 divided into 825,000 common shares at par value of SGD 1 per share)

Company Name	HALCYON TECHNOLOGY (M) SDN. BHD.
Type of Business	Marketing and distribution of customized PCD and carbide cutting tools, and standard carbide, ceramic, PCD and PCBN cutting tools in Malaysia
Company Address	Block A-6-11, Ativo Plaza, No. 1, Jalan PJU 9/1, Damansara Avenue, Bandar Sri Damansara, PJU 9, Kuala Lumpur, Malaysia Tel. +60 (3) 6263 0313 / Fax +60 (3) 6263 4550
Registered Share Capital	MYR 5,000,000 (Paid-up MYR 2,021,250 divided into 2,021,250 common shares at par value of MYR 1 per share)

Company Name	HALCYON TECHNOLOGY VIETNAM CO., LTD.
Type of Business	Manufacturing and distribution of customized PCD and carbide cutting tools, and standard carbide, ceramic, PCD and PCBN cutting tools in Vietnam.
Company Address	Floor 6, Smart Building, 793/49/1 Tran Xuan Soan Street, Tan Hung Ward, District 7, Ho Chi Minh City, Vietnam Tel. / Fax +84 (8) 3711 6497
Factory Address	Hamlet No. 4, Quang Minh Ward, Me Linh District, Hanoi, Vietnam Tel. +84 (24) 3200 8520 / Fax +84 (24) 3200 8521
Registered Share Capital	VND 28,991,284,300 (Paid-up VND 28,991,284,300)

Company Name	PT HTECH TOOLS INDONESIA
Type of Business	Marketing and distribution of customized PCD and carbide cutting tools, and standard carbide, ceramic, PCD and PCBN cutting tools in Indonesia
Company Address	Mintra Sunter Boulevard Blok B No.18, Jl. Yos Sudarso Kav.89 Jakarta Utara, Indonesia 14350 Tel. +62 (21) 6530 6109 / Fax +62 (21) 650 9220
Sales Office Address	Kawasan Industri Delta Silicon Valley 5 Jl. Kenari Timur Blok G1A No. 29, Cicau, Cikarang Pusat – Bekasi 17530
Registered Share Capital	USD 1,050,000 (Paid-up USD 300,000)

Company Name	HALCYON TOOLS AND ENGINEERING CO., LTD.
Type of Business	Marketing and distribution of customized PCD and carbide cutting tools, and standard carbide, ceramic, PCD and PCBN cutting tools in Rayong and nearby provinces
Company Address	303/14 Moo 3, Bowin Sub-District, Sriracha District, Chonburi Tel. 038 350 723
Registered Share Capital	THB 2,000,000 (Paid-up THB 2,000,000 divided into 20,000 common shares at par value of THB 100 per share)

Business Objectives and Strategies

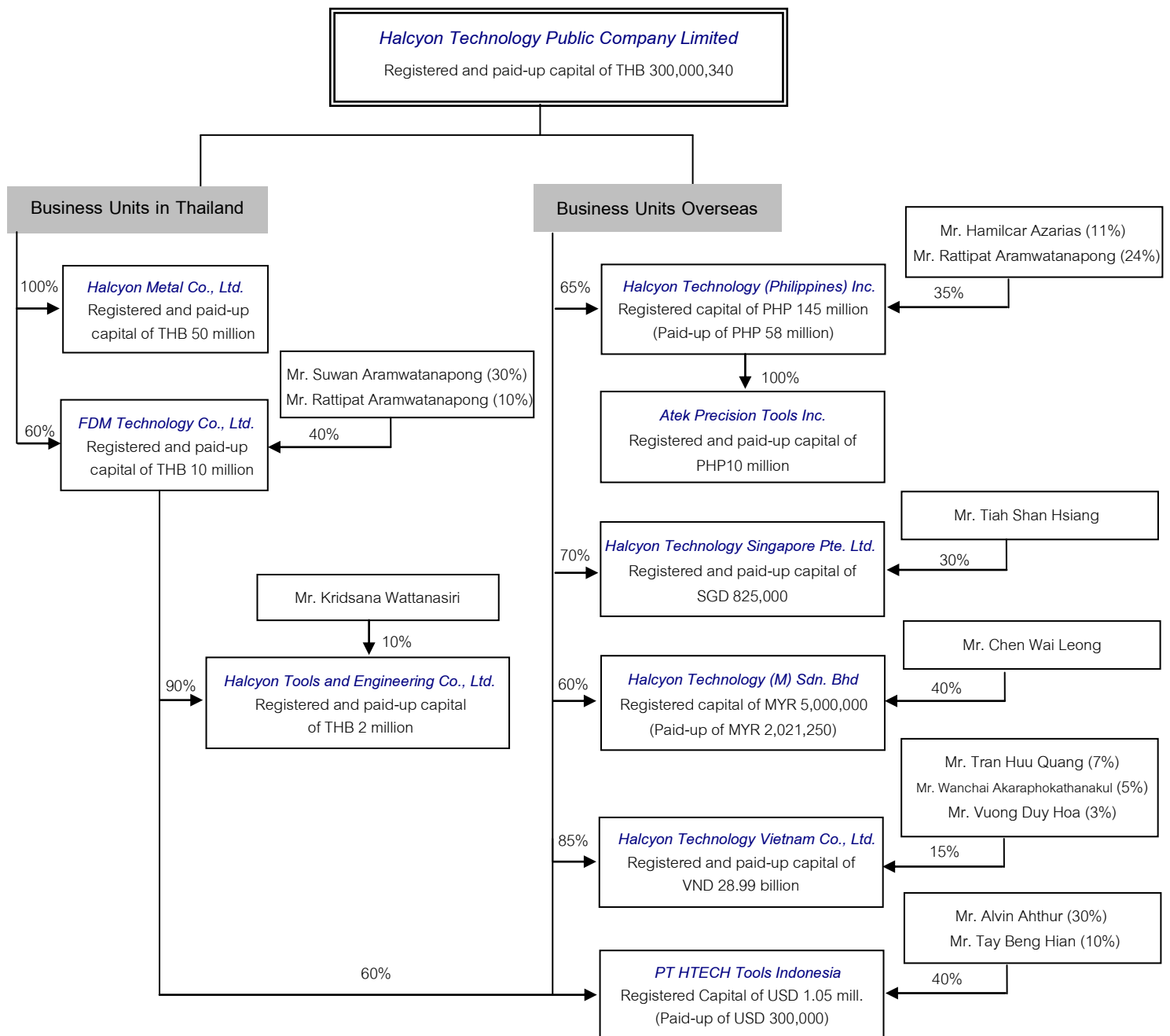
The Company aims to be the leader in the manufacturing of cutting tools in Thailand and ASEAN region, focusing on customized PCD, PCBN and carbide cutting tools, and high-precision parts. The Company's strategy in business operations aims to provide a one-stop service for customers initiating from tool design, efficient quality control for high precision, working closely with customers to quickly troubleshoot problems in applications, as well as improving production process and reducing the customer's production costs.

The Company's business targets and objectives are as following:

- Continuously developing new ranges of products in order to serve the variety of industries which need the application of cutting tools in general with emphasis on part's precision and quality
- Increasing the income of the Company very year by expanding customer base both domestically and overseas for the core business of the Company, as well as seeking new business opportunities to help sustain the income in the future
- Expanding the market share of customized PCD, CBN and carbide cutting tools for the manufacturers of electronic components, automotive parts, aerospace, medical equipment, machineries and other related businesses
- Reducing cost of production in order to increase competitive advantage by converting its production process from manual system to semi-automatic to automatic system, respectively.
- Continue to improve its human resources by providing trainings to the Company's staff and developing new generations with knowledge and ability to keep up with the change of production technology.

Shareholding Structure

After the Company's initial public offerings and started trading in the MAI stock exchange in 2009 and moved to the trade in the Stock Exchange of Thailand (SET) in 2017, the Company continuously expands its business both domestically and overseas. Currently, the Company has 3 subsidiaries in Thailand and 6 subsidiaries overseas in the Philippines, Singapore, Malaysia Vietnam, and Indonesia. The Company and its subsidiaries segment its business operations by the type of business according to the products manufactured and/or traded, and by geography. Since the Company has customer base in various countries, the Company sets up subsidiaries as authorized distributors of its products to effectively serve the customers' needs. The Company and its subsidiaries shareholding structures are as shown in the diagram below.



Financial Highlights

Description (Unit: THB)	Consolidated Financial Statements		
	2018	2017	2016
Total Assets	1,659,552,133	1,595,387,179	1,276,820,510
Total Liabilities	436,931,440	491,682,386	253,322,906
Equity attributable to parent company	1,222,620,693	1,103,704,793	918,629,515
Revenues from Sales and Services	1,113,201,111	996,703,520	819,098,036
Total Revenues	1,117,548,120	1,004,216,205	826,204,461
Gross Profit	439,607,918	409,136,513	321,960,871
Earnings before interest and tax	251,385,898	230,437,359	167,553,999
Net Profit for the year	208,528,611	181,468,828	142,397,438
Net Profit attributable to the shareholder of the Company	174,287,748	148,296,624	117,885,777

Financial Ratios

Description	Consolidated Financial Statements		
	2018	2017	2016
Gross Profit Margin	39.49%	41.05%	39.31%
Comprehensive Income Margin	18.66%	18.07%	17.24%
Net Profit to parent company	15.60%	14.77%	14.27%
Return on Equity	16.83%	15.57%	14.78%
Return on Total Assets	40.28%	36.19%	41.77%
Current Ratio	2.47	1.73	2.87
Debt to Equity Ratio	0.40	0.50	0.28

Share Value

Description	Consolidated Financial Statements		
	2018	2017	2016
Paid-up Share Capital (Shares)	300,000,340	300,000,340	300,000,340
Earnings Per Share (Baht)	0.5810	0.4943	0.4476
Book Value Per Share (Baht)	3.49	3.21	2.76
Dividend Per share (Baht)*	0.24	0.21	0.175
Dividend Payout Ratio	37.87%	42.48%	42.37%

* Dividends for the year 2016 were paid on 9 September 2016 and 23 May 2016 / Dividends for the year 2017 were paid on 9 September 2017 and 25 May 2017 / Interim dividend for the performance of year 2018 was paid on 10 September 2018 and the Board of Directors' Meeting No. 1/2019 has approved for additional 0.12 baht per share to be paid on 28 May 2019

Nature of Business Operations

Halcyon Technology Public Company Limited (“HTECH”) is the headquarter for the group companies and has a manufacturing plant in Bangchan Industrial Estate. The Company is engaged in manufacturing, customized production and distribution of polycrystalline diamond (PCD), Monocrystalline Diamond (MCD), Polycrystalline Cubic Boron Nitride (PCBN), and carbide cutting tools for cutting high-precision workpieces. These PCD/MCD/PCBN/Carbide cutting tools offer different cutting quality/properties, and are suitable for cutting different type of materials used in production. However, the Company focuses mainly on PCD cutting tools due to its superior characteristics including longer tool life and better performance compared to other carbide tools, and supports customers in the industries of manufacturing hard disk drive (HDD) parts, automotive parts, aerospace parts, and other machinery parts, as well as manufacturers of watches, lens, medical equipments, etc.

Halcyon Metal Co., Ltd. (“HM”) is a subsidiary wholly owned by HTECH, with a manufacturing plant at the same location as the Company. It engages in manufacturing, customized production and distribution of Cutting Tools Holders, Jigs & Fixtures, and other high-precision metal fabricated parts according to requirements from customer for the use in their production processes in various industries such as electronic parts, automotive parts, aerospace parts, machinery parts and other mechanical related industries.

In 2010, the Company invested to set up a new manufacturing company in the Philippines, namely Halcyon Technology (Philippines) Inc. (“HP”), to engage in manufacturing and distribution of cutting tools made of PCD, PCBN, and carbide, as well as Jigs & Fixtures and other metal fabricated products, same as the products from HTECH and HM in order to distribute to customers in the Philippines. Target customers include those in the hard disk drive, automotive, or other industries. The Company provides technical support and research & development by sending personnel with expertise in production to train HP’s staff in the Philippines.

In 2012, purchased shares in FDM Technology Co., Ltd. (“FDM”), which is a distributor of customized PCD cutting tools and standard carbide, ceramic, PCD, PCBN cutting tools, mainly under the Kyocera brand. FDM also sells cutting tools from other brands to fully support its customer’s requirements. In 2016, another subsidiary was established, namely Halcyon Tools and Engineering Co., Ltd. (“HENG”). HENG is a distributor of the Company’s products in the Rayong province and other provinces in the Eastern region which is a big industrial hub, and the Company sees an opportunity to grow and expand its customer base and distribution channels. Target customers for FDM and HENG are mainly local motorcycle parts and automotive parts manufactures, and also those in other industries such as HDD or other electronic parts industries in Thailand with no sales overseas.

Between the years 2010 and 2013, the Company set up joint-ventures in various countries in the ASEAN region to expand its customer base and distribution channel of its products to new customers. Currently, the Company has 5 subsidiaries including ATEK Precision Tools Inc. (“ATEK”), Halcyon Technology Singapore Pte. Ltd. (“HS”), Halcyon Technology (M) Sdn. Bhd. (“HY”), Halcyon Technology Vietnam Co., Ltd. (“HV”), and PT HTECH Indonesia (“HI”) located in the Philippines, Singapore, Malaysia, Vietnam, and Indonesia respectively. These subsidiaries are distributor for customized PCD, PCBN, and carbide cutting tools purchased from the Company or HP, as well as standard carbide, ceramic, PCD and PCBN cutting tools under other brand names in order to fully support the customers.

In 2016, the Company started to expand its local production capacity by building a new factory plant (HT2) located in the same location adjacent to the current factory, and investing in new machines to develop high-end products, which had been tested by the customers and received good feedbacks. These tools can be used in customers in the HDD industry, which has been growing due to main makers in Thailand expanding their production capacity and moving production base to Thailand. The tools can also be used in the automotive, aerospace, and other industries.

Moreover, Halcyon Technology Vietnam Co., Ltd, (HV), the subsidiary in Vietnam also set up a new factory as well. Formerly, HV is only a distributor for the Company's products and imported products from other brands with sales offices located in Ho Chi Minh City and Hanoi; and there are no local makers of PCD Cutting Tools in Vietnam yet. Since the establishment of HV in 2013, the company has continuous growth in sales from customers who are automotive parts, machine parts, and mold manufacturers, etc. The company saw an opportunity to grow in Vietnam, while a local factory would increase the credibility of the company's products compared to importing from overseas. The company will also be reducing importing costs, reducing lead time for delivery to customers, as well as have a chance to work more closely with the customers to service and troubleshoot the problems in productions more quickly. The company rented a factory building and set up another manufacturing plant in Hanoi, in the northern region of the country, which is a production hub for automotive parts makers. In the future, the HTECH may be able to reduce the production cost by transferring low-end products to HV due to lower labor costs than Thailand. HTECH also sent personnel from Thailand to help set up and oversee production in order to meet the Company's quality standards.

Both new factory has started production in 2017, HV factory commenced its production in December; while the company will continue to train its employees and improve skills respectively. The new factory in Thailand had been installing new machines throughout the year 2017; while the constructions completed and full production commenced in December 2017 at the same time to start using BOI tax privileges. In 2017, the Company and subsidiaries had a revenue structure breakdown by the type of product as follows:

Revenue Structure

Type of Product	2016		2017		2018	
	Million	%	Million	%	Million	%
Customized Cutting Tools ¹	422.50	51.14%	509.89	50.77%	591.03	52.89%
Standard Cutting Tools ²	339.51	41.09%	426.96	42.52%	457.48	40.94%
Metal Fabrications ³	57.09	6.91%	59.85	5.96%	64.69	5.79%
Other Income ⁴	7.11	0.86%	7.51	0.75%	4.35	0.39%
Total	826.20	100.00%	1,004.22	100.00%	1,117.55	100.00%

Remarks: ¹ Sales revenue from the Company HTECH, and subsidiaries HP+ATEK and HV

² Sales revenue from subsidiaries FDM, HS, HY, HI and HENG

³ Sales revenue from subsidiary HM

⁴ Other revenue consisting of proceeds from disposal equipment, gain from exchange rate, interest income, etc.

Products and Services

The Company divides its products and services into 3 main businesses including (1) Manufacturing of Customized Cutting Tools, (2) Manufacturing of Tooling and Metal Fabrications, and (3) Trading for Cutting Tools. The details for each business are as follows:

1. Manufacturing of Customized Cutting Tool Products

The Company and subsidiaries HP and HV are engaged in the manufacturing, customized production and distribution of customized cutting tools products that can be designed according to the specifications of the workpiece, ideal for high-precision parts with tolerance control. The product line can be categorized into 4 groups according to the material used on the cutting edge: Polycrystalline Diamond or PCD, Monocrystalline Diamond or MCD, Polycrystalline Carbon Boron Nitride or PCBN, and carbide.

1.1 Polycrystalline Diamond (PCD) Cutting Tools – PCD possesses the properties of high hardness and high abrasive resistance, resulting in better heat evacuation and longer tool life for PCD cutting tools compared to those of carbide. PCD Cutting Tools are used for controlled quality, size, and tolerance specified by the customers. They also produce high quality surface finish, while creating less pressure on the cutting edge. PCD Cutting Tools are most suitable for non-ferrous materials such as aluminum, brass, and copper; abrasive materials such as graphite; and other materials such as carbon-fiber-reinforced polymers (CFRP), plastics, woods, etc. They are mainly used for manufacturing products that require high precision such as HDD or electronic component, aerospace, medical equipments, as well as watches and jewelry, etc.

Products in this line include PCD Inserts, PCD Boring Tools, PCD Endmill, PCD Drill, PCD Reamer, PCD Brazed Tools, and PCD Hollow Tools. In 2012, the Company introduced PCD Chipbreaker, which is a modified form of regular PCD cutting tools, where it reduces the problem of long, curling chips resulting in longer continuous run and better surface finishes due to less scratch from the chips. It also allows for higher RPM feed rate as well. In 2014-5, the Company developed PCD Monoblock to combine multiple processes into one tool, resulting in higher precision, and help customer save time and production costs. There is also PCD Facemill with Replaceable Inserts which cutting edge height can be adjusted, saving production costs by combining roughing and finishing processed into one.





PCD Monoblocks



PCD Facemill with Replaceable Inserts



Other Customized PCD Cutting Tools

In 2016, the Company successfully developed another high-end product type from existing types including Veined PCD Tools (V-Tec) and Solid-Head PCD Tools (S-Tec). Both of these models have high cost due to complicated production process and limited raw material sizes, which results in limitation on the flexibility of design. So the Company developed another new model called Helix PCD Tools or "H-Tec". It can reduce production time, production costs, and has better performance comparing to normal PCD tools. It also has longer tool life and better finishing surface.



