

The Current Condition of the Japanese Machine Tool Industry

Monthly Machine Tool Orders (May 2022)

The total value of machine tool orders in May was 153.33 billion yen. This was a decrease of 1.1% compared to April 2022 and marked the consecutive month-on-month decline in two months. However, this figure represented an increase of 23.7% compared to the same month of the previous year and marked the nineteenth consecutive month of year-on-year growth. The total amount of orders has exceeded 150 billion yen for three consecutive months and 100 billion yen for 16 consecutive months.

Orders received in May have continued to be trending, and both domestic and foreign demand have remained strong, and risk factors such as parts shortages, geopolitical risks, and lockdown in China have not become apparent, but we would like to keep an eye on future trends.

Domestic orders fell by 7.0% from April, amounting to 49.48 billion yen. This marked the consecutive month-on-month decline in two months. Nevertheless, this figure was an increase of 48.9% over the same month of the previous year and marked the year-on-year growth in fifteen consecutive months. Looking at major industries, orders compared to April fell by 11.3% in industrial machinery, by 13.0% in motor vehicles, up by 20.4% in electrical & precision machinery, and by 46.9% in aircraft, shipbuilding & transport equipment.

Foreign orders rose by 2.0% over April to 103.85 billion yen, marked the first month of month-on-month growth in two months. Although, foreign orders showed an increase of 14.5% over the same month of the previous year, and this marked the nineteenth consecutive month of year-on-year growth. By region, orders from Asia rose by 0.8% over April to 48.34 billion yen. This was a decrease of 4.2% from the same month of the previous year. Orders from Europe rose by 0.9% from April to 20.51 billion yen. This was an increase of 20.2% over the same month of the previous year. Orders from North America fell by 6.8% over April, amounting to 33.03 billion yen. This figure was an increase of 49.9% over the same month of the previous year.

