January - March 2023 Results Production and Shipments of Manipulators and Robots by Applications [JARA Member Companies]

			Number of units, () : million yer
	January - March 2022	January - March 2023	Change from 2022
Orders	70,772	56,604	-20.0%
Orders	(256,677)	(208,155)	(-18.9%)
Production	63,189	58,722	-7.1%
	(216,188)	(216,815)	(0.3%)

Shipments	Jani	ary - March	2022	January - March 2023		Change from 2022		January - March 2022			January - March 2023				
			Demestia						(percentage distribution)			(percentage distribution)			
Applications	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total
Plastic moulding	771	873	1,644	781	796	1,577	1.3%	-8.8%	-4.1%	6.7%	1.7%	2.6%	6.3%	1.7%	2.7%
Arc welding	1,084	5,855	6,939	1,040	4,277	5,317	-4.1%	-27.0%	-23.4%	9.4%	11.2%	10.9%	8.3%	9.1%	9.0%
Spot welding	903	5,246	6,149	580	5,185	5,765	-35.8%	-1.2%	-6.2%	7.8%	10.0%	9.6%	4.6%	11.1%	9.7%
Laser welding	5	118	123	7	409	416	40.0%	246.6%	238.2%	0.0%	0.2%	0.2%	0.1%	0.9%	0.7%
Others	10	169	179	10	39	49		-76.9%	-72.6%	0.1%	0.3%	0.3%	0.1%	0.1%	0.1%
Welding Units	2,002	11,388	13,390	1,637	9,910	11,547	-18.2%	-13.0%	-13.8%	17.3%	21.8%	21.0%	13.1%	21.1%	19.5%
(million yen)	(8,560)	(26,045)	(34,606)	(7,978)	(24,069)	(32,047)	(-6.8%)	(-7.6%)	(-7.4%)	(15.6%)	(15.8%)	(15.7%)	(14.4%)	(14.6%)	(14.5%)
Painting	215	483	698	190	587	777	-11.6%	21.5%	11.3%	1.9%	0.9%	1.1%	1.5%	1.3%	1.3%
Loading/unloading	560	3,670	4,230	573	3,690	4,263	2.3%	0.5%	0.8%	4.8%	7.0%	6.6%	4.6%	7.9%	7.2%
Mechanical cutting	5		5	9	5	14	80.0%		180.0%	0.0%		0.0%	0.1%	0.0%	0.0%
Grinding/deburring	42	198	240	54	86	140	28.6%	-56.6%	-41.7%	0.4%	0.4%	0.4%	0.4%	0.2%	0.2%
Others	17	11	28	12	35	47	-29.4%	218.2%	67.9%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%
Machining Units	624	3,879	4,503	648	3,816	4,464	3.8%	-1.6%	-0.9%	5.4%	7.4%	7.0%	5.2%	8.1%	7.5%
(million yen)	(1,904)	(6,683)	(8,587)	(1,990)	(6,894)	(8,884)	(4.5%)	(3.2%)	(3.5%)	(3.5%)	(4.0%)	(3.9%)	(3.6%)	(4.2%)	(4.0%)
Surface Mount Technology	256	3,662	3,918	305	2,680	2,985	19.1%	-26.8%	-23.8%	2.2%	7.0%	6.1%	2.4%	5.7%	5.0%
General Assembly	1,662	8,881	10,543	2,120	4,110	6,230	27.6%	-53.7%	-40.9%	14.4%	17.0%	16.5%	17.0%	8.8%	10.5%
Other Assembly	208	172	380	191	627	818	-8.2%	264.5%	115.3%	1.8%	0.3%	0.6%	1.5%	1.3%	1.4%
Bonding	2		2				-100.0%		-100.0%	0.0%		0.0%			
Soldering				3		3							0.0%		0.0%
Sealing/glueing	83	164	247	41	452	493	-50.6%	175.6%	99.6%	0.7%	0.3%	0.4%	0.3%	1.0%	0.8%
Screwing	3		3	4		4	33.3%		33.3%	0.0%		0.0%	0.0%		0.0%
Others	120	8	128	143	175	318	19.2%	2087.5%	148.4%	1.0%	0.0%	0.2%	1.1%	0.4%	0.5%
Assembly Units	1,870	9,053	10,923	2,311	4,737	7,048	23.6%	-47.7%	-35.5%	16.1%	17.3%	17.1%	18.5%	10.1%	11.9%
(million yen)	(5,779)	(8,717)	(14,496)	(6,769)	(6,595)	(13,364)	(17.1%)	(-24.3%)	(-7.8%)	(10.5%)	(5.3%)	(6.6%)	(12.2%)	(4.0%)	(6.1%)
Palletizing/depalletizing	447	1,655	2,102	469	1,128	1,597	4.9%	-31.8%	-24.0%	3.9%	3.2%	3.3%	3.8%	2.4%	2.7%
Material handling	2,115	11,490	13,605	2,369	16,285	18,654	12.0%	41.7%	37.1%	18.3%	22.0%	21.3%	19.0%	34.7%	31.4%
FPD	23	79	102	12	66	78	-47.8%	-16.5%	-23.5%	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%
Semiconductor	2,434	3,924	6,358	2,805	3,093	5,898	15.2%	-21.2%	-7.2%	21.0%	7.5%	10.0%	22.5%	6.6%	9.9%
Others		209	209		90	90		-56.9%	-56.9%		0.4%	0.3%		0.2%	0.2%
Cleanroom Units	2,457	4,212	6,669	2,817	3,249	6,066	14.7%	-22.9%	-9.0%	21.2%	8.1%	10.4%	22.6%	6.9%	10.2%
(million yen)	(8,116)	(9,904)	(18,019)	(9,106)	(9,872)	(18,979)	(12.2%)	(-0.3%)	(5.3%)	(14.8%)	(6.0%)	(8.2%)	(16.5%)	(6.0%)	(8.6%)
Other applications	576	2,057	2,633	727	1,352	2,079	26.2%	-34.3%	-21.0%	5.0%	3.9%	4.1%	5.8%	2.9%	3.5%
Unspecified	247	3,554	3,801	227	2,328	2,555	-8.1%	-34.5%	-32.8%	2.1%	6.8%	5.9%	1.8%	5.0%	4.3%
Total Units	11,580	52,306	63,886	12,481	46,868	59,349	7.8%	-10.4%	-7.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
(million yen)	(54,807)	(165,110)	(219,917)	(55,284)	(165,361)	(220,645)	(0.9%)	(0.2%)	(0.3%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)
Note)			/			/	. , , , , , , , , , , , , , , , , , , ,	, /I	· /	. ,	. ,	. /	. /	. /	. ,

