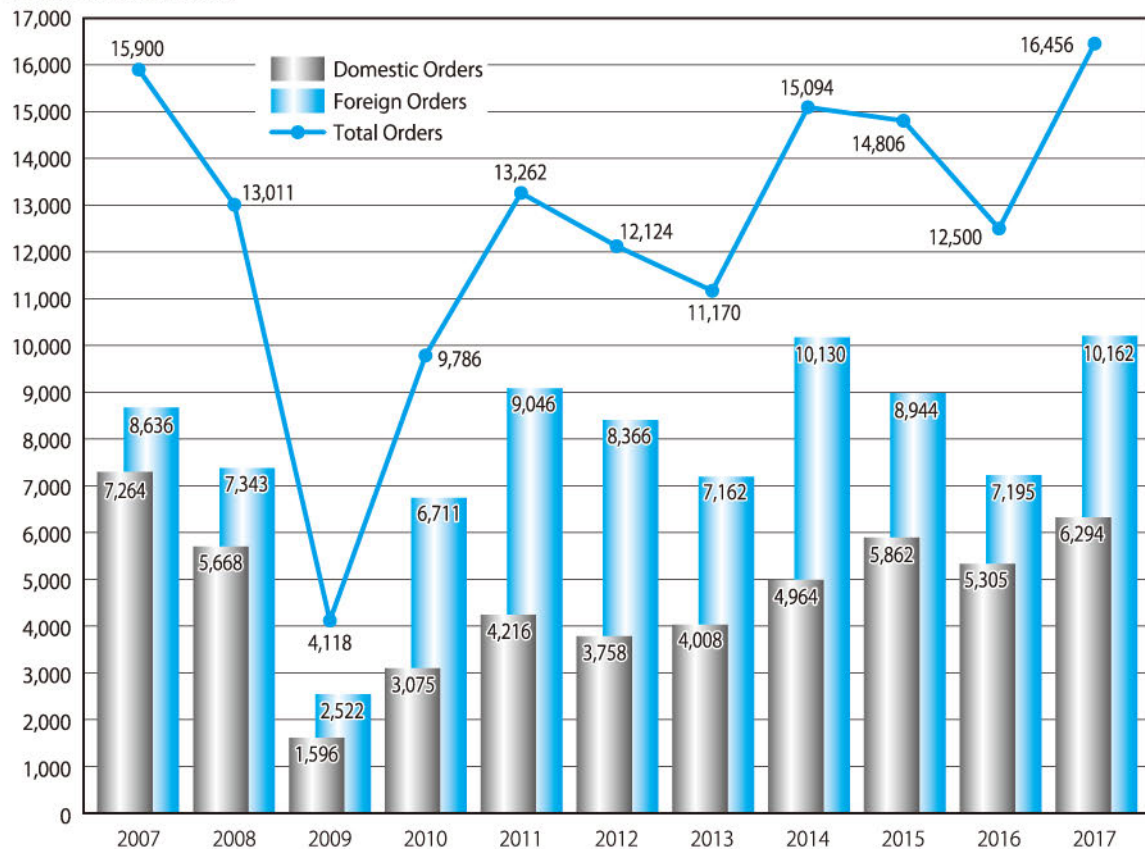


Trends in Orders of Machine Tools

Machine Tool Orders

(Value in 100 Millions of Yen)