Main Statistics of Metal Cutting Machine Tools

Value in Millions of Yen

Period	ORDERS								PRODUCTION				SALES		INVENTORY		EXPORTS		IMPORTS		EMPLOYEES	WHOLE-SALE
	Total	%	Domestic	%	Foreign	%	Sales	Order Backlog	Unites	Weight	Value	%	Unites	Value	Unites	Weight	Value	%	Value	%	No. of	PRICE
C.Y. 2005	1,363,203	110.3	746,709	111.0	616,494	109.4	1,275,637	644,180	92,385	453,038	1,110,257	126.4	88,719	1,125,758	5,049	23,025	815,110	119.3	107,453	121.8	22,907	100.0
2006	1,436,970	105.4	733,009	98.2	703,961	114.2	1,407,258	684,266	100,171	492,096	1,211,230	109.1	94,383	1,232,261	6,963	26,930	921,456	113.0	135,649	126.2	23,503	101.1
2007	1,589,991	110.6	726,424	99.1	863,567	122.7	1,522,632	758,815	106,282	515,268	1,303,164	107.6	98,752	1,317,226	9,662	32,006	892,032	96.8	72,601	53.5	24,624	100.6
2008	1,301,147	81.8	566,820	78.0	734,327	85.0	1,472,029	574,383	95,310	492,188	1,249,184	95.9	88,319	1,267,372	11,436	31,685	874,723	98.1	60,226	83.0	25,323	101.5
2009	411,809	31.6	159,648	28.2	252,161	34.3	596,920	382,592	28,281	180,025	486,283	38.9	29,894	514,793	9,547	22,656	321,399	36.7	28,717	47.7	24,542	100.2
2010	978,622	237.6	307,527	192.6	671,095	266.1	851,272	508,446	67,607	302,376	813,002	167.2	67,954	820,517	10,464	24,489	608,551	189.3	30,579	106.5	23,380	100.0
2011	1,326,188	135.5	421,599	137.1	904,589	134.8	1,179,316	653,138	85,483	432,693	1,149,394	141.4	87,452	1,170,069	10,437	28,720	855,195	140.5	43,442	142.1	24,348	102.5
2012	1,212,445	91.4	375,822	89.1	836,623	92.5	1,329,650	543,736	93,649	429,207	1,151,980	100.2	95,824	1,173,114	9,894	34,483	945,594	110.6	51,080	117.6	25,524	102.7
2013	1,117,049	92.1	400,803	106.6	716,246	85.6	1,094,673	566,113	56,780	320,904	886,372	76.9	62,518	911,286	7,890	31,779	766,495	81.1	63,016	123.4	24,716	101.2
2014	1,509,397	135.1	496,391	123.8	1,013,006	141.4	1,422,184	652,213	99,407	454,866	1,186,293	133.8	102,231	1,221,172	9,924	34,308	961,862	125.5	78,087	123.9	25,188	104.0
2015	1,480,592	98.1	586,240	118.1	894,352	88.3	1,532,603	607,499	102,101	489,253	1,258,087	106.1	105,147	1,310,282	11,274	38,620	932,123	96.9	91,580	117.3	25,826	100.0
2016	1,250,003	84.4	530,545	90.5	719,458	80.4	1,280,584	522,527	67,991	374,124	1,012,810	80.5	73,443	1,058,471	9,321	35,371	666,519	71.5	78,249	85.4	26,252	100.5
2017	1,645,554	131.6	629,369	118.6	1,016,185	141.2	1,467,285	694,231	88,644	426,841	1,129,823	111.6	92,174	1,181,505	9,936	33,453	786,221	118.0	72,276	92.4	26,161	99.3
2018	1,815,771	110.3	750,343	119.2	1,065,428	104.8	1,684,768	826,197	84,803	454,619	1,236,790	109.5	90,160	1,297,087	9,167	31,553	881,700	112.1	90,574	125.3	27,348	101.1
2019	1,229,900	67.7	493,188	65.7	736,712	69.1	1,501,633	561,265	62,240	380,419	1,072,452	86.7	66,288	1,118,969	9,490	33,806	735,108	83.4	85,996	94.9	27,436	103.7
2020	901,835	73.3	324,455	65.8	577,380	78.4	1,033,616	430,794	45,569	244,973	723,994	67.5	49,457	762,032	8,145	28,075	529,567	72.0	55,530	64.6	27,249	100.0
2021	1,541,419	170.9	510,324	157.3	1,031,095	178.6	1,283,499	701,005	67,601	313,143	895,409	123.7	68,971	923,460	7,465	30,612	712,613	134.6	60,795	109.5	26,689	100.1
F.Y. 2017	1,780,339	138.1	687,975	129.4	1,092,364	144.2	1,578,249	727,486	97,915	457,502	1,203,453	121.7	102,009	1,259,109	9,532	30,607	867,434	133.7	74,455	98.0	26,436	99.5
2018	1,689,133	94.9	703,366	102.2	985,767	90.2	1,666,400	751,183	76,151	438,300	1,210,013	100.5	81,169	1,272,572	9,171	29,803	841,164	97.0	94,726	127.2	27,387	101.8
2019	1,099,541	65.1	446,639	63.5	652,902	66.2	1,367,888	490,671	55,766	341,046	975,568	80.6	60,157	1,019,629	8,302	29,106	673,839	80.1	78,536	82.9	27,470	104.5
2020	988,483	89.9	325,988	73.0	662,495	101.5	1,032,575	446,582	50,683	248,838	728,004	74.6	53,627	757,915	6,581	25,927	546,956	81.2	52,435	66.8	27,108	99.2
