

**April - June 2014 Results**  
**Production and Shipments of Manipulators and Robots by Application Areas**  
**[JARA Member Companies]**

Number of units, ( ): million yen

Production	April - June 2013		April - June 2014		Change from 2013	
		24,125 (100,250)		33,388 (121,842)		+38.4% (+21.5%)

Shipments	April - June 2013			April - June 2014			Change from 2013			April - June 2013 (percentage distribution)			April - June 2014 (percentage distribution)		
	Application area	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports
<b>Plastic moulding</b>	422	1,520	1,942	434	959	1,393	+2.8%	-36.9%	-28.3%	9.0%	7.9%	8.1%	6.8%	3.5%	4.1%
Arc welding	594	3,703	4,297	766	4,745	5,511	+29.0%	+28.1%	+28.3%	12.6%	19.3%	18.0%	12.0%	17.4%	16.4%
Spot welding	570	2,658	3,228	995	4,229	5,224	+74.6%	+59.1%	+61.8%	12.1%	13.9%	13.5%	15.5%	15.5%	15.5%
Laser welding	10	3	13	9	49	58									
Others	4	1	5	4	2	6									
<b>Welding</b> Units	1,178	6,365	7,543	1,774	9,025	10,799	+50.6%	+41.8%	+43.2%	25.1%	33.2%	31.6%	27.7%	33.2%	32.1%
(million yen)	(5,483)	(15,647)	(21,130)	(7,320)	(22,259)	(29,579)	(+33.5%)	(+42.3%)	(+40.0%)	(22.1%)	(20.7%)	(21.0%)	(28.8%)	(23.7%)	(24.8%)
<b>Painting</b>	72	329	401	60	266	326	-16.7%	-19.1%	-18.7%	1.5%	1.7%	1.7%	0.9%	1.0%	1.0%
Loading/unloading	192	888	1,080	286	1,211	1,497	+49.0%	+36.4%	+38.6%	4.1%	4.6%	4.5%	4.5%	4.4%	4.5%
Mechanical cutting	1	5	6												
Grinding/deburring	15	5	20	32	15	47									
Others	10		10	10	4	14									
<b>Machining</b> Units	218	898	1,116	328	1,230	1,558	+50.5%	+37.0%	+39.6%	4.6%	4.7%	4.7%	5.1%	4.5%	4.6%
(million yen)	(733)	(1,356)	(2,089)	(723)	(1,856)	(2,579)	(-1.3%)	(+36.9%)	(+23.5%)	(3.0%)	(1.8%)	(2.1%)	(2.8%)	(2.0%)	(2.2%)
<b>Surface Mount Technology</b>	224	2,379	2,603	219	2,386	2,605	-2.2%	+0.3%	+0.1%	4.8%	12.4%	10.9%	3.4%	8.8%	7.7%
General Assembly	875	2,125	3,000	1,318	6,506	7,824	+50.6%	+206.2%	+160.8%	18.6%	11.1%	12.6%	20.6%	23.9%	23.3%
Other Assembly	22	131	153	9	43	52	-59.1%	-67.2%	-66.0%	0.5%	0.7%	0.6%	0.1%	0.2%	0.2%
Bonding		6	6												
Soldering															
Sealing/glueing	11	78	89	5	31	36									
Screwing	5		5												
Others	6	47	53	4	12	16									
<b>Assembly</b> Units	897	2,256	3,153	1,327	6,549	7,876	+47.9%	+190.3%	+149.8%	19.1%	11.8%	13.2%	20.7%	24.1%	23.4%
(million yen)	(6,200)	(37,061)	(43,261)	(5,873)	(45,535)	(51,408)	(-5.3%)	(+22.9%)	(+18.8%)	(25.0%)	(49.0%)	(43.1%)	(23.1%)	(48.6%)	(43.1%)
<b>Palletizing/depalletizing</b>	150	433	583	146	358	504	-2.7%	-17.3%	-13.6%	3.2%	2.3%	2.4%	2.3%	1.3%	1.5%
<b>Material handling</b>	652	3,350	4,002	1,116	4,736	5,852	+71.2%	+41.4%	+46.2%	13.9%	17.5%	16.8%	17.4%	17.4%	17.4%
FPD	67	298	365	49	82	131	-26.9%	-72.5%	-64.1%	1.4%	1.6%	1.5%	0.8%	0.3%	0.4%
Semiconductor	504	898	1,402	658	854	1,512	+30.6%	-4.9%	+7.8%	10.7%	4.7%	5.9%	10.3%	3.1%	4.5%
Others	1		1												
<b>Cleanroom</b> Units	572	1,196	1,768	707	936	1,643	+23.6%	-21.7%	-7.1%	12.2%	6.2%	7.4%	11.0%	3.4%	4.9%
(million yen)	(3,626)	(4,178)	(7,804)	(3,725)	(3,349)	(7,074)	(+2.7%)	(-19.9%)	(-9.4%)	(14.6%)	(5.5%)	(7.8%)	(14.6%)	(3.6%)	(5.9%)
<b>Other applications</b>	315	430	745	290	770	1,060	-7.9%	+79.1%	+42.3%	6.7%	2.2%	3.1%	4.5%	2.8%	3.2%
<b>Total</b> Units	4,700	19,156	23,856	6,401	27,215	33,616	+36.2%	+42.1%	+40.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
(million yen)	(24,823)	(75,638)	(100,460)	(25,462)	(93,768)	(119,230)	(+2.6%)	(+24.0%)	(+18.7%)	(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 2014 Results**  
**Shipments of Manipulators and Robots by Industrial Branches**  
**[JARA Member Companies]**

