

Construction Machinery Industry in Thailand

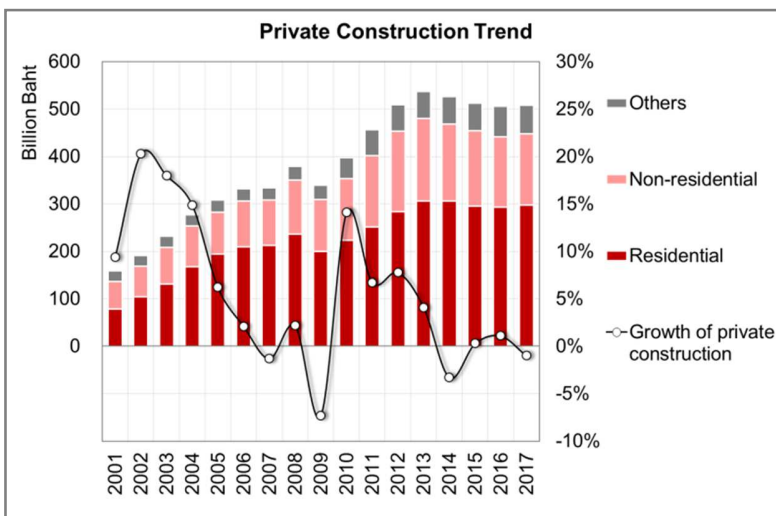
1. Thailand's Construction Situation

The construction investment in Thailand has moved in tandem with economic performance. **Over the past three years, following the acceleration of mega infrastructure investment, the public investment contributed to the growth of construction in Thailand.**



Private Construction:

- Private construction has decelerated since 2014 as a consequence of a continual decline in residential construction. The gloomy economic climate and high household debts caused the slowdown in housing demand.
- However, Bangkok's construction has rebounded since the 2nd quarter of 2017, whereas it has continually declined in other regions.
- Private construction is expected to recover in tandem with the economic and investment growth as well as the public construction expansion over the upcoming years.



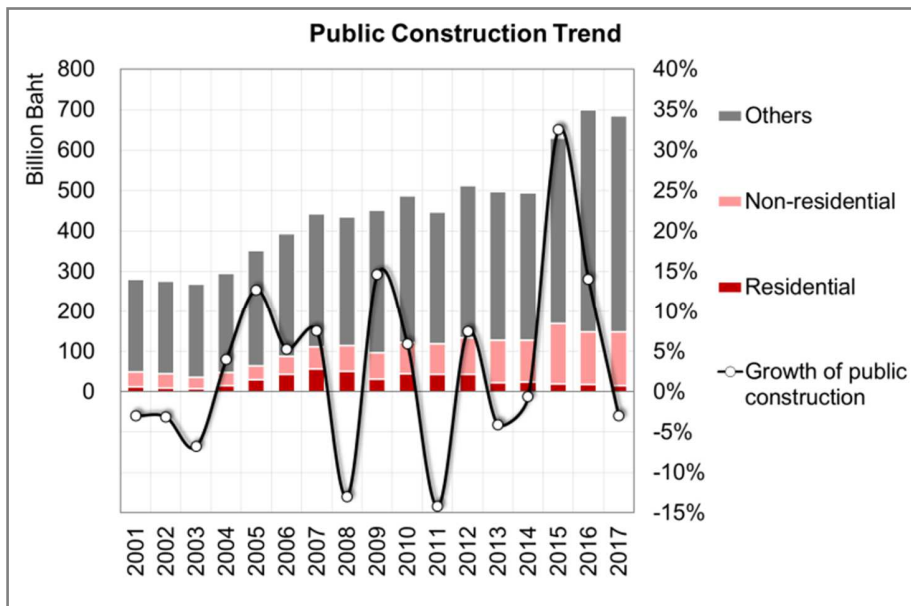
Residential: low-rise (i.e. single house, townhouse), high-rise (i.e. condominium, apartment, flat)

Non-residential: i.e. office building, factory, warehouse, retail center, hospital, and school

Others: non-building construction or infrastructure establishment (i.e. road, railway, port, and dam)

Public Construction:

- In 2017, there was a decline in public construction due mainly to the delay in budget disbursement due to flooding in several areas and the new government procurement act's enforcement.
- However, the public construction remained high compared with 2014, thanks to the investment in several mega projects on transport infrastructure. Also, the public construction is likely to accelerate next year following the increase in the annual government budget and the construction phase of several projects.