2021	1,667,502	168.7	566,229	173.7	1,101,273	166.2	1,368,954	757,694	69,950	333,567	954,330	131.1	70,992	986,131	7,703	30,665	747,692	136.7	66,233	126.3	26,570	100.7
2019 4-6	316,119	67.0	123,934	63.8	192,185	69.3	351,564	715,738	15,598	94,086	263,823	89.6	16,497	265,489	9,513	33,994	187,244	85.4	21,169	106.8	27,573	103.1
7-9	288,738	64.9	124,777	64.2	163,961	65.4	375,809	628,667	14,951	92,970	263,112	86.1	16,265	278,308	9,249	32,671	178,320	81.3	20,601	93.5	27,505	103.4
10-12	259,236	63.7	102,099	59.2	157,137	67.0	333,439	561,265	13,255	82,325	233,332	78.3	13,826	240,720	9,490	33,806	163,690	83.2	19,993	69.8	27,387	105.5
2020 1-3	235,448	64.4	95,829	67.3	139,619	62.5	307,076	490,671	11,962	71,665	215,301	69.0	13,569	235,112	8,302	29,106	144,586	70.2	16,773	69.2	27,416	101.4
4-6	174,572	55.2	62,703	50.6	111,869	58.2	218,148	447,095	9,523	53,084	158,647	60.1	10,226	162,725	8,290	29,800	122,887	65.6	13,233	62.5	27,338	100.0
7-9	221,867	76.8	78,147	62.6	143,720	87.7	249,558	419,404	11,098	58,825	173,287	65.9	11,810	181,194	8,302	28,294	128,857	72.3	11,687	56.7	27,230	99.3
10-12	269,948	104.1	87,776	86.0	182,172	115.9	328,834	430,794	12,986	61,399	176,759	75.8	13,852	183,001	8,145	28,075	133,237	81.4	13,837	69.2	27,012	99.3
2021 1-3	292,096	136.8	97,362	101.6	224,734	161.0	306,035	446,582	17,076	75,530	219,311	101.9	17,739	230,995	6,581	25,927	161,974	112.0	13,678	81.5	26,851	98.4
4-6	379,991	217.7	113,957	181.7	266,034	237.8	308,866	517,707	19,484	79,254	223,784	141.1	19,762	223,780	6,777	28,689	176,392	143.5	13,704	103.6	26,731	99.7
7-9	405,482	182.8	147,520	188.8	257,962	179.5	331,779	591,410	15,410	77,314	223,592	129.0	16,170	235,467	6,586	27,809	186,350	144.6	14,343	122.7	26,656	100.6
10-12	433,850	160.7	151,485	172.6	282,365	155.0	436,819	701,005	15,631	81,045	228,722	129.4	15,300	233,218	7,465	30,612	187,897	141.0	19,070	137.8	26,518	101.6
2022 1-3	448,179	139.1	153,267	157.4	294,912	131.2	391,490	757,694	19,425	95,954	278,232	126.9	19,760	293,666	7,703	30,665	197,054	121.7	19,116	139.8	26,375	100.8
2020 12	99,057	109.9	31,842	85.4	67,215	127.3	102,487	430,794	4,912	22,560	64,562	76.9	5,087	69,259	8,145	28,075	49,102	86.1	4,459	67.0	26,926	98.9
2021 1	88,627	109.7	26,405	89.2	62,222	121.5	73,345	445,803	4,298	19,441	55,702	84.8	4,271	53,563	6,996	28,942	41,135	109.4	5,483	74.1	26,902	97.9
2	105,593	136.7	30,470	95.2	75,123	166.1	85,596	465,800	5,440	23,699	68,569	99.5	5,088	65,068	7,466	31,267	47,762	95.2	3,733	85.3	26,829	98.0
3	127,876	165.1	40,487	118.2	87,389	202.3	147,094	446,582	7,338	32,390	95,040	117.8	8,380	112,364	6,581	25,927	73,077	128.6	4,461	89.3	26,823	99.2
4	123,974	220.8	36,078	170.6	87,896	251.2	94,526	476,030	6,785	26,519	72,700	137.7	6,679	67,717	6,838	28,913	55,530	132.7	4,310	85.2	26,727	98.9
5	123,936	241.9	33,223	182.6	90,713	274.5	101,566	498,460	6,287	25,217	72,468	149.1	6,057	73,058	7,332	29,612	58,370	156.5	4,367	99.7	26,722	100.6
6	132,081	196.6	44,656	191.1	87,425	199.5	112,834	517,707	6,412	27,518	78,616	137.3	7,026	83,005	6,777	28,689	62,492	142.9	5,028	132.4	26,745	99.7
7	134,983	193.4	45,385	182.9	89,598	199.2	104,298	548,392	5,483	25,921	73,556	135.1	5,157	73,259	7,379	30,445	63,785	155.0	4,818	138.0	26,700	99.9
8	125,903	185.2	44,575	193.2	81,328	181.1	101,111	573,184	4,322	23,316	67,478	125.9	5,172	72,744	6,705	29,019	55,951	132.8	4,892	131.6	26,671	101.3
9	144,596	171.9	57,560	190.2	87,036	161.7	126,370	591,410	5,605	28,077	82,558	126.5	5,841	89,464	6,586	27,809	66,614	146.1	4,633	103.4	26,598	100.5
10	149,222	181.5	50,289	174.1	98,933	185.5	102,860	637,772	4,695	24,032	67,209	127.6	4,855	72,407	6,620	28,292	64,758	153.9	4,615	129.4	26,590	101.5
11	145,401	164.0	50,001	184.9	95,400	154.8	105,037	678,136	4,965	27,481	76,284	128.2	4,903	74,473	6,846	30,846	58,382	138.8	6,489	111.6	26,542	101.5
12	139,227	140.6	51,195	160.8	88,032	131.0	128,922															

