

January – March 2017 Results
Production and Shipments of Manipulators and Robots by Applications
[JARA Member Companies]

Number of units, (): million yen

Production	January – March 2016	January – March 2017	Change from 2016
	36,920 (138,955)	47,438 (157,974)	28.5% (13.7%)

Shipments Applications	January – March 2016			January – March 2017			Change from 2016			January – March 2016 (percentage distribution)			January – March 2017 (percentage distribution)		
	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total
Plastic moulding	864	1,322	2,186	858	1,412	2,270	-0.7%	6.8%	3.8%	8.4%	4.9%	5.9%	8.3%	3.9%	4.8%
Arc welding	996	3,748	4,744	1,033	4,142	5,175	3.7%	10.5%	9.1%	9.6%	14.0%	12.8%	10.0%	11.3%	11.0%
Spot welding	1,671	4,273	5,944	1,179	4,663	5,842	-29.4%	9.1%	-1.7%	16.2%	16.0%	16.0%	11.5%	12.7%	12.4%
Laser welding	5	32	37	18	2	20									
Others	11	1	12	4	159	163									
Welding Units	2,683	8,054	10,737	2,234	8,966	11,200	-16.7%	11.3%	4.3%	26.0%	30.1%	29.0%	21.7%	24.5%	23.9%
(million yen)	(12,573)	(20,881)	(33,454)	(11,117)	(22,998)	(34,115)	(-11.6%)	(10.1%)	(2.0%)	(26.2%)	(23.2%)	(24.2%)	(22.9%)	(20.5%)	(21.3%)
Painting	256	339	595	300	730	1,030	17.2%	115.3%	73.1%	2.5%	1.3%	1.6%	2.9%	2.0%	2.2%
Loading/unloading	525	1,079	1,604	446	2,829	3,275	-15.0%	162.2%	104.2%	5.1%	4.0%	4.3%	4.3%	7.7%	7.0%
Mechanical cutting		1	1	3		3									
Grinding/deburring	56	7	63	66	103	169									
Others	39		39	15	3	18									
Machining Units	620	1,087	1,707	530	2,935	3,465	-14.5%	170.0%	103.0%	6.0%	4.1%	4.6%	5.2%	8.0%	7.4%
(million yen)	(1,800)	(2,108)	(3,908)	(1,744)	(3,245)	(4,989)	(-3.1%)	(53.9%)	(27.7%)	(3.7%)	(2.3%)	(2.8%)	(3.6%)	(2.9%)	(3.1%)
Surface Mount Technology	338	1,859	2,197	291	2,363	2,654	-13.9%	27.1%	20.8%	3.3%	7.0%	5.9%	2.8%	6.4%	5.7%
General Assembly	1,786	4,102	5,888	1,463	5,524	6,987	-18.1%	34.7%	18.7%	17.3%	15.4%	15.9%	14.2%	15.1%	14.9%
Other Assembly	88	141	229	78	145	223	-11.4%	2.8%	-2.6%	0.9%	0.5%	0.6%	0.8%	0.4%	0.5%
Bonding	2		2												
Soldering															
Sealing/glueing	61	31	92	59	47	106									
Screwing	3		3	4	1	5									
Others	22	110	132	15	97	112									
Assembly Units	1,874	4,243	6,117	1,541	5,669	7,210	-17.8%	33.6%	17.9%	18.1%	15.9%	16.5%	15.0%	15.5%	15.4%
(million yen)	(3,617)	(5,069)	(8,686)	(3,290)	(6,364)	(9,654)	(-9.1%)	(25.5%)	(11.1%)	(7.5%)	(5.6%)	(6.3%)	(6.8%)	(5.7%)	(6.0%)
Palletizing/depalletizing	250	436	686	247	689	936	-1.2%	58.0%	36.4%	2.4%	1.6%	1.9%	2.4%	1.9%	2.0%
Material handling	1,857	6,765	8,622	2,159	10,796	12,955	16.3%	59.6%	50.3%	18.0%	25.3%	23.3%	21.0%	29.4%	27.6%
FPD	89	87	176	58	146	204	-34.8%	67.8%	15.9%	0.9%	0.3%	0.5%	0.6%	0.4%	0.4%
Semiconductor	898	1,623	2,521	1,306	2,326	3,632	45.4%	43.3%	44.1%	8.7%	6.1%	6.8%	12.7%	6.3%	7.7%
Others															
Cleanroom Units	987	1,710	2,697	1,364	2,472	3,836	38.2%	44.6%	42.2%	9.6%	6.4%	7.3%	13.3%	6.7%	8.2%
(million yen)	(5,828)	(5,242)	(11,070)	(7,370)	(7,135)	(14,505)	(26.5%)	(36.1%)	(31.0%)	(12.1%)	(5.8%)	(8.0%)	(15.2%)	(6.4%)	(9.0%)
Other applications	599	905	1,504	765	631	1,396	27.7%	-30.3%	-7.2%	5.8%	3.4%	4.1%	7.4%	1.7%	3.0%
Total Units	10,328	26,720	37,048	10,289	36,663	46,952	-0.4%	37.2%	26.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
(million yen)	(48,052)	(90,059)	(138,111)	(48,466)	(112,058)	(160,524)	(0.9%)	(24.4%)	(16.2%)	(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.

