

**January - March 2015 Results**  
**Production and Shipments of Manipulators and Robots by Application Areas**  
**[JARA Member Companies]**

Number of units, ( ): million yen

Production	January - March 2014	January - March 2015	Change from 2014
		30,355 (120,657)	34,601 (135,222)

Shipments	January - March 2014			January - March 2015			Change from 2014			January - March 2014 (percentage distribution)			January - March 2015 (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>	906	1,303	2,209	843	1,534	2,377	-7.0%	+17.7%	+7.6%	11.7%	5.9%	7.4%	9.6%	6.1%	7.0%
Arc welding	925	4,079	5,004	1,078	4,118	5,196	+16.5%	+1.0%	+3.8%	11.9%	18.4%	16.7%	12.3%	16.4%	15.3%
Spot welding	803	3,940	4,743	898	4,153	5,051	+11.8%	+5.4%	+6.5%	10.4%	17.7%	15.8%	10.2%	16.5%	14.9%
Laser welding	12		12	7		7									
Others	5	4	9	11	6	17									
<b>Welding</b> Units	1,745	8,023	9,768	1,994	8,277	10,271	+14.3%	+3.2%	+5.1%	22.5%	36.1%	32.6%	22.7%	32.9%	30.3%
(million yen)	(7,894)	(20,717)	(28,612)	(9,464)	(21,021)	(30,485)	(+19.9%)	(+1.5%)	(+6.5%)	(21.9%)	(25.8%)	(24.6%)	(23.0%)	(23.6%)	(23.4%)
<b>Painting</b>	179	442	621	215	343	558	+20.1%	-22.4%	-10.1%	2.3%	2.0%	2.1%	2.4%	1.4%	1.6%
Loading/unloading	439	748	1,187	438	1,220	1,658	-0.2%	+63.1%	+39.7%	5.7%	3.4%	4.0%	5.0%	4.9%	4.9%
Mechanical cutting		16	16	1	1	2									
Grinding/deburring	38	4	42	49	73	122									
Others	16	4	20	8	4	12									
<b>Machining</b> Units	493	772	1,265	496	1,298	1,794	+0.6%	+68.1%	+41.8%	6.4%	3.5%	4.2%	5.6%	5.2%	5.3%
(million yen)	(1,192)	(1,226)	(2,418)	(1,223)	(1,887)	(3,110)	(+2.6%)	(+53.9%)	(+28.6%)	(3.3%)	(1.5%)	(2.1%)	(3.0%)	(2.1%)	(2.4%)
<b>Surface Mount Technology</b>	306	1,748	2,054	333	1,973	2,306	+8.8%	+12.9%	+12.3%	4.0%	7.9%	6.9%	3.8%	7.8%	6.8%
General Assembly	1,127	2,346	3,473	1,493	3,078	4,571	+32.5%	+31.2%	+31.6%	14.6%	10.6%	11.6%	17.0%	12.2%	13.5%
Other Assembly	14	40	54	14	38	52		-5.0%	-3.7%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Bonding															
Soldering				1		1									
Sealing/glueing	9	15	24	8	10	18									
Screwing															
Others	5	25	30	5	28	33									
<b>Assembly</b> Units	1,141	2,386	3,527	1,507	3,116	4,623	+32.1%	+30.6%	+31.1%	14.7%	10.7%	11.8%	17.1%	12.4%	13.6%
(million yen)	(7,219)	(29,655)	(36,875)	(9,505)	(36,096)	(45,601)	(+31.7%)	(+21.7%)	(+23.7%)	(20.0%)	(36.9%)	(31.7%)	(23.1%)	(40.5%)	(35.0%)
<b>Palletizing/depalletizing</b>	283	563	846	227	596	823	-19.8%	+5.9%	-2.7%	3.7%	2.5%	2.8%	2.6%	2.4%	2.4%
<b>Material handling</b>	1,332	5,067	6,399	1,631	5,552	7,183	+22.4%	+9.6%	+12.3%	17.2%	22.8%	21.4%	18.5%	22.1%	21.2%
FPD	55	224	279	30	99	129	-45.5%	-55.8%	-53.8%	0.7%	1.0%	0.9%	0.3%	0.4%	0.4%
Semiconductor	931	1,130	2,061	968	1,401	2,369	+4.0%	+24.0%	+14.9%	12.0%	5.1%	6.9%	11.0%	5.6%	7.0%
Others															
<b>Cleanroom</b> Units	986	1,354	2,340	998	1,500	2,498	+1.2%	+10.8%	+6.8%	12.7%	6.1%	7.8%	11.3%	6.0%	7.4%
(million yen)	(4,799)	(5,455)	(10,253)	(4,546)	(5,297)	(9,843)	(-5.3%)	(-2.9%)	(-4.0%)	(13.3%)	(6.8%)	(8.8%)	(11.1%)	(5.9%)	(7.6%)
<b>Other applications</b>	373	541	914	556	957	1,513	+49.1%	+76.9%	+65.5%	4.8%	2.4%	3.1%	6.3%	3.8%	4.5%
<b>Total</b> Units	7,744	22,199	29,943	8,800	25,146	33,946	+13.6%	+13.3%	+13.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
(million yen)	(36,073)	(80,369)	(116,443)	(41,087)	(89,088)	(130,175)	(+13.9%)	(+10.8%)	(+11.8%)	(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 2015 Results**  
**Shipments of Manipulators and Robots by Industrial Branches**  
**[JARA Member Companies]**