Veined PCD Tools (V-Tec)



Solid-Headed PCD Tools (S-Tec)



Helix PCD Tools (H-Tec)

Most recently at the end of the year 2017, the Company developed the High-Helix PCD End Mill or Z-Tec, which is a further improvement from the H-Tec type. It is the Company's own innovation through in-house research and development. Z-Tec tools more flexible than the H-Tec type with higher helix angle and longer cutting length. Due to its higher helix angle, Z-Tec tools can result in a better surface finish on the workpiece, as well as reducing the force exerted on the cutting edge. Hence, longer tool life can be achieved than the tools with existing designs. This breakthrough in High-Helix PCD End Mill allows the feed rate to be increased, meaning lower machine cycle time. Through its flexibility in advantageous design geometry, Z-Tec tools are highly attractive products that can produce higher quality parts for our customer while reducing their costs, both directly and indirectly. The Company has filed the application for a petty patent for our High-Helix PCD End Mill (Z-Tec) in Thailand since 18 January 2019 (pending approval), and is now in the process of applying in other countries.

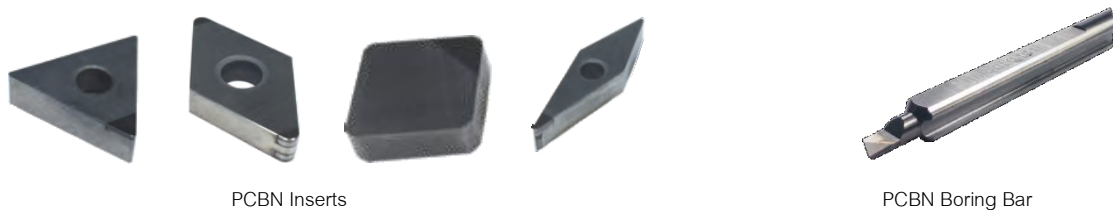


High-Helix PCD End Mill (Z-Tec)

1.2 Monocrystalline Diamond (MCD) Cutting Tools – this product line is to serve the more variety of needs from the customers. MCD is a type of synthetic diamond with the most strength and has the closest properties to those of a natural diamond. MCD cutting tools are suitable for workpieces that need super-finishing or mirror-finish. Products in this line include MCD Inserts, MCD Boring Bar, and MCD Endmills, used for cutting of non-ferrous or other materials such as aluminum, brass, copper, glass, etc. They are used in the production of camera lens, watch components, jewelry, as well as medical equipments and others.



1.3 Polycrystalline Carbon Boron Nitride (PCBN/CBN) Cutting Tools – PCBN has high resistance to heat and abrasion, suitable for iron, cast iron, and other high-hardness materials (above 50 HRc). Core products in this line include PCBN Inserts and PCBN Boring Tools, widely used in the automotive parts industry, as well as other machinery parts manufacturing.



1.4 Special Carbide Cutting Tools – custom-designed according to the customer's workpiece, different from other standard carbide cutting tools in the market due to its shape, size and tolerance which can be controlled according to the customer's application. Products in this line include Carbide Insert, Carbide Boring Tool, Carbide Drill, Carbide Endmill, Carbide Reamer, and Carbide Hollow Tools. Carbide tools used in many industries as general-purpose tools.



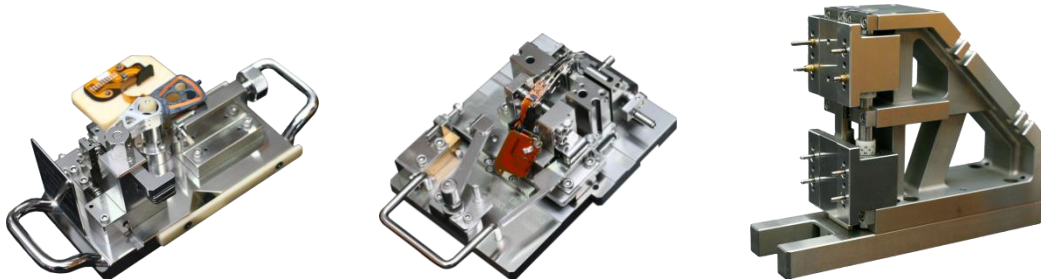
2. Manufacturing of Tooling and Metal Fabrications

The Company's subsidiary, HM, is engaged in the manufacturing, customized productions, and distribution of various metal fabrications to support the needs of the customers. Tooling and Metal Fabrication products can be categorized into 3 lines as follows:

2.1 Cutting Tool Holders are used to hold various types of cutting tools in place in order to facilitate working process. These holders include holders for inserts, as well as boring bar, made of carbide or steel of special grade. They can be used generally in various industries; and can be used with HTECH's products including PCD Inserts, PCBN Inserts, and MCD Inserts, etc. The cutting tools holders are custom-designed by our own experienced Engineering team to suit each customer's production requirements most effectively.



2.2 Jigs & Fixtures firmly hold components into right position to facilitate production process to be more precise and more efficient. Jigs & Fixtures are used in the manufacturing of components such as computer parts, automotive parts and other machinery parts. A well-designed jig and fixture can reduce production time and help ensure standardization of the products of each production batch as well as reducing production waste. HM specializes in designing, manufacturing and assembling jigs and fixtures according to the any customer's requirements.



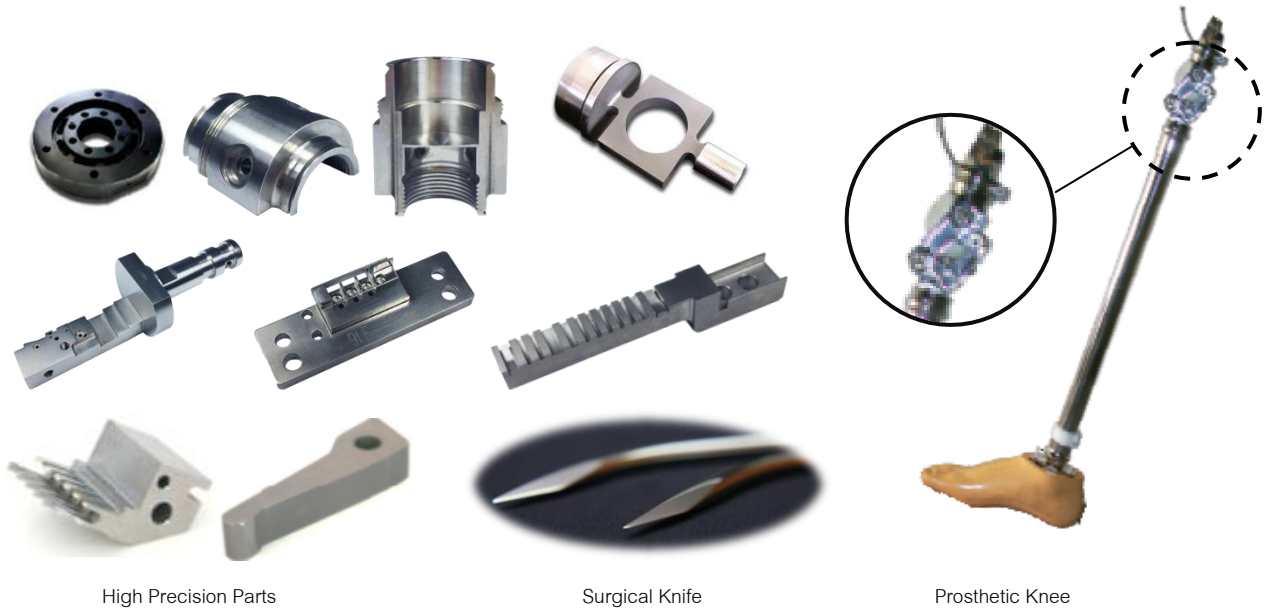
2.3 High-Precision Metal-Fabricated Products: Other than mentioned above, HM also designs and manufactures other metal-fabricated products that require high tolerance control and high precision including toolings, machine spare parts, etc. And the company also designs and manufactures other components for supporting manufacturing production such as toggle, diaphragm chuck, gear carrier, indicator stand, etc. With over 20 years of experience, HM is trusted by customers to produce both custom pieces as well as mass production pieces.

HM also products tools for customers in the aerospace industry and medical equipments as it is certified under ISO 13485 standards for quality management of medical devices. Moreover, HM works together with Sirindhorn National Medical Rehabilitation Centre (SNMRC) and National Science and Technology Development Agency (NSTDA) to design and produce prosthetic knee, etc.



Diaphragm Chuck

Gear Carrier



3. Trading for Cutting Tools

The Company's subsidiaries both locally and overseas distribute customized PCD, PCBN and carbide cutting tools (details as mentioned in Product and Services No. 1) manufactured by the Company or subsidiaries HP and HV; as well as standard carbide, ceramic, PCD and PCBN cutting tools under various brands. These subsidiaries are authorized distributors in many different countries including the Philippines, Singapore, Malaysia, Vietnam and Indonesia to expand its customer base and provide comprehensive products to satisfy the customer's needs.



Samples of Standard Carbide Cutting Tools

Marketing and Competitive Condition

Target Customers

The Company emphasizes on target customers who are manufacturers of metal components. Main industry for the target customers include electronics components manufacturers, focusing mainly on manufacturers hard disk drive (HDD) components, and manufacturers of automotive and motorcycle parts. Other customers include manufacturers of aerospace parts, camera/watch/jewelry, mould and die, or other machinery parts, as well as oil & gas.

The Company's customers in the HDD sector are brand owners as well as 1st tier and 2nd tier suppliers. The Company's cutting tools can be used for manufacturing of various metal HDD components such as the base plate, or spindle components like shaft of hub. These components require high precision and quality because HDD has moving parts when they are in use to read and write data quickly and efficiently.

The Company would expand its customer base into other industries in order to diversify the customer market, focusing on automotive parts industry due to its large production base in Thailand and the ASEAN region, and high demands for the use of cutting tools. This is achieved through marketing to new customer by the Company as well as through its subsidiaries. Target customers in this sector includes manufacturers of alloy wheels, engine block, cylinder head, gear system, brake system, steering linkage, turbo, and other engine parts, who are the 1st tier and 2nd tier suppliers in automotive industry. However, the automotive industry is competitive in price and service, so the Company emphasizes on designing cutting tools that help lower the production cost for customers, and produce tools with higher quality than the market in order to gain new customer as well as retaining existing customers.

The Company also sees opportunities in the aerospace industry, as the Company's products can be used in the manufacturing of various aerospace parts such as the fuselage made of CFRP (Carbon-Fiber Reinforced Polymer), or other aluminum and titanium parts including the engine housing, or other components on the wheel, seat, cart, etc. The Company already has a customer base with continuous orders, but it is still considered a very small portion comparing to customers in other industries. However, this industry is still considered to be our long-term target due to difficulty in access, as well as long processing time for testing and approving an item.

Marketing Strategy

The Company's marketing strategy focuses on providing a fully-integrated service for the customers in order to maintain good relationships with existing customer base as well as expanding to capture new customers. The Company provides service both before and after sales, from designing the cutting tools suitable for the customer's applications by experienced engineer team; our marketing team coordinate with the customers for technical support in the production process to help reduce cycle time and cost of the production for the customers. Also, the Company follows up and help troubleshoots problems arise in the production process to help improving its products continuously. The Company provide regrinding, relapping, and retipping for cutting tools with wear and tear from the production process to help customers reduce their production cost.

On the other hand, the Company also emphasize on maintaining the standards of quality. Our manufacturing companies are certified with ISO 9001, while HM is also certified with ISO 13485 for medical devices. The Company's quality assurance process is precise from the process of selecting and inspecting the raw materials, in-process inspections, until outgoing inspection before sending out to customers. In some occasions, the Company performs a test cut to ensure that the product is of quality and size specified by customer. This helps reduce problem in the production process.

Distribution Channels

The Company has sales and marketing team to contact and provide services to local customers who are mostly manufacturers. The team work closely with the customers, help give advice, and help troubleshoot the problem in the production process. For domestic sales, most of the sales is directly to the customers who are manufacturers, and a small portion is sold through distributors who have experience in specific market, or specific customers to help expand customer base and distribution channels.

For sales overseas, the Company relies mainly on subsidiary distributing offices since target customers have production bases located all over the region. By selling through distributor with strong marketing penetration capability in each country, the Company is able to reach new customer base and provide better service for customer. All distributors are trained by the Company about the products' applications and characteristics as well as common application problems, so they can

quickly identify and help customers solve the problems. Another advantage for selling through distributors overseas is that the Company does not have to bear all the cost of inventory, since each distributor will keep their own stock for their customers; this can ensure quick delivery to customers also. In 2018, the Company has revenue from each country as follows:

Unit: THB million	2017		2018		2019	
	Revenue*	%	Revenue*	%	Revenue*	%
Thailand**	465.28	56.32%	596.04	59.35%	700.47	62.68%
Philippines	142.59	17.26%	161.81	16.11%	158.43	14.18%
Singapore	77.55	9.39%	85.45	8.51%	84.17	7.53%
Malaysia	76.72	9.29%	87.04	8.67%	90.38	8.09%
Indonesia	48.01	5.81%	52.45	5.22%	55.73	4.99%
Vietnam	16.04	1.94%	21.43	2.13%	28.36	2.54%
Total Overseas	360.92	43.68%	408.18	40.65%	417.07	37.32%
Total Thailand and Overseas	826.20	100.00%	1,004.22	100.00%	1,117.55	100.00%

* Total revenue from selling to non-related companies with related transactions eliminated

** Revenue in Thailand comes from total revenue of the mother company HTECH, and subsidiaries HM, FDM, HENG (related transactions eliminated)

Industrial Outlook and Competitive Environment

(1) The Hard-Disk Drive (HDD) Industry

The Hard-Disk Drive (HDD) industry is highly competitive in price and technology. Manufacturers have to adapt by effectively manage their production costs to stay competitive. Many HDD manufacturers relocate their production bases to the countries which offer relatively low costs, especially to those in Asia. Thailand has policies to support foreign direct investment, whereby the industry of HDD production is ranked in top priority under which certain privileges are provided by the Board of Investment (BOI) such as tax exemption for the imported machines and corporate income exemptions, etc.

The Office of Industrial Economics has reported that the HDD industry in Thailand in 2018 has a growth in production at the rate of 9.1%¹ (compared to a growth of 16.24% in 2017 and a decline of 8.90% in 2016) due to the continuous expansion from the second half of 2016 throughout the year 2017-18 where major HDD makers in Thailand are expanding their production capacity and/or moving production base into Thailand. This resulted in a high growth in HDD industry in Thailand for the past two years. Although there is a sign of a slowdown towards the end of 2018 due to the indirect effect of the trade war between the US and China, the overall outlook for the year 2019 is still heading towards a good direction from the positive signs of easing countermeasures between the US and China².

Regarding the worry that the SSD technology will be replacing the HDD market, it only affects the market in the personal computer and mobile device segments, while HDD is still leading the market in the computer in the corporate segment as well as the data center and Cloud system due to the ever-growing demand to for data storage. This resulted in a declining numbers of HDD shipments, while the need to use HSS is still in high demand. HDD makers are also continuously

¹ The Office of Industrial Economics, "Reports of Industrial Economics Conditions in 2018 and Trends for 2019." 15 February 2019

² The Office of Industrial Economics, "Reports of Industrial Economics Conditions in 2018 and Trends for 2019." 15 February 2019

developing their technologies to increase HDD capacity and its performance, resulting in more components in one HDD unit and remaining demands for the Company's cutting tools.

Furthermore, the continuous development of HDD technology gives an opportunity for the Company to present new products to reduce production cost for the customers, while also reducing competition from other makers who cannot adjust to the change in technology. The demands for high-end products are also increasing to support the growth in revenue for the Company because these high-end products are developed by the Company and no other makers can produce, so the Company is able to sell at higher price and margin. In terms of competition, the Company is the market leader in PCD cutting tools for HDD manufacturers in Thailand and Southeast Asia, because there are very small number of local producers due to productions complexity and specific know-how. Other market share is mostly importers of cutting tools for other countries. Therefore, the Company has advantages in cost and delivery lead time as well as other services including designing the tools, solving application problems. The Company also works with customers to develop new products in order to consistently lower the cost of production, giving the Company high advantage through close relationship with customers.

(2) The Automotive Industry

Thai automotive parts industry posts a bright potential in the ASEAN region due to its strong production base and geographical advantage as the ASEAN hub with good infrastructure to attract the world's automotive manufacturers to set up production plants in the country. Thus, its supporting businesses such as the manufacturers of motorcycle parts and automobile parts, which are two of the Company's main target customer base, also grow accordingly. In 2018, the automotive industry had growth statistics as follows³:

Description	2017	2018	Change (%)
Automobile Industry			
- Production of Automobile	1,988,823	2,167,694	8.99%
- Domestic Sale of Automobile	871,650	1,041,527	19.49%
- Export of Automobile	1,139,696	1,140,640	0.08%
Motorcycle Industry			
- Production of Motorcycle	2,055,193	2,063,056	0.38%
- Domestic Sale of Motorcycle	1,810,771	1,788,323	(1.24%)
- Export of Motorcycle	849,081	841,190	(0.93%)

In 2018, the volume of automobile production in Thailand grew significantly from the previous year due to the growth in the domestic market in Thailand from the public and private investments as well as the increase in agricultural productivity that increase that domestic demands, while the export demand did not grow as much. The Office of Industrial Economics (OIE) predicts that the production of automobile in 2019 will be approximately 2.2 million units, increasing 4.76% from last year. Domestic sale of automobile will be approximately 1.05 million units (increasing 5.00%) and export of automobile will be approximately 1.15 million units (increasing 4.55%). The production of motorcycles in 2018 saw little growth from the previous year, while the OIE also predicts the production figure for 2019 to be approximately 2.0 million units; 85-90% for domestic sales and 10-15% for export⁴.

³ The Office of Industrial Economics, "Reports of Industrial Economics Conditions in 2018 and Trends for 2019." 15 February 2019

⁴ The Office of Industrial Economics, "Reports of Industrial Economics Conditions in 2018 and Trends for 2019." 15 February 2019

Furthermore, the OEI also predicts that the overall economy in 2019 to grow from various factors such as the certainty of the general election, which will build confidence for the investors, the driving force from public investment from the progress of major products including operations under the Eastern Economic Corridor development plans. Under the concept "Thailand 4.0," the Ministry of Industry has taken important steps to set measures / guidelines for the development of target industries, and to drive the implementation of measures to achieve operational results. In 2017, there were measures related to the automotive industry, which were approved by the cabinet, including measures to support the production of electric vehicles in Thailand by defining the vision "Thailand is the production base for automobiles which are 'clean, economical, safe' and electric vehicles (Motor Driven Vehicles: xEV) with an efficient testing center to raise the Thai standard to international standards," while aiming to have a 25% xEV production ratio of domestic car production by 2036⁵.