Major Infrastructure Investment Projects under Transport Action Plan

Projects		Construction stage			
		2017	2018	2019	2020
Road					
Intercity Motorway:	Pattaya - Map Ta Phut	[Progress bar]			
	Bang Pa In - Nakhon Ratchasima	[Progress bar]			
	Bang Yai - Kanchanaburi	[Progress bar]			
	Thonburi - Mahachai	[Progress bar]			
	Nakhon Pathom - Cha Am	[Progress bar]			
	Had Yai - Malaysia Border	[Progress bar]			
	Rangsit - Bang Pa In	[Progress bar]			
Express Way:	Rama3 - Dao Kanong - Outer Ring (west)	[Progress bar]			
	3 rd Phase Expressway's Northern Section in Bangkok (N2) and East - West Corridor	[Progress bar]			
	Kratu - Patong (Phuket)	[Progress bar]			

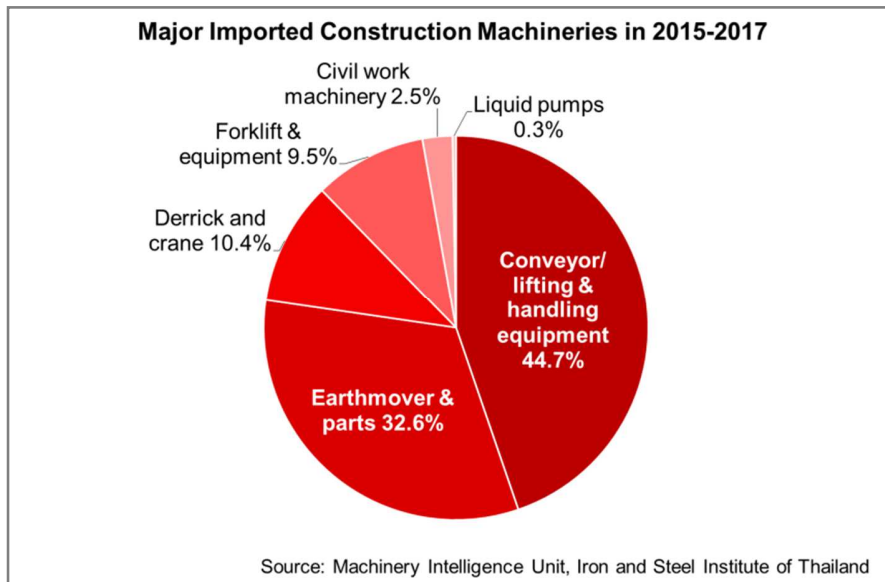
Rail				
Dual-track Rail:	Jira - Khon Kaen			
	Prachuab Khiri Khan - Chumporn			
	Mab Krabao - Jira			
	Nakhonpathom - Hua Hin			
	Lop Buri - Pak Nam Pho			
	Hua Hin – Prachuab Khiri Khan			
	Pak Nam Pho - Denchai			
	Jira Junction - Ubon Ratchathani			
	Khon Kaen - Nong Khai			
	Chumporn - Surat Thani			
	Surat Thani - Had Yai - Songkhla			
	Had Yai - Padang Besar			
	Denchai - Chiang Mai			
	Mass Rapid Transit:	Orange Line: Thailand Cultural Center - Minburi		
Orange Line: Talingchan - Thailand Cultural Center				
Pink Line: Khae Rai – Minburi				
Yellow Line: Lad Phrao - Samrong				
Purple Line: Tao Poon - Rath Burana				
Commuter Train:	Dark Red Line: Rangsit - Thammasat University			
	Light Red Line: Talingchan - Salaya - Siriraj			
High Speed Train:	Bangkok - Nakhon Ratchasima			
	High speed train linking 3 major airports (Don Muang, Suvarnabhumi, & U Ta Pao)			
	Bangkok – Hua Hin			
Light Rail:	Light rail network in Phuket			
	Light rail network in Chiang Mai			
Airport				
	Suvarnabhumi Airport: Phase II			
	Regional Airport: Phase I (Mae Sot, Betong, Krabi, Sakolnakorn)			
	Khon Kaen Airport			
	U Ta Pao Airport (Maintenance, Repair and Overhaul: MRO)			
Seaport				
	Laem Chabang Port: Phase III			

Source: NESDB, Ministry of Transport, and Office of Transport and Traffic Policy and Planning
Note: The investment projects mentioned in the table include only the projects that are (or expected to be) under construction stage in 2017-2020. The completed and mostly completed projects (>90%) as of Feb 12, 2018 are excluded.

