

**January - March 2013 Results**  
**Production and Shipments of Manipulators and Robots by Application Areas**  
**[JARA Member Companies]**

Number of units, ( ): million yen

Production	January - March 2012	January - March 2013	Change from 2012
	26,285 (114,201)	21,150 (94,288)	-19.5% (-17.4%)

Shipments	January - March 2012			January - March 2013			Change from 2012			January - March 2012 (percentage distribution)			January - March 2013 (percentage distribution)		
	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total
<b>Application area</b>															
<b>Plastic moulding</b>	609	1,548	2,157	545	998	1,543	-10.5%	-35.5%	-28.5%	8.1%	8.0%	8.1%	9.0%	6.1%	6.9%
Arc welding	731	3,722	4,453	691	2,884	3,575	-5.5%	-22.5%	-19.7%	9.7%	19.3%	16.6%	11.5%	17.8%	16.1%
Spot welding	897	3,478	4,375	895	3,121	4,016	-0.2%	-10.3%	-8.2%	11.9%	18.1%	16.3%	14.8%	19.2%	18.0%
Gas welding															
Laser welding	18	6	24	5		5	-72.2%	-100.0%	-79.2%	0.2%	0.0%	0.1%	0.1%		0.0%
Others		2	2	12	2	14			+600.0%		0.0%	0.0%	0.2%	0.0%	0.1%
<b>Welding</b> Units	1,646	7,208	8,854	1,603	6,007	7,610	-2.6%	-16.7%	-14.1%	21.8%	37.4%	33.1%	26.6%	37.0%	34.2%
(million yen)	(8,545)	(18,553)	(27,098)	(7,527)	(15,539)	(23,067)	(-11.9%)	(-16.2%)	(-14.9%)	(22.7%)	(23.4%)	(23.1%)	(23.4%)	(23.8%)	(23.7%)
<b>Painting</b>	221	334	555	109	463	572	-50.7%	+38.6%	+3.1%	2.9%	1.7%	2.1%	1.8%	2.9%	2.6%
Loading/unloading	428	767	1,195	312	1,061	1,373	-27.1%	+38.3%	+14.9%	5.7%	4.0%	4.5%	5.2%	6.5%	6.2%
Mechanical cutting	1		1	2	1	3	+100.0%		+200.0%	0.0%		0.0%	0.0%	0.0%	0.0%
Grinding/deburring	29	35	64	34	7	41	+17.2%	-80.0%	-35.9%	0.4%	0.2%	0.2%	0.6%	0.0%	0.2%
Others	31	2	33	5	1	6	-83.9%	-50.0%	-81.8%	0.4%	0.0%	0.1%	0.1%	0.0%	0.0%
<b>Machining</b> Units	489	804	1,293	353	1,070	1,423	-27.8%	+33.1%	+10.1%	6.5%	4.2%	4.8%	5.9%	6.6%	6.4%
(million yen)	(1,542)	(1,746)	(3,288)	(901)	(1,731)	(2,632)	(-41.6%)	(-0.9%)	(-20.0%)	(4.1%)	(2.2%)	(2.8%)	(2.8%)	(2.7%)	(2.7%)
<b>Surface Mount Technology</b>	328	2,101	2,429	193	1,463	1,656	-41.2%	-30.4%	-31.8%	4.4%	10.9%	9.1%	3.2%	9.0%	7.4%
General Assembly	1,331	2,008	3,339	987	1,804	2,791	-25.8%	-10.2%	-16.4%	17.7%	10.4%	12.5%	16.4%	11.1%	12.5%
Other Assembly	22	68	90	34	91	125	+54.5%	+33.8%	+38.9%	0.3%	0.4%	0.3%	0.6%	0.6%	0.6%
Bonding	1		1				-100.0%		-100.0%	0.0%		0.0%			
Soldering															
Sealing/glueing	17	35	52	12	51	63	-29.4%	+45.7%	+21.2%	0.2%	0.2%	0.2%	0.2%	0.3%	0.3%
Screwing															
Others	4	33	37	22	40	62	+450.0%	+21.2%	+67.6%	0.1%	0.2%	0.1%	0.4%	0.2%	0.3%
<b>Assembly</b> Units	1,353	2,076	3,429	1,021	1,895	2,916	-24.5%	-8.7%	-15.0%	18.0%	10.8%	12.8%	16.9%	11.7%	13.1%
(million yen)	(2,242)	(2,698)	(4,939)	(1,852)	(2,473)	(4,325)	(-17.4%)	(-8.3%)	(-12.4%)	(5.9%)	(3.4%)	(4.2%)	(5.8%)	(3.8%)	(4.4%)
<b>Palletizing/depalletizing</b>	265	367	632	263	358	621	-0.8%	-2.5%	-1.7%	3.5%	1.9%	2.4%	4.4%	2.2%	2.8%
<b>Material handling</b>	937	3,347	4,284	949	2,712	3,661	+1.3%	-19.0%	-14.5%	12.4%	17.4%	16.0%	15.7%	16.7%	16.4%
FPD	162	154	316	110	243	353	-32.1%	+57.8%	+11.7%	2.1%	0.8%	1.2%	1.8%	1.5%	1.6%
Semiconductor	906	976	1,882	506	574	1,080	-44.2%	-41.2%	-42.6%	12.0%	5.1%	7.0%	8.4%	3.5%	4.9%
Others				1		1							0.0%		0.0%
<b>Cleanroom</b> Units	1,068	1,130	2,198	617	817	1,434	-42.2%	-27.7%	-34.8%	14.2%	5.9%	8.2%	10.2%	5.0%	6.4%
(million yen)	(7,348)	(6,500)	(13,848)	(5,473)	(6,491)	(11,964)	(-25.5%)	(-0.1%)	(-13.6%)	(19.5%)	(8.2%)	(11.8%)	(17.0%)	(10.0%)	(12.3%)
<b>Other applications</b>	621	337	958	381	448	829	-38.6%	+32.9%	-13.5%	8.2%	1.8%	3.6%	6.3%	2.8%	3.7%
<b>Total</b> Units	7,537	19,252	26,789	6,034	16,231	22,265	-19.9%	-15.7%	-16.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
(million yen)	(37,723)	(79,433)	(117,157)	(32,105)	(65,186)	(97,292)	(-14.9%)	(-17.9%)	(-17.0%)	(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 2013 Results**  
**Shipments of Manipulators and Robots by Industrial Branches**  
**[JARA Member Companies]**

