October - December 2020 Results Production and Shipments of Manipulators and Robots by Applications [JARA Member Companies]

			Number of units, () : million yen
	October - December 2019	October - December 2020	Change from 2019
Ordere	48,257	59,824	24.0%
Orders	(164,170)	(222,287)	(35.4%)
Production	44,180	48,661	10.1%
	(161,138)	(173,714)	(7.8%)
	(161,138)	(173,714)	(7.8%)

October - December 2019 October - December 2020					Change from 2019				- Decemb		October - December 2020			
									(percentage distribution)			(percentage distribution)		
shipments	Exports	Total	shipments	Exports	Total	shipments	Exports	Total	shipments	Exports	Total	shipments	Exports	Total
761	845	1,606	586	870	1,456	-23.0%	3.0%	-9.3%	7.5%	2.5%	3.7%	7.0%	2.2%	3.1%
986	3,593	4,579	699	4,622	5,321	-29.1%	28.6%	16.2%	9.7%	10.6%	10.4%	8.3%	11.9%	11.2%
709	2,072	2,781	687	2,691	3,378	-3.1%	29.9%	21.5%	7.0%	6.1%	6.3%	8.2%	6.9%	7.1%
3	127	130	1	22	23	-66.7%	-82.7%	-82.3%	0.0%	0.4%	0.3%	0.0%	0.1%	0.0%
35	7	42	11	26	37	-68.6%	271.4%	-11.9%	0.3%	0.0%	0.1%	0.1%	0.1%	0.1%
1,733	5,799	7,532	1,398	7,361	8,759	-19.3%	26.9%	16.3%	17.1%	17.2%	17.2%	16.6%	18.9%	18.5%
(8,872)	(11,817)	(20,689)	(8,204)	(14,982)	(23,186)	(-7.5%)	(26.8%)	(12.1%)	(18.7%)	(10.5%)	(12.9%)	(20.0%)	(11.7%)	(13.7%)
95	286	381	110	359	469	15.8%	25.5%	23.1%	0.9%	0.8%	0.9%	1.3%	0.9%	1.0%
483	2,075	2,558	340	974	1,314	-29.5%	-53.1%	-48.6%	4.8%		5.8%	4.0%	2.5%	2.8%
2	42	44	8		8	300.0%								0.0%
58	14	72	55	77	132	-5.2%	450.0%	83.3%	0.6%	0.0%	0.2%	0.7%	0.2%	0.3%
8	12	20	7	12	19	-12.5%		-5.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%
551	2,143	2,694	410	1,063	1,473	-25.5%	-50.4%	-45.3%		6.3%	6.1%	4.9%	2.7%	3.1%
(1,745)	(4,457)	(6,201)	(1,319)	(1,671)	(2,989)	(-24.4%)	(-62.5%)	(-51.8%)	(3.7%)	(3.9%)	(3.9%)	(3.2%)	(1.3%)	(1.8%)
353	2,934	3,287	228	4,257	4,485	-35.4%	45.1%	36.4%	3.5%	8.7%	7.5%	2.7%	10.9%	9.5%
1,826	8,209	10,035	1,575	6,325	7,900	-13.8%	-22.9%	-21.3%	18.0%	24.3%	22.9%	18.7%	16.2%	16.7%
145	104	249	148	58	206	2.2%	-44.2%	-17.2%	1.4%	0.3%	0.6%	1.8%	0.1%	0.4%
2		2				-100.0%		-100.0%	0.0%		0.0%			
15	73	88	38	43	81	153.3%	-41.1%	-8.0%	0.1%	0.2%	0.2%	0.5%	0.1%	0.2%
2	4	6	2	2	4		-50.0%	-33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
126	27	153	108	13	121	-14.2%	-51.9%	-20.8%	1.2%	0.1%	0.3%	1.3%	0.0%	0.3%
1,971	8,313	10,284	1,723	6,383	8,106	-12.6%	-23.2%	-21.2%	19.5%	24.6%	23.4%	20.5%	16.4%	17.1%
(5,424)	(8,594)	(14,017)	(4,856)	(6,323)	(11,180)	(-10.5%)	(-26.4%)	(-20.2%)	(11.4%)	(7.6%)	(8.7%)	(11.8%)	(4.9%)	(6.6%)
439	533	971	407	610	1,017	-7.2%	14.5%	4.7%	4.3%	1.6%	2.2%	4.8%	1.6%	2.1%
2,307	7,523	9,830	1,611	12,681	14,292	-30.2%	68.6%	45.4%	22.8%	22.3%	22.4%	19.1%	32.6%	30.2%
27	149	176	35	83	118	29.6%	-44.3%	-33.0%	0.3%	0.4%	0.4%	0.4%	0.2%	0.2%
1,319	1,609	2,928	1,364	2,222	3,586	3.4%	38.1%	22.5%	13.0%	4.8%	6.7%	16.2%	5.7%	7.6%
	38	38		128	128		236.8%	236.8%		0.1%	0.1%		0.3%	0.3%
1,346	1,796	3,142	1,399	2,433	3,832	3.9%	35.5%	22.0%	13.3%	5.3%	7.2%	16.6%	6.2%	8.1%
(4,538)	(5,314)	(9,852)	(5,067)	(5,539)	(10,606)	(11.7%)	(4.2%)	(7.7%)	(9.6%)	(4.7%)	(6.1%)	(12.4%)	(4.3%)	(6.3%)
485	983	1,468	391	819	1,210	-19.3%	-16.7%	-17.6%	4.8%	2.9%	3.3%	4.6%	2.1%	2.6%
93	2,623	2,716	153	2,110	2,263	64.5%	-19.6%	-16.7%	0.9%	7.8%	6.2%	1.8%	5.4%	4.8%
10,133	33,778	43,911	8,416	38,946	47,362	-16.9%	15.3%	7.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
(47,504)	(112,954)	(160,458)	(41,024)	(128,302)	(169,326)	(-13.6%)	(13.6%)	(5.5%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)
