

October - December 2009 Results
Production and Shipments of Manipulators and Robots by Application Areas (based on Value)
(JARA Member Companies)

(Unit: million yen)

Production	October - December 2008	October - December 2009	Change from 2008
	84,160	61,629	-26.8%

Shipments	October - December 2008			October - December 2009			Change from 2008			October - December 2008 (percentage distribution)			October - December 2009 (percentage distribution)		
	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total
Application area															
Plastic moulding	2,759	1,658	4,417	1,414	1,074	2,488	-48.7%	-35.2%	-43.7%	7.7%	3.4%	5.2%	7.9%	2.4%	4.0%
Arc welding	(6,275)	(5,219)	(11,494)	(1,853)	(2,944)	(4,797)	-70.5%	-43.6%	-58.3%	17.6%	10.6%	13.5%	10.4%	6.6%	7.7%
Spot welding	(3,565)	(7,118)	(10,683)	(816)	(3,976)	(4,792)	-77.1%	-44.1%	-55.1%	10.0%	14.4%	12.6%	4.6%	9.0%	7.7%
Gas welding															
Laser welding	(6)		(6)												
Others	(10)	(9)	(19)	(84)	(10)	(94)									
Welding	9,856	12,346	22,202	2,753	6,930	9,683	-72.1%	-43.9%	-56.4%	27.7%	25.1%	26.2%	15.4%	15.6%	15.6%
Loading/unloading	(1,104)	(966)	(2,070)	(577)	(600)	(1,177)									
Mechanical cutting	(11)		(11)												
Grinding/deburring	(115)	(8)	(123)	(31)	(10)	(41)									
Others	(2)		(2)	(46)	(4)	(50)									
Machining	1,231	974	2,206	654	614	1,268	-46.9%	-36.9%	-42.5%	3.5%	2.0%	2.6%	3.7%	1.4%	2.0%
General Assembly	2,973	1,621	4,594	1,195	1,237	2,432	-59.8%	-23.7%	-47.1%	8.3%	3.3%	5.4%	6.7%	2.8%	3.9%
Surface Mount Technology	5,404	13,963	19,367	3,275	23,016	26,291	-39.4%	64.8%	35.8%	15.2%	28.3%	22.8%	18.4%	51.9%	42.3%
Other Assembly	204	241	445	49	119	168	-76.0%	-50.8%	-62.3%	0.6%	0.5%	0.5%	0.3%	0.3%	0.3%
(Bonding)															
(Soldering)															
(Sealing/glueing)	(200)	(236)	(436)	(43)	(57)	(100)									
(Screwing)															
(Others)	(4)	(5)	(9)	(6)	(62)	(68)									
Assembly	8,581	15,825	24,406	4,519	24,371	28,890	-47.3%	54.0%	18.4%	24.1%	32.1%	28.8%	25.3%	54.9%	46.5%
Material handling	3,141	6,585	9,726	1,679	2,698	4,377	-46.6%	-59.0%	-55.0%	8.8%	13.4%	11.5%	9.4%	6.1%	7.0%
Painting	2,174	818	2,992	427	395	822	-80.4%	-51.7%	-72.5%	6.1%	1.7%	3.5%	2.4%	0.9%	1.3%
(FPD)	(3,057)	(8,056)	(11,113)	(2,537)	(5,961)	(8,497)	-17.0%	-26.0%	-23.5%	8.6%	16.4%	13.1%	14.2%	13.4%	13.7%
(Semiconductor)	(1,504)	(863)	(2,367)	(2,011)	(1,031)	(3,042)	33.7%	19.5%	28.5%	4.2%	1.8%	2.8%	11.3%	2.3%	4.9%
(Others)				(61)		(61)									
Cleanroom	4,561	8,919	13,479	4,608	6,992	11,600	1.0%	-21.6%	-13.9%	12.8%	18.1%	15.9%	25.8%	15.8%	18.7%
Other applications	3,306	2,140	5,446	1,789	1,277	3,066	-45.9%	-40.3%	-43.7%	9.3%	4.3%	6.4%	10.0%	2.9%	4.9%
Total	35,609	49,265	84,874	17,843	44,352	62,195	-49.9%	-10.0%	-26.7%	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 2009 Results
Shipments of Manipulators and Robots by Industrial Branches (based on Value)
(JARA Member Companies)

Industrial branches	2008	2009	Change from 2008	Percentage distribution	
	million yen	million yen		2008	2009
Metal products	1,099	499	-54.6%	3.1%	2.8%
Construction Machinery	(782)	(84)	-89.2%	2.2%	0.5%
Metalworking machinery	(262)	(141)	-46.2%	0.7%	0.8%
Other machinery and equipment	(774)	(314)	-59.4%	2.2%	1.8%
Machinery and equipment	1,817	539	-70.4%	5.1%	3.0%
Computers	(161)	(16)	-89.9%	0.5%	0.1%
Consumer electrical machinery	(168)	(550)	227.1%	0.5%	3.1%
Industrial electrical machinery	(1,575)	(134)	-91.5%	4.4%	0.8%
Info-communications equipment	(2,039)	(2,835)	39.0%	5.7%	15.9%
VTR	(104)	(53)	-49.0%	0.3%	0.3%
Electronic components/devices	(2,845)	(2,499)	-12.2%	8.0%	14.0%
Other electrical machinery	(3,086)	(2,873)	-6.9%	8.7%	16.1%
Electrical machinery	9,977	8,959	-10.2%	28.0%	50.2%
Precision and optical instruments	654	237	-63.7%	1.8%	1.3%
Motor vehicles	(6,650)	(1,068)	-83.9%	18.7%	6.0%
Auto parts	(8,754)	(2,432)	-72.2%	24.6%	13.6%
Motor vehicles and auto parts	15,404	3,500	-77.3%	43.3%	19.6%
Food products, beverages, and tobacco products	617	653	5.9%	1.7%	3.7%
Plastic products	2,715	1,472	-45.8%	7.6%	8.2%
EMS companies (Subconstructors)	17	16	-5.9%	0.0%	0.1%
Non-manufacturing	378	170	-55.1%	1.1%	1.0%
Other industries	2,931	1,799	-38.6%	8.2%	10.1%
Total domestic shipments	35,609	17,843	-49.9%	100.0%	100.0%
				(42.0%)	(28.7%)
Export	49,265	44,352	-10.0%	(58.0%)	(71.3%)
Grand total	84,874	62,195	-26.7%	(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.