

April - June 2017 Results
Production and Shipments of Manipulators and Robots by Applications
[JARA Member Companies]

Number of units, () : million yen

Production	April - June 2016		April - June 2017		Change from 2016	
		37,004 (129,469)		55,472 (173,338)		49.9% (33.9%)

Shipments Applications	April - June 2016			April - June 2017			Change from 2016			April - June 2016 (percentage distribution)			April - June 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	623	1,024	1,647	738	1,416	2,154	18.5%	38.3%	30.8%	8.2%	3.5%	4.5%	8.6%	3.0%	3.9%
Arc welding	660	3,625	4,285	683	4,333	5,016	3.5%	19.5%	17.1%	8.6%	12.6%	11.7%	7.9%	9.3%	9.1%
Spot welding	972	4,748	5,720	681	6,031	6,712	-29.9%	27.0%	17.3%	12.7%	16.5%	15.7%	7.9%	13.0%	12.2%
Laser welding	12	72	84	2	1	3									
Others	7	1	8	10	23	33									
Welding Units	1,651	8,446	10,097	1,376	10,388	11,764	-16.7%	23.0%	16.5%	21.6%	29.3%	27.7%	16.0%	22.3%	21.3%
(million yen)	(8,126)	(20,955)	(29,081)	(7,376)	(25,138)	(32,514)	(-9.2%)	(20.0%)	(11.8%)	(23.0%)	(21.6%)	(21.9%)	(18.1%)	(18.5%)	(18.4%)
Painting	126	465	591	198	415	613	57.1%	-10.8%	3.7%	1.7%	1.6%	1.6%	2.3%	0.9%	1.1%
Loading/unloading	361	1,327	1,688	461	2,955	3,416	27.7%	122.7%	102.4%	4.7%	4.6%	4.6%	5.4%	6.4%	6.2%
Mechanical cutting	4		4	9	2	11									
Grinding/deburring	39	4	43	80	209	289									
Others	8		8	8	9	17									
Machining Units	412	1,331	1,743	558	3,175	3,733	35.4%	138.5%	114.2%	5.4%	4.6%	4.8%	6.5%	6.8%	6.8%
(million yen)	(1,343)	(1,979)	(3,322)	(1,560)	(3,713)	(5,273)	(16.1%)	(87.6%)	(58.7%)	(3.8%)	(2.0%)	(2.5%)	(3.8%)	(2.7%)	(3.0%)
Surface Mount Technology	247	2,222	2,469	434	3,354	3,788	75.7%	50.9%	53.4%	3.2%	7.7%	6.8%	5.0%	7.2%	6.9%
General Assembly	1,457	5,295	6,752	1,617	9,599	11,216	11.0%	81.3%	66.1%	19.1%	18.4%	18.5%	18.8%	20.6%	20.3%
Other Assembly	10	41	51	10	352	362		758.5%	609.8%	0.1%	0.1%	0.1%	0.1%	0.8%	0.7%
Bonding															
Soldering															
Sealing/glueing	4	21	25	8	238	246									
Screwing	3	1	4	1	3	4									
Others	3	19	22	1	111	112									
Assembly Units	1,467	5,336	6,803	1,627	9,951	11,578	10.9%	86.5%	70.2%	19.2%	18.5%	18.6%	18.9%	21.4%	21.0%
(million yen)	(2,735)	(6,488)	(9,223)	(3,308)	(9,948)	(13,255)	(20.9%)	(53.3%)	(43.7%)	(7.7%)	(6.7%)	(7.0%)	(8.1%)	(7.3%)	(7.5%)
Palletizing/depalletizing	153	551	704	178	533	711	16.3%	-3.3%	1.0%	2.0%	1.9%	1.9%	2.1%	1.1%	1.3%
Material handling	1,457	7,216	8,673	1,608	13,570	15,178	10.4%	88.1%	75.0%	19.1%	25.0%	23.8%	18.7%	29.2%	27.5%
FPD	110	183	293	37	167	204	-66.4%	-8.7%	-30.4%	1.4%	0.6%	0.8%	0.4%	0.4%	0.4%
Semiconductor	899	1,493	2,392	1,313	2,730	4,043	46.1%	82.9%	69.0%	11.8%	5.2%	6.6%	15.2%	5.9%	7.3%
Others				5		5									
Cleanroom Units	1,009	1,676	2,685	1,355	2,897	4,252	34.3%	72.9%	58.4%	13.2%	5.8%	7.4%	15.7%	6.2%	7.7%
(million yen)	(6,133)	(5,343)	(11,476)	(6,502)	(8,256)	(14,759)	(6.0%)	(54.5%)	(28.6%)	(17.3%)	(5.5%)	(8.7%)	(15.9%)	(6.1%)	(8.4%)
Other applications	487	586	1,073	541	828	1,369	11.1%	41.3%	27.6%	6.4%	2.0%	2.9%	6.3%	1.8%	2.5%
Total Units	7,632	28,853	36,485	8,613	46,527	55,140	12.9%	61.3%	51.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
(million yen)	(35,387)	(97,176)	(132,563)	(40,823)	(135,722)	(176,545)	(15.4%)	(39.7%)	(33.2%)	(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.