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.

January - March 2023 Results Shipments of Manipulators and Robots by Industries [JARA Member Companies]

	2022	2023	Change	nber of units, () : million yen Percentage distribution			
Industries	Jan Mar.	Jan Mar.	from 2022	2022	2023		
Metal products	781	724	-7.3%	6.7%	5.8%		
Construction and mining machinery	14	31	121.4%	0.1%	0.2%		
Metalworking machinery	180	146	-18.9%	1.6%	1.2%		
Other machinery and equipment	954	798	-16.4%	8.2%	6.4%		
Machinery and equipment Units	1,148	975	-15.1%	9.9%	7.8%		
(million yen)	(4,564)	(3,915)	(-14.2%)	(8.3%)	(7.1%)		
Electronic computers	7	3	-57.1%	0.1%	0.0%		
Consumer electrical machinery	352	342	-2.8%	3.0%	2.7%		
Industrial electrical machinery	268	535	99.6%	2.3%	4.3%		
Communication equipment	254	271	6.7%	2.2%	2.2%		
Video and audio equipment	9	8	-11.1%	0.1%	0.1%		
Electronic components/devices/circuits	1,882	2,224	18.2%	16.3%	17.8%		
Other electrical machinery	599	734	22.5%	5.2%	5.9%		
Electrical machinery Units	3,371	4,117	22.1%	29.1%	33.0%		
(million yen)	(15,223)	(18,609)	(22.2%)	(27.8%)	(33.7%)		
Precision instruments	41	69	68.3%	0.4%	0.6%		
Motor vehicles	1,269	1,264	-0.4%	11.0%	10.1%		
Auto parts	2,281	2,492	9.3%	19.7%	20.0%		
Motor vehicles and auto parts Units	3,550	3,756	5.8%	30.7%	30.1%		
(million yen)	(16,296)	(16,324)	(0.2%)	(29.7%)	(29.5%)		
Other transport equpment	168	50	-70.2%	1.5%	0.4%		
Food products, beverages, and tobacco products	230	246	7.0%	2.0%	2.0%		
Chemical products	84	93	10.7%	0.7%	0.7%		
Plastic products	308	308		2.7%	2.5%		
Other industries	936	927	-1.0%	8.1%	7.4%		
Non-manufacturing industry	130	83	-36.2%	1.1%	0.7%		
Unspecified	833	1,133	36.0%	7.2%	9.1%		
Total domestic shipments Units	11,580	12,481	7.8%	100.0%	100.0%		
				18.1%	21.0%		
(million yen)	(54,807)	(55,284)	(0.9%)	(100.0%)	(100.0%)		
			. ,	(24.9%)	(25.1%)		
Export Units	52,306	46,868	-10.4%	81.9%	79.0%		
(million yen)	(165,110)	(165,361)	(0.2%)	(75.1%)	(74.9%)		
Grand total Units	63,886	59,349	-7.1%	100.0%	100.0%		
(million yen)	(219,917)	(220,645)	(0.3%)	(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.