

April - June 2016 Results
Production and Shipments of Manipulators and Robots by Applications
[JARA Member Companies]

Number of units, (): million yen

Production	April - June 2015		April - June 2016		Change from 2015	
		36,126 (138,646)		37,004 (129,469)		+2.4% (-6.6%)

Shipments Applications	April - June 2015			April - June 2016			Change from 2015			April - June 2015 (percentage distribution)			April - June 2016 (percentage distribution)		
	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total
Plastic moulding	572	1,236	1,808	623	1,024	1,647	+8.9%	-17.2%	-8.9%	7.8%	4.3%	5.0%	8.2%	3.5%	4.5%
Arc welding	778	5,031	5,809	660	3,625	4,285	-15.2%	-27.9%	-26.2%	10.6%	17.6%	16.2%	8.6%	12.6%	11.7%
Spot welding	416	4,251	4,667	972	4,748	5,720	+133.7%	+11.7%	+22.6%	5.7%	14.9%	13.0%	12.7%	16.5%	15.7%
Laser welding	2	1	3	12	72	84									
Others	5	2	7	7	1	8									
Welding Units	1,201	9,285	10,486	1,651	8,446	10,097	+37.5%	-9.0%	-3.7%	16.3%	32.5%	29.2%	21.6%	29.3%	27.7%
(million yen)	(7,047)	(23,617)	(30,664)	(8,126)	(20,955)	(29,081)	(+15.3%)	(-11.3%)	(-5.2%)	(20.1%)	(23.7%)	(22.7%)	(23.0%)	(21.6%)	(21.9%)
Painting	70	413	483	126	465	591	+80.0%	+12.6%	+22.4%	1.0%	1.4%	1.3%	1.7%	1.6%	1.6%
Loading/unloading	412	1,337	1,749	361	1,327	1,688	-12.4%	-0.7%	-3.5%	5.6%	4.7%	4.9%	4.7%	4.6%	4.6%
Mechanical cutting	4	1	5	4		4									
Grinding/deburring	66	12	78	39	4	43									
Others	10		10	8		8									
Machining Units	492	1,350	1,842	412	1,331	1,743	-16.3%	-1.4%	-5.4%	6.7%	4.7%	5.1%	5.4%	4.6%	4.8%
(million yen)	(1,146)	(2,035)	(3,181)	(1,343)	(1,979)	(3,322)	(+17.2%)	(-2.8%)	(+4.4%)	(3.3%)	(2.0%)	(2.4%)	(3.8%)	(2.0%)	(2.5%)
Surface Mount Technology	396	2,513	2,909	247	2,222	2,469	-37.6%	-11.6%	-15.1%	5.4%	8.8%	8.1%	3.2%	7.7%	6.8%
General Assembly	1,675	4,534	6,209	1,457	5,295	6,752	-13.0%	+16.8%	+8.7%	22.8%	15.9%	17.3%	19.1%	18.4%	18.5%
Other Assembly	18	140	158	10	41	51	-44.4%	-70.7%	-67.7%	0.2%	0.5%	0.4%	0.1%	0.1%	0.1%
Bonding	1		1												
Soldering															
Sealing/glueing	3	36	39	4	21	25									
Screwing	2		2	3	1	4									
Others	12	104	116	3	19	22									
Assembly Units	1,693	4,674	6,367	1,467	5,336	6,803	-13.3%	+14.2%	+6.8%	23.0%	16.4%	17.7%	19.2%	18.5%	18.6%
(million yen)	(10,552)	(44,970)	(55,522)	(7,602)	(42,134)	(49,735)	(-28.0%)	(-6.3%)	(-10.4%)	(30.0%)	(45.1%)	(41.2%)	(21.5%)	(43.4%)	(37.5%)
Palletizing/depalletizing	158	684	842	153	551	704	-3.2%	-19.4%	-16.4%	2.1%	2.4%	2.3%	2.0%	1.9%	1.9%
Material handling	1,305	6,144	7,449	1,457	7,216	8,673	+11.6%	+17.4%	+16.4%	17.7%	21.5%	20.7%	19.1%	25.0%	23.8%
FPD	47	67	114	110	183	293	+134.0%	+173.1%	+157.0%	0.6%	0.2%	0.3%	1.4%	0.6%	0.8%
Semiconductor	948	1,514	2,462	899	1,493	2,392	-5.2%	-1.4%	-2.8%	12.9%	5.3%	6.9%	11.8%	5.2%	6.6%
Others															
Cleanroom Units	995	1,581	2,576	1,009	1,676	2,685	+1.4%	+6.0%	+4.2%	13.5%	5.5%	7.2%	13.2%	5.8%	7.4%
(million yen)	(5,338)	(4,723)	(10,060)	(6,133)	(5,343)	(11,476)	(+14.9%)	(+13.1%)	(+14.1%)	(15.2%)	(4.7%)	(7.5%)	(17.3%)	(5.5%)	(8.7%)
Other applications	472	693	1,165	487	586	1,073	+3.2%	-15.4%	-7.9%	6.4%	2.4%	3.2%	6.4%	2.0%	2.9%
Total Units	7,354	28,573	35,927	7,632	28,853	36,485	+3.8%	+1.0%	+1.6%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
(million yen)	(35,124)	(99,779)	(134,903)	(35,387)	(97,176)	(132,563)	(+0.7%)	(-2.6%)	(-1.7%)	(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 2016 Results
Shipments of Manipulators and Robots by Industries
[JARA Member Companies]