However, the Company still has small market share in the automotive industry since most of the makers are still using standard tools and importing tools from other countries. The Company, then, focuses on penetrating this sector through its subsidiaries, FDM Technology Co., Ltd. and Halcyon Tools & Engineering Co., Ltd. (HENG), who are distributors of standard carbide cutting tools, widely used in the industry. FDM and HENG is another channel that the Company's products (customized PCD, PCBN, MCD, and carbide cutting tools) can be introduced to the customers in this sector, because it can help manufacturers reduce production cost or their cycle time.

For the markets overseas, the Company sees opportunity to growth in automotive industry, especially from the expansion of the subsidiaries in Indonesia and Vietnam who has main target customers in the automotive industry. Also, the new factory in Vietnam is expected to help increase the support the demands from the automotive industry in the country as well.

Production and Sourcing of Materials

Production

The Company has a manufacturing plant in Bangchan Industrial Estate, Bangkok, Thailand, where cutting tools products from the Company, and metal fabricated products from HM are being manufactured. The subsidiaries in the Philippines and Vietnam have two other manufacturing plants, where mainly cutting tools products are being manufactured. The HP and HV factories can also produce metal fabricated products if required by customers. Our three manufacturing plants produced goods by customer's orders, and may partially produce additional quantity to save production time and cost if there is an order in the future. The production capacity of each company is as follow:

HTECH

Type of Product	Total Capacity (pcs.)	Actual Production (pcs.)	% of Capacity Used
PCD Cutting Tools	278,304	187,329	67.31%
Carbide Cutting Tools	118,560	72,553	61.20%
PCBN Cutting Tools	43,680	29,088	66.59%
MCD Cutting Tools	2,496	1,637	65.58%
Total	443,040	290,607	65.59%

* Due to different size and design of different type of products in each category, the machine capacity and the actual production output may vary greatly. It also depends on the working hour during each time of the year, while the Company's

⁵ The Office of Industrial Economics, "Reports of Industrial Economics Conditions in 2017 and Trends for 2018." 26 March 2018

normal working hours are 6 days/week, 2 shifts/day (8 hours + 3 hours OT), or average of 572 hours per month. (HTECH changed its production capacity calculation for the year 2018 onwards to better reflect the actual production.)

HM

Type of Product	Total Capacity (pcs.)	Actual Production (pcs.)	% of Capacity Used
Metal Fabrications	575,000	338,026	58.79%
Tooling & Gauging	4,500	2,258	50.18%
Jigs & Fixtures	1,500	1,992	132.80%
Total	581,000	342,276	58.91%

* Due to different size and design of different type of products in each category, the machine capacity and the actual production output may vary greatly. It also depends on the working hour during each time of the year, while HM's normal working hours are 6 days/week, 2 shifts/day (8 hours + 2 hours OT), or average of 520 hours per month.

HP

Type of Product	Total Capacity (pcs.)	Actual Production (pcs.)	% of Capacity Used
PCD Cutting Tools	65,000	26,828	41.27%
Carbide Cutting Tools	40,000	30,526	76.32%
Metal Fabrications	5,000	4,099	81.98%
Total	110,000	61,453	55.87%

* Due to different size and design of different type of products in each category, the machine capacity and the actual production output may vary greatly. It also depends on the working hour during each time of the year, while HP's normal working hours are 6 days/week, 2 shifts/day (7 hours + 3.5 hours OT), or average of 546 hours per month.

HV

Type of Product	Total Capacity (pcs.)	Actual Production (pcs.)	% of Capacity Used
PCD Cutting Tools	20,000	4,241	21.21%
Carbide Cutting Tools	2,000	904	45.20%
Total	122,000	5,145	23.39%

* Due to different size and design of different type of products in each category, the machine capacity and the actual production output may vary greatly. It also depends on the working hour during each time of the year, while HV's normal working hours are 6 days/week, 1 shift/day (8 hours + no OT), or average of 208 hours per month.

In 2017, the Company completed the construction of its new factory building to expand production capacity, and commenced official full-capacity production in December 2017 at the same time to starting using BOI tax benefits. The Company installed 56 machines for this project with the value amounting to 373 million baht for the first phase expansion. In 2018, the Company invested in additional 11 machines (total value of 31 million baht) to reduce bottlenecks in production. These new machines are machines in the secondary process with one measuring machine (1.6 million baht) for the quality control process, so they did not have much effect on the production output of the Company. Our new factory focuses on the productions of new high-end products that have been tested and received good feedback from the customers. These high-end products are used in the HDD industry, which is growing due to major local makers expanding its production capacity and moving production base into Thailand. And they can also be used by the makers of automotive parts, aerospace parts, and other industries as well. So in 2019, the Company has plans to invest in the second phase expansion to buy 10 additional machines in the primary production processes and 6 machines in the secondary processes with a total value of approximately 150 million baht.

The subsidiary HM installed one new CNC milling machine in 2018 with a value of 2.04 million baht to increase its production capacity for metal fabricated products. The subsidiary HP also installed 4 additional machines with a total value of approximately 21.13 million baht to increase its production capacity to support the growing demands from the automotive sector in the country. The subsidiary HV in Vietnam had just launched its production in the end of 2017 and did not invest in any additional machines in 2018. However, the company continued to do training to improve its production throughout the year, resulting in growing sales from the factory in Vietnam, and it has plans to install some additional machines in 2019.

Sourcing of Raw Materials for Production

The Company sources out raw materials from both domestic suppliers and import from overseas, so the Company needs to set production plan to be able to determine the procurement schedule of raw materials and consumable goods to be available and ready for the production for at least one month in advance, depending on the demand and customer's order at certain time. Also, in 2014, the Company started a consignment stock with one of its main suppliers, by allowing the supplier to place his stock of raw material at the Company to reduce the lead time in purchasing the raw materials and reduce the risk of delivery delay, which would affect the production and delivery to customers.

The purchasing policy of the Company is not to depend on a single supplier, rather sourcing from quotations of at least two suppliers for bargaining purposes. Raw material sourcing does not depend only on the pricing; the Company also considers other factors all together such as quality, service, delivery, as well as payment term to ensure the standard of products and cost saving. An appropriate production plan is determined to allocate raw materials, labor and machine for the production of products according to the batch size and time requirement on an efficient basis. The Company's raw materials and products are classified as follows:

- **Raw Materials for Customized Cutting Tools**

Raw materials for the production of special cutting tools consist of carbide, blank insert, and materials used for cutting edge: PCD, MCD, or PCBN. In 2018, HTECH purchased raw materials from local supplier and imported in the approximate proportion of 87% and 13% respectively; HP purchased raw materials from local suppliers and overseas in the proportion of 25% and 75% respectively; and HV imported most of its raw materials in the proportion of 98%.

- **Raw Materials for Metal Fabricated Products**

Raw materials for productions of tooling and other metal fabricated products for subsidiaries HM and HP include steel, carbide, aluminum, stainless steel, plastic, etc. of which most are sourced locally.

Sourcing of Products for Sale

The Company has 9 subsidiaries in Thailand and overseas in the Philippines, Singapore, Malaysia, Vietnam and Indonesia. These subsidiaries are distributor for the Company's customized cutting tools and standard cutting tools of other brands to fulfill customer's needs. Each subsidiary will buy customized PCD/PCBN/Carbide cutting tools directly from HTECH or HP, while keeping stock for their own customers in order to ensure timely delivery. Standard cutting tools will be supplied by other brand owners in the same way. These brands include Kyocera, Widia, Vargus, etc.

Privileges from the Board of Investment (BOI)

The Company's business activity is granted the BOI privileges for the Production of Cutting Tools under Type 4.2 concerning the manufacturer of machinery, equipment, or parts and/or fixing molds, under the benefits stated in the Investment Promotion Act for the period of 6 years. The date of BOI approval is June 6, 2017 and the date at which the Company commenced the use of the BOI benefits is December 11, 2017.

In addition, the Company's subsidiary (HM) business activity is granted the BOI privileges for the Production and Fixing of Jig & Fixture, Tooling & Gauging, and Metal Fabricated Products under Type 4.5.2 concerning the manufacturer of machinery, equipment, and parts; and Type 4.3 concerning the manufacturer of metal and metal fabrication under the benefits stated in the Investment Promotion Act for the period of 8 years. The date of BOI approval is March 21, 2011 and the date at which the company commenced the use of the BOI benefits is April 25, 2011.

Halcyon Technology (Philippines) Inc., the Company's subsidiary, is granted the tax exemption for imports and exports from the Philippine Economic Zone Authority (PEZA). The period HP is granted such benefits is during 2 September 2010 to 30 April 2016 for the Production of PCBN, Carbide, and Natural Diamond Cutting Tools, Jig & Fixture, and Machine Parts; and 1 May 2015 to 30 April 2018 for Pioneer of PCD Cutting Tools. HP is also granted an exemption for tax and duty when importing raw materials, equipment, machines, and other parts; and VAT 0% by purchasing from local suppliers subject to PEZA conditions. After the tax exemption period ended, HP has a corporate income tax rate of 5%.

Risk Factors

(1) Risk Associated with the Dependence on Hard-Disk Drive Industry

In the past, the Company manufactures and distributes its products to customers mainly in the HDD industry due to continuous growth from ever changing technology. However, the competitive nature of technology results in an alternative data storage system, or the Solid-State Drive (SSD), which uses the technology of “flash memory.” Flash memory data storage requires no moving parts, so it can process information faster and is more durable than HDD. SSD became the main competitor for HDD industry but it still cannot replace HDD anytime soon due to much higher cost per storage unit, and less capacity compared to HDD.

Today, with the fast-changing technology, mobile devices like laptop computers, smart phones, and tablets become more popular, changing the way data is stored in an HDD as well as the overall HDD demands. HDD demands in the personal computer segment are declining due to the more efficient use of the flash memory in mobile devices like mobile phones or tablets. However, the HDD demands in server or corporate segment are growing from more data storage, while the mentioned mobile devices also still need to transfer data to a server with HDD components. SSD still cannot develop a cost-effective solution for data storage comparing to HDD. The growing usage of Big Data also pushes the need for continuously growing data storage, while the technology of HDD is also being developed and improved constantly in terms of data recording and helium technology, etc. to increase data storage capacity, to reduce some weakness of HDD such as durability, and to improve performance in the future.

Even though the Company still have high volume of orders from customer base in the HDD industry, from brand owners and component suppliers, the Company plans to reduce the risk of relying too much on HDD industry by expanding the customer base to increase the services to other industries such as automotive parts, aerospace parts, mechanical related industries, medical parts and other metal fabrication manufacturing by developing new types of PCD and special carbide cutting tools (see details in the Products and Services section), through the utilization of new machines with new technology to improve performance. The Company also invested in subsidiaries in foreign countries such as Singapore, Malaysia, and Vietnam to expand distribution channels for its products and expand new customer base with high potential of growth. In 2018, the percentage of sales from customers in the manufacturing of HDD was 55%, compared to 56% and 54% in 2017 and 2016 respectively.

(2) Risk Associated with Small Customer Base

As the products of the Company are custom made to order, its customer base is limited, and the Company's revenue is concentrated on a few major customers. This may be a risk if such customers changed their purchasing policies or moved their production base, which will affect the Company's revenue adversely. However, the Company has a policy to reduce such risk by making effort to increase the customer base, especially those in the non-HDD segments such as the automotive parts or aerospace parts industries by utilizing its research and development capability and launching new products, as well as expanding customer base overseas to increase its revenue in another way.

In 2018, the Company's revenue from the top five customers (not including the Company's subsidiaries) is approximately 55% of the total sales, where sales to subsidiaries accounted for another 19%, and 25% for other customers; while the whole group of company has 18 major customers (with sales more than 10% of each company) accounting for 45% of the sales in 2018.

(3) Risk Associated with the Sourcing of Raw Materials

Due to limited numbers of suppliers for Polycrystalline Diamond (PCD), which is one of the main materials used in the production of the Company's cutting tools, there may be a risk on reliance on major supplier if such supplier cannot deliver on

time, or the quality does not meet the requirement, or there is a change in policies. However, the Company has policies to reduce such risk by sourcing PCD from 4 suppliers, two of whom are main suppliers. Incoming materials are also being regularly inspected for quality. And delivery problems are eliminated by the use of consignment stock system, where the supplier keeps stock at the Company and orders will be issued once the items have been taken.

For other main raw materials such as carbide and steel, as well as other consumable goods, the Company will source from more than two main suppliers by considering not only price, but quality, lead time, and credit term. The Company also seeks out options for new suppliers. Furthermore, the main raw materials for the Company are not considered as commodity products, so there is little risk in the fluctuation of price.

(4) Risk Associated with the Fluctuation of Foreign Exchange Rates

The Company shares the risk associated with the fluctuation of foreign exchange rates from both imports and exports in foreign currencies. In 2018, the value of sale transactions in foreign currencies was THB 70.78 million, or 13.11% of total sales, most of which were in USD for 99.99%. The value of purchasing goods in foreign currencies were THB 46.95 million, and purchasing machineries were THB 34.43 million, total of 37.39% of all purchase. Foreign currency purchases were mainly in USD for 76.46% of the total. The Company does not usually engage in a foreign currency forward contract, so the Company may have a risk from the fluctuation of foreign exchange rates. However, since the Company has both imports and exports in foreign currencies, such risk is partially offset through Natural Hedge. Overall, the foreign exchange rates do not have a significant effect in the Company's performance.

In 2018, the Company has a gain from exchange rate in the amount of THB 0.41 million or 0.04% of the consolidated total revenue, compared to a loss in the previous year in the amount of THB 3.96 million or 0.40% of the consolidated total revenue. On the other hand, the foreign exchange rates effect the conversion of overseas subsidiaries' financial statements in the consolidated financial statements. In 2018, the Company has a currency translation difference of THB 12.96 million or 1.14% of the total revenue, compared to THB 24.78 million or 2.47% of the previous year. However, it does not affect the Company's basic earnings per share.

(5) Risk Associated with the Dependence on Personnel

The businesses of the Company and its subsidiaries require knowledge, skill and experience of the personnel in order to design and produce products with high standard and precision to serve various requirements of the customers from various industries. Therefore, the Company relies on key personnel in designing and in the production line, which utilizes high and complicated technology, as well as in the marketing area to market and distribute products locally and overseas. If the Company were to lose such personnel, there may be an effect on the Company's future revenue, if the Company cannot find a suitable replacement in time. One of the Company's policies is to develop its staff through training and learning the transfer of production technology from machine suppliers. In addition, the Company has arranged for job rotation to allow the staff to work with various types of machines to be able to work in substitution to reduce the risk of relying on a single person. The Company also supports the qualified staff to become the management and shareholders to create the ownership participation and increase the morale to keep their loyalty in the Company.

Share and Shareholders

As of December 31, 2018, the Company has the registered and paid-up capital of THB 300,000,340, divided into 300,000,340 shares with par value at THB 1 per share. The Company is listed in the Stock Exchange of Thailand (SET).

Top 10 Major Shareholders

Shareholders' Name	As of 15 March 2019	
	Shares	%
1. Rimchala Family	59,079,600	19.69%
Mr. Pete Rimchala	25,136,400	8.38%
Ms. Petra Rimchala	11,500,000	3.83%
Mr. Chris Rimchala	11,443,200	3.81%
Ms. Joyce Rimchala	11,000,000	3.67%
2. Thai NVDR Co., Ltd.	17,958,833	5.99%
3. Mr. Prasit Rakthaisantawee	11,511,188	3.84%
4. Mr. Viboon Rujireksathorn	10,500,000	3.50%
5. Mr. Suparoj Rojweera	10,015,600	3.34%
6. Mr. Chua Cheng Khuan	8,000,000	2.67%
7. Mr. Rattipat Aramwatanapong	7,500,000	2.50%
8. Mr. Norawee Changlum	5,666,700	1.89%
9. Mr. Vichya Mekha-apirak	4,452,400	1.48%
10. Mr. Vichien Srimuninnimit	4,047,700	1.35%
11. Other Shareholders	161,628,319	53.76%
Total	300,000,340	100.00%

Dividend Policy

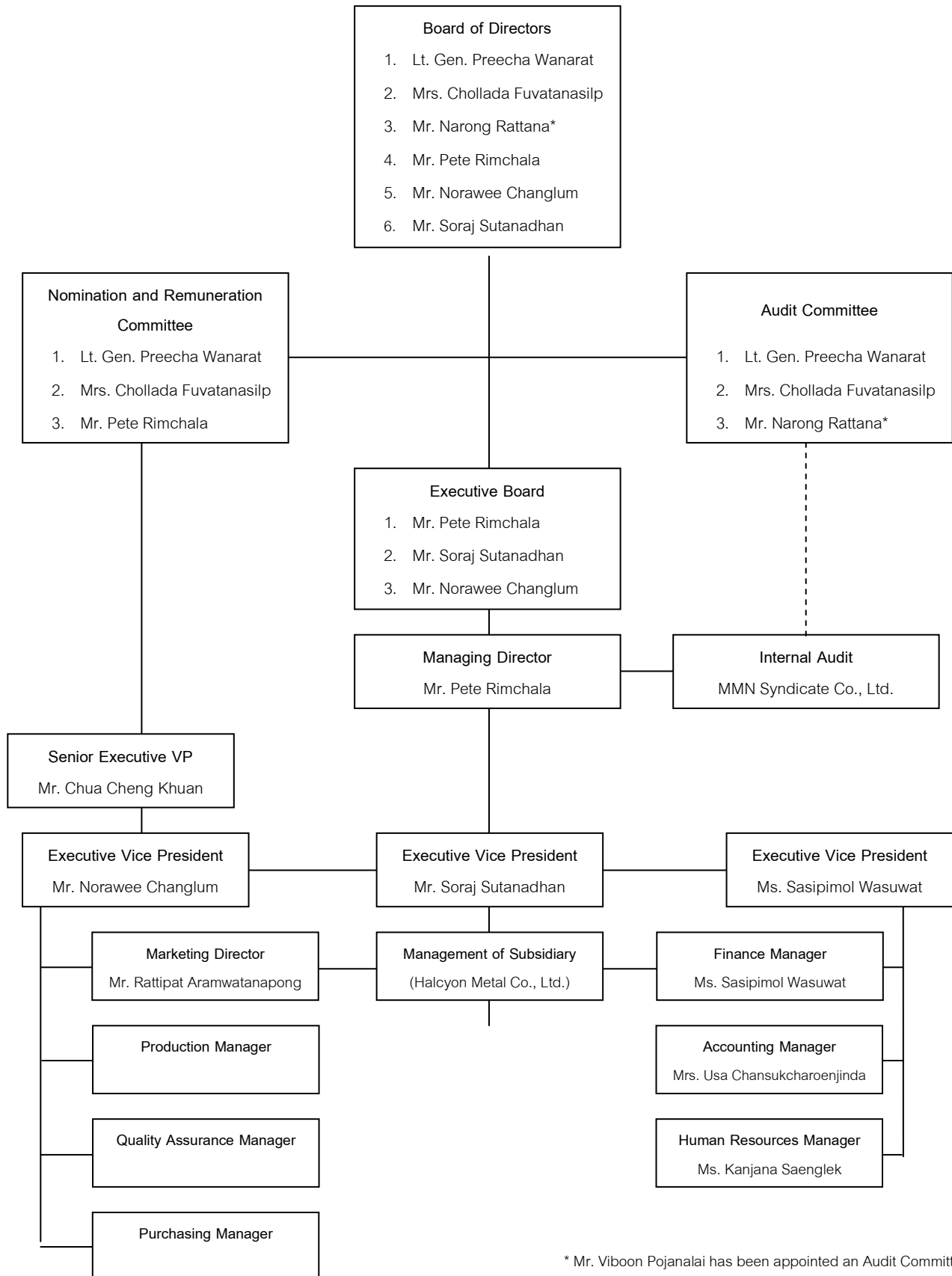
The Company has a policy to pay dividends to shareholders at least twice a year at the rate of not less than 40% of net profit after deduction of corporate income tax and reserves according to the law. The Company's subsidiary has a policy to pay out dividends to shareholders at the rate of 40% of net profit after deduction of corporate income tax and reserves according to the law. However, the Company and its subsidiaries may pay out dividend at the rate lower than mentioned above if it is necessary for the Company to use such net profit for expansion of business.