	Domestic shipments 761 986 709 3 355 1,733 (8,872) 95 483 2 58 8 551 (1,745) 353 1,826 145 2 15 2 126 1,971 (5,424) 439 2,307 2,7 1,319 1,346 (4,538) 485 933 10,133	Domestic shipmentsi Exports 761 845 986 3,593 709 2,072 3 127 35 7 1,733 5,799 (8,872) (11,817) 95 286 483 2,075 2 42 58 144 8 122 551 2,143 (1,745) (4,457) 353 2,934 1,826 8,209 145 104 2 4 126 27 1,971 8,313 (5,424) (8,594) 439 533 2,307 7,523 27 149 1,319 1,609 38 1,346 1,346 1,796 (4,538) (5,314) 485 983 93 2,623	Domestic shipmentis Exports Total 761 845 1,606 986 3,593 4,579 709 2,072 2,781 3 127 130 35 7 422 1,733 5,799 7,532 (8,872) (11,817) (20,689) 95 286 381 483 2,075 2,558 2 42 44 58 14 72 8 12 200 551 2,143 2,694 (1,745) (4,457) (6,201) 353 2,934 3,287 1,826 8,209 10,035 145 104 249 2 2 2 15 73 88 2 4 6 126 27 153 1,971 8,313 10,284 (5,424) (8,594) (14,017) <	Domestic shipments Exports Total Domestic shipments 761 845 1,606 586 986 3,593 4,579 699 709 2,072 2,781 687 3 127 130 1 135 7 42 111 1,733 5,799 7,532 1,398 (8,872) (11,817) (20,689) (8,204) 95 286 381 110 483 2,075 2,558 340 2 42 444 8 58 14 72 555 8 12 20 7 551 2,143 2,694 410 (1,745) (4,457) (6,201) (1,319) 353 2,934 3,287 228 1,826 8,209 10,035 1,575 145 104 249 148 2 2 2 2	Domestic shipments Exports Total Domestic shipments Exports 761 845 1,606 586 870 986 3,593 4,579 699 4,622 709 2,072 2,781 687 2,691 3 127 130 1 222 35 7 422 11 266 1,733 5,799 7,532 1,398 7,361 (8,872) (11,817) (20,689) (8,204) (14,982) 95 286 381 110 359 483 2,075 2,558 340 974 2 42 44 8 77 3 12 20 7 12 551 2,143 2,694 410 1,063 (1,745) (4,457) (6,201) (1,319) (1,671) 353 2,934 3,287 228 4,257 1,826 8,209 10,035	Domestic shipments Exports Total Domestic shipments Exports Total 761 845 1,606 586 870 1,456 986 3,593 4,579 699 4,622 5,321 709 2,072 2,781 687 2,691 3,378 3 127 130 1 22 233 35 7 42 11 26 37 1,733 5,799 7,532 1,398 7,361 8,759 (8,872) (11,817) (20,689) (8,204) (14,982) (23,186) 95 286 381 110 359 469 483 2,075 2,558 340 974 1,314 2 42 44 8 8 8 58 14 72 55 77 132 8 12 20 7 12 19 551 2,143 2,694 <td< td=""><td>Domestic shipments Exports Total Domestic shipments Exports Total Domestic shipments 761 845 1,606 586 870 1,456 -23.0% 986 3,593 4,579 699 4,622 5,321 -29.1% 709 2,072 2,781 687 2,691 3,378 -3.1% 3 127 130 1 22 23 -66.7% 35 7 42 11 26 37 -68.6% 1,733 5,799 7,532 1,398 7,361 8,759 -19.3% (8,872) (11,817) (20,689) (8,204) (14,962) (23,186) (-7.5%) 95 286 381 110 359 469 15.8% 483 2,075 2,558 340 974 1,314 -29.5% 551 2,143 2,694 410 1,063 1,473 -25.5% (1,745) (4,457) (</td><td>Domestic shipments Exports Total Domestic shipments Exports Total Domestic shipments Exports 761 845 1,606 586 870 1,456 -29.1% 3.0% 986 3,593 4,579 699 4,622 5,321 -29.1% 28.6% 709 2,072 2,781 687 2,691 3,378 -3.1% 29.9% 3 127 130 1 22 23 -66.7% -82.7% 3,579 7 42 11 26 37 -66.8% 271.4% 1,733 5,799 7,532 1,398 7,361 8,759 -19.3% 26.9% (8,872) (11,817) (20,689) (8,204) (14,982) (23,186) (-7.5%) 26.8% 95 286 381 110 359 469 15.8% 25.5% 6383 2,075 2,558 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-9.3% 986 3,593 4,579 699 4,622 5,321 -29.1% 28.6% 16.2% 709 2,072 2,781 687 2,691 3,378 -3.1% 29.9% 21.5% 3 127 130 1 22 23 -66.7% 71.4% -11.9% 1,733 5,799 7,532 1,398 7,361 8,759 -19.3% 26.9% 16.3% (8,872) (11,817) (20.689) (8.204) (14.982) (23.186) '7.55% 23.1% 985 286 381 110 359 4469 15.8% 25.5% 23.1% 483 2,075 2,558 340 974 1,314 -29.5% -50.1% -61.9%	Domestic shipments Exports Total Domestic shipments 761 845 1,606 586 870 1,456 -23.0% 3.0% 9.3% 7.5% 7.0% 3 127 130 1 22 3.66.7% -62.7% -82.3% 0.0% 35 7 42 11 26 37 -68.6% 271.4% -11.9% 0.3% 1,733 5,79 7,532 1,398 7,361 8,759 -19.3% 26.9% 16.3% 12.1% 0.3% 48.33 2,075 2,558 340 974 1,314 -29.5% 53.1% -48.6% 4.8% 2 42 44 8	Domestic shipments Exports Total Domestic shipments Exports Total Domestic shipments Exports Total 761 845 1,606 586 870 1,456 23.0% 3.0% 9.93% 7.5% 2.5% 986 3.593 4,579 699 4,622 5,321 -29.1% 28.6% 16.2% 9.7% 10.6% 3 127 130 1 22 36.7% -82.7% -82.7% -82.3% 0.0% 0.4% 35 7 42 11 26 37 -68.6% 271.4% -11.9% 0.3% 0.0% 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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.

