

2023 Results
Orders, Production and Shipments of Manipulators and Robots by Applications
[JARA Members and Non-members]

Number of units, () : million yen

CY	2022	2023	Change from 2022
Orders	299,093 (1,111,776)	198,864 (843,440)	-33.5% (-24.1%)
Production	280,051 (1,020,971)	220,581 (891,556)	-21.2% (-12.7%)

Shipments Applications	2022			2023			Change from 2022			2022 (percentage distribution)			2023 (percentage distribution)		
	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total
Plastic moulding	3,749	4,505	8,254	4,605	3,405	8,010	22.8%	-24.4%	-3.0%	7.2%	2.0%	2.9%	9.5%	1.9%	3.5%
Arc welding	4,133	19,455	23,588	3,023	15,027	18,050	-26.9%	-22.8%	-23.5%	7.9%	8.4%	8.3%	6.3%	8.4%	7.9%
Spot welding	2,516	19,931	22,447	2,305	21,060	23,365	-8.4%	5.7%	4.1%	4.8%	8.6%	7.9%	4.8%	11.8%	10.3%
Laser welding	10	649	659	20	1,252	1,272	100.0%	92.9%	93.0%	0.0%	0.3%	0.2%	0.0%	0.7%	0.6%
Others	67	193	260	46	61	107	-31.3%	-68.4%	-58.8%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%
Welding Units	6,726	40,228	46,954	5,394	37,400	42,794	-19.8%	-7.0%	-8.9%	12.8%	17.5%	16.6%	11.2%	20.9%	18.8%
(million yen)	(29,798)	(94,669)	(124,467)	(27,178)	(94,049)	(121,227)	(-8.8%)	(-0.7%)	(-2.6%)	(12.8%)	(11.6%)	(11.8%)	(12.2%)	(13.4%)	(13.1%)
Painting	541	2,035	2,576	562	2,581	3,143	3.9%	26.8%	22.0%	1.0%	0.9%	0.9%	1.2%	1.4%	1.4%
Loading/unloading	2,451	12,133	14,584	1,818	15,145	16,963	-25.8%	24.8%	16.3%	4.7%	5.3%	5.2%	3.8%	8.5%	7.5%
Mechanical cutting	29		29	26	6	32	-10.3%		10.3%	0.1%		0.0%	0.1%	0.0%	0.0%
Grinding/deburring	153	574	727	175	641	816	14.4%	11.7%	12.2%	0.3%	0.2%	0.3%	0.4%	0.4%	0.4%
Others	51	70	121	44	98	142	-13.7%	40.0%	17.4%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%
Machining Units	2,684	12,777	15,461	2,063	15,890	17,953	-23.1%	24.4%	16.1%	5.1%	5.5%	5.5%	4.3%	8.9%	7.9%
(million yen)	(8,297)	(21,555)	(29,853)	(7,308)	(28,867)	(36,175)	(-11.9%)	(33.9%)	(21.2%)	(3.6%)	(2.6%)	(2.8%)	(3.3%)	(4.1%)	(3.9%)
Surface Mount Technology	1,013	16,020	17,033	1,071	11,338	12,409	5.7%	-29.2%	-27.1%	1.9%	6.9%	6.0%	2.2%	6.3%	5.5%
General Assembly	6,931	26,934	33,865	6,848	16,945	23,793	-1.2%	-37.1%	-29.7%	13.2%	11.7%	12.0%	14.2%	9.5%	10.5%
Other Assembly	2,194	7,033	9,227	2,041	7,602	9,643	-7.0%	8.1%	4.5%	4.2%	3.1%	3.3%	4.2%	4.2%	4.2%
Bonding	1,427	5,361	6,788	1,405	5,789	7,194	-1.5%	8.0%	6.0%	2.7%	2.3%	2.4%	2.9%	3.2%	3.2%
Soldering	7		7	3		3	-57.1%		-57.1%	0.0%		0.0%	0.0%		0.0%
Sealing/glueing	252	489	741	145	1,369	1,514	-42.5%	180.0%	104.3%	0.5%	0.2%	0.3%	0.3%	0.8%	0.7%
Screwing	59	6	65	46	7	53	-22.0%	16.7%	-18.5%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%
Others	449	1,177	1,626	442	437	879	-1.6%	-62.9%	-45.9%	0.9%	0.5%	0.6%	0.9%	0.2%	0.4%
Assembly Units	9,125	33,967	43,092	8,889	24,547	33,436	-2.6%	-27.7%	-22.4%	17.4%	14.7%	15.2%	18.4%	13.7%	14.7%
(million yen)	(35,100)	(75,780)	(110,880)	(36,411)	(72,496)	(108,907)	(3.7%)	(-4.3%)	(-1.8%)	(15.0%)	(9.3%)	(10.6%)	(16.4%)	(10.4%)	(11.8%)
Palletizing/depalletizing	1,394	4,455	5,849	1,364	3,126	4,490	-2.2%	-29.8%	-23.2%	2.7%	1.9%	2.1%	2.8%	1.7%	2.0%
Material handling	7,569	69,885	77,454	8,031	55,031	63,062	6.1%	-21.3%	-18.6%	14.4%	30.3%	27.4%	16.6%	30.7%	27.7%
FPD	855	1,634	2,489	416	1,090	1,506	-51.3%	-33.3%	-39.5%	1.6%	0.7%	0.9%	0.9%	0.6%	0.7%
Semiconductor	14,877	23,783	38,660	11,944	12,874	24,818	-19.7%	-45.9%	-35.8%	28.4%	10.3%	13.7%	24.7%	7.2%	10.9%
Others	1	712	713		253	253	-100.0%	-64.5%	-64.5%	0.0%	0.3%	0.3%		0.1%	0.1%
Cleanroom Units	15,733	26,129	41,862	12,360	14,217	26,577	-21.4%	-45.6%	-36.5%	30.0%	11.3%	14.8%	25.6%	7.9%	11.7%
(million yen)	(59,448)	(105,808)	(165,257)	(44,440)	(64,731)	(109,171)	(-25.2%)	(-38.8%)	(-33.9%)	(25.5%)	(12.9%)	(15.7%)	(20.0%)	(9.2%)	(11.8%)
Other applications	2,358	6,397	8,755	2,365	4,410	6,775	0.3%	-31.1%	-22.6%	4.5%	2.8%	3.1%	4.9%	2.5%	3.0%
Unspecified	1,523	14,121	15,644	1,564	7,163	8,727	2.7%	-49.3%	-44.2%	2.9%	6.1%	5.5%	3.2%	4.0%	3.8%
Total Units	52,415	230,519	282,934	48,268	179,108	227,376	-7.9%	-22.3%	-19.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
(million yen)	(233,463)	(817,406)	(1,050,869)	(222,481)	(700,148)	(922,629)	(-4.7%)	(-14.3%)	(-12.2%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)

