

October - December 2011 Results
Production and Shipments of Manipulators and Robots by Application Areas (based on Value)
(JARA Member Companies)

(Unit: million yen)

Production	October - December 2010	October - December 2011	Change from 2010
	120,659	105,341	-12.7%

Shipments	October - December 2010			October - December 2011			Change from 2010			October - December 2010 (percentage distribution)			October - December 2011 (percentage distribution)		
	Application area	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports
Plastic moulding	1,565	2,243	3,808	2,202	2,189	4,391	40.7%	-2.4%	15.3%	5.2%	2.6%	3.3%	7.1%	3.0%	4.2%
Arc welding	(3,826)	(6,995)	(10,821)	(3,473)	(7,709)	(11,182)	-9.2%	10.2%	3.3%	12.8%	8.2%	9.4%	11.2%	10.5%	10.7%
Spot welding	(1,852)	(7,666)	(9,518)	(3,126)	(11,659)	(14,785)	68.8%	52.1%	55.3%	6.2%	9.0%	8.3%	10.1%	15.8%	14.2%
Gas welding															
Laser welding	(28)	(2)	(30)	(53)		(53)									
Others	(28)	(29)	(57)	(9)	(5)	(14)									
Welding	5,734	14,693	20,427	6,661	19,373	26,034	16.2%	31.9%	27.4%	19.2%	17.2%	17.7%	21.5%	26.3%	24.9%
Painting	546	1,764	2,310	436	2,542	2,978	-20.0%	44.1%	28.9%	1.8%	2.1%	2.0%	1.4%	3.5%	2.9%
Loading/unloading	(847)	(1,710)	(2,556)	(1,184)	(1,777)	(2,960)									
Mechanical cutting															
Grinding/deburring	(110)	(33)	(142)	(126)	(194)	(321)									
Others	(68)	(3)	(71)	(30)	(6)	(36)									
Machining	1,024	1,745	2,770	1,340	1,977	3,317	30.8%	13.3%	19.8%	3.4%	2.0%	2.4%	4.3%	2.7%	3.2%
General Assembly	2,055	2,478	4,533	2,232	2,585	4,817	8.6%	4.3%	6.3%	6.9%	2.9%	3.9%	7.2%	3.5%	4.6%
Surface Mount Technology	5,363	41,856	47,219	5,594	26,237	31,831	4.3%	-37.3%	-32.6%	18.0%	48.9%	40.9%	18.1%	35.7%	30.5%
Other Assembly	348	252	600	122	69	192	-64.9%	-72.4%	-68.0%	1.2%	0.3%	0.5%	0.4%	0.1%	0.2%
(Bonding)	(237)		(237)	(52)		(52)									
(Soldering)															
(Sealing/glueing)	(58)	(86)	(145)	(51)	(42)	(93)									
(Screwing)	(9)	(4)	(13)	(7)		(7)									
(Others)	(43)	(161)	(205)	(12)	(28)	(40)									
Assembly	7,766	44,586	52,352	7,949	28,891	36,840	2.4%	-35.2%	-29.6%	26.0%	52.1%	45.4%	25.7%	39.3%	35.3%
Palletizing/depalletizing	1,673	1,594	3,267	1,794	1,463	3,257	7.3%	-8.3%	-0.3%	5.6%	1.9%	2.8%	5.8%	2.0%	3.1%
Material handling	3,340	7,636	10,976	3,167	8,872	12,039	-5.2%	16.2%	9.7%	11.2%	8.9%	9.5%	10.2%	12.1%	11.5%
(FPD)	(2,677)	(7,420)	(10,097)	(1,952)	(4,410)	(6,363)	-27.1%	-40.6%	-37.0%	9.0%	8.7%	8.8%	6.3%	6.0%	6.1%
(Semiconductor)	(4,088)	(2,272)	(6,360)	(2,994)	(2,312)	(5,306)	-26.8%	1.8%	-16.6%	13.7%	2.7%	5.5%	9.7%	3.1%	5.1%
(Others)	(306)		(306)	(0)		(0)									
Cleanroom	7,071	9,692	16,762	4,946	6,722	11,668	-30.0%	-30.6%	-30.4%	23.7%	11.3%	14.5%	16.0%	9.1%	11.2%
Other applications	1,132	1,556	2,688	2,415	1,535	3,950	113.4%	-1.4%	47.0%	3.8%	1.8%	2.3%	7.8%	2.1%	3.8%
Total	29,849	85,510	115,359	30,910	73,564	104,474	3.6%	-14.0%	-9.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note)

These statistics include dedicated type (Surface Mount Technology / Bonding).

These statistics are 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 2011 Results
Shipments of Manipulators and Robots by Industrial Branches (based on Value)
(JARA Member Companies)

Industrial branches	2010	2011	Change from 2010	Percentage distribution	
	million yen	million yen		2010	2011
Metal products	906	1,064	17.5%	3.0%	3.4%
Construction Machinery	(140)	(109)	-21.9%	0.5%	0.4%
Metalworking machinery	(161)	(321)	99.1%	0.5%	1.0%
Other machinery and equipment	(517)	(608)	17.5%	1.7%	2.0%
Machinery and equipment	818	1,038	26.8%	2.7%	3.4%
Computers	(69)	(147)	113.9%	0.2%	0.5%
Consumer electrical machinery	(617)	(261)	-57.8%	2.1%	0.8%
Industrial electrical machinery	(714)	(1,922)	169.1%	2.4%	6.2%
Info-communications equipment	(3,190)	(3,745)	17.4%	10.7%	12.1%
VTR	(93)	(55)	-41.2%	0.3%	0.2%
Electronic components/devices	(5,173)	(3,951)	-23.6%	17.3%	12.8%
Other electrical machinery	(5,059)	(3,139)	-38.0%	16.9%	10.2%
Electrical machinery	14,915	13,219	-11.4%	50.0%	42.8%
Precision and optical instruments	174	687	296.0%	0.6%	2.2%
Motor vehicles	(2,491)	(2,844)	14.2%	8.3%	9.2%
Auto parts	(4,175)	(5,672)	35.9%	14.0%	18.3%
Motor vehicles and auto parts	6,665	8,516	27.8%	22.3%	27.5%
Food products, beverages, and tobacco products	725	877	20.9%	2.4%	2.8%
Plastic products	1,585	2,104	32.8%	5.3%	6.8%
EMS companies (Subconstructors)	27	8		0.1%	0.0%
Non-manufacturing	1,620	304	-81.2%	5.4%	1.0%
Other industries	2,415	3,093	28.1%	8.1%	10.0%
Total domestic shipments	29,849	30,910	3.6%	100.0%	100.0%
				(25.9%)	(29.6%)
Export	85,510	73,564	-14.0%	(74.1%)	(70.4%)
Grand total	115,359	104,474	-9.4%	(100.0%)	(100.0%)

Note) These statistics include dedicated type (Surface Mount Technology / Bonding).
These statistics are 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.