

July - September 2014 Results
Production and Shipments of Manipulators and Robots by Application Areas
[JARA Member Companies]

Number of units, (): million yen

| Production | July - September 2013 | July - September 2014 | Change from 2013 |
|------------|-----------------------|-----------------------|--------------------|
| | 26,646 (105,484) | 33,342 (135,200) | +25.1% (+28.2%) |

| Shipments | July - September 2013 | | | July - September 2014 | | | Change from 2013 | | | July - September 2013 (percentage distribution) | | | July - September 2014 (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 | 543 | 1,135 | 1,678 | 661 | 1,307 | 1,968 | +21.7% | +15.2% | +17.3% | 8.5% | 5.5% | 6.3% | 8.7% | 5.0% | 5.9% |
| Arc welding | 889 | 4,117 | 5,006 | 985 | 4,217 | 5,202 | +10.8% | +2.4% | +3.9% | 14.0% | 20.1% | 18.7% | 12.9% | 16.3% | 15.5% |
| Spot welding | 591 | 3,094 | 3,685 | 1,024 | 4,415 | 5,439 | +73.3% | +42.7% | +47.6% | 9.3% | 15.1% | 13.7% | 13.5% | 17.1% | 16.2% |
| Laser welding | 11 | | 11 | 7 | 74 | 81 | | | | | | | | | |
| Others | 4 | 2 | 6 | 10 | 13 | 23 | | | | | | | | | |
| Welding Units | 1,495 | 7,213 | 8,708 | 2,026 | 8,719 | 10,745 | +35.5% | +20.9% | +23.4% | 23.5% | 35.2% | 32.5% | 26.6% | 33.7% | 32.1% |
| (million yen) | (6,563) | (17,779) | (24,342) | (8,263) | (22,182) | (30,445) | (+25.9%) | (+24.8%) | (+25.1%) | (22.2%) | (23.3%) | (23.0%) | (24.3%) | (22.3%) | (22.8%) |
| Painting | 106 | 229 | 335 | 163 | 337 | 500 | +53.8% | +47.2% | +49.3% | 1.7% | 1.1% | 1.2% | 2.1% | 1.3% | 1.5% |
| Loading/unloading | 315 | 1,172 | 1,487 | 393 | 1,237 | 1,630 | +24.8% | +5.5% | +9.6% | 5.0% | 5.7% | 5.5% | 5.2% | 4.8% | 4.9% |
| Mechanical cutting | | | | | 10 | 10 | | | | | | | | | |
| Grinding/deburring | 20 | 12 | 32 | 38 | 12 | 50 | | | | | | | | | |
| Others | 16 | 1 | 17 | 9 | 3 | 12 | | | | | | | | | |
| Machining Units | 351 | 1,185 | 1,536 | 440 | 1,262 | 1,702 | +25.4% | +6.5% | +10.8% | 5.5% | 5.8% | 5.7% | 5.8% | 4.9% | 5.1% |
| (million yen) | (823) | (1,957) | (2,781) | (1,011) | (1,932) | (2,944) | (+22.8%) | (-1.3%) | (+5.9%) | (2.8%) | (2.6%) | (2.6%) | (3.0%) | (1.9%) | (2.2%) |
| Surface Mount Technology | 248 | 1,941 | 2,189 | 354 | 2,707 | 3,061 | +42.7% | +39.5% | +39.8% | 3.9% | 9.5% | 8.2% | 4.7% | 10.5% | 9.1% |
| General Assembly | 1,264 | 2,048 | 3,312 | 1,266 | 4,259 | 5,525 | +0.2% | +108.0% | +66.8% | 19.9% | 10.0% | 12.3% | 16.6% | 16.5% | 16.5% |
| Other Assembly | 22 | 159 | 181 | 20 | 56 | 76 | -9.1% | -64.8% | -58.0% | 0.3% | 0.8% | 0.7% | 0.3% | 0.2% | 0.2% |
| Bonding | | | | | | | | | | | | | | | |
| Soldering | 1 | | 1 | 1 | | 1 | | | | | | | | | |
| Sealing/glueing | 16 | 82 | 98 | 10 | 54 | 64 | | | | | | | | | |
| Screwing | 1 | | 1 | 1 | | 1 | | | | | | | | | |
| Others | 4 | 77 | 81 | 8 | 2 | 10 | | | | | | | | | |
| Assembly Units | 1,286 | 2,207 | 3,493 | 1,286 | 4,315 | 5,601 | | +95.5% | +60.3% | 20.2% | 10.8% | 13.0% | 16.9% | 16.7% | 16.7% |
| (million yen) | (6,623) | (32,693) | (39,316) | (8,919) | (48,907) | (57,826) | (+34.7%) | (+49.6%) | (+47.1%) | (22.4%) | (42.8%) | (37.1%) | (26.3%) | (49.1%) | (43.3%) |
| Palletizing/depalletizing | 227 | 485 | 712 | 242 | 374 | 616 | +6.6% | -22.9% | -13.5% | 3.6% | 2.4% | 2.7% | 3.2% | 1.4% | 1.8% |
| Material handling | 990 | 4,157 | 5,147 | 1,438 | 5,352 | 6,790 | +45.3% | +28.7% | +31.9% | 15.6% | 20.3% | 19.2% | 18.9% | 20.7% | 20.3% |
| FPD | 93 | 201 | 294 | 35 | 102 | 137 | -62.4% | -49.3% | -53.4% | 1.5% | 1.0% | 1.1% | 0.5% | 0.4% | 0.4% |
| Semiconductor | 608 | 907 | 1,515 | 634 | 774 | 1,408 | +4.3% | -14.7% | -7.1% | 9.6% | 4.4% | 5.6% | 8.3% | 3.0% | 4.2% |
| Others | | | | | | | | | | | | | | | |
| Cleanroom Units | 701 | 1,108 | 1,809 | 669 | 876 | 1,545 | -4.6% | -20.9% | -14.6% | 11.0% | 5.4% | 6.7% | 8.8% | 3.4% | 4.6% |
| (million yen) | (4,571) | (6,659) | (11,230) | (3,331) | (3,349) | (6,680) | (-27.1%) | (-49.7%) | (-40.5%) | (15.5%) | (8.7%) | (10.6%) | (9.8%) | (3.4%) | (5.0%) |
| Other applications | 413 | 808 | 1,221 | 333 | 638 | 971 | -19.4% | -21.0% | -20.5% | 6.5% | 3.9% | 4.6% | 4.4% | 2.5% | 2.9% |
| Total Units | 6,360 | 20,468 | 26,828 | 7,612 | 25,887 | 33,499 | +19.7% | +26.5% | +24.9% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| (million yen) | (29,510) | (76,363) | (105,873) | (33,939) | (99,514) | (133,453) | (+15.0%) | (+30.3%) | (+26.0%) | (100.0%) | (100.0%) | (100.0%) | (100.0%) | (100.0%) | (100.0%) |

