

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

Number of units, ( ): million yen

Production	January - March 2013	January - March 2014	Change from 2013
		21,339 (94,323)	30,627 (120,687)

Shipments	January - March 2013			January - March 2014			Change from 2013			January - March 2013 (percentage distribution)			January - March 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>	548	998	1,546	906	1,303	2,209	+65.3%	+30.6%	+42.9%	8.7%	6.1%	6.9%	11.3%	5.9%	7.3%
Arc welding	715	2,884	3,599	925	4,079	5,004	+29.4%	+41.4%	+39.0%	11.3%	17.8%	16.0%	11.5%	18.4%	16.6%
Spot welding	895	3,121	4,016	803	3,940	4,743	-10.3%	+26.2%	+18.1%	14.2%	19.2%	17.8%	10.0%	17.7%	15.7%
Laser welding	5	5	5	12	12	12									
Others	12	2	14	5	4	9									
<b>Welding</b> Units	1,627	6,007	7,634	1,745	8,023	9,768	+7.3%	+33.6%	+28.0%	25.8%	37.0%	33.9%	21.8%	36.1%	32.3%
(million yen)	(7,599)	(15,547)	(23,147)	(7,894)	(20,717)	(28,612)	(+3.9%)	(+33.3%)	(+23.6%)	(23.3%)	(23.8%)	(23.6%)	(21.9%)	(25.8%)	(24.6%)
<b>Painting</b>	110	463	573	179	442	621	+62.7%	-4.5%	+8.4%	1.7%	2.9%	2.5%	2.2%	2.0%	2.1%
Loading/unloading	313	1,061	1,374	439	748	1,187	+40.3%	-29.5%	-13.6%	5.0%	6.5%	6.1%	5.5%	3.4%	3.9%
Mechanical cutting	2	1	3	16	16	16									
Grinding/deburring	34	7	41	38	4	42									
Others	5	1	6	16	4	20									
<b>Machining</b> Units	354	1,070	1,424	493	772	1,265	+39.3%	-27.9%	-11.2%	5.6%	6.6%	6.3%	6.2%	3.5%	4.2%
(million yen)	(905)	(1,731)	(2,636)	(1,192)	(1,226)	(2,418)	(+31.7%)	(-29.2%)	(-8.3%)	(2.8%)	(2.7%)	(2.7%)	(3.3%)	(1.5%)	(2.1%)
<b>Surface Mount Technology</b>	193	1,463	1,656	306	1,749	2,055	+58.5%	+19.5%	+24.1%	3.1%	9.0%	7.3%	3.8%	7.9%	6.8%
General Assembly	987	1,804	2,791	1,127	2,346	3,473	+14.2%	+30.0%	+24.4%	15.6%	11.1%	12.4%	14.1%	10.6%	11.5%
Other Assembly	223	91	314	286	40	326	+28.3%	-56.0%	+3.8%	3.5%	0.6%	1.4%	3.6%	0.2%	1.1%
Bonding	188	188	188	272	272	272									
Soldering	12	51	63	9	15	24									
Sealing/glueing	23	40	63	5	25	30									
Screwing	23	40	63	5	25	30									
Others	23	40	63	5	25	30									
<b>Assembly</b> Units	1,210	1,895	3,105	1,413	2,386	3,799	+16.8%	+25.9%	+22.4%	19.2%	11.7%	13.8%	17.6%	10.7%	12.6%
(million yen)	(4,986)	(23,498)	(28,484)	(7,249)	(29,655)	(36,905)	(+45.4%)	(+26.2%)	(+29.6%)	(15.3%)	(36.0%)	(29.1%)	(20.1%)	(36.9%)	(31.7%)
<b>Palletizing/depalletizing</b>	276	358	634	283	563	846	+2.5%	+57.3%	+33.4%	4.4%	2.2%	2.8%	3.5%	2.5%	2.8%
<b>Material handling</b>	967	2,712	3,679	1,332	5,067	6,399	+37.7%	+86.8%	+73.9%	15.3%	16.7%	16.3%	16.6%	22.8%	21.2%
FPD	110	243	353	55	224	279	-50.0%	-7.8%	-21.0%	1.7%	1.5%	1.6%	0.7%	1.0%	0.9%
Semiconductor	506	574	1,080	931	1,130	2,061	+84.0%	+96.9%	+90.8%	8.0%	3.5%	4.8%	11.6%	5.1%	6.8%
Others	1	1	1	1	1	1									
<b>Cleanroom</b> Units	617	817	1,434	986	1,354	2,340	+59.8%	+65.7%	+63.2%	9.8%	5.0%	6.4%	12.3%	6.1%	7.7%
(million yen)	(5,473)	(6,491)	(11,964)	(4,799)	(5,455)	(10,253)	(-12.3%)	(-16.0%)	(-14.3%)	(16.7%)	(10.0%)	(12.2%)	(13.3%)	(6.8%)	(8.8%)
<b>Other applications</b>	412	448	860	373	541	914	-9.5%	+20.8%	+6.3%	6.5%	2.8%	3.8%	4.7%	2.4%	3.0%
<b>Total</b> Units	6,314	16,231	22,545	8,016	22,200	30,216	+27.0%	+36.8%	+34.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
(million yen)	(32,681)	(65,194)	(97,875)	(36,103)	(80,374)	(116,478)	(+10.5%)	(+23.3%)	(+19.0%)	(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 2014 Results**  
**Shipments of Manipulators and Robots by Industrial Branches**  
**[JARA Member Companies]**