January – March 2017 Results
Shipments of Manipulators and Robots by Industries
[JARA Member Companies]

Number of units, (): million yen

Industries	2016 Jan.–Mar.	2017 Jan.–Mar.	Change from 2016	Percentage distribution	
				2016	2017
Metal products	472	644	36.4%	4.6%	6.3%
Construction and mining machinery	38	16	-57.9%	0.4%	0.2%
Metalworking machinery	156	127	-18.6%	1.5%	1.2%
Other machinery and equipment	557	548	-1.6%	5.4%	5.3%
Machinery and equipment Units	751	691	-8.0%	7.3%	6.7%
(million yen)	(3,606)	(3,768)	(4.5%)	(7.5%)	(7.8%)
Electronic computers	12	19	58.3%	0.1%	0.2%
Consumer electrical machinery	536	489	-8.8%	5.2%	4.8%
Industrial electrical machinery	179	298	66.5%	1.7%	2.9%
Communication equipment	163	145	-11.0%	1.6%	1.4%
Video and audio equipment	1	4		0.0%	0.0%
Electronic components/devices/circuits	674	1,235	83.2%	6.5%	12.0%
Other electrical machinery	881	707	-19.8%	8.5%	6.9%
Electrical machinery Units	2,446	2,897	18.4%	23.7%	28.2%
(million yen)	(12,605)	(14,011)	(11.2%)	(26.2%)	(28.9%)
Precision instruments	119	111	-6.7%	1.2%	1.1%
Motor vehicles	1,904	1,662	-12.7%	18.4%	16.2%
Auto parts	2,244	2,036	-9.3%	21.7%	19.8%
Motor vehicles and auto parts Units	4,148	3,698	-10.8%	40.2%	35.9%
(million yen)	(17,536)	(15,949)	(-9.1%)	(36.5%)	(32.9%)
Other transport equipment	64	80	25.0%	0.6%	0.8%
Food products, beverages, and tobacco products	144	207	43.8%	1.4%	2.0%
Chemical products	109	95	-12.8%	1.1%	0.9%
Plastic products	381	304	-20.2%	3.7%	3.0%
Other industries	1,624	1,467	-9.7%	15.7%	14.3%
Non-manufacturing industry	70	95		0.7%	0.9%
Total domestic shipments Units	10,328	10,289	-0.4%	100.0%	100.0%
(million yen)	(48,052)	(48,466)	(0.9%)	(27.9%)	(21.9%)
Export Units	26,720	36,663	37.2%	(72.1%)	(78.1%)
(million yen)	(90,059)	(112,058)	(24.4%)	(65.2%)	(69.8%)
Grand total Units	37,048	46,952	26.7%	(100.0%)	(100.0%)
(million yen)	(138,111)	(160,524)	(16.2%)	(100.0%)	(100.0%)

Note)

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

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