October - December 2020 Results Shipments of Manipulators and Robots by Industries [JARA Member Companies]

				nber of units, ()	·	
Industries	2019	2020	Change	Percentage distribution		
	Oct Dec.	Oct Dec.	from 2019	2019	2020	
Metal products	779	439	-43.7%	7.7%	5.2%	
Construction and mining machinery	38	39	1.5%	0.4%	0.5%	
Metalworking machinery	179	105	-41.3%	1.8%	1.2%	
Other machinery and equipment	729	521	-28.5%	7.2%	6.2%	
Machinery and equipment Units	946	665	-29.7%	9.3%	7.9%	
(million yen)	(3,965)	(2,984)	(-24.7%)	(8.3%)	(7.3%)	
Electronic computers	5	37	640.0%	0.0%	0.4%	
Consumer electrical machinery	329	181	-45.1%	3.3%	2.2%	
Industrial electrical machinery	85	180	111.1%	0.8%	2.1%	
Communication equipment	338	266	-21.3%	3.3%	3.2%	
Video and audio equipment	9	6	-33.3%	0.1%	0.1%	
Electronic components/devices/circuits	1,181	1,175	-0.5%	11.7%	14.0%	
Other electrical machinery	849	518	-39.0%	8.4%	6.2%	
Electrical machinery Units	2,796	2,363	-15.5%	27.6%	28.1%	
(million yen)	(13,873)	(11,024)	(-20.5%)	(29.2%)	(26.9%)	
Precision instruments	109	78	-28.4%	1.1%	0.9%	
Motor vehicles	1,011	1,206	19.3%	10.0%	14.3%	
Auto parts	2,476	1,630	-34.2%	24.4%	19.4%	
Motor vehicles and auto parts Units	3,487	2,836	-18.7%	34.4%	33.7%	
(million yen)	(15,182)	(13,620)	(-10.3%)	(32.0%)	(33.2%)	
Other transport equpment	49	42	-14.8%	0.5%	0.5%	
Food products, beverages, and tobacco products	198	178	-10.1%	2.0%	2.1%	
Chemical products	71	96	35.2%	0.7%	1.1%	
Plastic products	263	318	20.9%	2.6%	3.8%	
Other industries	714	634	-11.2%	7.0%	7.5%	
Non-manufacturing industry	109	92	-15.6%	1.1%	1.1%	
Unspecified	611	675	10.5%	6.0%	8.0%	
Total domestic shipments Units	10,133	8,416	-16.9%	100.0%	100.0%	
•				(23.1%)	(17.8%)	
(million yen)	(47,504)	(41,024)	(-13.6%)	(100.0%)	(100.0%)	
	, , ,	· //	· · · · · · · · · · · · · · · · · · ·	(29.6%)	(24.2%)	
Export Units	33,778	38,946	15.3%	(76.9%)	(82.2%)	
(million yen)	(112,954)	(128,302)	(13.6%)	(70.4%)	(75.8%)	
Grand total Units	43,911	47,362	7.9%	(100.0%)	(100.0%)	
		,			1.20.0/0	

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.