Number of units, ( ): million yen

Industrial branches	2014 Jan-Mar	2015 Jan-Mar	Change from 2014	Percentage distribution	
				2014	2015
<b>Metal products</b>	<b>352</b>	<b>465</b>	<b>+32.1%</b>	<b>4.5%</b>	<b>5.3%</b>
Construction machinery	46	43	-6.5%	0.6%	<b>0.5%</b>
Metalworking machinery	210	168	-20.0%	2.7%	1.9%
Other machinery and equipment	211	427	+102.4%	2.7%	4.9%
<b>Machinery and equipment</b>	<b>467</b>	<b>638</b>	<b>+36.6%</b>	<b>6.0%</b>	<b>7.3%</b>
Units				<b>(4.3%)</b>	<b>(6.8%)</b>
(million yen)	<b>(1,535)</b>	<b>(2,786)</b>	<b>(+81.4%)</b>		
Computers	9	10	+11.1%	0.1%	0.1%
Consumer electrical machinery	169	369	+118.3%	2.2%	4.2%
Industrial electrical machinery	81	285	+251.9%	1.0%	3.2%
Info-communications equipment	196	170	-13.3%	2.5%	1.9%
VTR	0	1		0.0%	0.0%
Electronic components/devices	1,003	937	-6.6%	13.0%	10.6%
Other electrical machinery	597	965	+61.6%	7.7%	11.0%
<b>Electrical machinery</b>	<b>2,055</b>	<b>2,737</b>	<b>+33.2%</b>	<b>26.5%</b>	<b>31.1%</b>
Units				<b>(31.2%)</b>	<b>(31.3%)</b>
(million yen)	<b>(11,270)</b>	<b>(12,868)</b>	<b>(+14.2%)</b>		
<b>Precision and optical instruments</b>	<b>93</b>	<b>162</b>	<b>+74.2%</b>	<b>1.2%</b>	<b>1.8%</b>
Motor vehicles	869	1,219	+40.3%	11.2%	13.9%
Auto parts	1,661	1,859	+11.9%	21.4%	21.1%
<b>Motor vehicles and auto parts</b>	<b>2,530</b>	<b>3,078</b>	<b>+21.7%</b>	<b>32.7%</b>	<b>35.0%</b>
Units				<b>(31.8%)</b>	<b>(33.6%)</b>
(million yen)	<b>(11,469)</b>	<b>(13,813)</b>	<b>(+20.4%)</b>		
<b>Food products, beverages, and tobacco products</b>	<b>226</b>	<b>140</b>	<b>-38.1%</b>	<b>2.9%</b>	<b>1.6%</b>
<b>Plastic products</b>	<b>925</b>	<b>302</b>	<b>-67.4%</b>	<b>11.9%</b>	<b>3.4%</b>
<b>Chemical products</b>	<b>92</b>	<b>87</b>	<b>-5.4%</b>	<b>1.2%</b>	<b>1.0%</b>
<b>Other industries</b>	<b>1,004</b>	<b>1,166</b>	<b>+16.1%</b>	<b>13.0%</b>	<b>13.3%</b>
<b>Non-manufacturing industry</b>	<b>0</b>	<b>25</b>		<b>0.0%</b>	<b>0.3%</b>
<b>Total domestic shipments</b>	<b>7,744</b>	<b>8,800</b>	<b>+13.6%</b>	<b>100.0%</b>	<b>100.0%</b>
Units				<b>25.9%</b>	<b>25.9%</b>
(million yen)	<b>(36,073)</b>	<b>(41,087)</b>	<b>(+13.9%)</b>	<b>(100.0%)</b>	<b>(100.0%)</b>
<b>Export</b>	<b>22,199</b>	<b>25,146</b>	<b>+13.3%</b>	<b>74.1%</b>	<b>74.1%</b>
Units				<b>(69.0%)</b>	<b>(68.4%)</b>
(million yen)	<b>(80,369)</b>	<b>(89,088)</b>	<b>(+10.8%)</b>		
<b>Grand total</b>	<b>29,943</b>	<b>33,946</b>	<b>+13.4%</b>	<b>100.0%</b>	<b>100.0%</b>
Units				<b>(100.0%)</b>	<b>(100.0%)</b>
(million yen)	<b>(116,443)</b>	<b>(130,175)</b>	<b>(+11.8%)</b>		

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