

October - December 2013 Results
Production and Shipments of Manipulators and Robots by Application Areas
[JARA Member Companies]

Number of units, (): million yen

Production	October - December 2012	October - December 2013	Change from 2012
	21,122 (83,174)	25,655 (96,741)	+21.5% (+16.3%)

Shipments Application area	October - December 2012			October - December 2013			Change from 2012			October - December 2012 (percentage distribution)			October - December 2013 (percentage distribution)		
	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total
Plastic moulding	528	891	1,419	564	1,060	1,624	+6.8%	+19.0%	+14.4%	9.3%	5.5%	6.5%	9.6%	5.3%	6.3%
Arc welding	723	3,481	4,204	750	3,564	4,314	+3.7%	+2.4%	+2.6%	12.8%	21.7%	19.4%	12.8%	17.8%	16.6%
Spot welding	643	3,328	3,971	457	3,389	3,846	-28.9%	+1.8%	-3.1%	11.3%	20.7%	18.3%	7.8%	16.9%	14.8%
Laser welding	2		2	16	1	17	+700.0%		+750.0%	0.0%		0.0%	0.3%	0.0%	0.1%
Others	2	3	5	9	2	11	+350.0%	-33.3%	+120.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%
Welding Units	1,370	6,812	8,182	1,232	6,956	8,188	-10.1%	+2.1%	+0.1%	24.2%	42.4%	37.7%	21.0%	34.6%	31.5%
(million yen)	(5,811)	(17,621)	(23,432)	(5,737)	(18,711)	(24,448)	(-1.3%)	(+6.2%)	(+4.3%)	(22.1%)	(29.5%)	(27.2%)	(21.8%)	(26.6%)	(25.2%)
Painting	56	206	262	33	231	264	-41.1%	+12.1%	+0.8%	1.0%	1.3%	1.2%	0.6%	1.2%	1.0%
Loading/unloading	224	509	733	283	788	1,071	+26.3%	+54.8%	+46.1%	4.0%	3.2%	3.4%	4.8%	3.9%	4.1%
Mechanical cutting		1	1	1	22	23		+2,100.0%	+2,200.0%		0.0%	0.0%	0.0%	0.1%	0.1%
Grinding/deburring	47	13	60	55	2	57	+17.0%	-84.6%	-5.0%	0.8%	0.1%	0.3%	0.9%	0.0%	0.2%
Others	7	18	25	6	8	14	-14.3%	-55.6%	-44.0%	0.1%	0.1%	0.1%	0.1%	0.0%	0.1%
Machining Units	278	541	819	345	820	1,165	+24.1%	+51.6%	+42.2%	4.9%	3.4%	3.8%	5.9%	4.1%	4.5%
(million yen)	(834)	(894)	(1,728)	(833)	(1,553)	(2,386)	(-0.1%)	(+73.7%)	(+38.1%)	(3.2%)	(1.5%)	(2.0%)	(3.2%)	(2.2%)	(2.5%)
Surface Mount Technology	198	1,389	1,587	249	1,475	1,724	+25.8%	+6.2%	+8.6%	3.5%	8.7%	7.3%	4.2%	7.3%	6.6%
General Assembly	1,184	1,483	2,667	1,090	1,895	2,985	-7.9%	+27.8%	+11.9%	20.9%	9.2%	12.3%	18.5%	9.4%	11.5%
Other Assembly	23	118	141	13	72	85	-43.5%	-39.0%	-39.7%	0.4%	0.7%	0.6%	0.2%	0.4%	0.3%
Bonding															
Soldering															
Sealing/glueing	11	57	68	7	23	30	-36.4%	-59.6%	-55.9%	0.2%	0.4%	0.3%	0.1%	0.1%	0.1%
Screwing				1		1							0.0%		0.0%
Others	12	61	73	5	49	54	-58.3%	-19.7%	-26.0%	0.2%	0.4%	0.3%	0.1%	0.2%	0.2%
Assembly Units	1,207	1,601	2,808	1,103	1,967	3,070	-8.6%	+22.9%	+9.3%	21.3%	10.0%	12.9%	18.8%	9.8%	11.8%
(million yen)	(2,055)	(2,079)	(4,134)	(1,951)	(2,962)	(4,913)	(-5.1%)	(+42.5%)	(+18.9%)	(7.8%)	(3.5%)	(4.8%)	(7.4%)	(4.2%)	(5.1%)
Palletizing/depalletizing	201	514	715	222	568	790	+10.4%	+10.5%	+10.5%	3.5%	3.2%	3.3%	3.8%	2.8%	3.0%
Material handling	941	2,889	3,830	1,005	5,012	6,017	+6.8%	+73.5%	+57.1%	16.6%	18.0%	17.6%	17.1%	25.0%	23.2%
FPD	30	102	132	32	117	149	+6.7%	+14.7%	+12.9%	0.5%	0.6%	0.6%	0.5%	0.6%	0.6%
Semiconductor	425	466	891	808	1,006	1,814	+90.1%	+115.9%	+103.6%	7.5%	2.9%	4.1%	13.7%	5.0%	7.0%
Others	6	1	7				-100.0%	-100.0%	-100.0%	0.1%	0.0%	0.0%			
Cleanroom Units	461	569	1,030	840	1,123	1,963	+82.2%	+97.4%	+90.6%	8.1%	3.5%	4.7%	14.3%	5.6%	7.6%
(million yen)	(3,097)	(1,859)	(4,955)	(4,230)	(4,940)	(9,171)	(+36.6%)	(+165.8%)	(+85.1%)	(11.8%)	(3.1%)	(5.8%)	(16.0%)	(7.0%)	(9.5%)
Other applications	430	644	1,074	285	866	1,151	-33.7%	+34.5%	+7.2%	7.6%	4.0%	4.9%	4.8%	4.3%	4.4%
Total Units	5,670	16,056	21,726	5,878	20,078	25,956	+3.7%	+25.0%	+19.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
(million yen)	(26,350)	(59,656)	(86,006)	(26,369)	(70,465)	(96,834)	(+0.1%)	(+18.1%)	(+12.6%)	(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.

