

January - December 2006 Results
Production and Shipments of Manipulators and Robots by Application Areas (based on Value)
(JARA Member Companies)

(Unit: million yen)

Production	January - December 2005	January - December 2006	Change from 2005
	512,514	551,609	7.6%

Shipments	January - December 2005			January - December 2006			Change from 2005			January - December 2005 (percentage distribution)			January - December 2006 (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	12,150	10,817	22,967	12,711	11,010	23,721	4.6%	1.8%	3.3%	5.9%	3.3%	4.3%	6.3%	3.1%	4.3%
Arc welding	(25,884)	(22,831)	(48,715)	(29,789)	(19,785)	(49,574)	15.1%	-13.3%	1.8%	12.7%	7.0%	9.2%	14.9%	5.6%	8.9%
Spot welding	(28,221)	(28,130)	(56,351)	(24,922)	(24,942)	(49,865)	-11.7%	-11.3%	-11.5%	13.8%	8.7%	10.7%	12.4%	7.0%	9.0%
Gas welding		(3)	(3)												
Laser welding	(224)	(12)	(236)	(266)	(19)	(285)									
Others	(307)	(93)	(400)	(40)	(25)	(65)									
Welding	54,636	51,069	105,706	55,017	44,772	99,789	0.7%	-12.3%	-5.6%	26.7%	15.7%	20.0%	27.5%	12.6%	18.0%
Loading/unloading	(7,019)	(3,394)	(10,413)	(6,810)	(3,487)	(10,297)									
Mechanical cutting	(35)	(2)	(37)	(20)	(2)	(22)									
Grinding/deburring	(623)	(82)	(704)	(942)	(54)	(996)									
Others	(126)		(126)	(167)		(167)									
Machining	7,803	3,478	11,281	7,938	3,543	11,481	1.7%	1.9%	1.8%	3.8%	1.1%	2.1%	4.0%	1.0%	2.1%
General Assembly	14,223	6,611	20,834	15,810	7,957	23,768	11.2%	20.4%	14.1%	7.0%	2.0%	3.9%	7.9%	2.2%	4.3%
Surface Mount Technology	50,029	164,292	214,321	50,462	204,085	254,548	0.9%	24.2%	18.8%	24.5%	50.7%	40.5%	25.2%	57.4%	45.8%
Other Assembly	1,292	908	2,200	1,023	717	1,739	-20.8%	-21.1%	-20.9%	0.6%	0.3%	0.4%	0.5%	0.2%	0.3%
(Bonding)	(285)	(381)	(666)												
(Soldering)	(19)	(4)	(23)												
(Sealing/glueing)	(948)	(517)	(1,465)	(846)	(702)	(1,548)									
(Screwing)	(27)		(27)	(31)		(31)									
(Others)	(13)	(6)	(19)	(146)	(15)	(161)									
Assembly	65,544	171,811	237,355	67,295	212,760	280,055	2.7%	23.8%	18.0%	32.1%	53.0%	44.9%	33.6%	59.9%	50.4%
Material handling	16,831	18,795	35,626	14,948	17,802	32,750	-11.2%	-5.3%	-8.1%	8.2%	5.8%	6.7%	7.5%	5.0%	5.9%
Painting	13,085	9,585	22,670	6,399	11,287	17,686	-51.1%	17.8%	-22.0%	6.4%	3.0%	4.3%	3.2%	3.2%	3.2%
(FPD)	(13,535)	(45,014)	(58,550)	(15,303)	(36,067)	(51,370)	13.1%	-19.9%	-12.3%	6.6%	13.9%	11.1%	7.6%	10.1%	9.2%
(Semiconductor)	(4,767)	(3,705)	(8,472)	(6,005)	(6,240)	(12,245)	26.0%	68.4%	44.5%	2.3%	1.1%	1.6%	3.0%	1.8%	2.2%
(Others)	(7)		(7)	(72)	(3)	(75)									
Clean room	18,309	48,719	67,029	21,380	42,310	63,690	16.8%	-13.2%	-5.0%	9.0%	15.0%	12.7%	10.7%	11.9%	11.5%
Other applications	16,104	10,003	26,107	14,636	11,907	26,543	-9.1%	19.0%	1.7%	7.9%	3.1%	4.9%	7.3%	3.4%	4.8%
Total	204,463	324,276	528,739	200,324	355,390	555,714	-2.0%	9.6%	5.1%	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.

January - December 2006 Results
Shipments of Manipulators and Robots by Industrial Branches (based on Value)
(JARA Member Companies)

Industrial branches	2005	2006	Change from 2005	Percentage distribution	
	million yen	million yen		2005	2006
Metal products	5,862	6,585	12.3%	2.9%	3.3%
Construction Machinery	(1,986)	(2,747)	38.3%	1.0%	1.4%
Metalworking machinery	(913)	(1,316)	44.2%	0.4%	0.7%
Other machinery and equipment	(4,886)	(5,911)	21.0%	2.4%	3.0%
Machinery and equipment	7,785	9,974	28.1%	3.8%	5.0%
Computers	(1,869)	(3,871)	107.1%	0.9%	1.9%
Consumer electrical machinery	(781)	(1,088)	39.3%	0.4%	0.5%
Industrial electrical machinery	(10,024)	(7,701)	-23.2%	4.9%	3.8%
Info-communications equipment	(27,380)	(30,488)	11.3%	13.4%	15.2%
VTR	(298)	(367)	23.4%	0.1%	0.2%
Electronic components/devices	(13,341)	(10,028)	-24.8%	6.5%	5.0%
Other electrical machinery	(13,971)	(17,143)	22.7%	6.8%	8.6%
Electrical machinery	67,664	70,686	4.5%	33.1%	35.3%
Precision and optical instruments	2,579	2,832	9.8%	1.3%	1.4%
Motor vehicles	(45,060)	(30,203)	-33.0%	22.0%	15.1%
Auto parts	(44,398)	(48,659)	9.6%	21.7%	24.3%
Motor vehicles and auto parts	89,458	78,861	-11.8%	43.8%	39.4%
Food products, beverages, and tobacco products	2,788	2,105	-24.5%	1.4%	1.1%
Plastic products	11,488	12,256	6.7%	5.6%	6.1%
EMS companies (Subconstructors)	601	627	4.3%	0.3%	0.3%
Non-manufacturing	1,477	3,061	107.3%	0.7%	1.5%
Other industries	14,762	13,338	-9.6%	7.2%	6.7%
Total domestic shipments	204,463	200,324	-2.0%	100.0%	100.0%
				(38.7%)	(36.0%)
Export	324,276	355,390	9.6%	(61.3%)	(64.0%)
Grand total	528,739	555,714	5.1%	(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.