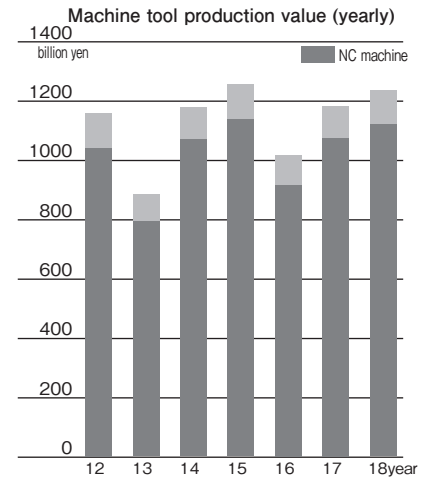
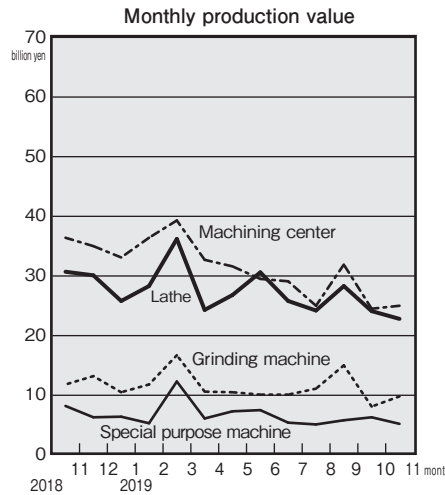


# [ November, 2019 ] Japanese FA related products' Production

## Machine tool

	Nov., 2019	monthly growth	yearly growth
Machine tool	75,730	102.9	72.5
Lathe	22,877	94.9	74.3
NC lathe	20,203	94.0	75.9
Vertical	1,978	99.9	81.6
Horizontal	18,225	93.4	75.4
Grinding machine	9,846	120.2	83.3
Special purpose machine	5,271	82.4	63.8
Machining center	25,072	102.3	68.7
NC drilling machine	180	99.4	109.1
NC boring machine	914	92.7	90.2
NC milling machine	394	62.9	67.9
NC EDM	2,366	113.6	62.9
<b>Total</b>	19/Jan.-Nov.		yearly growth
	987,890		87.1%

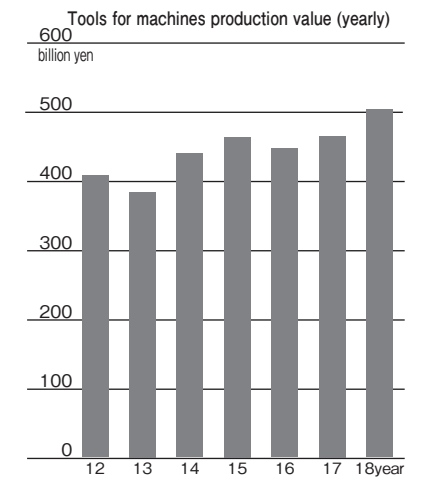
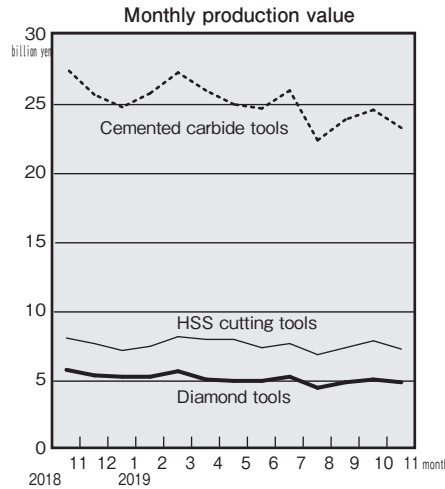
Source : Ministry of Economy, Trade and Industry



## Cutting tool

	Nov., 2019	monthly growth	yearly growth
Tools for machines	38,080	94.9	85.4
HSS	7,492	92.5	91.2
Drills	1,515	92.5	86.3
Milling cutters	601	83.2	74.4
Gear cutters	773	97.8	87.0
Taps and dies	3,275	92.2	99.9
Diamond tools	5,050	96.2	84.7
Segments tools	504	93.5	98.4
CBN tools	2,057	102.5	78.3
Cemented carbide tools	23,479	94.7	84.5
Carbide chips	11,213	93.1	79.0
Milling cutter	747	102.8	90.8
<b>Total</b>	19/Jan.-Nov.		yearly growth
	442,884		96.2%

Source : Ministry of Economy, Trade and Industry



## Industrial robot

	Nov., 2019	monthly growth	yearly growth
Industrial robot	41,785	102.8	83.8
Playback robots	20,517	100.5	80.4
Playback (unit.)	9,825	98.8	82.5
NC	15,971	106.4	89.6
NC(unit.)	2,142	66.5	61.2
Parts, accessory for industrial robots	3,556	109.8	72.9
<b>Total</b>	19/Jan.-Nov.		yearly growth
	493,229		82.0%

\*Due to the decrease in the number of sites surveyed, data on sequence robots and intelligent robots have been closed to the public since January 2019.

Source : Ministry of Economy, Trade and Industry