2. Thailand's Construction Machinery Industry & Market Performance

(1) Import

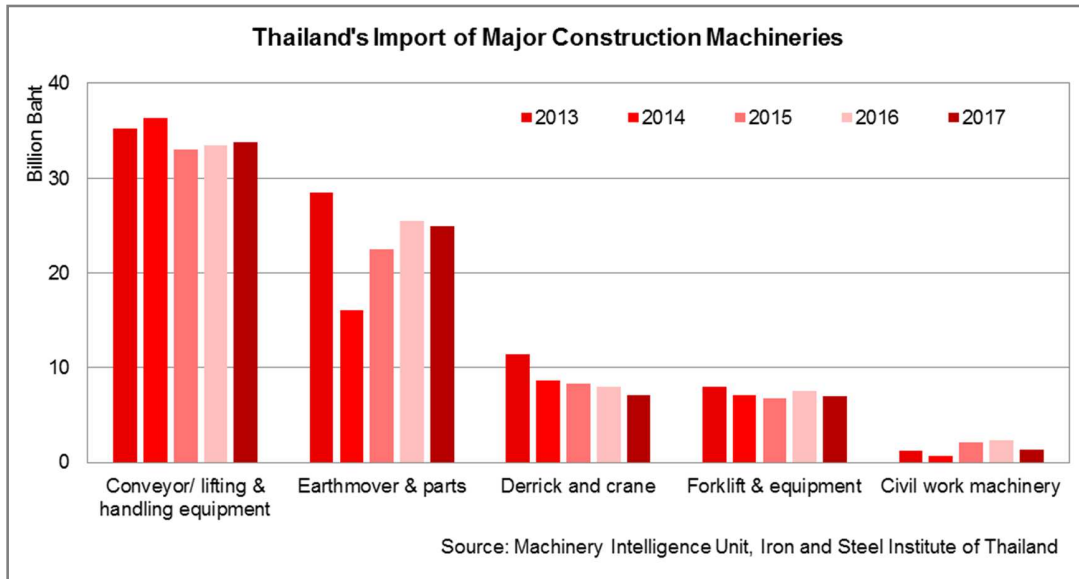
- **Only a few international leading construction machinery brands have production facilities in Thailand.** Therefore, construction machineries are imported every year to accommodate the country's growth in the construction sector.



