

October - December 2012 Results
Production and Shipments of Manipulators and Robots by Application Areas (based on Value)
(JARA Member Companies)

(Unit: million yen)

Production	October - December 2011	October - December 2012	Change from 2011
	105,341	83,222	-21.0%

Shipments	October - December 2011			October - December 2012			Change from 2011			October - December 2011 (percentage distribution)			October - December 2012 (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	2,202	2,189	4,391	2,049	2,218	4,267	-6.9%	1.3%	-2.8%	7.1%	3.0%	4.2%	7.8%	3.7%	5.0%
Arc welding	(3,473)	(7,709)	(11,182)	(3,305)	(6,813)	(10,118)	-4.8%	-11.6%	-9.5%	11.2%	10.5%	10.7%	12.5%	11.4%	11.8%
Spot welding	(3,126)	(11,659)	(14,785)	(2,469)	(10,800)	(13,269)	-21.0%	-7.4%	-10.3%	10.1%	15.8%	14.2%	9.4%	18.1%	15.4%
Gas welding				(3)		(3)									
Laser welding	(53)		(53)	(9)		(9)									
Others	(9)	(5)	(14)	(24)	(8)	(32)									
Welding	6,661	19,373	26,034	5,811	17,621	23,432	-12.8%	-9.0%	-10.0%	21.5%	26.3%	24.9%	22.0%	29.5%	27.2%
Painting	436	2,542	2,978	583	2,161	2,743	33.5%	-15.0%	-7.9%	1.4%	3.5%	2.9%	2.2%	3.6%	3.2%
Loading/unloading	(1,184)	(1,777)	(2,960)	(646)	(790)	(1,436)									
Mechanical cutting					(2)	(2)									
Grinding/deburring	(126)	(194)	(321)	(138)	(40)	(178)									
Others	(30)	(6)	(36)	(51)	(62)	(112)									
Machining	1,340	1,977	3,317	834	894	1,728	-37.7%	-54.8%	-47.9%	4.3%	2.7%	3.2%	3.2%	1.5%	2.0%
General Assembly	2,232	2,585	4,817	1,991	1,829	3,819	-10.8%	-29.3%	-20.7%	7.2%	3.5%	4.6%	7.5%	3.1%	4.4%
Surface Mount Technology	5,594	26,237	31,831	3,707	22,000	25,707	-33.7%	-16.1%	-19.2%	18.1%	35.7%	30.5%	14.0%	36.9%	29.9%
Other Assembly	122	69	192	112	250	362	-8.4%	260.7%	89.0%	0.4%	0.1%	0.2%	0.4%	0.4%	0.4%
(Bonding)	(52)		(52)	(48)		(48)									
(Soldering)															
(Sealing/glueing)	(51)	(42)	(93)	(33)	(132)	(165)									
(Screwing)	(7)		(7)												
(Others)	(12)	(28)	(40)	(31)	(119)	(150)									
Assembly	7,949	28,891	36,840	5,810	24,079	29,889	-26.9%	-16.7%	-18.9%	25.7%	39.3%	35.3%	22.0%	40.4%	34.7%
Palletizing/depalletizing	1,794	1,463	3,257	1,850	1,723	3,573	3.1%	17.8%	9.7%	5.8%	2.0%	3.1%	7.0%	2.9%	4.2%
Material handling	3,167	8,872	12,039	3,030	6,346	9,375	-4.3%	-28.5%	-22.1%	10.2%	12.1%	11.5%	11.5%	10.6%	10.9%
(FPD)	(1,952)	(4,410)	(6,363)	(1,091)	(868)	(1,959)	-44.1%	-80.3%	-69.2%	6.3%	6.0%	6.1%	4.1%	1.5%	2.3%
(Semiconductor)	(2,994)	(2,312)	(5,306)	(1,985)	(990)	(2,975)	-33.7%	-57.2%	-43.9%	9.7%	3.1%	5.1%	7.5%	1.7%	3.5%
(Others)	(0)		(0)	(21)	(1)	(22)									
Cleanroom	4,946	6,722	11,668	3,097	1,859	4,955	-37.4%	-72.4%	-57.5%	16.0%	9.1%	11.2%	11.7%	3.1%	5.8%
Other applications	2,415	1,535	3,950	3,336	2,756	6,091	38.1%	79.5%	54.2%	7.8%	2.1%	3.8%	12.6%	4.6%	7.1%
Total	30,910	73,564	104,474	26,398	59,656	86,054	-14.6%	-18.9%	-17.6%	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 2012 Results
Shipments of Manipulators and Robots by Industrial Branches (based on Value)
(JARA Member Companies)

Industrial branches	2011	2012	Change from 2011	Percentage distribution	
	million yen	million yen		2011	2012
Metal products	1,064	928	-12.8%	3.4%	3.5%
Construction Machinery	(109)	(195)	78.1%	0.4%	0.7%
Metalworking machinery	(321)	(206)	-35.9%	1.0%	0.8%
Other machinery and equipment	(608)	(481)	-20.9%	2.0%	1.8%
Machinery and equipment	1,038	881	-15.1%	3.4%	3.3%
Computers	(147)	(44)	-70.2%	0.5%	0.2%
Consumer electrical machinery	(261)	(206)	-20.8%	0.8%	0.8%
Industrial electrical machinery	(1,922)	(659)	-65.7%	6.2%	2.5%
Info-communications equipment	(3,745)	(2,382)	-36.4%	12.1%	9.0%
VTR	(55)	(5)	-90.9%	0.2%	0.0%
Electronic components/devices	(3,951)	(2,703)	-31.6%	12.8%	10.2%
Other electrical machinery	(3,139)	(2,173)	-30.8%	10.2%	8.2%
Electrical machinery	13,219	8,172	-38.2%	42.8%	31.0%
Precision and optical instruments	687	174	-74.7%	2.2%	0.7%
Motor vehicles	(2,844)	(3,244)	14.1%	9.2%	12.3%
Auto parts	(5,672)	(5,618)	-0.9%	18.3%	21.3%
Motor vehicles and auto parts	8,516	8,862	4.1%	27.5%	33.6%
Food products, beverages, and tobacco products	877	750	-14.4%	2.8%	2.8%
Plastic products	2,104	2,145	2.0%	6.8%	8.1%
Chemical products	506	391	-22.8%	1.6%	1.5%
Non-manufacturing	304	366	20.2%	1.0%	1.4%
Other industries	2,595	3,728	43.7%	8.4%	14.1%
Total domestic shipments	30,910	26,398	-14.6%	100.0%	100.0%
				(29.6%)	(30.7%)
Export	73,564	59,656	-18.9%	(70.4%)	(69.3%)
Grand total	104,474	86,054	-17.6%	(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.