Year	2016	2017	2018
Net profit attributable for the owner of the Company (THB)	117,885,777	148,296,624	174,287,748
Dividend Payout*	49,952,320	63,000,071	72,000,081
Dividend per Share	0.175	0.21	0.24
Dividend per Net Profit (%)	42.37%	42.48%	41.31%

* Dividends for the performance of year 2016 were paid on 9 September 2016 and 23 May 2016. Dividends for the performance of year 2017 were paid on 11 September 2017 and 25 May 2018. Interim dividend for the year 2018 was paid on 10 September 2018 and the Board of Directors' Meeting No. 1/2019 has approved for additional 0.12 baht per share to be paid on 28 May 2019.

Management Structure

Organization Chart of Halcyon Technology Public Company Limited



* Mr. Viboon Pojanalai has been appointed an Audit Committee and Independent Director to replace Mr. Narong Rattana who resigned, effective 1 March 2019

Board of Directors, Committees, and Management

The Company consists of 4 committees, which are Board of Directors, Audit Committee, Executive Committee, and Nomination and Remuneration Committee as follows:

(1) Board of Directors

The Company's Board of Directors consists of 6 directors as follows:

- | | |
|------------------------------|--|
| 1. Lt. Gen. Preecha Wanarat | Chairman of the Board / Independent Director |
| 2. Mrs. Chollda Fuvatanasilp | Director / Independent Director |
| 3. Mr. Narong Rattana* | Director / Independent Director |
| 4. Mr. Pete Rimchala | Director |
| 5. Mr. Norawee Changlum | Director |
| 6. Mr. Soraj Sotanadhan | Director |

* Mr. Viboon Pojanalai has been appointed Director / Independent Director to replace Mr. Narong Rattana, who resigned, effective 1 March 2019.

Scope of Duties and Responsibilities of the Board of Directors

The Board of Directors has authority and duties and responsibilities in management of the Company according to the laws, purposes, and articles of the Company. In summary, essential authorities and responsibilities are as follows:

1. To hold the annual shareholders meeting within 4 months from the end of accounting period of the Company.
2. To hold the Board of Directors' meeting at least once every three months.
3. To prepare balance sheet and income statements of the Company at the end of accounting period of the Company for which the auditor audited and present to shareholders assembly to consider and approve.
4. The Board may delegate its power to one or more directors or any other person to act on behalf of the Board under the Board's control; or delegates its power to such person for other things that the Board regards as appropriate and within a certain period. The Board may revoke or alter or change the delegate when it sees proper.

In addition, the Board may delegate its power to the Executive Board to have power to conduct any thing which has details according to the scope of power and duties of the Executive Board. Nevertheless, such delegation must not have a feature that allow the Executive Board to consider or approve anything that the Executive Board or other persons may have conflict, interest, or any conflict of interest with the Company or its subsidiary, except for approvals of normal trade practice in accordance with policies and rules that the Board of Directors or Shareholders has considered and approved as prescribed by laws.

5. To set up targets, directions, policies, plans, and budgets of the Company, oversee management of the Executive Board to conform with the assigned policy except for these following matters, which the Board must obtain an approval from the shareholders meeting in advance, i.e. a matter that an approval from the shareholders meeting is required by laws such as increasing or decreasing of capital, debenture issuing, whole or partial selling or transfer of the business of the Company to other persons, acquiring or receiving of other company's business, revision of Memorandum or Articles of Association, etc.

In addition, The Board of Directors has duty to oversee the Company to conform with laws regarding securities and securities exchange, regulations of the stock exchange such as related transactions, acquisition or disposal of assets according to the rules of the Stock Exchange of Thailand, or laws relating to the Company's business.

6. To consider management structure, appoint the Executive Board, Managing Director, or other committees as appropriate.
7. To continuously follow up the operation to be in accordance with plans and budgets.
8. the Board neither operates any business that has similar nature and competes with the Company's business, nor be a partner in any ordinary partnership, a general partner in any limited liability partnership, a director of a private company, nor other companies that involved in the business of similar nature and compete with business of the Company, whether for themselves or for other persons, except the shareholders' meetings has been informed of that fact prior to the appointment.
9. The director has to inform the Company immediately when he or she has an interest, whether direct or indirect, in a contract that the Company has concluded, or has more or less shares or other forms of securities of the Company or associated company.

(2) Audit Committee

The Company's Audit Committee consists of 3 persons as follows:

- | | |
|-------------------------------|---------------------------------|
| 1. Lt. Gen. Preecha Wanarat | Chairman of the Audit Committee |
| 2. Mrs. Chollada Fuvatanasilp | Audit Committee |
| 3. Mr. Narong Rattana* | Audit Committee |

* Mr. Viboon Pojanalai has been appointed Audit Committee to replace Mr. Narong Rattana, who resigned, effective 1 March 2019.

Mrs. Chollada Fuvatanasilp and Mr. Viboon Pojanalai have knowledge and adequate experiences to verify the credibility of financial statements. Mr. Norawee Changlum acts as the Audit Committee's Secretary.

Scope of Duties and Responsibilities of the Audit Committee

1. To verify that the Company has an accurate and adequate disclosure on financial statements by coordinating with the external auditor and the management responsible for the disclosure of quarterly and yearly financial statements. The Audit Committee may propose to the auditor to review or audit any transaction deemed necessary or importance during financial statement auditing.
2. To verify that the Company has proper and effective internal control and internal audit system.
3. To verify that the Company conforms with laws regarding securities and stock exchange, regulations of the stock exchange, or laws regarding businesses of the Company.
4. To consider, select, propose an appointment, and propose remuneration to auditors of the Company to be approved by the shareholders' meeting.

5. To disclose the Company's information when there is a related transaction or transaction that may have conflict of interest correctly and completely, including approval of such transaction in order to propose to the Board of Directors and/or the shareholders' meeting.
6. To review the financial management and risk management policies assigned by the Board of Director with consent from the Audit Committee.
7. To prepare corporate governance report of the Audit Committee for disclosure in the annual report of the Company which such report must be signed by the Audit Committee Chairman.
8. To conduct any other works as assigned by the Board of Directors with consent from the Audit Committee.

(3) Executive Board

The Executive Board consists of 3 persons as following:

- | | |
|-------------------------|---|
| 1. Mr. Pete Rimchala | Chairman of the Executive Board / Managing Director |
| 2. Mr. Norawee Changlum | Executive Director |
| 3. Mr. Soraj Sutanadhan | Executive Director |

Scope of Duties and Responsibilities of the Executive Board

The Executive Board have the authority, duties and responsibilities in the normal operation and administration of the Company, establishing policies, business plan, budget, administrative structure and any the Company's administrative authority and direction in operating business of the Company in line with the prevailing economic situations for proposing to the Board of Directors' meeting for consideration and approval and/or ratification as well as verifying and monitoring the operation of the Company according to the specified policies. The key authority, duties and responsibilities can be summarized as following:

1. Operating and administering the Company according to the objectives, regulations, policies, rules, limitations, directions and resolutions of the Board of Directors and/or resolutions of the shareholders' meetings according to the rules and regulations of the Executive Board's meeting.
2. Considering the establishment of the policy, direction and strategy of operating the business of the Company, financial budgeting plan, human resource management, investment, expansion of the business, public relations according to the scope that the Board of Directors' pre-approved, and monitoring the process of the operation of the appointed working group.
3. Considering the allocation of annual budget as proposed by the management before proposing the Board of Directors to consider and approve, including considering and approving the change and addition of the annual budget when there is no Board of Directors' meeting to propose to the next Board of Directors' meeting.
4. Approving the expenditure on the purchasing of raw materials, according to the Company's normal operation, of no more than Baht 30 million (Baht Thirty Million) per transaction.
5. Approving the expenditure on the purchasing of the equipment or fixed assets, according to the Company's normal operation, of no more than Baht 50 million (Baht Fifty Million) per transaction.

6. Approving of selling, according to the Company's normal operation, such as selling of goods, made to order contracts, etc, of no more than Baht 50 million (Baht Fifty Million) per transaction.
7. Approving the opening and closing of any bank or financial institution accounts, including the terms and conditions on the withdrawal or any juristic acts related to such accounts.
8. Approving the lending, procuring credit line, issuing of debentures, overdraft contracts or any loans from bank or financial institution or general persons according to normal business conditions, of no more than Baht 60 million (Baht Sixty Million) per transaction, including approving of bank guarantee for beneficial of the Company's business of no more than Baht 50 million (Baht Fifty Million) per transaction.
9. Approving of the pledging and mortgage of the Company's assets to warrantee the Company's debts, whether existing debts or debts to be incurred in the future, of no more than Baht 60 million (Baht Sixty Million) per transaction.
10. Approving of the significant expenditure, this is already set in the annual budget assigned or approved in principle by the Board of Directors.
11. Acting as the advisory body on policies concerning finance, marketing, personnel management and other operations.
12. Specifying the organization structure, administrative authority of the organization as well as appointing, hiring, removing, determining the wages, payment, bonus of the executives and layoff.
13. Authorizing mandate of one or more directors or any person to perform any act under the supervision of the Executive Board or to authorize such person to perform acts as deemed appropriate by the Executive Board within a certain period. The Executive Board may repeal, withdraw, change or amend the authorized person or the authority as it deems appropriate. However, such authorization shall not be given to persons who may have conflicts of interest.
14. Performing any act authorized by the Board of Directors from time to time.

The Executive Board shall not approve any conflicting transaction or any transaction the Executive Board has interests in or any other benefits which is contrary to the interests of the Company and its subsidiary, except such transactions that the Company's Board of Directors or shareholders' meeting has considered and pre-approved and in accordance with the law. The Board of Directors authorizes to repeal, withdraw, change or amend the Executive Board's authorization.

Scope of Duties and Responsibilities of the Managing Director

1. Managing and supervising daily operations and/or administration of the Company.
2. Managing and operating in accordance with the policy, plan and budget approved by the Board of Directors and/or Executive Board of the Company.
3. Acting as the authorized person of the Company in operating the Company's business in compliance with the objectives, regulations, policies, rules, limitations, directions and resolutions of the shareholders' meetings and/or resolutions of the Board of Directors' meetings and/or the Executive Board.

4. Being authorized to sub-authorize and/or mandate other person to perform certain acts. The aforesaid sub-authorization or mandatory shall be under the scope of the authorization as specified herein and/or in accordance with the regulation, limitation or order which the Board of Directors and/or the Company has specified, whereas the sub-authorization shall not be given to persons who may have conflicts of interest.
5. Monitoring and evaluating the operation of the Company at all time in order to minimize the risk arising from internal or external factors.
6. Considering the entry into agreements regarding Company's business and any agreement which is in the interest of the Company including specifying the procedures and process of such agreement for proposing to the Executive Board and/or the Board of Directors.
7. Approving of the expenditure on normal business operation such as purchasing of raw materials, equipment or fix assets, excluding machines, of no more than Baht 5 million (Baht Five Million) per transaction.
8. Approving of the purchasing of operating machines of no more than Baht 20 million (Baht Twenty Million) per transaction.
9. Approving of selling, according to the Company's normal operation, such as selling of goods, made to order contracts, etc, of no more than Baht 15 million (Baht Fifteen Million) per transaction.
10. Considering the allocation on pension, bonus or any remuneration as approved by the Board of Directors to the employees or workers of the Company or any person performed any act for the Company.
11. Considering the employment and appointment as well as removal, relocation between the field/department/division or layoff, determining wage rate, remuneration, bonus including welfare regarding all employee of the Company except those employees at the management level.
12. Specifying the orders, regulations, notifications, memorandum in order to operate the business according to the policy and in the interests of the Company and to maintain the internal discipline of the organization.
13. Performing other functions authorized by the Board of Directors from time to time.

The Managing Director shall not approve any conflicting transaction or any transaction the Managing Director has interests in or any other benefits which is contrary to the interests of the Company and its subsidiary, except such transactions that the Company's Board of Directors or shareholders' meeting has considered and pre-approved and in accordance with the law. The Board of Directors authorizes to repeal, withdraw, change or amend the Managing Director's authorization.

(4) Nomination and Remuneration Committee

The Nomination and Remuneration Committee consist of 3 persons as follows:

- | | |
|-------------------------------|---|
| 1. Lt. Gen. Preecha Wanarat | Chairman of the Nomination and Remuneration Committee |
| 2. Mrs. Chollada Fuvatanaslip | Nomination and Remuneration Committee |
| 3. Mr. Pete Rimchala | Nomination and Remuneration Committee |

Scope of Duties and Responsibilities of the Nomination and Remuneration Committee

1. To express opinion to the Board of Directors with respect to the rate of remuneration of Chairman of the Board of Directors, Directors, Chairman of the Audit Committee, Audit Committee and any Sub-Committee (if any) (Such matter shall be proposed to the Shareholders' meeting for consideration and approval afterward).
2. To nominate and propose the name list of person, who has the suitable qualifications to be a director at the first time and to monitor the performance and suitability of the director who will be retired by rotation and re-elected, to the Board of Directors for consideration and approval and propose to the Shareholders' meeting for appointment to be the director.
3. To consider and give an opinion to the Board of Directors and to follow up the operation regarding vision and strategy of human resource including management development plan.
4. To assess the Company's overall performance in order to determine the bonus and salary increase by using a suitable industrial standard for consideration.
5. To propose the salary structure and other benefits.

Meeting Statistics for the Board of Directors and Committees

In 2018, the Company's Board of Directors and committees have meeting attendance as follows:

Name	Meeting statistic (number of meeting / number of time that join the meeting)			
	The Board of Directors' Meetings	Audit Committee Meetings	Nomination and Remuneration Committee Meeting	Shareholders' Meetings
1. Lt. Gen. Preecha Wanarat	4/4	4/4	1/1	1/1
2. Mrs. Chollada Fuvatanasilp	3/4	3/4	1/1	1/1
3. Mr. Narong Rattana	4/4	4/4	-	1/1
4. Mr. Pete Rimchala	4/4	-	1/1	1/1
5. Mr. Norawee Changlum	4/4	-	-	1/1
6. Mr. Soraj Sutanadhan	4/4	-	-	1/1

Authorized Signatory Directors

Directors who have the authority to sign on behalf of the Company are Mr. Pete Rimchala or Mr. Norawee Changlum or Mr. Soraj Sutanadhan, two of the three sign together with Company's stamp.

Company Secretary

The Board of Directors has appointed Mr. Norawee Changlum as the Company Secretary effective on 30 July 2010. The Board of Directors' Meeting No. 1/2019 has resolved to appoint Miss Petra Rimchala as the Company Secretary, effective 25 February 2019 onwards.

Management Team

The Company's management team consists of 5 persons as follows:

- | | |
|-------------------------|---------------------------------|
| 1. Mr. Pete Rimchala | Managing Director |
| 2. Mr. Chua Cheng Khuan | Senior Executive Vice President |
| 3. Mr. Soraj Sutanadhan | Senior Executive Vice President |

- | | |
|--------------------------|--------------------------|
| 4. Mr. Norawee Changlum | Executive Vice President |
| 5. Ms. Sasipimol Wasuwat | Executive Vice President |

Remunerations of Directors and Executives

Cash Remunerations

(1) Total remunerations of the directors

Position	Meeting Allowance (THB per Meeting)
<i>The Board of Director's meetings</i>	
Chairman of the Board of Directors	16,500
Directors	13,500
<i>The Audit Committee's meetings</i>	
Chairman of the Audit Committee	16,500
Audit Committee	13,500
<i>The Nomination and Remuneration Committee's meetings*</i>	
Chairman of the Nomination and Remuneration Committee	13,500
Nomination and Remuneration Committee	13,500

In 2018, the Directors received remunerations as follows:

Director's Name	Remuneration (THB)				
	Meeting allowance	Meeting allowance	Meeting allowance	Yearly remuneration	Total
1. Lt. Gen. Preecha Wanarat	66,000	66,000	13,500	150,000	295,500
2. Mrs. Chollada Fuvatanaslip	40,500	40,500	13,500	115,000	209,500
3. Mr. Narong Rattana	54,000	54,000	-	115,000	223,000
4. Mr. Pete Rimchala	54,000	-	13,500	40,000	107,500
5. Mr. Norawee Changlum	54,000	-	-	40,000	94,000
6. Mr. Soraj Sutanadhan	54,000	-	-	40,000	84,000

(2) In 2018, remunerations for the Company's top 5 executives consist of salary and bonus in a total amount of THB 15.33 million (4 executives are paid by the Company and 2 executives are paid by the subsidiary HM)

Other Remunerations

Provident Fund: The Company established its provident funds for its management and employees since September 2008 onwards, the management and employees must contribute 2% of their basic salary and the Company will contribute at the same rate. In 2018, the Company paid contribution to the Provident Fund for the top 5 executives in a total amount of THB 111,788.