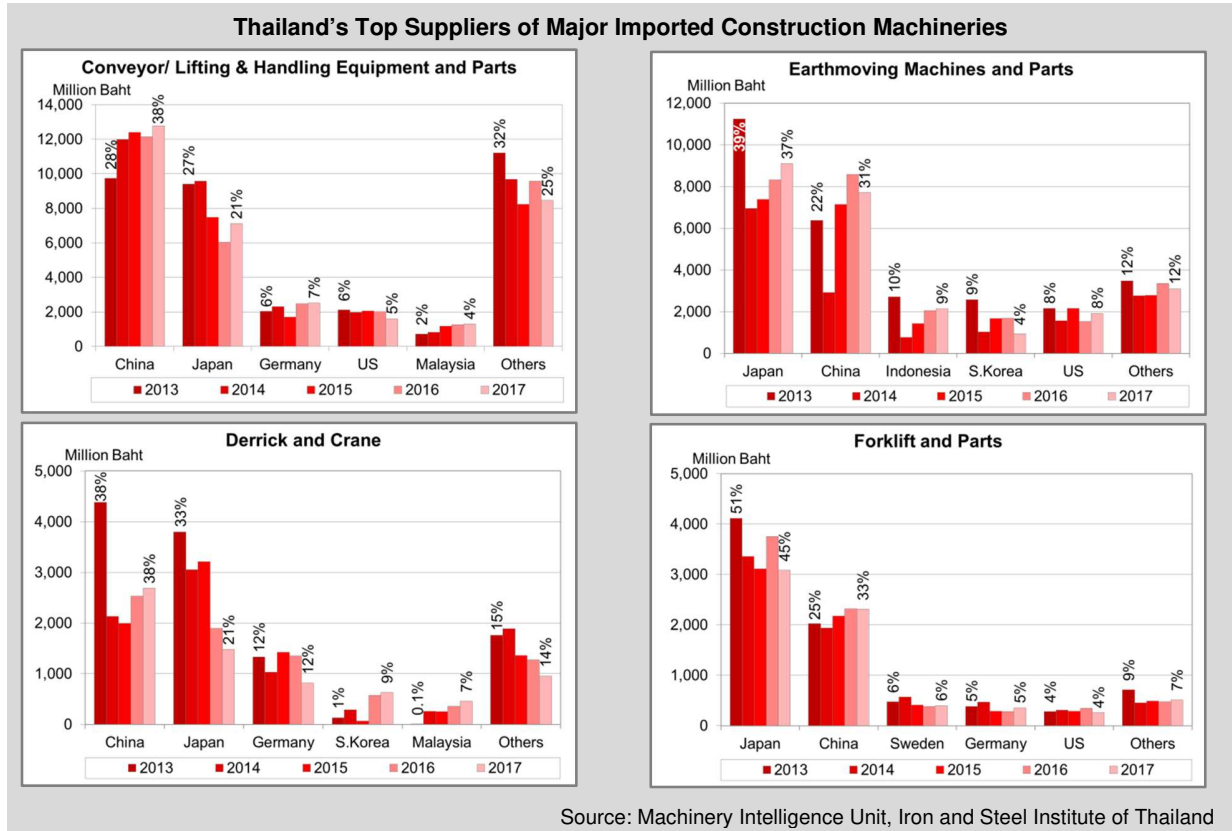
- **In 2017, Thailand's import of construction machinery valued around 74 billion baht,** according to the Machinery Intelligence Unit.
- **Main construction machinery imported into Thailand are lifting & handling equipment¹ and earthmoving machines²,** which have a combined share of 77% of total imported construction machinery.
- Despite the gloomy economic climate in 2015-2016, the import of earthmoving machines grew noticeably following the accelerating investment in public transport infrastructure projects. Nevertheless, the import slowed down in 2017 due mainly to delayed public investment and decline in private construction projects.

¹ Lifting & handling equipment includes pulley tackle and hoists, lifts and skip hoists, conveyors, and so on.

² Earthmoving machinery includes excavator, loader, pile-driver, road roller, grader, leveller, boring or sinking machinery, tunneling machine, and so on.

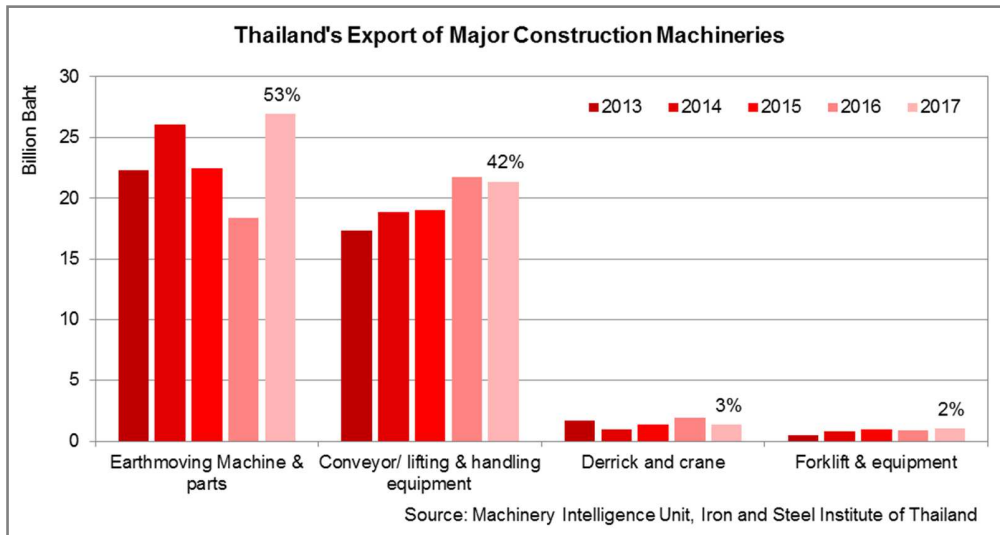


- **The machineries from China gain more popularity in the Thai market** because of pricing and affordability, increased overall quality, and warranty and after-sales services. The competitive price of Chinese machinery is believed to affect the Japanese and Western used machinery market.
- However, **Japanese heavy machineries, especially earthmoving machines, and forklift still command a significant market share in imported machinery** due to its quality and strong brand recognition.