Note)

Data includes dedicated type (Surface Mount Technology / Bonding).

Data is collected in unit of 10,000 yen. However, the results are shown in unit of million yen by rounding the figures of 100,000 yen.

2023 Results
Shipments of Manipulators and Robots by Industries
[JARA Members and Non-members]

Number of units, () : million yen

Industries	2022	2023	Change from 2022	Percentage distribution	
				2022	2023
Metal products	2,734	2,724	-0.4%	5.2%	5.6%
Construction and mining machinery	114	153	34.2%	0.2%	0.3%
Metalworking machinery	824	681	-17.4%	1.6%	1.4%
Other machinery and equipment	4,226	4,080	-3.5%	8.1%	8.5%
Machinery and equipment Units	5,164	4,914	-4.8%	9.9%	10.2%
(million yen)	(23,018)	(23,876)	(3.7%)	(9.9%)	(10.7%)
Electronic computers	22	32	45.5%	0.0%	0.1%
Consumer electrical machinery	1,144	996	-12.9%	2.2%	2.1%
Industrial electrical machinery	1,380	1,511	9.5%	2.6%	3.1%
Communication equipment	1,107	890	-19.6%	2.1%	1.8%
Video and audio equipment	41	49	19.5%	0.1%	0.1%
Electronic components/devices/circuits	14,426	10,895	-24.5%	27.5%	22.6%
Other electrical machinery	2,587	2,644	2.2%	4.9%	5.5%
Electrical machinery Units	20,707	17,017	-17.8%	39.5%	35.3%
(million yen)	(95,549)	(82,447)	(-13.7%)	(40.9%)	(37.1%)
Precision instruments	204	222	8.8%	0.4%	0.5%
Motor vehicles	4,274	3,790	-11.3%	8.2%	7.9%
Auto parts	8,305	7,980	-3.9%	15.8%	16.5%
Motor vehicles and auto parts Units	12,579	11,770	-6.4%	24.0%	24.4%
(million yen)	(54,180)	(54,824)	(1.2%)	(23.2%)	(24.6%)
Other transport equipment	412	253	-38.6%	0.8%	0.5%
Food products, beverages, and tobacco products	883	897	1.6%	1.7%	1.9%
Chemical products	374	338	-9.6%	0.7%	0.7%
Plastic products	1,077	1,040	-3.4%	2.1%	2.2%
Other industries	2,968	2,876	-3.1%	5.7%	6.0%
Non-manufacturing industry	398	298	-25.1%	0.8%	0.6%
Unspecified	4,915	5,919	20.4%	9.4%	12.3%
Total domestic shipments Units	52,415	48,268	-7.9%	100.0%	100.0%
(million yen)	(233,463)	(222,481)	(-4.7%)	18.5%	21.2%
				(100.0%)	(100.0%)
				(22.2%)	(24.1%)
Export Units	230,519	179,108	-22.3%	81.5%	78.8%
(million yen)	(817,406)	(700,148)	(-14.3%)	(77.8%)	(75.9%)
Grand total Units	282,934	227,376	-19.6%	100.0%	100.0%
(million yen)	(1,050,869)	(922,629)	(-12.2%)	(100.0%)	(100.0%)

Note)

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