Number of units, ( ): million yen

Industrial branches	2012 Jan-Mar	2013 Jan-Mar	Change from 2012	Percentage distribution	
				2012	2013
<b>Metal products</b>	<b>450</b>	<b>257</b>	<b>-42.9%</b>	<b>6.0%</b>	<b>4.3%</b>
Construction Machinery	24	24	+0.0%	0.3%	0.4%
Metalworking machinery	137	132	-3.6%	1.8%	2.2%
Other machinery and equipment	97	117	+20.6%	1.3%	1.9%
<b>Machinery and equipment</b>	<b>258</b>	<b>273</b>	<b>+5.8%</b>	<b>3.4%</b>	<b>4.5%</b>
Units					
(million yen)	<b>(1,117)</b>	<b>(1,097)</b>	<b>(-1.8%)</b>	<b>(3.0%)</b>	<b>(3.4%)</b>
Computers	79	13	-83.5%	1.0%	0.2%
Consumer electrical machinery	132	201	+52.3%	1.8%	3.3%
Industrial electrical machinery	236	195	-17.4%	3.1%	3.2%
Info-communications equipment	304	130	-57.2%	4.0%	2.2%
VTR					
Electronic components/devices	976	590	-39.5%	12.9%	9.8%
Other electrical machinery	822	527	-35.9%	10.9%	8.7%
<b>Electrical machinery</b>	<b>2,549</b>	<b>1,656</b>	<b>-35.0%</b>	<b>33.8%</b>	<b>27.4%</b>
Units					
(million yen)	<b>(14,585)</b>	<b>(10,537)</b>	<b>(-27.8%)</b>	<b>(38.7%)</b>	<b>(32.8%)</b>
<b>Precision and optical instruments</b>	<b>138</b>	<b>70</b>	<b>-49.3%</b>	<b>1.8%</b>	<b>1.2%</b>
Motor vehicles	815	819	+0.5%	10.8%	13.6%
Auto parts	1,335	1,361	+1.9%	17.7%	22.6%
<b>Motor vehicles and auto parts</b>	<b>2,150</b>	<b>2,180</b>	<b>+1.4%</b>	<b>28.5%</b>	<b>36.1%</b>
Units					
(million yen)	<b>(11,533)</b>	<b>(10,573)</b>	<b>(-8.3%)</b>	<b>(30.6%)</b>	<b>(32.9%)</b>
<b>Food products, beverages, and tobacco products</b>	<b>169</b>	<b>219</b>	<b>+29.6%</b>	<b>2.2%</b>	<b>3.6%</b>
<b>Plastic products</b>	<b>623</b>	<b>564</b>	<b>-9.5%</b>	<b>8.3%</b>	<b>9.3%</b>
<b>Chemical products</b>	<b>66</b>	<b>63</b>	<b>-4.5%</b>	<b>0.9%</b>	<b>1.0%</b>
<b>Non-manufacturing</b>	<b>52</b>		<b>-100.0%</b>	<b>0.7%</b>	
<b>Other industries</b>	<b>1,082</b>	<b>752</b>	<b>-30.5%</b>	<b>14.4%</b>	<b>12.5%</b>
<b>Total domestic shipments</b>	<b>7,537</b>	<b>6,034</b>	<b>-19.9%</b>	<b>100.0%</b>	<b>100.0%</b>
Units					
(million yen)	<b>(37,723)</b>	<b>(32,105)</b>	<b>(-14.9%)</b>	<b>28.1%</b>	<b>27.1%</b>
				<b>(100.0%)</b>	<b>(100.0%)</b>
				<b>(32.2%)</b>	<b>(33.0%)</b>
<b>Export</b>	<b>19,252</b>	<b>16,231</b>	<b>-15.7%</b>	<b>71.9%</b>	<b>72.9%</b>
Units					
(million yen)	<b>(79,433)</b>	<b>(65,186)</b>	<b>(-17.9%)</b>	<b>(67.8%)</b>	<b>(67.0%)</b>
<b>Grand total</b>	<b>26,789</b>	<b>22,265</b>	<b>-16.9%</b>	<b>100.0%</b>	<b>100.0%</b>
Units					
(million yen)	<b>(117,157)</b>	<b>(97,292)</b>	<b>(-17.0%)</b>	<b>(100.0%)</b>	<b>(100.0%)</b>

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