Personnel

As of 31 December 2018, the Company had a total of 313 employees, comparing to 268 employees in the previous year. The Company paid a total of THB 92.69 million in remunerations, including wages and salaries, over time, bonus, social security, provident fund, etc.; and its subsidiaries paid a total of THB 75.13 in the same manner. The total number of employees by business segment and operational department are as follows:

As of 31 December 2019	Customized Cutting Tools ¹	Standard Cutting Tools ²	Tooling and Metal Fabrications ³	Total
Management	13	8	2	23
Production	345	4	82	431
Sales & Marketing	15	16	3	34
Administrative & Accounting	47	20	5	72
Total	420	48	92	560
Total Remuneration (THB Million)	107.89	30.68	29.25	167.82

Remarks: ¹ HTECH and subsidiaries HP+ ATEK and HV

² Subsidiaries FDM, HS, HY, HI and HENG

³ Subsidiaries HM

Management Policies

Corporate Governance Policy

The Company is aware of the significance of good governance principles. Therefore, the Board of Directors has established the Code of Conduct for the Company's directors which corresponds to the Code of Best Practices for Directors of Listed Company under the guideline of Stock Exchange of Thailand. All rules and provisions are stipulated based on actual practice. Furthermore, the Company applies the Good Corporate Governance for guideline on development of the policy of right and equality of all shareholders and stakeholders, structure, duties, responsibilities and independency of the directors, information disclosure and transparency, risk control and management, and business code of conduct for the purpose of efficiency and transparency of the Company's operation and management. The Board of Directors' Meeting No. 1/2019 held on February 25, 2019 approved the code of Company's good corporate governance consisted of 5 categories as follows.

Category 1 Rights of Shareholders

The Company is aware and pays attention to rights of shareholders. It shall avoid any actions that violate those rights and shall encourage shareholders to exercise their basic rights, which are buying, selling, or transferring shares, sharing in the profit of the Company, obtaining relevant and adequate information on the Company in a timely manner and on a regular basis and participating and voting in the shareholder meetings to elect or remove members of the board, appoint the external auditor, and make decisions on any transactions that affect the Company such as dividends payment, amendments to the Company's articles or memorandum of association, capital increases or decreases, and the approval of extraordinary transactions, etc.

The Company shall perform things that encourage and facilitate the exercise of shareholders' rights as follows:

- The Company will mandate the directors to prepare notice of the shareholders' meeting in writing with sufficient information, to send to shareholders for at least 7 days before the actual meeting or for the certain period according to the rules and regulations of the Securities Exchange Commission or those of the Stock Exchange of Thailand.
- During each meeting, the Chairman will inform shareholders of the criteria and procedures governing the Company's shareholders meetings, including the voting procedure and allocate appropriate time for the meeting.
- Shareholders are able to send their questions and suggestions prior to the meeting date, and are able to comment or query during the meeting, whereas directors and managements will attend the meeting to answer.
- In case that the shareholders are not able to attend the shareholders' meeting, the Company will enable shareholders to appoint an independent director or any person as their proxy.
- The Company will record important queries and comments on the shareholders' meeting report, which is auditable by shareholders.

Category 2 Equitable Treatment of Shareholders

The Company shall treat all shareholders, including those with management positions, non-executive shareholders, foreign shareholders and minority shareholders in an equal way as follows:

- Facilitate minority shareholders to nominate, in advance of the meeting dates, a candidate for director position.
- The Board of Directors will not add any agenda items without notifying other shareholders in advance, especially if it is an issue that will require shareholders to spend a good deal of time to study relevant information before making their decisions.
- The Company established procedures concerning the protection of inside information that prohibit its employees to disclose the inside information to irrelevant persons. In case that its employees or management use or disclose the information for their or their related persons' behalf, the action will be considered misdeed and will be subject to take disciplinary action. In addition, the Company established the policy to audit its directors and managements of disclosure of inside information on their benefits of stock trading, which is disclosed in the section of Policy and Guidance Relating to Insider Information.
- In the shareholders' meeting, the directors and managements will disclose whether they and their related parties have any interest in any issue, in order for the Board of Directors to consider such issue entirely for the Company's benefits. Directors and managements who have such interests should not participate in the decision making process on such issues.

Category 3 Role of Stakeholders

The Company pays attention to rights of each stakeholder group and has established a policy for each group as follows:

- | | |
|---------------------------------|--|
| Shareholders: | The Company aims to conduct the business using its best knowledge and management skills, with honesty and fairness to majority and minority shareholders in the best interests of all shareholders and disclose the information completely and accurately. |
| Staff: | The Company will pay reasonable remunerations to all staff, provide safe working environment for life and property, seriously and continuously develop the staff's potentials, strictly comply with all laws and regulations in conjunction with the staff, avoid unfair practice which could affect staff's career, and treat all staff with respect to honor their humanity. |
| Customers: | The Company aims to produce goods and provide services in good quality and standard with reasonable price, always and strictly maintain customer's confidence and search for more opportunity to continuously increase customer's benefits and strictly follows the terms and conditions that the Company provides to the customers. |
| Suppliers and Creditors: | The Company will not conduct its business with suppliers and creditors in bad faith. The Company will strictly perform all agreements between the Company and creditors whether the repayment, reimbursement, care of warrantee assets and any other agreements given to the creditors for mutual benefit. |

Trade Competitors:	The Company will follow the best practices of competition, avoid using dishonest and improper methods for acquisition of the competitor's secret and avoid making baseless claims to destroy the competitor's reputation.
Public:	The Company will do nothing which will have adverse affect on the public, natural resources and the environment. The Company will seek an opportunity to support social creative activity, simultaneously and seriously educate staff on social responsibility including strictly follow and monitor staff practice as required by laws or regulations issued by the relevant authority.

Category 4 Disclosure and Transparency

The Company intends to disclose information accurately, transparently, timely and in compliance with the standards and criteria set by the Stock Exchange of Thailand to ensure that each person receives information equally. The aforementioned includes financial and general information and other information which affect the share price and the decision making process of the investors and stakeholders. The Company posts the information on the Stock Exchange of Thailand's website and www.halcyon.co.th.

The Board of Directors is aware of the responsibility to have accurate, actual, complete and reasonable financial statements. The consolidated financial statements of the Company were made in compliance with the generally accepted accounting principles. The appropriate accounting policies have been consistently adopted. The accountancy information recording is complete in order to maintain the integrity and aware of weaknesses so that the Company can consistently prevent corruption or material crisis conducts including adequate disclosure of important information in the notes to the financial statements. Moreover, the Board of Directors has appointed Audit Committee to examine financial reports, related transactions and internal control system and the result of Audit Committee audits must be reported to each Board of Directors' meeting. The reports of the Board of Director, the Audit Committee and the Company's external auditor are disclosed in the Company's Annual Report. Currently, the Company does not intend to establish the investment relation department, but assigns Mr. Pete Rimchala, the Managing Director, to coordinate with shareholders, analyst and others.

Category 5 Responsibilities of the Board

(1) Structure of the Board of Directors

The Company's Board of Directors comprises of ones who have knowledge, ability and experiences in business operations beneficial to the Company. The Board of Directors, appointed by the shareholders' meeting, consists of 7 directors which include 3 independent directors; of which 1 of them was appointed as the Chairman of the Board of Directors and the Chairman of the Audit Committee whereas the other 2 were appointed as the Audit Committee. One of the Audit Committee has accounting background and is able to verify the credibility of the financial statements. In addition, one-third of the Board of Directors, or at least 3 directors, will be independent directors, who act as representatives of the minority shareholders in examining and balancing the Company's operation for correct and fair operation and for the best interest of shareholders.

The Chairman of the Board of Directors will not be the same person as the Chairman of the Executive Board and the Managing Director in order to create a balanced and reviewed management. In addition, the Company has clearly established the scope of authorities, duties and responsibilities of the directors, Executive Board and the Managing Director, so that the Executive Board and the managing director will not have unlimited authorities regarding management and credit line approval.

(2) Subcommittees

The subcommittees appointed by the Board of Directors to assist in monitoring the business of the Company are:

- *The Executive Board*, consisting of 3 persons, which facilitates the Company's operation and authorizes according to the scope of duties given by the Board of Directors.
- *The Audit Committee*, consisting of at least 3 persons, who examine and monitor the business of the Company authorizes according to the scope of duties given by the Board of Directors. All Audit Committee Member have qualifications as stated by the law of securities and securities exchange or the regulations, notifications or rules of the Securities and Exchange Commission or Stock Exchange of Thailand.
- *The Nomination and Remuneration Committee*, consisting of 3 persons, which help the Company to nominate and consider remuneration and to comply with the good corporate governance according to the scope of duties given by the Board of Directors.

However, in the future, the Company may establish subcommittees to assist the Board of Directors on the assigned business of the Company.

(3) Scope of Duties and Responsibilities of the Directors

The Board of Directors is responsible for establishing policies, visions, strategies, missions, business plans and the Company's budget including monitoring the management for effective and successful performance of the policies provided under the law, objectives, Articles of Association and resolutions of the shareholders' meeting. The Board of Directors has established:

Corporate Governance Policy

The Board of Directors has established, in written, the policy of corporate governance and reviewed the policy and its implementation at least annually.

Code of Conduct

The Company has established the Code of Conduct as a guideline to the Board of Directors, Audit Committee and every staff, which mainly compresses the principles of non-disclosure of the Company's secret, honesty and compliance with the laws, respect for the right of each other and protection of the Company's internal resources and the environment. Focusing on the Code of Conduct will encourage all levels to work with honesty and support efficient internal control which will create confidence in the capital market and among the investors.

Conflicts of Interest Policy

The Company has established the policy of conflicts of interest based on the principles that all staff must work in the best interest of the Company. All acts and decisions must be made without influences of personal interest, in the interest of family, kins or other person with whom the employees have personal relationship. This policy includes 2 matters as follows:

- **Related Transactions:** The Company carefully considers the appropriateness of every related transaction prior to enter into such transaction, including pricing and establishing of the conditions on the related transactions on an arm's length basis. The Audit Committee will consider the necessity and reasonability of every transaction. In case the transactions are related transactions as stipulated in "Notification of Securities and Exchange

Commission of Thailand on Information Disclosure and Operation of the Listed Company in the Related Transaction B.E. 2546", the Company will comply with the rules, conditions, and procedures of the Notification including disclosure of such transactions in the annual report and annual information disclosure form (Form 56-1) for transparency of the related transactions and avoidance of the conflict of interest and other circumstances under which a conflict of interest may develop.

- Other circumstances which may give rise to conflict of interest, which are:
 1. General Investment. The Company does not allow the Company's staffs who are involved in or receive any benefits from the Company's competitors, to participate in any decisions making for any matters in conjunction with the relationship between the Company and such competitor. Unless the approval of the Company's Board of Directors or shareholders has been obtained under the requirements of Stock Exchange of Thailand.
 2. Gift. Every staff of all levels should not accept any gift, journey ticket, sport ticket, offer of vacation, accommodations or any offer of personal benefits, etc. if such acceptance entails obligations to the Company or loss to the Company's benefits.
 3. Academic work, public service work, lecturer or taking any position. Every staff of all levels may request for the approval of the director of their work line in order to engage in any academic work, public service work, and lecturer or taking any position, e.g. Company's director and consultant, which will create more visions and experience, provided that such staff must not involve the Company or his position in the Company without approval.

Internal Control

The Company has set up an internal control system in order to operate the Company's business effectively and increase the credibility of its financial statements. In 2018, the Company hired MMN Syndicate Office Co., Ltd. operated by Mr. Marnit Aongphisud, Certified Public Accountant, who is competent in accounting and internal control, as a consultant of the Company to improve the internal control system and eliminate risks and unusual transactions. The Company annually reviews its internal control system and assesses risk management. Upon the expiration of the hiring contract, the Company plans to continue the contract and at the same time training its staffs for the job.

In addition, the Company has appointed Mr. Norawee Changlum as the Audit Committee's secretary, coordinating with MMN Syndicate Office Co., Ltd. and proposing the result of internal audit to the Audit Committee at least once every 3 months.

(4) Meeting of the Board of Directors

The Board of Directors will arrange a meeting at least once every 3 months and may have special additional meetings, if necessary. The written notice of the meeting will be sent to directors for its consideration in advance at least 7 days before the meeting date except in case of an emergency or preserve the right or benefit of the Company. The directors can request any related disclosure from the Company's secretary.

The Chairman of the Board of Directors and Managing Director will set the board meeting agenda together and each director is free to propose issues for a meeting agenda. The executive managements may attend some agendas during the meeting to provide information in details.

(5) Remunerations

The Company has established a policy to set remunerations of the directors and Audit Committee as an incentive to keep quality directors who meet the Company's standard. The remuneration shall be at the same rate as paid by a similar industry and which is based on the result of operation of the Company. The remuneration has to be proposed for approval in the shareholders' meeting.

Remuneration of the Managing Director and top executives should be in accordance with the scope of authorities and the policy of the board. For the best interest of the company, executives' salaries, bonuses, and other long-term compensation will correspond to the Company's performance and that of each executive.

(6) Director and Management Training

The Board of Director will encourage and facilitate training for all internal parties related to corporate governance such as directors, Audit Committee, managements, etc. Training will enable them to continuously improve their performances. It can be either internal or external training.

The Company's secretary will provide each new director with all documents and information useful to perform their duties, including introduction of the nature of the business and the operations.

Recruitment and Appointment of Directors and Senior Management Levels

Independent Committee

The Company must have independent directors at least one-third of total number of Board of Directors but not less than 3 persons.

Qualifications of the Independent Committee

1. Holds no more than 1% of the total voting shares of the Company, its parent company, its subsidiaries, its associated companies or a juristic person who may have conflicts of interest, including shares held by any related person.
2. Not be and have not been a director participating in management role, employee, staff, advisor who receives regular salary, or controlling person of the Company, its parent company, its subsidiaries, its associated companies, same-level subsidiaries or a juristic person who may have conflicts of interest, unless the foregoing status has ended for more than 2 years.
3. Not being a person related by blood or legal registration, such as father, mother, spouse, sibling, and child, including spouse of the children, management, major shareholders, controlling persons, or persons to be nominated as management or controlling person of the Company or its subsidiaries.
4. Not having a business relationship with the Company, its parent company, its subsidiaries, its associated companies or a juristic person who may have conflicts of interest, in the manner that may interfere with his/her independent judgment, or not being a major shareholder, non-independent director or management

of any person having business relationship with the Company, its parent company, its subsidiaries, its associated companies or a juristic person who may have conflicts of interest.

5. Not being an auditor of the Company, its parent company, its subsidiaries, its associated companies or a juristic person who may have conflicts of interest, in the manner that may interfere with his/her independent judgment, or not being a major shareholder, non-independent director or management of any person having business relationship with the Company, its parent company, its subsidiaries, its associated companies or a juristic person who may have conflicts of interest.
6. Not being an professional advisor including legal or financial advisor who receives an annual service fee of exceeding Baht 2 million from the Company, its parent company, its subsidiaries, its associated companies or a juristic person who may have conflicts of interest, or not being a major shareholder, non-independent director, management or partner of the professional advisor.
7. Not being appointed to represent the Company's Director, its major shareholders or shareholders who are related to the Company's major shareholders.
8. Not having any characteristics by which him/her independent opinion may be affected.
9. Not being a director assigned by the Company's Board of Directors to take part in the business decisions of the Company, its parent company, its subsidiaries, its associated companies, same-level subsidiaries or a juristic person who may have conflicts of interest, and not being a director of the Company, its parent company, its subsidiaries, its associated companies, same-level subsidiaries.
10. Having duties according to the Stock Exchange of Thailand's regulations regarding the qualifications and scope of work of the Audit Committee.

In the case that the independent director being appointed as the independent director of the parent company, its subsidiaries, its associated companies, same-level subsidiaries, the Company has to disclose such information, including the remuneration received by the independent director in the Filing, Form 56-1 and Form 56-2.

Member of Audit Committee

The Company must have at least 3 audit committees.

Qualifications of Audit Committee

1. Appointed by the Board of Directors or the shareholders
2. Audit Committee must be independent and
 - Do not participate in decision making on the Company's operations or its subsidiaries
 - Is not a director of the Company or its subsidiaries
3. Has at least one audit committee whom has sufficient knowledge and experience to ensure the reliability of financial statements.
4. Has served in the same manner as set forth in the Stock Exchange of Thailand on the features and scope of operations of the Audit Committee.

Nomination and Remuneration Committee

Nomination and Remuneration Committee, consist of 2 independent committees out of 3 committees, The committees have responsibility to recruit directors based on qualification, competency, experience, and the ability to attend the Board of Directors' meetings consistently. The directors shall be appointed by a majority vote of the shareholders' meeting in accordance with the following conditions and procedures:

1. Each shareholder shall be entitled to the number of votes equivalent to the number of share held by him. One share shall have one vote.
2. Each Shareholder may exercise all the votes to elect one or several persons, as the shareholders' meeting may deem fit, as directors, but may not allot his votes to any person at any number.
3. The directors shall be appointed in accordance with the majority vote. In the event of equal votes among the persons elected in order of respective high numbers of votes, the Chairman of that meeting shall have a casting vote.

Senior Management Level

In recruiting senior management level, the Executive Committee recruits senior management based on qualification, competency, and experiences related to the Company's business, ability to complete the giving tasks. Senior management will be presented to Nomination and Remuneration Committee and board of committee to approve.

Corporate Governance of Subsidiaries

Corporate governance of subsidiaries and/or affiliates, the managements has been selecting qualified representative who have appropriated experiences and skills to be a representative of the Company manager and make a policy to control the subsidiaries and/ or joint venture.

For efficiency and transparency of the subsidiaries and/or affiliates governance, from 2014 onward, the Company has set rules to nominate and vote for a qualified director for subsidiaries which also need to be approved by Board of Directors. The representative director at the subsidiaries and/or affiliates must operates in the best interest of subsidiaries and/or affiliates by controlling the operation of the subsidiaries and/or affiliates according to strategies and business plan which were approved by the Company's Board of Directors including operation under good governances. In addition, the representative shall receive an approval from the Company before voting for any issue which is significant as is required the board approval at the Company level. Nominating board the representative is based on proportions of the Company's shareholding.