October - December 2013 Results
Shipments of Manipulators and Robots by Industrial Branches
[JARA Member Companies]

Number of units, (): million yen

Industrial branches	2012 Oct-Dec	2013 Oct-Dec	Change from 2012	Percentage distribution	
				2012	2013
Metal products	224	288	+28.6%	4.0%	4.9%
Construction Machinery	30	28	-6.7%	0.5%	0.5%
Metalworking machinery	82	135	+64.6%	1.4%	2.3%
Other machinery and equipment	100	132	+32.0%	1.8%	2.2%
Machinery and equipment	212	295	+39.2%	3.7%	5.0%
Units				(3.3%)	(3.9%)
(million yen)	(881)	(1,030)	(+16.8%)		
Computers	7	6	-14.3%	0.1%	0.1%
Consumer electrical machinery	111	98	-11.7%	2.0%	1.7%
Industrial electrical machinery	159	82	-48.4%	2.8%	1.4%
Info-communications equipment	156	157	+0.6%	2.8%	2.7%
VTR	2		-100.0%	0.0%	
Electronic components/devices	478	935	+95.6%	8.4%	15.9%
Other electrical machinery	573	589	+2.8%	10.1%	10.0%
Electrical machinery	1,486	1,867	+25.6%	26.2%	31.8%
Units				(30.8%)	(38.2%)
(million yen)	(8,124)	(10,068)	(+23.9%)		
Precision and optical instruments	83	106	+27.7%	1.5%	1.8%
Motor vehicles	703	397	-43.5%	12.4%	6.8%
Auto parts	1,326	1,299	-2.0%	23.4%	22.1%
Motor vehicles and auto parts	2,029	1,696	-16.4%	35.8%	28.9%
Units				(33.6%)	(26.8%)
(million yen)	(8,862)	(7,074)	(-20.2%)		
Food products, beverages, and tobacco products	119	200	+68.1%	2.1%	3.4%
Plastic products	556	585	+5.2%	9.8%	10.0%
Chemical products	63	93	+47.6%	1.1%	1.6%
Non-manufacturing	78		-100.0%	1.4%	
Other industries	820	748	-8.8%	14.5%	12.7%
Total domestic shipments	5,670	5,878	+3.7%	100.0%	100.0%
Units				26.1%	22.6%
(million yen)	(26,350)	(26,369)	(+0.1%)	(100.0%)	(100.0%)
Export	16,056	20,078	+25.0%	73.9%	77.4%
Units				(69.4%)	(72.8%)
(million yen)	(59,656)	(70,465)	(+18.1%)		
Grand total	21,726	25,956	+19.5%	100.0%	100.0%
Units				(100.0%)	(100.0%)
(million yen)	(86,006)	(96,834)	(+12.6%)		

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

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