NET NEW ORDERS – METAL CUTTING MACHINE TOOLS IN JAPAN

(Value: in Millions of Yen)

Period		Total 2021	21/20 (%)	21/10-21/12	22/01-22/03	Previous Quarter (%)	year-to-year (%)	22/01-22/05	year-to-year (%)	May ' 22	May 22/Apr. 22 (%)	May 22/May 21 (%)
Industry												
1. Primary Metals		17,981	159.6	3,955	5,043	127.5	129.1	8,198	137.7	1,600	102.9	167.7
2. Fabricated Metal Products		40,274	171.4	11,050	12,157	110.0	175.0	20,899	174.7	3,506	67.0	126.2
Machinery & Equipment Industries	3. Industrial Machinery	200,489	150.6	60,702	62,389	102.8	168.8	104,832	163.4	19,948	88.7	150.1
	(of which construction machinery)	11,166	159.2	3,774	3,470	91.9	230.1	6,226	212.3	886	47.4	108.2
	(of which dies and molds)	26,785	201.6	8,932	9,268	103.8	218.6	15,275	220.8	2,325	63.1	190.6
	4. Motor Vehicles	115,123	138.0	30,300	30,432	100.4	111.3	54,925	119.8	11,396	87.0	149.7
	(of which auto parts)	84,015	151.2	21,372	20,645	96.6	105.1	37,684	115.7	8,354	96.2	142.7
	5. Electrical Machinery	45,020	212.0	15,206	18,360	120.7	261.3	26,827	224.6	4,543	115.8	181.3
	6. Precision Machinery	24,423	186.8	7,920	9,035	114.1	247.7	13,341	184.0	2,435	130.1	112.0
	5 – 6. Electrical & Precision Machinery (Sub Total)	69,443	202.4	23,126	27,395	118.5	256.7	40,168	209.3	6,978	120.4	149.1
	7. Aircraft, Shipbuilding & Transport equipment	16,026	144.5	6,264	4,940	78.9	153.7	7,634	152.1	1,603	146.9	180.3
	(of which aircraft)	4,791	133.2	1,731	1,216	70.2	106.7	2,081	133.0	674	352.9	204.9
3 – 7. Sub total		401,081	153.1	120,392	125,156	104.0	160.1	207,559	154.7	39,925	94.0	150.8
8. Other Machinery & Equipment		26,774	219.7	7,449	5,744	77.1	117.9	10,841	132.6	3,049	148.9	182.1
9. Government, Public Agencies & Schools		7,349	247.0	3,185	484	15.2	176.0	612	90.5	74	137.0	34.3
10. Others		10,582	125.3	3,409	3,259	95.6	148.3	5,180	138.5	897	87.6	119.3
11. Trading Companies		6,283	151.9	2,045	1,424	69.6	146.1	2,639	134.8	430	54.8	115.3
1-11. Domestic Total		510,324	157.3	151,485	153,267	101.2	157.4	255,928	153.6	49,481	93.0	148.9
12. Foreign		1,031,095	178.6	282,365	294,912	104.4	131.2	500,583	124.1	103,853	102.0	114.5
1-12. Grand Total		1,541,419	170.9	433,850	448,179	103.3	139.1	756,511	132.7	153,334	98.9	123.7
(of which: NC machines)		1,514,935	171.2	424,546	439,808	103.6	138.7	743,013	132.4	151,174	99.4	123.8
Sales		1,283,499	124.2	336,819	391,490	116.2	127.9	614,063	122.3	115,711	108.3	114.0
(of which: NC machines)		1,261,733	124.9	331,252	385,388	116.3	128.3	605,156	122.8	114,186	108.1	114.2
Order Backlog		701,005	162.7	701,005	757,694	108.1	169.7	843,453	169.2	843,453	104.7	169.2
(of which: NC machines)		681,753	164.1	681,753	736,173	108.0	170.2	819,610	169.3	819,610	104.7	169.3

NET NEW ORDERS BY DESTINATION

(Value in Millions of yen)