In case of subsidiaries, the Company set rules for nominated representative to monitor subsidiaries to implement policy regarding related transaction, gain or dispose of assets, any other significant related transaction and disclose the above transaction in the same rule conditions as those of the Company including the need to ensure the storage and accounting of the subsidiary which can be reviews and consolidate financial statements within deadlines.

Policy and Guidance Relating to Insider Information

The Company has a policy and ways to examine directors and executives concerning use of insider information not yet disclosed to the public for personal gains as follows:

1. The Company will educate directors and executives on the duty to report their shareholdings, shareholdings of their spouses and minor children to the Office of the Securities and Exchange Commission and the Stock Exchange of Thailand according to Section 59 and penalties in Section 275 of the Securities and Exchange Act, B.E. 2535.
2. The Company requires that the executives have to report any change in their shareholdings to the Office of the Securities and Exchange Commission according to Section 59 of the Securities and Exchange Act, B.E. 2535 in order that the Company can monitor stock trading of each executive.
3. The Company will send circular notices to executives to advise them of the important information that could affect stock prices in order to restrain trading their shares for the 1-month period before financial statements or such information are disclosed to the public and not to disclose such important information to other people. In case the non-disclosed information was used in a way that the Company or shareholders will suffer lost or damaged and the person responsible is executive-level person, the Board of Directors will consider the punishment and if the misconduct was carried out by lower-level managers, the managing director will be responsible for meting out the punishment.

Corporate Social Responsibilities (CSR)

Policy Overview

Corporate Social Responsibilities refer to business operation with care to stakeholders, economy, society and environment with integrity, ethics and morals; as well as the corporate governance carrying out in various activities with honesty, transparency and fairness. The Company and its subsidiaries conduct business in a responsible manner to the society, environment, and stakeholders according to the guiding principle of social responsibility of 8 clauses of the Stock Exchange of Thailand. The Board of Directors' Meeting No. 1/2014 on February 20, 2014 had set policy and procedure for the Company and its subsidiaries to adopt as part of managing business processes (CSR-in-Process) as follows:

(1) Operate with Fairness

Businesses with fairness give confidence to stakeholders. The Company and its subsidiaries are committed to conduct its business with ethics to the competitors to achieve fair competition. The guidelines are as following:

1. Practice under the rules of fair competition and avoid accomplice with competitor to take out other business
2. Do not seek information that is confidential to competitors by means of dishonest or inappropriate such as the payment of remuneration to the employees of its competitors.
3. Never try to damage the reputation of competitors by a malicious accusation without basis in fact.
4. Do not support any action in the manner of intellectual property infringement, uses products and services with a valid license.

(2) Anti-Corruption

Company's policy is to conduct business with transparency, adhering to the righteousness, unsupporting the job completion by method of fraud. The Board's policy is to comply anti-corruption with the law. The guidelines comply with clause 10.5.

(3) Respect for Human Rights

Respect for human rights refer to treating stakeholders, community and peers with respect to human values and does not violate the basic human rights. The Company and its subsidiaries are committed to respect and do not violate human rights. The guidelines are as follows:

1. Supports and respects the protection of human rights by frequent monitoring to ensure that the business is not involved with human rights abuses such as forced labor support or use of child labor, etc.
2. Promote human rights compliance within the Company and encourage employees to comply with human rights standards.

(4) Treat Labor with Fairness

Company's policy is to treat all employees equally and fairly; take care of safety and hygiene in the workplace; and to promote learning experience and development organizations to leverage the work of the professional staff, development work and create innovation in organizations. The guidelines are as following:

1. Provide fair conditions of employment and ensure employees receive proper compensation.
2. Arrange for appropriate welfare to employees such as providing annual vacation leave, reasonable overtime, medical treatment as necessary and appropriate etc.
3. Promotion, reward and punishment to employees are in good faith and neutrally which based on the capability and suitability of the staff.
4. Providing care to employees in the work environment with safety to healthcare and their properties
5. Develop staff to increase their skills and potential by offer opportunity for employees to learn thoroughly and regularly.
6. Strictly cope with legal and regulations related to employee
7. Avoid any action of unfairness which may affect the stability of the employee and treat employees with courtesy.

(5) Responsibility for Consumer

The Company is committed to delivering quality and standard products and services while the offering price is reasonable, confidentiality of its customers seriously and consistently, constantly pursuit of opportunities to add value to its customers and cope with the conditions made by the customers strictly. The guidelines are as following:

1. Delivering quality products that meet the needs of customers under the fair condition.
2. Constantly developing products and services which add value to the business and to add value to its customers.
3. Provide accurate information about products and services to customers with enough information to make decisions.
4. Maintain client confidentiality, and do not apply to own advantage or related wrongful.

(6) Responsibility for Environment

The Company recognizes the importance of environmental preservation not to cause pollution problems including global warming which affects the quality of human life and the ecosystem. The Company has a policy of not taking any action to result in damage to natural resources and the environment. The guidelines are as following:

1. Use resources more efficiently by means of energy saving and recycling resources
2. Develop products and services that do not affect the environment and is safe to use.
3. Use technology and production process with standards by taking into account of the reduction of pollutants and waste treatment before being released to the environment.
4. Support activities that will contribute to social and environmental regularly.

(7) Community and Society Development

The Company has a policy to promote the use of business processes to benefit the quality of life, create a stronger economy, community and society. The guidelines are as following:

1. Supporting employment in the community.
2. Seeking opportunities to support social and community activities.
3. Building awareness about social and environmental responsibility among employees at all levels.
4. Strictly controlling practices to comply with laws and regulations issued by regulatory agencies

(8) Dissemination of Innovation for Responsibility of Social, Environmental and Stakeholders

The Company recognizes that all stakeholders have an important role in determining the direction of the business. It is important to take care of and take into account all stakeholders, both internally and externally. The Company has a policy to encourage the participation of stakeholders (Co-Creation) in developing innovations that create a balance between value and benefits to the community, society and the environment, coupled with the growth of sustainable businesses. The guidelines are as following:

1. Analyzing operating processes in details, which may lead opportunities to discover business innovation
2. Creating opportunities to invent new products with stakeholders, to grow with stakeholder while creating sustainable profit.
3. Collaborating with government agencies in the development of products to help the disadvantaged in society

To have everyone notice the corporate social responsibility policy in the organization, the Company will publish such policies over the communication channels, such as email newsletters, annual report disclosures (56-1) and annual reports (56-2). The policy will be reviewed on a yearly basis.

Implementation and Report Preparation

Social responsibility policies and guidelines above are parts of the Company's business which the Company and its subsidiaries have been followed along. The Company has operations in accordance with policies and guidelines from source of supply (high raw materials quality at reasonable prices), to achieve fairly competitive and avoid accomplice with competitor to take out other business. The Company has no intention of purchasing raw material from any suppliers in particular. The purchasing orders of raw material are made from several suppliers so that the Company can compare prices and increased bargaining power.

For the production process, the Company checks and ensures quality control from the beginning of the production process until the last step before delivering to customers, including providing advice in bringing its products to the customer's production processes to reduce cycle time in manufacturing as well as marketing to follow up after sales to listen to the feedback from customers and improve, develop new products to meet the needs of the customers even more.

The business of the Company and its subsidiaries rely on knowledge, skill, and experience employees. The Company management realized the importance of human resources and promoting new personnel with the knowledge and capability to keep pace with changes in technology by arrange a training seminar for employees which give an opportunity for employees to learn new technology from direct oversea manufacturer.

Business Operation that Impacts the Social Responsibility

-none-

Corporate Social Responsibilities After Process

The Company has a policy to support the society and the environment activities when there is a reasonable opportunity.

Prevention in Involvement with Corruptions

“Corruption” means use of power or use of property that is in an inappropriate way, such as the benefit for own self, families, friends, acquaintances or any other advantage possible which caused damage to the interests of others. Corruption can occur in several ways, such as bribery by providing either money or goods, money laundering, embezzlement, concealment of facts and obstruction of justice etc.

The Company and its subsidiaries have been aware of the importance of anti-corruption. In the past, the Company establishes guidelines for the proper conduct of the Board of Directors, management and employees in business ethics and corporate governance. The Company has to take into account the damage caused by corruption. The Board of Directors' Meeting No. 1/2014 on February 20, 2014 has implemented anti-corruption by preventing directors, executive officers and employees of the Company and its subsidiaries to act related to all forms of corruption to directly or indirectly gain benefits for themselves, their family, friends and acquaintances whether they are as a recipient or provider, either in monetary or non-monetary form to the state agency or private agency that conducts businesses with the Company or its subsidiary. The Company and its subsidiaries conduct business by the following guidelines:

1. Create a corporate culture of integrity and fairness.
2. Do not receive or provide bribery from/to stakeholders in their own responsibility either directly or indirectly in order to obtain benefits in any way.
3. Procurement / commissioning must be taken through the steps by regulations of the Company with transparency.
4. Avoid conflicts of interest which could lead to corruption, such as holding shares in the competitors company, avoiding the use of inside information for own advantage to buy or sell shares of the Company, or giving inside information to others.
5. Responsible for the preparation of financial reports with accurate and complete in accordance with generally accepted accounting standards.
6. Providing a strong effective internal control system and evaluate internal controls each year, the Company has hired an outside company (Outsource) to serve as an internal auditor to evaluate the risks and unusual transactions which will present to the Audit Committee at least every 3 months.
7. If witness any action related to the corruption associated with the Company either directly or indirectly, the person should inform the committee immediately. The Company will maintain the confidentiality of the reporter.

To have everyone notice the anti-corruption policy in the organization, The Company will publish such policies over the communication channels such as email newsletters, annual report disclosures (56-1) and annual reports (56-2). The policy will be reviewed on a yearly basis.

Internal Control and Risk Management

Adequacy of Internal Control System Assessment by Board of Directors

At the meeting of Board of Directors No. 1/2019 dated February 25, 2019 with participation of Audit Committee. The Board of Directors had assessed internal control system by inquiring information from management on the adequacy of internal control system of the Company in 5 areas consisting of organization and environment, risk management, management control, information system and data communications, and monitoring system. After the assessment, the Board of Directors believed that the Company has the adequate internal control system for transactions with major shareholders, directors, executives or related persons and the Company had sufficient internal control in all 5 areas which are appropriate and sufficient to protect its assets from misuse or unauthorized use by the management. Also, the Company has an independent internal control system, which can be tracked and assessed including the storage system of important documents for examination as in appropriate by directors, auditors and person in authority.

Auditor Observations on the Company's Systems of Internal Control

From review of the Company's internal control system for the year 2018, the auditor reported to Audit Committee's Meeting No.1/2019 dated February 25, 2019 that there was no significant issue of internal control system so that there was no report of auditor observations on the Company's systems of internal control in 2018.

Observation of Internal Auditor on the Internal Control Systems

At the meeting of Committee No. 1/2018 dated February 23, 2018 the Company hired MMN Syndicate Co., Ltd. to audit internal control in 2018. MMN Syndicate Co., Ltd. assigned Mr. Marnit Aongphisud to audit internal control of the Company

The Audit Committee has considered qualification of the MMN Syndicate Co., Ltd. and Mr. Marnit Aongphisud, believe that they are qualify for the giving tasks. Mr. Marnit Aongphisud is a certify auditor who has knowledge and experience in accounting system and internal control as well, to be the consultant of the Company's internal control system including with assesses risks and directly report about the irregular transactions to Audit Committee. The Company's internal control department has responsibilities for cooperating and being the Audit Committee's secretary including with learning with the expert in order to apply in the future. The internal auditor assesses risks, makes annual internal audit program, audits, follows up with the system improvement and directly report to the Audit Committee at least every quarter. The main objective is to evaluate the effectiveness and adequacy of the internal control system, compliance with policies and regulations Including the suitability and reliability of financial reporting of the Company. In the past, auditors have audited the operations of the Company. The management realized that important of system and adjusted as auditor recommended. The appointment, transfer and dismissal of internal auditor must be approved by the Audit Committee.

Related Transactions

The Related Transactions in 2018

Detail as describe in the Notes to Financial Statements No. 7 Related Party Transactions. Related parties comprise enterprises and individuals that control, or are controlled, by the Company, whether directly or indirectly, or which under common control with the Company. They also include associated companies and individuals which directly or indirectly own a voting interest in the Company that gives them significant influence over the Company, key management personnel, directors, and officers with authority in the planning and direction of the Company's operations.

Measures or Procedures for Related Transaction Approval

The entry of any related transaction with the person who may have a conflict of interest must be submitted to the Audit Committee to consider and approve in the best interest of the Company and to protect investors and persons related to the Company. Such related transactions shall be in accordance with the rules regarding securities and the stock exchange and regulations, notifications, orders or rules of the Stock Exchange of Thailand. A person who may have any conflict of interest in the related transactions shall not be allowed to participate in an approval of such transactions.

For the regular traded transactions such as purchases or sales of products from a related company, the Company has the policy to comply such transactions with the normal trade practice with appropriate prices and conditions. However, the price shall not be higher than the price that the Company can purchase from other distributors. Such transactions will be examined by the Audit Committee every quarter and the reasonable of the transactions will be considered through market price, condition, and the necessity of the effect on Company businesses such as delivery period or qualification of product. This is for the best interest of the Company.

Trend of Related Transactions in the Future

Related transactions that may occur in the future will have similar conditions with the normal trade practice with reference to appropriate prices and market conditions. However, the Company and/or the Company group shall invite the Audit Committee and/or independent directors to comment on the price including the necessity and appropriateness of such transaction. If there is any transaction related to any person who might has a conflict of interest with the Company in the future, the Company shall perform in accordance with regulations, notifications, and/or rules of the Office of the Securities and Exchange Commission and/or the Stock Exchange of Thailand. The Company may invite an independent specialist or an auditor of the Company to make a comment on such transaction to supplement the Board of Directors or shareholders determination, depending on the circumstance. At all events, the Company group will disclose related transactions in the supplementary notes to the financial statement which is audited by the auditor of the Company.



Financial Information

Balance Sheet

Unit: THB

Balance Sheet	Consolidated Financial Statements					
	As of 31/12/2016		As of 31/12/2017		As of 31/12/2018	
	Amount	%	Amount	%	Amount	%
Assets						
Current Assets						
Cash and cash equivalents	264,934,113	20.75	137,849,567	8.64	203,507,945	12.26
Temporary investment	715,802	0.06	655,513	0.04	633,613	0.04
Trade and other receivables	231,888,752	18.16	275,268,157	17.25	293,847,597	17.71
Inventories	178,572,915	13.99	210,785,882	13.21	253,640,241	15.28
Other current assets	772,888	0.06	2,277,843	0.14	4,120,390	0.25
Total current assets	676,884,470	53.01	626,836,963	39.29	755,749,786	45.54
Non-Current Assets						
Restricted deposits at financial institutions	1,760,000	0.14	3,100,000	0.19	3,358,400	0.20
Property, plant and equipment	546,067,691	42.77	921,605,200	57.77	861,921,419	51.94
Intangible assets	51,133,522	4.00	42,980,218	2.69	35,607,814	2.15
Other non-current assets	974,827	0.08	864,798	0.05	2,914,714	0.18
Total non-current assets	599,936,040	46.99	968,550,216	60.71	903,802,347	54.46
Total Assets	1,276,820,510	100.00	1,595,387,179	100.00	1,659,552,133	100.00
Liabilities						
Current Liabilities						
Overdrafts and short-term loans from financial institutions	63,025,326	4.94	108,123,451	6.78	92,158,824	5.55
Trade and other payables	137,776,455	54.39	166,611,421	10.44	122,898,675	7.41
Short-term loans	10,745,285	0.84	5,413,104	0.34	1,510,033	0.09
Current portion of long-term loan from related parties	15,607,732	1.22	66,577,203	4.17	82,899,986	5.00
Accrued corporate income tax	8,514,824	0.67	10,906,517	0.68	6,728,168	0.41
Other Current Liabilities	-	-	9,063	0.00	102,754	0.01
Total current liabilities	235,669,622	18.46	357,640,759	22.42	306,298,440	18.46
Non-Current Liabilities						
Long-term loans	2,774,665	0.22	114,355,666	7.17	112,807,228	6.80
Deferred tax	3,885,936	0.30	3,424,216	0.21	3,267,436	0.20
Employee benefit obligations	10,992,683	0.86	16,261,745	1.02	14,558,336	0.88
Total Non-Current Liabilities	17,653,284	1.38	134,041,627	8.40	130,633,000	7.87
Total	253,322,906	19.84	491,682,386	30.82	436,931,440	26.33
Shareholders' Equity						
Authorized share capital	300,000,340	23.50	300,000,340	18.80	300,000,340	18.08
Issued and paid up share capital	300,000,340	23.50	300,000,340	18.80	300,000,340	18.08
Premium on share capital	214,951,946	16.83	214,951,946	13.47	214,951,946	12.95
Retained Earning:						
Appropriated for legal reserve	29,862,606	2.34	30,000,034	1.88	30,000,034	1.88
Unappropriated	373,006,031	29.21	455,201,420	28.53	560,524,397	33.78
Adj. from the combination of entity under common controls	808,592	0.06	(13,796,314)	(0.86)	(21,167,815)	(1.28)
Total equity attributable to parent company	918,629,515	71.95	986,357,426	61.83	1,084,308,9	65.34
Non-controlling interests	104,868,089	8.21	117,347,367	7.36	138,311,791	8.33
Total Shareholders' Equity	1,023,497,604	80.16	1,103,704,793	69.18	1,222,620,693	73.67
Total Liabilities and Shareholders' Equity	1,276,820,510	100.00	1,595,387,179	100.00	1,659,552,133	100.00

Statement of Income

Unit: THB

Statement of Income	Consolidated Financial Statement					
	2016		2017		2018	
	Amount	%	Amount	%	Amount	%
Revenues						
Revenue from sales and services	819,098,036	99.14	996,703,520	99.25	1,113,201,111	99.61
Other income	7,106,425	0.86	7,512,685	0.75	4,347,009	0.39
Total Revenues	826,204,461	100.00	1,004,216,205	100.00	1,117,548,120	100.00
Expenses						
Cost of sales and services	497,137,165	60.17	587,657,007	58.51	673,593,192	60.27
Selling and administrative expenses	161,513,297	19.55	186,211,839	18.54	192,569,029	17.23
Interest expenses	7,663,431	0.93	10,652,761	1.06	17,691,608	1.58
Total cost and expenses	666,313,893	80.65	784,431,607	78.11	833,853,830	79.09
Profit before tax	159,890,568	19.35	219,784,598	21.89	233,694,290	20.91
Income tax	17,493,130	2.12	38,315,770	3.82	25,165,679	2.25
Net Profit	142,397,438	17.24	181,468,828	18.07	208,528,611	18.66