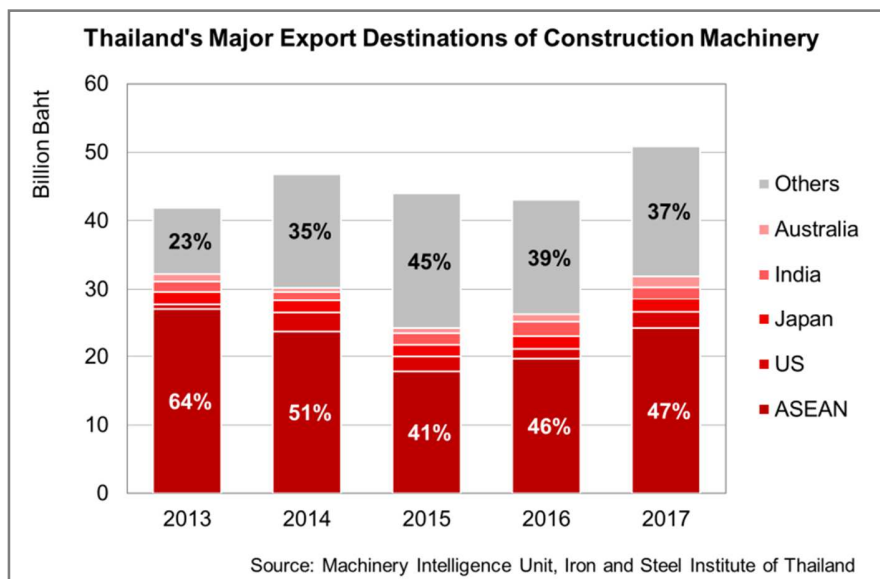


(2) Export

- Despite having a few domestic manufacturers, Thailand exports a significant number of excavator and loader since they used Thailand as their regional manufacturing base.
- **Earthmoving machines and parts held the largest share of Thailand's construction export**, followed by conveyor/ lifting and handling equipment.



- **Main export markets of Thailand's construction machinery are ASEAN countries**, which contributed nearly half of the total construction machinery export.



- In 2015-2016, there was a sharp decline in the export of construction machinery. This is due to the steep decline in the export of earthmoving machinery to Indonesia from weak domestic demand and depreciation of the Rupiah.

- However, the export of earthmoving machines rebounded in 2017 thanks to the global economic recovery and increasing demand from Indonesia, emerging markets, and developing countries.

(3) Structure of Construction Machinery Industry in Thailand

The construction machinery industry in Thailand is comprised of a number of both Thai and foreign manufacturers. Thai manufacturers mainly engage in low-medium technology equipment, such as concrete mixer, concrete batching plant, and machinery replacement parts. Meanwhile, the producers of heavy machinery and parts that require high technology and huge capital investment are foreign companies.

Earthmoving Machinery (Excavator & Loader)³

- Only a few foreign manufacturers with production facilities in Thailand and their primary operations are assembling. Some machinery parts are produced domestically, but the high-tech parts, i.e. engine, boiler, drivetrain, and controlling system, need to be imported.
- On the contrary, there are several distributors, either manufacturers' affiliated companies or independent distributors. Since only a few brands are manufactured domestically, the distributors or dealers offer more machineries and brands.
- Several companies offer support services, such as rental, leasing, maintenance, auction, etc. Some manufacturers and distributors also provide support services to their customers.
- Top brands in Thai market are **Komatsu, CAT, Kobelco, Hitachi, Volvo, and Sumitomo**.

(4) Competition in the Market

- There has been more intense competition in the construction machinery market in recent years due to several internationally recognized brands entering the market, and fierce marketing activities employed by the existing brands.
- The construction machinery distributors have been utilizing several strategies to maintain their competitive edge, such as expanding brand portfolio, expanding showroom and service center, partnering with financial institutions to offer an attractive leasing program, etc.