Number of units, ( ): million yen

Industrial branches	2013 Jan-Mar	2014 Jan-Mar	Change from 2013	Percentage distribution	
				2013	2014
<b>Metal products</b>	<b>257</b>	<b>352</b>	<b>+37.0%</b>	<b>4.1%</b>	<b>4.4%</b>
┆ Construction machinery	24	46	+91.7%	0.4%	<b>0.6%</b>
┆ Metalworking machinery	132	210	+59.1%	2.1%	2.6%
┆ Other machinery and equipment	117	211	+80.3%	1.9%	2.6%
<b>Machinery and equipment</b>	<b>273</b>	<b>467</b>	<b>+71.1%</b>	<b>4.3%</b>	<b>5.8%</b>
Units					
(million yen)	<b>(1,097)</b>	<b>(1,535)</b>	<b>(+40.0%)</b>	<b>(3.4%)</b>	<b>(4.3%)</b>
┆ Computers	13	9	-30.8%	0.2%	0.1%
┆ Consumer electrical machinery	201	169	-15.9%	3.2%	2.1%
┆ Industrial electrical machinery	195	81	-58.5%	3.1%	1.0%
┆ Info-communications equipment	130	196	+50.8%	2.1%	2.4%
┆ VTR	0	0		0.0%	0.0%
┆ Electronic components/devices	778	1,275	+63.9%	12.3%	15.9%
┆ Other electrical machinery	527	597	+13.3%	8.3%	7.4%
<b>Electrical machinery</b>	<b>1,844</b>	<b>2,327</b>	<b>+26.2%</b>	<b>29.2%</b>	<b>29.0%</b>
Units					
(million yen)	<b>(10,564)</b>	<b>(11,300)</b>	<b>(+7.0%)</b>	<b>(32.3%)</b>	<b>(31.3%)</b>
<b>Precision and optical instruments</b>	<b>70</b>	<b>93</b>	<b>+32.9%</b>	<b>1.1%</b>	<b>1.2%</b>
┆ Motor vehicles	819	869	+6.1%	13.0%	10.8%
┆ Auto parts	1,361	1,661	+22.0%	21.6%	20.7%
<b>Motor vehicles and auto parts</b>	<b>2,180</b>	<b>2,530</b>	<b>+16.1%</b>	<b>34.5%</b>	<b>31.6%</b>
Units					
(million yen)	<b>(10,573)</b>	<b>(11,469)</b>	<b>(+8.5%)</b>	<b>(32.4%)</b>	<b>(31.8%)</b>
<b>Food products, beverages, and tobacco products</b>	<b>217</b>	<b>226</b>	<b>+4.1%</b>	<b>3.4%</b>	<b>2.8%</b>
<b>Plastic products</b>	<b>564</b>	<b>925</b>	<b>+64.0%</b>	<b>8.9%</b>	<b>11.5%</b>
<b>Chemical products</b>	<b>63</b>	<b>92</b>	<b>+46.0%</b>	<b>1.0%</b>	<b>1.1%</b>
<b>Non-manufacturing</b>	<b>106</b>	<b>0</b>		<b>1.7%</b>	<b>0.0%</b>
<b>Other industries</b>	<b>740</b>	<b>1,004</b>	<b>+35.7%</b>	<b>11.7%</b>	<b>12.5%</b>
<b>Total domestic shipments</b>	<b>6,314</b>	<b>8,016</b>	<b>+27.0%</b>	<b>100.0%</b>	<b>100.0%</b>
Units					
(million yen)	<b>(32,681)</b>	<b>(36,103)</b>	<b>(+10.5%)</b>	<b>28.0%</b>	<b>26.5%</b>
				<b>(100.0%)</b>	<b>(100.0%)</b>
				<b>(33.4%)</b>	<b>(31.0%)</b>
<b>Export</b>	<b>16,231</b>	<b>22,200</b>	<b>+36.8%</b>	<b>72.0%</b>	<b>73.5%</b>
Units					
(million yen)	<b>(65,194)</b>	<b>(80,374)</b>	<b>(+23.3%)</b>	<b>(66.6%)</b>	<b>(69.0%)</b>
<b>Grand total</b>	<b>22,545</b>	<b>30,216</b>	<b>+34.0%</b>	<b>100.0%</b>	<b>100.0%</b>
Units					
(million yen)	<b>(97,875)</b>	<b>(116,478)</b>	<b>(+19.0%)</b>	<b>(100.0%)</b>	<b>(100.0%)</b>

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

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