April - June 2017 Results
Shipments of Manipulators and Robots by Industries
[JARA Member Companies]

Number of units, () : million yen

Industries	2016 Apr. - Jun.	2017 Apr. - Jun.	Change from 2016	Percentage distribution	
				2016	2017
Metal products	364	472	29.7%	4.8%	5.5%
Construction and mining machinery	13	18	38.5%	0.2%	0.2%
Metalworking machinery	139	164	18.0%	1.8%	1.9%
Other machinery and equipment	467	668	43.0%	6.1%	7.8%
Machinery and equipment Units	619	850	37.3%	8.1%	9.9%
(million yen)	(4,077)	(3,235)	(-20.7%)	(11.5%)	(7.9%)
Electronic computers	27	2	-92.6%	0.4%	0.0%
Consumer electrical machinery	299	369	23.4%	3.9%	4.3%
Industrial electrical machinery	250	130	-48.0%	3.3%	1.5%
Communication equipment	140	277	97.9%	1.8%	3.2%
Video and audio equipment		1			0.0%
Electronic components/devices/circuits	753	1,110	47.4%	9.9%	12.9%
Other electrical machinery	754	921	22.1%	9.9%	10.7%
Electrical machinery Units	2,223	2,810	26.4%	29.1%	32.6%
(million yen)	(10,299)	(14,029)	(36.2%)	(29.1%)	(34.4%)
Precision instruments	104	119	14.4%	1.4%	1.4%
Motor vehicles	1,048	883	-15.7%	13.7%	10.3%
Auto parts	1,648	1,753	6.4%	21.6%	20.4%
Motor vehicles and auto parts Units	2,696	2,636	-2.2%	35.3%	30.6%
(million yen)	(11,352)	(11,931)	(5.1%)	(32.1%)	(29.2%)
Other transport equipment	36	41	13.9%	0.5%	0.5%
Food products, beverages, and tobacco products	117	165	41.0%	1.5%	1.9%
Chemical products	108	76	-29.6%	1.4%	0.9%
Plastic products	264	290	9.8%	3.5%	3.4%
Other industries	1,069	1,112	4.0%	14.0%	12.9%
Non-manufacturing industry	32	42		0.4%	0.5%
Total domestic shipments Units	7,632	8,613	12.9%	100.0%	100.0%
(million yen)	(35,387)	(40,823)	(15.4%)	(20.9%)	(15.6%)
				(100.0%)	(100.0%)
				(26.7%)	(23.1%)
Export Units	28,853	46,527	61.3%	(79.1%)	(84.4%)
(million yen)	(97,176)	(135,722)	(39.7%)	(73.3%)	(76.9%)
Grand total Units	36,485	55,140	51.1%	(100.0%)	(100.0%)
(million yen)	(132,563)	(176,545)	(33.2%)	(100.0%)	(100.0%)

Note)

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