3. Major Players in Thailand's Construction Machinery Market

³ Summarized from the Report of Thailand's Construction Machinery Status provided by Iron and Steel Institute of Thailand (2014)

(1) Major Construction Machinery Manufacturers in Thailand

Company Name	Main Products	Company's Key Information												
Bangkok Komatsu Co., Ltd.	Hydraulic excavator	<ul style="list-style-type: none"> ➢ The company has fabrication and assembly plant of excavator in Thailand with an annual capacity of 6,000 units. ➢ Approximately 90% of the total output are exported to 25 countries worldwide. ➢ "Komatsu" holds the largest share in Thailand's excavator and loader market. ➢ The group has set up several subsidiaries in Thailand to provide a complete range of services to the customers as follow. <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Company</td> <td style="width: 50%;">Business</td> </tr> <tr> <td>Bangkok Komatsu Sales Co., Ltd.</td> <td>: Distribute "Komatsu" machine</td> </tr> <tr> <td>Bangkok Used and Rental Equipment Co., Ltd.</td> <td>: Sale and rental for used equipment</td> </tr> <tr> <td>Komatsu Bangkok Leasing Co., Ltd.</td> <td>: Construction machine leasing</td> </tr> <tr> <td>Komatsu Parts Asia & Pacific Co., Ltd.</td> <td>: Spare parts warehouse for South-East Asia</td> </tr> <tr> <td>Bangkok Komatsu Industries Co., Ltd.</td> <td>: Manufacture of "Komatsu" forklift casting iron parts and casting iron parts for construction machinery, agricultural machinery and trucks</td> </tr> </table>	Company	Business	Bangkok Komatsu Sales Co., Ltd.	: Distribute "Komatsu" machine	Bangkok Used and Rental Equipment Co., Ltd.	: Sale and rental for used equipment	Komatsu Bangkok Leasing Co., Ltd.	: Construction machine leasing	Komatsu Parts Asia & Pacific Co., Ltd.	: Spare parts warehouse for South-East Asia	Bangkok Komatsu Industries Co., Ltd.	: Manufacture of "Komatsu" forklift casting iron parts and casting iron parts for construction machinery, agricultural machinery and trucks
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Kobelco Construction Machinery Southeast Asia Co., Ltd. <i>(formerly known as "Thai Kobelco Construction Machinery Co., Ltd.")</i>	Excavator	<ul style="list-style-type: none"> ➢ The company is a manufacture of hydraulic excavators, sales and service operations of construction machinery in Southeast Asia. ➢ The company has two plants in Thailand. <u>1st plant</u> was opened in 1996 to supply fabrication parts to South East Asia. <u>2nd plant</u> was opened in 2008 to manufacture complete machinery. ➢ Ariya Equipment Co., Ltd. is the authorized dealer of "Kobelco" excavators in Thailand. 												
Caterpillar (Thailand) Co., Ltd.	Underground mining truck and loader, tractor	<ul style="list-style-type: none"> ➢ The company has its presence in Thailand to provide its technical services and product knowledge to the authorized dealers for more than 40 years. ➢ In 2012, the underground mining facility started production, while its first tractor was produced in 2013, mainly for export market. ➢ Caterpillar Leasing (Thailand) Ltd. was established in 1997 to provide financial services for customers. ➢ Metro Machinery Co., Ltd. is CAT's authorized dealer in Thailand since 1977. 												
Hidromek	Motor grader	<ul style="list-style-type: none"> ➢ The manufacture of motor grader was established in 												

Construction Equipment (Thailand) Co., Ltd.		<p>1993 as MHI-Pornchai Machinery Co., Ltd., which was a subsidiary of Mitsubishi Heavy Industries (MHI), to manufacture MHI products for the Middle East and Southeast Asia markets.</p> <ul style="list-style-type: none"> ➤ In 2014, Hidromek, the leading construction machinery manufacturer based in Turkey, acquired MHI motor grader operations and became the plant's owner in Thailand. ➤ In addition to the product portfolio expansion, the acquisition of MHI's motor grader operations also enables Hidromek to penetrate the Asia and ASEAN markets with its main products, i.e. loader and excavator ranges. ➤ Recently, the manufacture has an annual production capacity of 250 motor graders.
Liebherr (Thailand) Co., Ltd.	Mobile concrete truck mixer, stationary mixing plants	<ul style="list-style-type: none"> ➤ The manufacture has an annual capacity of 700 mobile truck mixers and 40 stationary mixing plants. ➤ The company produces and distributes mobile truck mixers and stationary mixing plants for the market in Southeast Asia. The company also imports and sells concrete pumps, which are made in Germany.