Net profit (loss) attributable to:

Owner of the Company	117,885,777	14.27	148,296,624	14.77	174,287,748	15.60
Non-controlling interests	24,511,661	2.97	33,172,204	3.30	34,240,863	3.06
Net profit	142,397,438	17.24	181,468,828	18.07	208,528,611	18.66

Basic Earning per share

Net profit attributable to owner of the Company	0.4476	0.4943	0.5810
Weighted average number of share	263,381,611	300,000,340	300,000,340

Statement of Comprehensive Income

Unit: THB

Statement of Comprehensive Income	Consolidated Financial Statement					
	2016		2017		2018	
	Amount	%	Amount	%	Amount	%
Net Profit for the year	142,397,438	17.24	181,468,828	18.07	208,528,611	18.66
Remeasurements of post-employment benefit obligations	110,420	0.01	34,871	0.00	(2,496,386)	(0.22)
Gains on remeasuring available-for-sale investment	3,553	0.00	9,251	0.00	14,966	0.00
Foreign currency transaction difference for foreign operations	(6,232,647)	(0.75)	(24,735,576)	(2.47)	(12,685,601)	(1.14)
					193,361,590	17.30
Total comprehensive income for the year	136,278,764	16.49	156,733,252	15.61	208,528,611	18.66

Net profit (loss) attributable to:

Owner of the Company	114,052,950	13.80	132,629,602	16.05	163,738,911	14.65
Non-controlling interests	22,225,814	2.69	24,103,650	2.92	24,103,650	2.65
Total comprehensive income for the year	136,278,764	16.49	156,733,252	18.97	156,733,252	17.30

Statements of Cash Flow

Unit: THB

Statements of Cash Flow	Consolidated Financial Statement		
	2016	2017	2018
Cash Flows from Operating Activities			
Net Profit before income tax	159,890,568	219,784,598	233,694,290
Adjustments to reconcile net earnings before tax to net cash provided by (used in) operating activities:			
Depreciation & Amortization	97,133,961	102,337,662	150,679,252
(Reversal of) allowance for doubtful accounts	(1,271,710)	853,559	(692,238)
Loss (Gain) from Reducing Inventory Value	6,429,873	4,779,744	4,546,017
(Gain) Loss on sales of fixed asset	(425,220)	(536,406)	(160,772)
(Gain) Loss on unrealized exchange rate	(1,100,220)	(312,805)	119,861
Employee benefit obligations	1,024,805	1,449,671	1,268,055
Finance cost	7,663,431	10,652,761	17,691,608
Profit from operating activities before change in operational assets and liabilities	269,345,488	339,008,784	407,146,073
Decrease (Increase) in operational assets:			
Trade and other receivables	(45,149,712)	(43,987,985)	(19,805,486)
Inventories	(26,867,448)	(36,992,712)	(47,400,375)
Other current assets	1,895,377	(1,310,689)	(1,842,546)
Other non-current assets	302,240	110,029	(201,024)
Decrease (Increase) in operational liabilities:			
Trade and other payables	12,940,368	(2,519,607)	7,114,274
Other current liabilities	9,063	(445,127)	93,691
Cash received (paid) from operations	176,914,786	196,561,211	269,420,895
Cash paid for employee benefits	(4,499,800)	(202,400)	(5,636,150)
Cash paid for finance cost	(6,898,136)	(10,164,366)	(17,248,944)
Cash paid for corporate income tax	(12,795,639)	(36,580,065)	(29,500,809)
Net cash flows from (used in) operating activities	172,367,636	222,474,064	292,718,704
Cash flows from investing activities			
Cash paid for purchases of investment	(712,400)	-	-
Cash paid for fixed assets acquisition	(111,141,185)	(457,447,134)	(138,963,326)
Proceeds from disposal of fixed assets	822,271	659,934	1,564,590
Cash received from sale of long-term investment	1,244,150	-	-
Purchase of long-term investment	-	-	-
Increase in restricted deposits at financial institutions	708,600	(1,340,000)	(258,400)
Net Cash Used in Investing Activities	(77,692,172)	(109,078,564)	(137,657,136)
Cash Flow from Financing Activities			
Increase (Decrease) in bank overdrafts and short-term loans from financial institution	(16,508,137)	45,103,764	(15,964,627)
Cash paid for liabilities under financial lease contracts	(1,566,023)	(2,168,875)	(1,640,033)
Short-term loans	(2,430,783)	(5,332,181)	(3,903,071)
Proceeds from long-term loans	-	197,953,286	93,354,749
Repayment of long-term loans	(29,293,404)	(36,697,681)	(77,875,680)
Dividend paid	(31,295,010)	(65,998,678)	(66,000,053)
Proceed from non-controlling interests in share capital of subsidiaries	573,429	4,154,236	8,153,098
Dividend paid by subsidiaries to non-controlling interests	(5,843,272)	(14,681,620)	(16,598,735)
Cash received from capital increment from exercise right	159,520,358	-	-
Net Cash Provided by (Used in) financial activities	73,157,158	122,322,251	(80,474,352)
Effect from foreign exchange in cash and cash equivalents	15,337	100,156	(147,231)
Net Increase (Decrease) in Cash and Cash Equivalents	134,286,864	(127,084,546)	65,658,378
Cash and cash equivalents at beginning of year	130,647,249	264,934,113	137,849,567
Cash and cash equivalents at end of year	264,934,113	137,849,567	203,507,945



Financial Ratios

Financial Ratios		Consolidated Financial Statements		
		2016	2017	2018
Liquidity Ratios				
Current Ratio	(Times)	2.87	1.73	2.47
Quick Ratio	(Times)	2.11	1.14	1.62
Operating Cash Flow to Current Liabilities Ratios	(Times)	0.75	0.74	0.88
Accounts Receivable Turnover	(Times)	3.91	3.93	3.91
Average Collection Period	(Days)	93	93	93
Inventory Turnover	(Times)	2.95	3.02	2.90
Average Day's Sales in Inventory	(Days)	124	121	126
Accounts Payable Turnover	(Times)	6.33	5.95	4.65
Average Payment Period	(Days)	58	61	78
Cash Cycle	(Days)	159	153	141
Profitability Ratios				
Gross Profit Margin	(%)	39.31%	41.05%	39.49%
Operation Profit Margin	(%)	20.28%	22.95%	22.49%
Operating Cash Flow to Operating Profit Ratio	(%)	102.87%	96.54%	116.44%
Net Profit Margin	(%)	17.24%	18.07%	18.66%
Comprehensive Income Margin	(%)	14.27%	14.77%	15.60%
Return on Equity	(%)	14.78%	15.57%	16.83%
Efficiency Ratios				
Return on Total Assets	(%)	10.25%	10.33%	10.71%
Return on Fixed Assets	(%)	41.77%	36.19%	40.28%
Total Asset Turnover	(Times)	0.72	0.70	0.69
Financial Policy Ratios				
Debt to Equity Ratio	(Times)	0.28	0.50	0.40
Interest Coverage Ratio	(Times)	27.84	26.49	18.97
Fixed Charged Coverage Ratio (cash basis)	(Times)	0.87	0.38	0.96
Dividend Payout Ratio	(%)	42.37%	44.51%	37.87%
Earning Per Share	(Baht)	0.4476	0.4943	0.5810

Management Discussion and Analysis: MD&A

Analysis of Performance for the Year of 2018

Halcyon Technology Public Co., Ltd. or “HTECH” and subsidiaries had the operation results for the year ended 31 December 2018 with the following details.

Unit: THB Million	2017	2018	Change	
			THB Million	%
Revenue from Sales and Service	996.70	1,113.20	116.50	10.47
Total Revenue	1,004.22	1,117.55	113.33	10.14
Net Profit for the Year	181.47	208.53	27.06	12.98
Net Profit for Shareholders of the Company	148.30	174.29	25.99	14.91

The Company had a revenue structure for the Company and its subsidiaries by business segment as follows:

Business Segment	2017		2018		Change	
	THB mill.	%	THB mill.	%	THB mill.	%
Sales Revenue from Customized Cutting Tools ¹	509.89	50.77	591.03	52.89	81.15	15.91
Sales Revenue from Standard Cutting Tools ²	426.96	42.52	457.48	40.94	30.51	7.15
Sales Revenue from Tooling & Metal Fabrications ³	59.85	5.96	64.69	5.79	4.84	8.08
Other Revenue ⁴	7.51	0.75	4.35	0.39	(3.17)	(42.14)
Total	1,004.22	100.00	1,117.55	100.00	113.33	11.29

Remarks: ¹ Sales revenue from the Company HTECH, and subsidiaries HP+ATEK and HV

² Sales revenue from subsidiaries FDM, HS, HY, HI and HENG

³ Sales revenue from subsidiary HM

⁴ Other revenue consisting of proceeds from disposal equipment, gain from exchange rate, interest income, etc.

Revenue

For the year ended 31 December 2018, the Company and its subsidiaries had a total revenue of THB 1,117.55 million, increasing THB 113.33 million, or 11.29% from THB 1,004.22 million in 2017. The increase in revenue is mainly due to the growth in revenue from the Company and subsidiaries in Thailand, which increased THB 104.51 million, accounting for 89.71% of the total change. The Company had an increase in revenue of THB 57.55 million (related transactions eliminated), while the three subsidiaries in Thailand had a total increase of THB 46.96 million (related transactions eliminated).

Main revenue for the Company and subsidiaries are from customers in 2 main industries: manufacturers of Hard Disk Drive (HDD) and manufacturers of automotive. Since the second half of 2016 to the year 2018, the HDD industry in the country has been growing continuously due to major HDD makers expanding their production capacity as well as moving production base into Thailand. In 2016, the Company made decisions to set up an additional factory building to expand production capacity to support the increasing demands from the customers, because currently the Company's capacity is not enough to serve the customers. Machines had been purchased and installed throughout the year 2017 until the construction of the new factory is completed, and the Company commenced production officially on 1 December 2017 at the same time to start utilizing BOI tax benefits. In Q4/2018, the HDD industry started to show signs of a slowdown resulting from the decline in global demands due to the economy, as well as an effect from the trade war between China and the US. And with the fourth

and first quarters of each year being a low season period for the customers in the HDD sector, orders had declined towards the end of year 2018. Overall, the sales revenue of the Company was THB 506.87 million in 2018, increasing THB 42.61 million or 9.18% from 2017; and the total revenue was THB 546.45 million, increasing THB 36.17 million or 7.09% from the previous year (the Company also received more dividend from subsidiaries from THB 27.71 million in the previous year to THB 31.94 million this year, or increasing THB 4.22 million).

Even though the sales to the HDD sector did not grow continuously as expected, the Company still gained advantage from the recovery of the automotive industry in Thailand, resulting in continuous growth in sales for Halcyon Tools and Engineering Co., Ltd. (HENG), our new subsidiary distributor in the Eastern Region established in Q4/2017. HENG had a total revenue of THB 39.70 million in 2017, and THB 50.78 million in 2018 (increasing 27.92%). Also, FDM Technology, another subsidiary with its main customer base in the automotive industry also had similar growth from THB 144.92 million to THB 176.18 million (increasing 21.57%).

The total revenue from overseas subsidiaries in year 2018 increased THB 11.99 million mainly from the establishment of the manufacturing factory in Vietnam, resulting in the 32.38% increase in sales revenue of Halcyon Technology Vietnam Co., Ltd. from THB 21.43 million to THB 28.36 million. However, the strengthening of Thai Baht in 2018 comparing to other currencies in the region and USD causes the growth in revenue from overseas subsidiaries to be less than actual when converting to Thai Baht, especially for the subsidiaries in the Philippines, Indonesia, and Vietnam. The difference in the exchange rate as mentioned affects the growth approximately 5-10%.

Other income in 2018 was THB 4.35 million, decreasing from 7.51 million baht of the previous year. Other income includes gains from the sales of fixed assets, gains from foreign exchange rate, interests, sales of scraps, etc.

Cost of Goods Sold and Gross Profit

Cost of goods sold for the Company and subsidiaries mainly consists of cost of raw materials, depreciation, and labor. In 2018, the Company and subsidiaries had a total cost of goods sold of THB 673.59 million, which is 60.51% of the sales revenue, compared to previous year of THB 587.57 million or 58.95%. The increase in proportion is due mainly to the depreciation of the new building and machines for the Company and subsidiary HV. Depreciation increased from THB 95.10 million in 2017 to THB 143.51 million in 2018, while other cost structure did not have any significant changes. This resulted in the gross profit of THB 439.61 million in 2018, increasing 7.45% from THB 409.14 million in the previous year, but the gross profit margin decreasing from 41.05% to 39.49% of the sales revenue.

Selling and Administrative Expenses

Selling and administrative expenses of the Company and subsidiaries include selling expenses such as salary for sales employees, commission fee, exporting costs, etc. and administrative expenses such as expense related to directors and office employees, director's remunerations, office rental, professional fees, etc. In 2018, the Company and subsidiaries had a total expense of THB 192.57 million, compared to THB 186.21 million of the previous year, increasing THB 6.36 million or 17.30%. The proportion of selling expense decreased slight from 5.68% to 5.23% because mainly the selling expense consists of sales commission which changes directly according to sales, similar to other selling expenses. Administrative expenses decreased more from 13.00% to 12.07% because the Company did have any additional administrative expenses, except the yearly adjustments of salary and bonus for the employees, which are the main administrative expenses.

Net Profit

The consolidated financial statements show a net profit for the year 2018 of THB 208.53 million; while the net profit attributable to the shareholders of the Company is THB 174.29 million. The net profit margin is 18.66% and 15.60% of the total revenue, respectively (compared to 18.07% and 14.77% from the same period of previous year). The separate financial statements show a net profit for the year 2018 of THB 139.03 million, or 25.44% of the total revenue (compared to 24.80% in the previous year). Overall, the group had an increase in net profit due to the increase in revenue. However, the gross profit margin has dropped from the previous year mainly due to the increase in cost from the Company, which started fully realizing the depreciation from the new factory building in 2018. The proportion of expenses to revenue decreased slightly. Even though the Company had an increase in financial cost of THB 7.04 million from previous year due to additional loans to pay for the building constructions and machines; because the Company began exercising BOI tax privilege, which exempts the corporate income tax for the revenue from the new factory, the tax expense decreased THB 13.15 million from the previous year. Therefore, overall net profit improved slightly from the previous year.

Analysis of Financial Status for the Year of 2018

Assets

Total asset value at the end of the year 2018 was THB 1,659.55 million, consisting of current assets of THB 755.75 million and non-current assets of THB 903.80 million, representing 45.54% and 54.46% of the total assets respectively. The main assets consist of the following:

(1) Cash and equivalents at the end of 2018 were THB 203.51 million, increasing from THB 137.85 million at the end of 2017, or increasing THB 65.66 million or 47.63% from previous year. This derived from cash flows from operating activities of THB 292.72 million, increasing THB 70.24 million from the previous year due to increased revenue. Cash flows used in investing activities were THB 137.66 million, decreasing THB 458.13 million from the previous year. Cash was used mainly to purchase new machines to reduce bottlenecks in production. Cash flows used in financing activities were THB 80.47 million, compared to gaining THB 127.08 million in the previous year. In 2017, the Company has a high value of overdrafts and short-term loans from financial institutions of THB 197.95 million to pay for the new machines and construction of the new factory building, while reducing in 2018 to THB 93.35 million with more cash to repay the loans. Overall, this resulted in significantly more cash and equivalents at the end of the year.

(2) Trade account receivables at the end of 2018 were THB 293.85 million, increasing from THB 275.27 million at the end of 2017. Account receivables not yet due are THB 178.22 million, accounting for 60.65% of the total; overdue less than three months are THB 82.03 million, accounting for 27.92%; and overdue more than three months are THB 8.29 million, accounting for 2.82%. The average collection period is the same as previous year at 93 days, while the Company's credit terms customers are approximately 30 – 90 days and 90 days for subsidiaries. Since some subsidiary HV recently started operating and still have low liquidity, there are some delays in payments to the Company, resulting in the total overdue account receivables from related parties of THB 17.70 million from the total account receivables for the Company only of THB 135.98 million. However, this does not increase the Company's risk from bad debts. For other unrelated debtors, the Company has policies to evaluate trade credit in order to lower the risk of bad debts as well

(3) Inventory at the end of 2018 was THB 253.64 million, increasing from THB 210.79 million of the previous year, due to the stock of finished goods and partially finished goods to support the product distribution of subsidiaries in overseas and locally. The inventories consist of raw materials, work in process, and finished goods. The Company has policy to set an

allowance for obsolete inventory by considering various factors including the ability and potential to sell the item in the future, how long the item has been in inventory and item life cycle, movement of the item, etc. The items will be reviewed at least every three months or every quarter. However, most of the obsolete items are mostly partially finished goods prepared as spare items in addition to customer's orders. These items are cutting tools that can be modified to be sold again. At the end of 2018, the Company sets an allowance for obsolete items at THB 27.43 million, compared to THB 22.89 million of the previous year.

(4) Property, plant and equipment (net) at the end of 2018 were THB 861.92 million, decreasing from THB 921.60 million at the end of 2017 due mainly to the depreciation of THB 143.51 million from the Company's new factory building and machines. Total PPE purchase value was THB 89.19 million in building improvements and new machines installed during the year to reduce bottlenecks in production.

(5) Intangible assets including market share and relationship with customers from the investments in FDM, HS and HY, at the end of 2018 were THB 35.61 million, decreasing from THB 42.98 million at the end of 2017, due to amortization during the year. As a result, the investments allowed for the group to expand its customer base both locally and into markets in Singapore and Malaysia. The Company can also sell certain products at a higher price because the Company can sell directly to the customers without going through a distributor. Moreover, the Company has acquired experienced personnel with knowledge and experience in the respective markets to oversee management.

Liabilities

At the end of 2018, the Company and subsidiaries had total liabilities of THB 436.93 million, decreasing from THB 491.68 million in the previous year, while most liabilities are in the form of current liabilities. Total current liabilities were THB 306.30 million, decreasing from THB 357.64 million in the previous year; and total non-current liabilities were THB 130.63 million, also decreasing from 134.04 million. The decrease in liabilities is mainly from the liabilities of the Company due to its expansion of production capacity and the need to use a lot of money in the previous years, and in 2018 the Company had already paid part of the liability reducing its total value. The main liabilities are as follows:

(1) Bank overdrafts and short-term loans from financial institutions at the end of 2018 were THB 92.16 million baht, compared to THB 108.12 million baht in the previous year, decreasing THB 15.96 million, while the Company's accounted for THB 14.64 million in the form of promissory notes with an interest rate of MLR-1.5%.