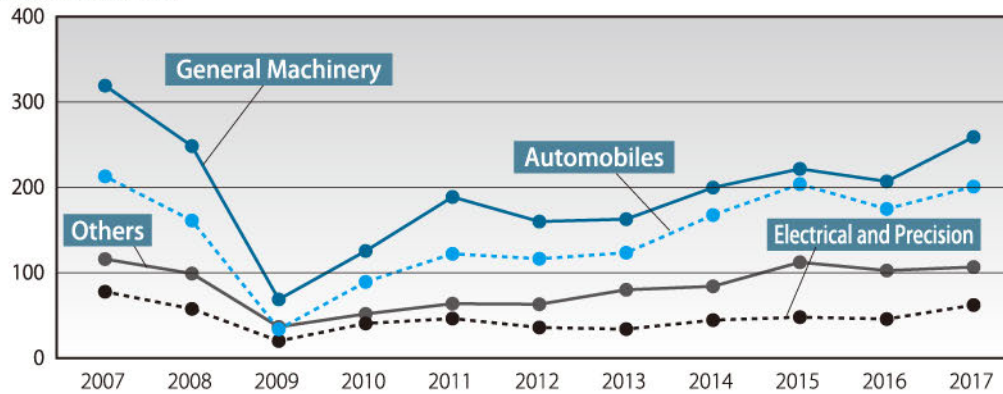


Source: JMTBA

- Since 1963, the Japan Machine Tool Builders' Association (JMTBA) has been compiling voluntary statistics from its members. This compilation is known as the Survey of Orders Received for Machine Tools.
- In 2017, the total amount of orders amounted to 1,645.6 billion yen, up 31.6% YOY. They topped 1.6 trillion yen for the first time, exceeding 1.59 trillion yen in 2007, and renewed the highest amount ever for the first time in ten years.
- Domestic orders increased to 629.4 billion yen, up 18.6 % YOY. They topped 600 billion yen for the first time since the Lehman Shock. At the beginning of the year, although the level was around 40 billion yen / month due to subsidy waiting, orders recovered after March as the result of adopted the subsidy, and in addition to subsidy related demand, automobile demand and semiconductor related demand pushed up domestic demand, and orders exceeding 50 billion yen for 10 consecutive months from March. Looking at major industries, orders for general machinery posted 259.1 billion yen, up 25.1%, for automobiles posted 201.1 billion yen, up 15.0%, for electrical equipment posted 37.1 billion yen, up 41.1%, for precision instruments posted 25.3 billion yen, and up 28.9%. In nine out of all 11 industries, mainly the major industries, exceeded the previous year's results.
- Foreign orders amounted to 1,016.2 billion yen, up 41.2% YOY. They topped 1,000 billion yen for the first time in three years since 2014 (1,013 billion yen), and marked the record high. In addition to the rapid recovery of the Chinese market from the first half of 2017, China's EMS-related special demand was reproduced again in March and high orders continued. In addition, continued recovery in the US and European markets, and the stable depreciation of the yen also contributed to the increase in external demand. By region, Asia amounted to 514.0 billion, up 79.1% YOY and marked the first year-on-year increase in three years and topped 500 billion yen for the first time in three years. Europe accounted for 213.7 billion yen, up 19.1%. This marked the first year-on-year growth in three years and topped 200 billion yen for the first time since Lehman shock, though various risk factors such as Brexit were existed. Order volume from North America amounted to 269.7 billion yen, up 13.7%, and marked the first year-on-year growth in three years. This topped 250 billion yen for the first time in two years and continued the high order level.

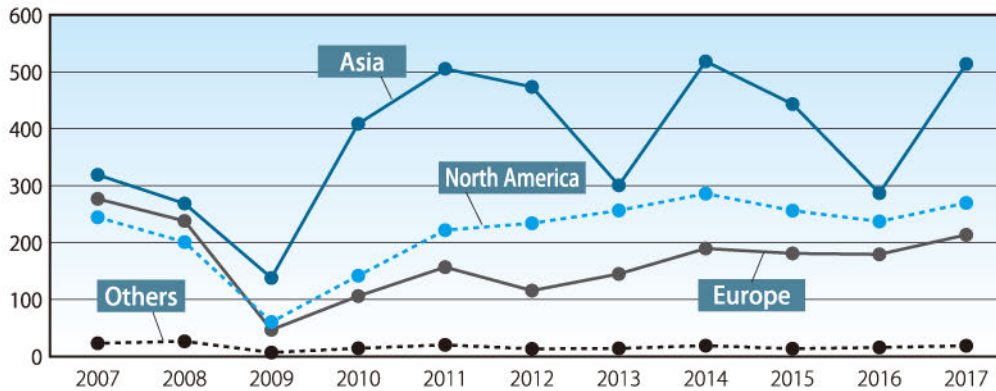
Domestic Orders: Trend of Order Value by Industry

(Value in Billions of Yen)



Foreign Orders: Trend of Order Value by Region

(Value in Billions of Yen)



Machine Tool Order by Type of Machine

(Value in Millions of Yen)

Type of Machine	Year	2015	2016	2017		
					'16/'15 (%)	Share (%)
Turning Machines		434,776 (427,808)	400,714 (394,001)	492,034 (486,213)	122.8 (123.4)	29.9 (30.1)
Drilling Machines		346 (7)	411 (76)	447 (263)	108.8 (346.1)	0.0 (0.0)
Boring Machines		15,815 (15,232)	12,080 (11,070)	14,120 (13,331)	116.9 (120.4)	0.9 (0.8)
Milling Machines		6,211 (5,418)	6,380 (5,471)	7,084 (5,670)	111.0 (103.6)	0.4 (0.4)
Grinding Machines		103,560 (94,687)	88,379 (81,808)	117,636 (109,279)	133.1 (133.6)	7.1 (6.8)
Gear Cutting & Finishing Machines		33,407 (32,916)	24,101 (23,417)	33,969 (33,735)	140.9 (144.1)	2.1 (2.1)
Special-Purpose Machines		34,758 (33,262)	34,274 (33,334)	28,669 (27,597)	83.6 (82.8)	1.7 (1.7)
Machining Centers		667,046 (667,046)	502,645 (502,645)	739,078 (739,078)	147.0 (147.0)	44.9 (45.7)
	Vertical	407,454 (407,454)	283,127 (283,127)	431,814 (431,814)	152.5 (152.5)	26.2 (26.7)
	Horizontal	198,355 (198,355)	171,839 (171,839)	247,001 (247,001)	143.7 (143.7)	15.0 (15.3)
	Other Machining Centers	61,237 (61,237)	47,679 (47,679)	60,263 (60,263)	126.4 (126.4)	3.7 (3.7)
Electrical Discharge Machines		49,248 (49,000)	41,652 (41,443)	49,918 (49,660)	119.8 (119.8)	3.0 (3.1)
Other Machine Tools		102,961 (92,164)	103,992 (97,128)	126,304 (115,095)	121.5 (118.5)	7.7 (7.1)
FMS		32,464 (32,464)	35,375 (35,375)	36,295 (36,295)	102.6 (102.6)	2.2 (2.2)
Total		1,480,592 (1,450,004)	1,250,003 (1,225,768)	1,645,554 (1,616,216)	131.6 (131.9)	100.0 (100.0)

Source: JMTBA
(): Share of NC Machine Tools