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

(Unit: million yen)

Production	January - March 2010	January - March 2011	Change from 2010		
	82,814	119,649	44.5%		

Shipments January - March 2010		January - March 2011		Change from 2010			January - March 2010 (percentage distribution)			January - March 2011 (percentage distribution)					
Application area	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total	Domestic shipments	Exports	Total
Plastic moulding	1,823	1,559	3,382	1,911	2,335	4,246	4.8%	49.8%	25.6%	7.0%	2.5%	3.8%	5.8%	2.7%	3.6%
Arc welding	(2,872)	(4,729)	(7,601)	(3,728)	(8,632)	(12,360)	29.8%	82.5%	62.6%	11.0%	7.5%	8.5%	11.3%	10.1%	10.4%
Spot welding	(1,954)	(4,784)	(6,738)	(2,732)	(8,559)	(11,291)	39.8%	78.9%	67.6%	7.5%	7.6%	7.6%	8.3%	10.0%	9.5%
Gas welding															
Laser welding	(13)	(46)	(59)	(46)	(2)	(48)									
Others	(35)	(9)	(44)	(13)		(13)									
Welding	4,875	9,568	14,443	6,520	17,193	23,713	33.7%	79.7%	64.2%	18.7%	15.2%	16.2%	19.8%	20.0%	20.0%
Painting	1,290	1,056	2,346	1,237	3,560	4,796	-4.1%	237.0%	104.5%	4.9%	1.7%	2.6%	3.8%	4.1%	4.0%
Loading/unloading	(541)	(863)	(1,403)	(624)	(1,285)	(1,909)									
Mechanical cutting				(3)		(3)									
Grinding/deburring	(108)	(66)	(174)	(139)	(20)	(159)									
Others	(48)	(3)	(51)	(48)	(9)	(57)									
Machining	697	932	1,628	814	1,314	2,128	16.8%	41.0%	30.7%	2.7%	1.5%	1.8%	2.5%	1.5%	1.8%
General Assembly	1,906	1,735	3,641	2,232	2,607	4,839	17.1%	50.3%	32.9%	7.3%	2.8%	4.1%	6.8%	3.0%	4.1%
Surface Mount Technology	4,497	34,829	39,326	5,909	40,755	46,664	31.4%	17.0%	18.7%	17.2%	55.3%	44.1%	17.9%	47.5%	39.3%
Other Assembly	135	110	245	222	96	318	64.9%	-13.1%	29.8%	0.5%	0.2%	0.3%	0.7%	0.1%	0.3%
(Bonding)				(153)		(153)									
(Soldering)															
(Sealing/glueing)	(40)	(63)	(103)	(37)	(54)	(92)									
(Screwing)				(2)		(2)									
(Others)	(94)	(47)	(141)	(30)	(41)	(71)									
Assembly	6,538	36,674	43,212	8,363	43,458	51,821	27.9%	18.5%	19.9%	25.0%	58.2%	48.5%	25.4%	50.7%	43.6%
Palletizing/depalletizing	1,461	930	2,391	2,051	1,236	3,287	40.4%	32.9%	37.5%	5.6%	1.5%	2.7%		1.4%	2.8%
Material handling	2,730	3,675	6,406	4,495	7,946	12,442	64.6%	116.2%	94.2%	10.5%	5.8%	7.2%	13.6%	9.3%	10.5%
(FPD)	(3,188)	(6,166)	(9,355)	(1,692)	(5,307)	(7,000)	-46.9%	-13.9%	-25.2%	12.2%	9.8%	10.5%	5.1%	6.2%	5.9%
(Semiconductor)	(2,835)	(1,686)	(4,521)	(4,576)	(2,390)	(6,966)	61.4%	41.8%	54.1%	10.9%	2.7%	5.1%	13.9%	2.8%	5.9%
(Others)	(100)	(21)	(121)	(173)		(173)									
Cleanroom	6,124	7,873	13,997	6,441	7,697	14,138	5.2%	-2.2%	1.0%	23.5%	12.5%	15.7%	19.6%	9.0%	11.9%
Other applications	565	719	1,283	1,111	1,043	2,154	96.7%	45.1%	67.8%	2.2%	1.1%	1.4%	3.4%	1.2%	1.8%
Total	26,101	62,987	89,087	32,942	85,783	118,725	26.2%	36.2%	33.3%	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 - March 2011 Results Shipments of Manipulators and Robots by Industrial Branches (based on Value) (JARA Member Companies)

Industrial branches	2010	2011	Change	Percentage distribution		
	million yen	million yen	from 2010	2010	2011	
Metal products	1,048	977	-6.8%	4.0%	3.0%	
Construction Machinery	(76)	(323)	328.2%	0.3%	1.0%	
Metalworking machinery	(89)	(207)	133.9%	0.3%	0.6%	
Other machinery and equipment	(586)	(655)		2.2%	2.0%	
Machinery and equipment	750	1,185	58.1%	2.9%	3.6%	
Computers	(97)	(122)	25.6%	0.4%	0.4%	
Consumer electrical machinery	(552)	(769)	39.3%	2.1%	2.3%	
Industrial electrical machinery	(91)	(521)	475.4%	0.3%	1.6%	
Info-communications equipment	(5,598)	(4,024)	-28.1%	21.4%	12.2%	
VTR	(89)	(68)	-23.6%	0.3%	0.2%	
Electronic components/devices	(3,024)	(5,322)	76.0%	11.6%	16.2%	
Other electrical machinery	(2,379)	(3,531)	48.4%	9.1%	10.7%	
Electrical machinery	11,831	14,357	21.4%	45.3%	43.6%	
Precision and optical instruments	814	494	-39.3%	3.1%	1.5%	
Motor vehicles	(1,980)	(4,020)	103.1%	7.6%	12.2%	
Auto parts	(3,839)	(4,696)	22.3%	14.7%	14.3%	
Motor vehicles and auto parts	5,818	8,716	49.8%	22.3%	26.5%	
Food products, beverages, and tobacco products	727	856	17.7%	2.8%	2.6%	
Plastic products	1,720	1,848	7.5%	6.6%	5.6%	
EMS companies (Subconstructors)	0	0		0.0%	0.0%	
Non-manufacturing	641	542	-15.5%	2.5%	1.6%	
Other industries	2,752	3,966	44.1%	10.5%	12.0%	
Total domestic shipments	26,101	32,942	26.2%	100.0%	100.0%	
·		•		(29.3%)	(27.7%)	
Export	62,987	85,783	36.2%	(70.7%)	(72.3%)	
Grand total	89,087	118,725	33.3%	(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.