2022		Jan.		Feb.		Mar.		Apr.		May		June		July		Aug.		Sep.		Oct.		Nov.		Dec.		Total 2022			
			%		%		%		%		%		%		%		%		%		%		%		%		%		%
Asia	East Asia	Korea	2,641	94.2	2,078	56.3	2,730	118.0	2,813	120.2	4,609	210.5																14,871	111.5
		Taiwan	4,815	215.9	2,137	86.8	4,005	137.0	2,912	94.3	2,850	119.1																16,719	127.7
		China	32,598	126.8	29,942	99.1	33,370	89.3	32,133	85.0	33,273	85.9																161,316	95.0
		Other	0	-	8	800.0	13	-	0	-	15	-																36	9.8
		East Asia Total	40,054	130.3	34,165	93.9	40,118	94.1	37,858	86.8	40,747	94.0																192,942	98.1
	Other Asia	Thailand	1,647	161.2	1,365	122.3	1,686	108.6	2,274	164.8	1,586	85.4																8,558	123.5
		Malaysia	999	130.8	1,183	228.8	1,314	242.4	1,644	197.8	1,260	170.3																6,400	188.6
		Singapore	465	96.3	315	87.3	3,690	697.5	1,134	77.2	704	113.4																6,308	182.2
		Philippine	58	252.2	182	303.3	935	361.0	215	179.2	399	539.2																1,789	333.8
		Indonesia	1,163	575.7	607	193.9	292	51.8	674	123.9	475	69.4																3,211	139.2
Vietnam		640	104.2	998	394.5	1,034	279.5	756	115.6	997	107.2																4,425	156.9	
India		2,499	142.8	3,454	71.8	2,760	68.7	3,317	109.4	2,164	98.8																14,194	89.8	
Other	6	150.0	8	32.0	42	300.0	69	766.7	3	42.9																128	216.9		
Other Asia Total	7,477	153.8	8,112	108.8	11,753	149.7	10,083	125.4	7,588	106.8																	45,013	127.5	
Sub Total	47,531	133.5	42,277	96.5	51,871	102.8	47,941	92.9	48,335	95.8																	237,955	102.6	
Europe	EU	Germany	4,459	177.4	4,784	159.2	4,298	133.4	4,222	143.9	4,616	123.2															22,379	145.1	
		Italy	4,574	258.4	3,870	183.8	4,698	163.9	3,758	125.6	3,626	111.0															20,526	157.9	
		France	1,738	198.9	2,111	201.8	1,959	172.8	3,520	272.0	2,427	177.7															11,755	205.7	
		Central Europe	1,469	169.8	1,444	227.4	1,428	140.7	1,731	125.6	1,202	89.9																7,274	139.1
		Other	3,383	160.3	3,880	213.8	3,251	141.0	3,274	129.4	3,748	130.1																17,536	150.7
	Sub Total	15,623	192.1	16,089	186.9	15,634	148.3	16,505	148.3	15,619	124.0																	79,470	155.8
	Other West Europe	U.K.	1,749	172.8	2,241	199.6	2,728	213.3	1,879	123.9	2,472	148.6																11,069	167.9
		Turkey	1,396	125.0	901	65.5	914	96.4	1,523	138.1	818	58.1																5,552	93.3
		Switzerland	745	280.1	784	161.3	743	115.6	640	132.5	1,106	228.0																4,018	170.0
		East Europe	81	337.5	78	73.6	81	71.7	43	172.0	86	64.7																	369
Russia - Other		400	275.9	180	92.8	-625	-	-16	-	6	1.7																	-55	-
Sub Total	20,412	189.4	20,647	169.8	19,528	138.9	20,687	138.2	20,510	120.2																	101,784	147.5	
North America & Central America	U.S.A.	26,887	227.0	22,965	152.5	30,070	160.0	27,206	152.2	30,822	160.8																137,950	166.7	
	Canada	1,121	90.3	1,855	199.2	1,455	96.2	1,667	150.2	1,219	100.2																7,317	121.7	
	Mexico	1,403	140.7	572	29.4	1,305	124.0	2,051	233.9	989	60.0																6,320	96.9	
	Sub Total	29,411	208.8	25,392	141.6	32,830	153.7	30,924	155.6	33,030	149.9																	151,587	159.1
South America	Brazil	614	129.0	569	139.1	578	94.0	749	143.8	721	188.3																3,231	134.4	
	Other	85	197.7	112	215.4	119	95.2	89	222.5	42	52.5																447	131.5	
	Sub Total	699	134.7	681	147.7	697	94.2	838	149.4	763	164.8																3,678	134.0	
Oceania	Australia	380	50.7	594	126.4	818	188.0	1,084	479.6	521	84.7																3,397	136.2	
	Other	86	245.7	259	1126.1	21	16.7	125	79.1	136	203.0																627	153.3	
Sub Total	466	59.4	853	173.0	839	149.6	1,209	314.8	657	96.3																	4,024	138.6	
Middle East	176	71.8	269	103.9	252	162.6	127	33.4	558	1361.0																	1,382	128.0	
Africa	54	25.5	20	-	7	15.9	92	85.2	0	-																	173	47.9	
Grand Total	98,749	158.7	90,139	120.0	106,024	121.3	101,818	115.8	103,853	114.5																	500,583	124.1	
Of which NC	97,408	157.8	89,315	119.9	104,242	120.1	100,547	115.1	103,038	114.4																	494,550	123.5	

(Note) It will be described as "-", if the actual value is "negative" or "0" or no actual value.

Japan Machine Tool Builders' Association

From January 2021, the UK was moved from the "EU" to "other Western Europe".