Number of units, (): million yen

Industries	2015 Apr.-Jun.	2016 Apr.-Jun.	Change from 2015	Percentage distribution	
				2015	2016
Metal products	443	364	-17.8%	6.0%	4.8%
Construction and mining machinery	22	13	-40.9%	0.3%	0.2%
Metalworking machinery	100	139	+39.0%	1.4%	1.8%
Other machinery and equipment	389	467	+20.1%	5.3%	6.1%
Machinery and equipment	511	619	+21.1%	6.9%	8.1%
Units (million yen)	(2,680)	(4,077)	(+52.1%)	(7.6%)	(11.5%)
Electronic computers	18	27	+50.0%	0.2%	0.4%
Consumer electrical machinery	385	299	-22.3%	5.2%	3.9%
Industrial electrical machinery	325	250	-23.1%	4.4%	3.3%
Communication equipment	187	140	-25.1%	2.5%	1.8%
Video and audio equipment	4	0		0.1%	0.0%
Electronic components/devices/circuits	832	753	-9.5%	11.3%	9.9%
Other electrical machinery	1,051	754	-28.3%	14.3%	9.9%
Electrical machinery	2,802	2,223	-20.7%	38.1%	29.1%
Units (million yen)	(13,676)	(10,299)	(-24.7%)	(38.9%)	(29.1%)
Precision instruments	111	104	-6.3%	1.5%	1.4%
Motor vehicles	617	1,048	+69.9%	8.4%	13.7%
Auto parts	1,511	1,648	+9.1%	20.5%	21.6%
Motor vehicles and auto parts	2,128	2,696	+26.7%	28.9%	35.3%
Units (million yen)	(9,191)	(11,352)	(+23.5%)	(26.2%)	(32.1%)
Other transport equipment	(38)	(36)	(-5.3%)	(0.5%)	(0.5%)
Food products, beverages, and tobacco products	121	117	-3.3%	1.6%	1.5%
Chemical products	45	108	+140.0%	0.6%	1.4%
Plastic products	256	264	+3.1%	3.5%	3.5%
Other industries	866	1,069	+23.4%	11.8%	14.0%
Non-manufacturing industry	33	32	-3.0%	0.4%	0.4%
Total domestic shipments	7,354	7,632	+3.8%	100.0%	100.0%
Units (million yen)	(35,124)	(35,387)	(+0.7%)	20.5% (100.0%) (26.0%)	20.9% (100.0%) (26.7%)
Export	28,573	28,853	+1.0%	79.5%	79.1%
Units (million yen)	(99,779)	(97,176)	(-2.6%)	(74.0%)	(73.3%)
Grand total	35,927	36,485	+1.6%	100.0%	100.0%
Units (million yen)	(134,903)	(132,563)	(-1.7%)	(100.0%)	(100.0%)

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

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