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

Number of units, (): million yen

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

Shipments July - September 2015		r 2015	July - September 2016			Change from 2015			July - September 2015 (percentage distribution)			July - September 2016 (percentage distribution)			
Applications	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	3		3								1	
Others	20		20	6	5	11								1	
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								İ	
Grinding/deburring	40	17	57	59	20	79								1	
Others	12	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	12	12	7	19									
Machining Units		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														1	
Soldering														İ	
Sealing/glueing	12	52	64	8	62	70								1	
Screwing	6		6	2		2								1	
Others	13	55	68	6	83	89									
Assembly Units	,	4,129	5,809	1,554	4,481	6,035	-7.5%		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		1,687	2,445	1,025	2,041	3,066	35.2%	21.0%	25.4%	9.3%		6.9%	11.0%	7.2%	8.1%
(million yen)		(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%		3.2%	6.9%	2.2%	3.4%
Total Units	-,	27,134	35,251	9,290	28,390	37,680	14.5%		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.

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

Number of units, (): million yen

	2015	2016	Change	Percentage distribution			
Industries	Jul Sep.	Jul Sep.	from 2015	2015	2016		
Metal products	574	470	-18.1%	7.1%	5.1%		
Construction and mining mac	37	42	13.5%	0.5%	0.5%		
Metalworking machinery	156	82	-47.4%	1.9%	0.9%		
Other machinery and equipme	ent	398	548	37.7%	4.9%	5.9%	
Machinery and equipment	Units	591	672	13.7%	7.3%	7.2%	
	(million yen)	(3,282)	(3,629)	(10.6%)	(8.8%)	(8.4%)	
Electronic computers		35	12	-65.7%	0.4%	0.1%	
Consumer electrical machine	ry	407	505	24.1%	5.0%	5.4%	
Industrial electrical machinery	,	161	372	131.1%	2.0%	4.0%	
Communication equipment		182	262	44.0%	2.2%	2.8%	
Video and audio equipment			2			0.0%	
Electronic components/device	678	763	12.5%	8.4%	8.2%		
Other electrical machinery	Other electrical machinery			1.4%	9.8%	8.7%	
Electrical machinery	Units	2,260	2,724	20.5%	27.8%	29.3%	
	(million yen)	(11,066)	(13,512)	(22.1%)	(29.5%)	(31.2%)	
Precision instruments	103	102	-1.0%	1.3%	1.1%		
Motor vehicles		1,010	1,395	38.1%	12.4%	15.0%	
Auto parts		1,758	2,175	23.7%	21.7%	23.4%	
Motor vehicles and auto parts	Units	2,768	3,570	29.0%	34.1%	38.4%	
	(million yen)	(12,588)	(14,634)	(16.3%)	(33.6%)	(33.8%)	
Other transport equpment	60	68	13.3%	0.7%	0.7%		
Food products, beverages, and tobac	131	221	68.7%	1.6%	2.4%		
Chemical products		75	96	28.0%	0.9%	1.0%	
Plastic products		282	251	-11.0%	3.5%	2.7%	
Other industries		1,228	1,075	-12.5%	15.1%	11.6%	
Non-manufacturing industry		45	41	-8.9%	0.6%	0.4%	
Total domestic shipments	Units	8,117	9,290	14.5%	100.0%	100.0%	
					(23.0%)	(24.7%)	
	(million yen)	(37,480)	(43,283)	(15.5%)	(100.0%)	(100.0%)	
	- 1	•	-		(27.9%)	(30.9%)	
Export	Units	27,134	28,390	4.6%	(77.0%)	(75.3%)	
- -	(million yen)	(97,017)	(96,762)	(-0.3%)	(72.1%)	(69.1%)	
Grand total	Units	35,251	37,680	6.9%	(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.