(2) Trade and other payables at the end of 2018 were THB 122.90 million, compared to THB 166.61 million of the previous year, decreasing THB 43.71 million. This includes decrease in payable from purchase of fixed assets of THB 50.69 million. Other items were THB 6.98 million, including trade payables, accrued expense and other.

(3) Long-term loans at the end of 2018 were THB 112.81 million, compared to THB 114.36 million of the previous year, decreasing THB 1.55 million. The long-term loans consist of 8 loans from financial institutions of THB 191.57 million less the current portion of long-term loan of THB 82.90 million.

Shareholders' Equities

At the end of 2018, the Company's shareholders' equities attributable to owners of the Company were THB 1,084.31 million, increasing from THB 986.36 million at the end of 2017, which include paid-up capital of THB 300.00 million, premium on share capital of THB 214.95 million with no change from the previous year. Appropriated legal reserve at the end of 2018

was THB 30.00 million, and unappropriated retained earnings were THB 560.52 million. Other components of shareholders' equity were THB -21.17 million.

Analysis of Financial Ratios for the Year of 2018

Liquidity

Cash flows from operating activities in 2018 were THB 292.72 million compared to THB 222.83 million, increasing THB 69.89 million mainly due to the increase of net profit of THB 68.14 million. Cash flows used investing activities in 2018 were THB 137.66 million, mainly from purchase of additional machine to reduce bottlenecks in production and building improvements for the new factory building. Cash flows used in financing activities were THB 80.47 million from repaying the loans from financial institutions. At the end of 2018, the Company and subsidiaries had cash and equivalents of THB 203.51 million, compared to THB 137.85 million at the end of 2017 with operating cash flow to current liabilities ratio improving from 0.74 to 0.88, while overall current ratio increased from 1.73 to 2.47 due to lack of liquidity from the business expansion in 2017.

Average collection period for the group in 2018 was 93 days, same as the previous year but the average payment period was 78 days compared to 61 days of the previous year, resulting in the cash cycle of 141 days, compared to 153 days in the previous year.

Return on Equity

Return on equity for the year 2018 was 16.83% compared to 15.57% in the previous year. Dividend payout ratio was 41.31% of net profit, compared to 42.48% in the previous year, which were 0.24 baht per share in 2018 and THB 0.21 per share in 2017. Earnings per share were 0.5810 baht, compared to 0.4943 baht in the previous year. Overall, return on equity for the year increased from the previous year due to increasing net profit from THB 148.30 million to THB 174.29 million, resulting from the additional production capacity to support the demands in the main customers in HDD industry, which has been growing continuously in the past year, and the growth of subsidiaries both locally and overseas.

The Significant Financial Changes after December 31, 2018

The Company's Board of Directors Meeting No. 1/2019 held on 25 February 2019 passed the resolution to propose to the Annual General Shareholders Meeting for approval of additional dividend payment from the operational performance for the year 2018 at the rate of THB 0.12 per share or approximately THB 36.00 million. The Company will identify the rightful shareholders who may receive dividend on 8 May 2019 (Record Date) and will pay dividend on 28 May 2019.

Report from the Board of Directors for the Responsibilities on the Financial Statements

Dear Shareholders,

The Board of Directors is responsible for the financial statements of Halcyon Technology (Public) Company Limited and consolidated financial statements of the Company and its subsidiaries as well as the information shown in the annual report. The financial statements have been prepared in accordance with the generally accepted accounting principles in Thailand using the appropriate accounting policies on the consistent basis. Crucial information was sufficiently disclosed in Notes to Financial Statements for the advantages of the shareholders and general investors.

The Board of Directors has appointed the Audit Committee to oversee the accounting policies and the accuracy of financial reports, including the review of the internal control system. The opinion of the Audit Committee is presented in the Audit Committee's Report, included in this annual report. Moreover, the Company's external auditor also gives opinion towards financial statements of the Company and subsidiary presented in Report of Certified Public Accountant which is also included in this annual report.

The Board of Directors has the opinion that the Company's overall internal control system is adequacy and be assured that the financial reports of the Company for the year ended December 31, 2018 are accurate and fairly stated, as well as in the compliance with the relevant laws and regulations.



(Lieutenant General Preecha Wanarat)

Chairman



(Mr. Pete Rimchala)

Managing Director

Audit Committee's Report

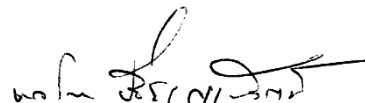
The Company's Audit Committee consists of the 3 independent directors in accordance with the qualification and rules stipulated by The Stock Exchange of Thailand are as following:

- | | |
|---------------------------------------|---------------------------------|
| 1. Lieutenant General Preecha Wanarat | Chairman of the Audit Committee |
| 2. Mr. Narong Rattana | Audit Committee |
| 3. Mrs. Chollada Fuvatanasilp | Audit Committee |

Mrs. Chollada Fuvatanasilp, member of the Committee who possesses knowledge and experience in the accounting field. All of the Audit Committee members do not have any vested interest in the Company. Neither are they shareholders, management, staffs, and employees of the Company.

The Audit Committee has performed its duties within scope of work authorized by the Company's Board of Directors. Its primary responsibilities have been to conduct a review in order that the Company has a financial report that is correct and transparent, to review that the Company has good corporate governance in line with the corporate governance principles. In this regard, the Audit Committee conducted 4 meetings in 2018, the content of which can be summarized as follow:

1. **The Accuracy of Financial Statement:** The Audit Committee reviewed and provided independent opinions in respect of the quarterly and yearly financial statements prior to submission to the Company's Board of Directors for approval. A meeting with the Company's authorized financial auditor was set in order to propose clarification, observations, and recommendation. The Audit Committee had an opinion that the Company's financial statements are accurate, complete and reliable.
2. **The Adequacy of Internal Control System:** The Audit Committee evaluated the adequacy of the Company's internal control system including the review of the internal audit report and had an opinion that the Company's internal control system is adequate and appropriate.
3. **Corporate Governance:** The Audit Committee had an opinion that the Company complies with the principles of good corporate governance adequately and appropriately. The Audit Committee intends to perform its duty under the good corporate governance conducts and be responsible to monitor that the Company's operations and activities follow the policy of the Board of Directors on the efficient transparent and legitimate manner, and to protect the interest of all shareholders with good care and fair treatment.
4. **Transaction that may have Potential Conflict of Interest:** The Audit Committee considered the related transactions or transaction which may have potential conflict of interest every quarter and had opinion that the related transactions for the year of 2018 were in the ordinary business condition, reasonable and most beneficial to the Company.
5. **The Appropriateness of Auditor:** The Audit Committee made the selection of auditor by considering the independence and appropriateness of auditor and their remuneration. A resolution was made and proposed to the Company's Board of Directors for approval and to be certified by the annual general meeting of shareholders.



(Lieutenant General Preecha Wanarat)
Chairman of the Audit Committee

Attachment 1

Information of the Company's Directors and Executives

Information of the Company's Directors and Executives

(1) Lt. Preecha Wanarat

Position held	Chairman of the Board / Chairman of Audit Committee / Chairman of Nomination and Remuneration Committee / Independent Director		
Education Background	<ul style="list-style-type: none"> - Master of Arts (Military Science), Royal Thai Army Command and General Staff College - Bachelor of Science, Chulachomkiao Royal Military Academy 		
Certificate Programs	Director Accreditation Program (DAP) from Thai IOD		
Work experience (within the last 5 years)	2012 – 2014	Independent Director / Audit Committee	IRPC Public Co., Ltd.
	2012 – Present	Chairman of the Nomination and Remuneration Committee	Halcyon Technology Public Co., Ltd.
	2008 – Present	Chairman of Board of Directors/ Chairman of Audit Committee / Independent Director	Halcyon Technology Public Co., Ltd.
	2006 – Present	President	Aiyapura Resort & Spa (World Residence Natural Beach Resort Co., Ltd.)

(2) Mrs. Chollada Fuvatanasilp

Position held	Director / Audit Committee / Nomination and Remuneration Committee / Independent Director		
Education Background	<ul style="list-style-type: none"> - Master Degree of Political Science (MPA), National Institute of Development Administration (NIDA) - LL.B, SukhothaiThammarat University - Bachelor Degree of Law (Accounting) (BBA), Ramkhamhaeng University 		
Certificate Programs	<ul style="list-style-type: none"> - Director Certification Program (DCP) from Thai IOD - Public Administration and Law for Executives, King Prajadhipok's Institute - Thailand and the ASEAN Economic Community, King Prajadhipok's Institute - TLCA Executive Development Program, Thai Listed Companies Association - Thai Intelligent Investor Program (TIIP), Thai Investors 		
Work experience (within the last 5 years)	2012 – Present	Nomination and Remuneration Committee	Halcyon Technology Public Co., Ltd
	2010 – 2017	Director	Federation of Accounting Professions
	2017 – Present	Director's Consultant	Federation of Accounting Professions
	2010 – 2015,	Tax Committee	Board of Trade of Thailand
	2017 – Present		
	2008 – Present	Director / Audit Committee / Independent Director	Halcyon Technology Public Co., Ltd.
	2007 – Present	VP. – Tax Department	PTT Public Co., Ltd.

(3) Mr. Narong Rattana

Position held	Director / Audit Committee / Independent Director		
Education Background	<ul style="list-style-type: none"> - The Master's Degree of Engineering, Urban Transportation Planning, Villanova University, USA - The Bachelor's Degree of Engineering, Chulalongkorn University 		
Certificate Programs	Director Accreditation Program (DAP) from Thai IOD		
Work experience (within the last 5 years)	2009 – Present	Independent Director	Thai Non-Destructive Testing Public Co., Ltd.
	2008 – 2019	Director / Audit Committee / Independent Director	Halcyon Technology Public Co., Ltd.
	2008 – Present	Advisor, Senior Executive Program	Office of the Civil Service Commission (OCSC)
	2004 – Present	Director	High Quality Cements Co., Ltd.
	2004 – Present	Director	Thai – German Institute
	2004 – Present	Consultant	Mittraphap Product Public Co., Ltd.

* Mr. Narong Rattana has resigned from the Independent Director and Audit Committee positions, and the Company has appointed Mr. Viboon Pojanalai to replace him, effective 1 March 2019

(4) Mr. Pete Rimchala

Position held	Director / Nomination and Remuneration Committee / Managing Director		
Education Background	<ul style="list-style-type: none"> - Faculty of Technical Education and Science in Mechanical Engineering, King Mongkut's Institute of Technology North Bangkok 		
Certificate Programs	<ul style="list-style-type: none"> - Director Accreditation Program (DAP) from Thai IOD - Financial Management for Executives from Chulalongkorn University 		
Work experience (within the last 5 years)	2016 - Present	Director	Halcyon Tools and Engineering Co., Ltd.
	2014 - Present	Director	PT HTECH Indonesia
	2014 – Present	Director	Halcyon Technology Vietnam Co., Ltd.
	2013 – Present	Director	Halcyon Technology Singapore Pte. Ltd.
	2012 – Present	Director	FDM Technology Co., Ltd.
	2011 – Present	Nomination and Remuneration Committee	Halcyon Technology Public Co., Ltd.
	2011 – Present	Director	Atek Precision Tools Inc.
	2010 – Present	Director	Halcyon Technology (Philippines) Inc.
	2010 – 2012	Director	Haltek Co., Ltd.
	2002 – Present	Managing Director	Halcyon Technology Public Co., Ltd.
	1993 - Present	Managing Director	Halcyon Metal Co., Ltd.

(5) Mr. Norawee Changlum

Position held	Director / Executive Vice President		
Education	- Master of Business Management, Bangkok University		
Background	- Bachelor of Art (Communication Design Arts), Bangkok University		
Certificate Programs	- Director Accreditation Program (DAP) from Thai IOD - Financial Management for Executives from Chulalongkorn University - Certificate Program for Thai Company Secretary		
Work experience (within the last 5 years)	2012 – Present	Director	FDM Technology Co., Ltd.
	2010 – Present	Director	Halcyon Metal Co., Ltd.
	2010 – Present	Director	Halcyon Technology Public Co., Ltd.
	2010 – 2019	Company Secretary	Halcyon Technology Public Co., Ltd.

(6) Mr. Soraj Sutanadhan

Position held	Director		
Education	- Master of Information Systems, New Jersey Institute of Technology		
Background	- Faculty of Engineering, Chulalongkorn University		
Certificate Programs	- Director Accreditation Program (DAP) from Thai IOD - Financial Management for Executives from Chulalongkorn University		
Work experience (within the last 5 years)	2014 – Present	Director	Atek Precision Tools Inc.
	2014 – Present	Director	Halcyon Technology (Philippines) Inc.
	2013 – Present	Director	Halcyon Technology Public Co., Ltd.
	2010 – Present	Director	Halcyon Metal Co., Ltd.

(7) Ms. Sasipimol Wasuwat

Position held	Executive Vice President / Finance Manager		
Education	- Bachelor of Business Management (Accounting), Rajamangala Institute of Technology		
Background	Phra Nakhon		
Work experience (within the last 5 years)	2011 – Present	Executive Vice President	Halcyon Technology Public Co., Ltd.
	2010 – 2011	Finance Manager	Halcyon Technology Public Co., Ltd.
	2008 – 2011	Accounting Manager	Halcyon Technology Public Co., Ltd.
	2008 – Present	Finance & Accounting Manager	Halcyon Metal Co., Ltd.

Attachment 2

List of Directors of Subsidiaries

List of Directors of Subsidiaries

Halcyon Metal Co., Ltd.

Halcyon Metal Co., Ltd. has 3 directors as follows:

- | | |
|-------------------------|-------------------------------------|
| 1. Mr. Pete Rimchala | Director / Managing Director |
| 2. Mr. Soraj Sutanadhan | Director / Executive Vice President |
| 3. Mr. Norawee Changlum | Director |

FDM Technology Co., Ltd.

FDM Technology Co., Ltd. has 5 directors as follows:

- | | |
|--------------------------------|------------------------------|
| 1. Mr. Suwan Aramwatanapong | Director / Managing Director |
| 2. Mr. Rattipat Aramwatanapong | Director |
| 3. Mr. Pete Rimchala | Director |
| 4. Mr. Chua Cheng Khuan | Director |
| 5. Mr. Norawee Changlum | Director |

Halcyon Tools and Engineering Co., Ltd.

Halcyon Tools and Engineering Co., Ltd. has 5 directors as follows:

- | | |
|--------------------------------|------------------------------|
| 1. Mr. Kridsana Wattanasiri | Director / Managing Director |
| 2. Mr. Rattipat Aramwatanapong | Director |
| 3. Mr. Suwan Aramwatanapong | Director |
| 4. Mr. Pete Rimchala | Director |
| 5. Mr. Chris Rimchala | Director |

Halcyon Technology (Philippines) Inc.

Halcyon Technology (Philippines) Inc. has 5 directors as follows:

- | | |
|--------------------------------|------------------------------|
| 1. Mr. Pete Rimchala | Chairman of the Board |
| 2. Mr. Hamilcar Azarias | Director / Managing Director |
| 3. Mr. Chua Cheng Khuan | Director |
| 4. Mr. Rattipat Aramwatanapong | Director |
| 5. Mr. Soraj Sutanadhan | Director |

ATEK Precision Tools Inc.

ATEK Precision Tools Inc. has 4 directors as follows:

- | | |
|-------------------------|------------------------------|
| 1. Mr. Pete Rimchala | Chairman of the Board |
| 2. Mr. Hamilcar Azarias | Director / Managing Director |
| 3. Mr. Chua Cheng Khuan | Director |
| 4. Mr. Soraj Sutanadhan | Director |

Halcyon Technology Singapore Pte. Ltd.

Halcyon Technology Singapore Pte. Ltd. has 3 directors as follows:

- | | |
|-------------------------|------------------------------|
| 1. Mr. Tian Shan Hsiang | Director / Managing Director |
| 2. Mr. Pete Rimchala | Director |
| 3. Mr. Chua Cheng Khuan | Director |

Halcyon Technology (M) Sdn. Bhd.

Halcyon Technology (M) Sdn. Bhd. has 3 directors as follows:

- | | |
|--------------------------------|------------------------------|
| 1. Mr. Chen Wai Leong | Director / Managing Director |
| 2. Mr. Chua Cheng Khuan | Director |
| 3. Mr. Rattipat Aramwatanapong | Director |

Halcyon Technology Vietnam Co., Ltd.

Halcyon Technology Vietnam Co., Ltd. has 3 directors as follows:

- | | |
|-------------------------|------------------------------|
| 1. Mr. Tran Huu Quang | Director / Managing Director |
| 2. Mr. Pete Rimchala | Director |
| 3. Mr. Chua Cheng Khuan | Director |

PT HTECH Indonesia

PT HTECH Indonesia has 5 directors as follows:

- | | |
|--------------------------------|------------------------------|
| 1. Mr. Alvin Ahthur | Director / Managing Director |
| 2. Mr. Tay Beng Hian | Director |
| 3. Mr. Pete Rimchala | Director |
| 4. Mr. Chua Cheng Khuan | Director |
| 5. Mr. Rattipat Aramwatanapong | Director |

Attachment 3

Financial Statements for the Year 2018

QR Code for Downloading the Financial Statements

The Company's Financial Statements for the year 2018 can be downloaded from the QR Code below, or from the Company's website at www.halcyon.co.th under the "Investor Relations" menu >> Financial Information >> Financial Statements.



Information Regarding the Financial Statements

The Financial Statements as of 31 December 2018 was reviewed by Miss Jintana Mahavanichl, CPA License No. 4687 from C&A Audit Office Co., Ltd., who was agreed that the financial statements of the Company shows the balance sheet and statement of income correctly according to general accounting practices. The auditor's remunerations for the year 2018 are as follows:

Auditor's Remunerations	Amount (baht)
Audit fee for the Company	1,200,000
Audit fees for subsidiaries in Thailand	
- Halcyon Metal Co., Ltd.	600,000
- FDM Technology Co., Ltd.	370,000
- Halcyon Tools & Engineering Co., Ltd.	170,000
Fees for BOI Statement Review	
- Halcyon Technology Public Co., Ltd.	40,000
- Halcyon Metal Co., Ltd.	40,000
Transportation Fees	
- Halcyon Technology Public Co., Ltd.	43,200
- Halcyon Metal Co., Ltd.	28,800

