

July - September 2016 Results
Production and Shipments of Manipulators and Robots by Applications
[JARA Member Companies]

Number of units, () : million yen

Production	July - September 2015		July - September 2016		Change from 2015	
		34,708 (133,643)		38,639 (140,658)		11.3% (5.2%)

Shipments Applications	July - September 2015			July - September 2016			Change from 2015			July - September 2015 (percentage distribution)			July - September 2016 (percentage distribution)		
	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total
Plastic moulding	725	1,138	1,863	777	1,090	1,867	7.2%	-4.2%	0.2%	8.9%	4.2%	5.3%	8.4%	3.8%	5.0%
Arc welding	925	3,640	4,565	1,070	3,573	4,643	15.7%	-1.8%	1.7%	11.4%	13.4%	12.9%	11.5%	12.6%	12.3%
Spot welding	828	5,083	5,911	1,137	3,510	4,647	37.3%	-30.9%	-21.4%	10.2%	18.7%	16.8%	12.2%	12.4%	12.3%
Laser welding	8	8	8	3	3	3									
Others	20	20	20	6	5	11									
Welding Units	1,781	8,723	10,504	2,216	7,088	9,304	24.4%	-18.7%	-11.4%	21.9%	32.1%	29.8%	23.9%	25.0%	24.7%
(million yen)	(8,620)	(23,926)	(32,546)	(10,975)	(18,492)	(29,467)	(27.3%)	(-22.7%)	(-9.5%)	(23.0%)	(24.7%)	(24.2%)	(25.4%)	(19.1%)	(21.0%)
Painting	186	428	614	156	441	597	-16.1%	3.0%	-2.8%	2.3%	1.6%	1.7%	1.7%	1.6%	1.6%
Loading/unloading	526	1,577	2,103	333	967	1,300	-36.7%	-38.7%	-38.2%	6.5%	5.8%	6.0%	3.6%	3.4%	3.5%
Mechanical cutting	2	3	5	1	1	1									
Grinding/deburring	40	17	57	59	20	79									
Others	12	12	12	12	7	19									
Machining Units	580	1,597	2,177	405	994	1,399	-30.2%	-37.8%	-35.7%	7.1%	5.9%	6.2%	4.4%	3.5%	3.7%
(million yen)	(1,513)	(2,716)	(4,229)	(1,017)	(1,580)	(2,597)	(-32.8%)	(-41.8%)	(-38.6%)	(4.0%)	(2.8%)	(3.1%)	(2.3%)	(1.6%)	(1.9%)
Surface Mount Technology	296	2,014	2,310	354	2,191	2,545	19.6%	8.8%	10.2%	3.6%	7.4%	6.6%	3.8%	7.7%	6.8%
General Assembly	1,649	4,022	5,671	1,538	4,336	5,874	-6.7%	7.8%	3.6%	20.3%	14.8%	16.1%	16.6%	15.3%	15.6%
Other Assembly	31	107	138	16	145	161	-48.4%	35.5%	16.7%	0.4%	0.4%	0.4%	0.2%	0.5%	0.4%
Bonding															
Soldering															
Sealing/glueing	12	52	64	8	62	70									
Screwing	6	6	6	2	2	2									
Others	13	55	68	6	83	89									
Assembly Units	1,680	4,129	5,809	1,554	4,481	6,035	-7.5%	8.5%	3.9%	20.7%	15.2%	16.5%	16.7%	15.8%	16.0%
(million yen)	(3,149)	(5,497)	(8,646)	(2,898)	(5,458)	(8,356)	(-8.0%)	(-0.7%)	(-3.4%)	(8.4%)	(5.7%)	(6.4%)	(6.7%)	(5.6%)	(6.0%)
Palletizing/depalletizing	216	597	813	223	609	832	3.2%	2.0%	2.3%	2.7%	2.2%	2.3%	2.4%	2.1%	2.2%
Material handling	1,521	6,064	7,585	1,936	8,832	10,768	27.3%	45.6%	42.0%	18.7%	22.3%	21.5%	20.8%	31.1%	28.6%
FPD	53	243	296	62	251	313	17.0%	3.3%	5.7%	0.7%	0.9%	0.8%	0.7%	0.9%	0.8%
Semiconductor	705	1,443	2,148	963	1,790	2,753	36.6%	24.0%	28.2%	8.7%	5.3%	6.1%	10.4%	6.3%	7.3%
Others		1	1												
Cleanroom Units	758	1,687	2,445	1,025	2,041	3,066	35.2%	21.0%	25.4%	9.3%	6.2%	6.9%	11.0%	7.2%	8.1%
(million yen)	(4,840)	(5,966)	(10,806)	(5,795)	(6,658)	(12,453)	(19.7%)	(11.6%)	(15.2%)	(12.9%)	(6.1%)	(8.0%)	(13.4%)	(6.9%)	(8.9%)
Other applications	374	757	1,131	644	623	1,267	72.2%	-17.7%	12.0%	4.6%	2.8%	3.2%	6.9%	2.2%	3.4%
Total Units	8,117	27,134	35,251	9,290	28,390	37,680	14.5%	4.6%	6.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
(million yen)	(37,480)	(97,017)	(134,497)	(43,283)	(96,762)	(140,045)	(15.5%)	(-0.3%)	(4.1%)	(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.