Note)

Data includes dedicated type (Surface Mount Technology / Bonding).

Data is 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.

July - September 2014 Results
Shipments of Manipulators and Robots by Industrial Branches
[JARA Member Companies]

Number of units, (): million yen

| Industrial branches | 2013 Jul-Sep | 2014 Jul-Sep | Change from 2013 | Percentage distribution | |
|---|------------------|------------------|---------------------|-------------------------|-----------------|
| | | | | 2013 | 2014 |
| Metal products | 306 | 366 | +19.6% | 4.8% | 4.8% |
| Construction machinery | 20 | 39 | +95.0% | 0.3% | 0.5% |
| Metalworking machinery | 151 | 192 | +27.2% | 2.4% | 2.5% |
| Other machinery and equipment | 110 | 168 | +52.7% | 1.7% | 2.2% |
| Machinery and equipment | 281 | 399 | +42.0% | 4.4% | 5.2% |
| Units | (860) | (1,162) | (+35.0%) | (2.9%) | (3.4%) |
| (million yen) | | | | | |
| Computers | 8 | 32 | +300.0% | 0.1% | 0.4% |
| Consumer electrical machinery | 95 | 171 | +80.0% | 1.5% | 2.2% |
| Industrial electrical machinery | 156 | 119 | -23.7% | 2.5% | 1.6% |
| Info-communications equipment | 159 | 229 | +44.0% | 2.5% | 3.0% |
| VTR | | | | | |
| Electronic components/devices | 780 | 691 | -11.4% | 12.3% | 9.1% |
| Other electrical machinery | 646 | 691 | +7.0% | 10.2% | 9.1% |
| Electrical machinery | 1,844 | 1,933 | +4.8% | 29.0% | 25.4% |
| Units | (10,655) | (11,167) | (+4.8%) | (36.1%) | (32.9%) |
| (million yen) | | | | | |
| Precision and optical instruments | 153 | 88 | -42.5% | 2.4% | 1.2% |
| Motor vehicles | 598 | 1,007 | +68.4% | 9.4% | 13.2% |
| Auto parts | 1,480 | 1,827 | +23.4% | 23.3% | 24.0% |
| Motor vehicles and auto parts | 2,078 | 2,834 | +36.4% | 32.7% | 37.2% |
| Units | (8,579) | (11,774) | (+37.2%) | (29.1%) | (34.7%) |
| (million yen) | | | | | |
| Food products, beverages, and tobacco products | 184 | 192 | +4.3% | 2.9% | 2.5% |
| Plastic products | 562 | 688 | +22.4% | 8.8% | 9.0% |
| Chemical products | 82 | 126 | +53.7% | 1.3% | 1.7% |
| Other industries | 870 | 986 | +13.3% | 13.7% | 13.0% |
| Total domestic shipments | 6,360 | 7,612 | +19.7% | 100.0% | 100.0% |
| Units | | | | 23.7% | 22.7% |
| (million yen) | (29,510) | (33,939) | (+15.0%) | (100.0%) | (100.0%) |
| | | | | (27.9%) | (25.4%) |
| Export | 20,468 | 25,887 | +26.5% | 76.3% | 77.3% |
| Units | (76,363) | (99,514) | (+30.3%) | (72.1%) | (74.6%) |
| (million yen) | | | | | |
| Grand total | 26,828 | 33,499 | +24.9% | 100.0% | 100.0% |
| Units | (105,873) | (133,453) | (+26.0%) | (100.0%) | (100.0%) |
| (million yen) | | | | | |

Note) Data includes dedicated type (Surface Mount Technology / Bonding).

Data is 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.