Number of units, ( ): million yen

Industrial branches	2013 Apr-Jun	2014 Apr-Jun	Change from 2013	Percentage distribution	
				2013	2014
<b>Metal products</b>	<b>182</b>	<b>253</b>	<b>+39.0%</b>	<b>3.9%</b>	<b>4.0%</b>
┆ Construction machinery	14	21	+50.0%	0.3%	<b>0.3%</b>
┆ Metalworking machinery	84	138	+64.3%	1.8%	2.2%
┆ Other machinery and equipment	62	182	+193.5%	1.3%	2.8%
<b>Machinery and equipment</b>	<b>160</b>	<b>341</b>	<b>+113.1%</b>	<b>3.4%</b>	<b>5.3%</b>
Units					
(million yen)	<b>(684)</b>	<b>(1,075)</b>	<b>(+57.2%)</b>	<b>(2.8%)</b>	<b>(4.2%)</b>
┆ Computers	5	8	+60.0%	0.1%	0.1%
┆ Consumer electrical machinery	76	100	+31.6%	1.6%	1.6%
┆ Industrial electrical machinery	136	49	-64.0%	2.9%	0.8%
┆ Info-communications equipment	156	270	+73.1%	3.3%	4.2%
┆ VTR	0	0		0.0%	0.0%
┆ Electronic components/devices	578	696	+20.4%	12.3%	10.9%
┆ Other electrical machinery	503	610	+21.3%	10.7%	9.5%
<b>Electrical machinery</b>	<b>1,454</b>	<b>1,733</b>	<b>+19.2%</b>	<b>30.9%</b>	<b>27.1%</b>
Units					
(million yen)	<b>(9,595)</b>	<b>(8,098)</b>	<b>(-15.6%)</b>	<b>(38.7%)</b>	<b>(31.8%)</b>
<b>Precision and optical instruments</b>	<b>78</b>	<b>94</b>	<b>+20.5%</b>	<b>1.7%</b>	<b>1.5%</b>
┆ Motor vehicles	549	1,004	+82.9%	11.7%	15.7%
┆ Auto parts	1,167	1,595	+36.7%	24.8%	24.9%
<b>Motor vehicles and auto parts</b>	<b>1,716</b>	<b>2,599</b>	<b>+51.5%</b>	<b>36.5%</b>	<b>40.6%</b>
Units					
(million yen)	<b>(7,926)</b>	<b>(9,670)</b>	<b>(+22.0%)</b>	<b>(31.9%)</b>	<b>(38.0%)</b>
<b>Food products, beverages, and tobacco products</b>	<b>132</b>	<b>124</b>	<b>-6.1%</b>	<b>2.8%</b>	<b>1.9%</b>
<b>Plastic products</b>	<b>427</b>	<b>457</b>	<b>+7.0%</b>	<b>9.1%</b>	<b>7.1%</b>
<b>Chemical products</b>	<b>33</b>	<b>83</b>	<b>+151.5%</b>	<b>0.7%</b>	<b>1.3%</b>
<b>Other industries</b>	<b>518</b>	<b>717</b>	<b>+38.4%</b>	<b>11.0%</b>	<b>11.2%</b>
<b>Total domestic shipments</b>	<b>4,700</b>	<b>6,401</b>	<b>+36.2%</b>	<b>100.0%</b>	<b>100.0%</b>
Units					
(million yen)	<b>(24,823)</b>	<b>(25,462)</b>	<b>(+2.6%)</b>	<b>19.7%</b>	<b>19.0%</b>
				<b>(100.0%)</b>	<b>(100.0%)</b>
				<b>(24.7%)</b>	<b>(21.4%)</b>
<b>Export</b>	<b>19,156</b>	<b>27,215</b>	<b>+42.1%</b>	<b>80.3%</b>	<b>81.0%</b>
Units					
(million yen)	<b>(75,638)</b>	<b>(93,768)</b>	<b>(+24.0%)</b>	<b>(75.3%)</b>	<b>(78.6%)</b>
<b>Grand total</b>	<b>23,856</b>	<b>33,616</b>	<b>+40.9%</b>	<b>100.0%</b>	<b>100.0%</b>
Units					
(million yen)	<b>(100,460)</b>	<b>(119,230)</b>	<b>(+18.7%)</b>	<b>(100.0%)</b>	<b>(100.0%)</b>

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

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