Source: Compiled from company's websites, and public news

(2) Major Construction Machinery Distributors in Thailand

Company Name	Main Products	Company's Key Information
Metro Machinery Co., Ltd.	CAT's machineries	<ul style="list-style-type: none"> ➤ The company is the authorized dealer of CAT machinery in Thailand for more than 30 years. Lately, there are 31 branches nationwide. ➤ It is also appointed to be the "CAT" authorized dealer in Lao PDR and Cambodia.
Ariya Equipment Co., Ltd.	Excavator, loader, paver	<ul style="list-style-type: none"> ➤ The company has engaged in the heavy machinery distribution business for almost 50 years. Recently, it has 28 branches nationwide. ➤ The company distributes several products and brands, which include Kobelco (excavator), Cheng Gong (loader), Sakai (paver), Hidromek (motor grader), and Everdigm (hydraulic braker).
Italthai Industrial Co., Ltd.	Excavator, loader, paver, compactor, crane, dump truck	<ul style="list-style-type: none"> ➤ The company distributes an extensive range of products and brands, such as Volvo, Power Curbers & Power Paver, SDLG, Bobcat, Tadano, Maeda, Yutong, Power Screen, etc. ➤ It has more than 14 branches in Thailand and Lao PDR.
Hitachi Construction Machinery (Thailand) Co., Ltd.	Excavator, loader	<ul style="list-style-type: none"> ➤ The company is the subsidiary of Hitachi Construction Machinery of Japan. In Southeast Asia, the group has production facilities in Malaysia and Indonesia. ➤ It distributes "Hitachi", "John Deere", and "Bell"

		<p>construction and forestry machineries in Thailand.</p> <ul style="list-style-type: none"> ➤ The group offers financial services through HTC Leasing Co., Ltd., a joint venture with the leading financial institutions in Thailand.
Wirtgen (Thailand) Co., Ltd.	Road construction and mining machinery	<ul style="list-style-type: none"> ➤ The company is a sale subsidiary of Wirtgen Group of Germany, which manufactures machineries under various brands including Wirtgen, Vogele, Hamm, Kleemann, and Ciber.
Leadway Heavy Machinery Co., Ltd.	Sumitomo's heavy machinery	<ul style="list-style-type: none"> ➤ The company is the exclusive distributor of Sumitomo's heavy machinery in Thailand since 2012. It has achieved 1,000 in sales within only five years of operation. ➤ In addition to Thai market, the company is also appointed as the official distributor of Sumitomo in Myanmar. ➤ The company's product portfolio include excavators, pavers, off-highway trucks (Brand: Terex), and used machines. ➤ As of March 2018, it has 11 branches, including head office. To support border area growth, the company plans to open more sales and service centers in the bordering provinces.
Aktio (Thailand) Co., Ltd.	Excavator, road equipment, forklift, crane	<ul style="list-style-type: none"> ➤ The company engages in the business of rental, import and export, and sales of used machines in Thailand since 1991. All machineries are imported from Japan. ➤ Recently, it has 8 branches, including head office, nationwide.
Watkinson Construction Equipment Co., Ltd.	Excavator, loader	<ul style="list-style-type: none"> ➤ The company has been appointed by "Case Construction" as the authorized dealer of construction machineries including excavator, loader, compactor, motor grader, and crawler dozer, in Thailand since 2014. ➤ In 2018, the company expanded its machinery portfolio by importing two more brands: RM (compact crusher) and Clark (forklift), to sell in the Thai market. ➤ As of March 2018, it has 7 branches in Thailand. The company planned to add 3 new branches within this year.

Source: Compiled from company's websites, and public news

4. Conclusion

- Thailand relies much on imported construction machinery to serve the growth of the construction sector. Since the past few years, various internationally recognized brands have entered the Thai construction market and marketed heavily to reap benefits from the expansion of the country's economy and construction sector.
 - The mega transport infrastructure construction and the future growth potential of the neighbouring emerging countries signal a promising future for the construction machinery industry in Thailand.
 - In the meantime, the locational advantage and logistics infrastructure readiness will attract more investment in construction machinery in the country to use as a regional distribution hub. Therefore, more intense competition in the market is expected.
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