

Coated Carbide **GSX**

Structural Steel	Carbon Steel	Alloy Steel	Pre-hardened Steel	Tempered Die Steel	Hardened Steel	Stainless Steel	Ti Alloy / Heat Resistant Alloy	Cast Iron	Al Alloy	Cu Alloy	Graphite
○	○	○	○	○	○	○	○	○	○	○	○

Grades Coating

Helix Angle: 30°
Corner: C Type

øDc	Tolerance
D ≤ 3,0	0 - 0,015
3,0 < D ≤ 12	0 - 0,020
12,0 < D	0 - 0,030

Grade: ACF20

Endmills

Cat. No.	Stock	øD	l ₁	l ₂	L	ød
GSX 30100C-2D	●	1,0	2,5	3,5	40	4
GSX 30150C-2D	●	1,5	3,8	4,8	40	4
GSX 30200C-2D	●	2,0	5,0	6,0	40	4
GSX 30250C-2D	●	2,5	6,3	7,3	40	4
GSX 30300C-2D	●	3,0	7,5	9,0	45	6
GSX 30400C-2D	●	4,0	11,0	12,5	45	6
GSX 30500C-2D	●	5,0	13,0	15,0	50	6
GSX 30600C-2D	●	6,0	13,0	-	50	6
GSX 30700C-2D	●	7,0	16,0	18,0	60	8
GSX 30800C-2D	●	8,0	19,0	-	60	8
GSX 30900C-2D	●	9,0	19,0	21,0	70	10
GSX 31000C-2D	●	10,0	22,0	-	70	10
GSX 31200C-2D	●	12,0	26,0	-	75	12
GSX 31600C-2D		16,0	32,0	-	90	16
GSX 32000C-2D		20,0	40,0	-	100	20

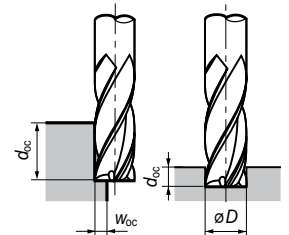
Endmill Identification (GSX MILL Series)

GSX 3 0100 C - 2D

- ① Series Code
 - ② No. of Teeth
 - ③ Diameter
 - ④ Cutting Edge
 - ⑤ Cutting Edge Length
- (S: Sharp Edge
C: Gash Land Drilling)

Recommended cutting conditions

- For stable machining performance use rigid, high-precision machines and holders.
- Use air blowing when dry machining.
- Use wet machining for stainless steel, heat resistant alloy, and titanium alloy applications.
- If the machine cannot achieve the recommended spindle speed, please use the max. spindle speed available.



Shoulder Milling

Work Material Cond.	Structural Steel		Carbon Steel (150 to 250HB)		Cast Iron		Alloy Steel (25 to 35HRC)		Tempered Steel, Hardened Steel (35 to 45HRC)		Hardened Steel (45 to 55HRC)		Stainless Steel		Heat Resistant Steel, Titanium Alloy	
	Spindle Speed (rpm)	Feed Rate (mm/min)	Spindle Speed (rpm)	Feed Rate (mm/min)	Spindle Speed (rpm)	Feed Rate (mm/min)	Spindle Speed (rpm)	Feed Rate (mm/min)	Spindle Speed (rpm)	Feed Rate (mm/min)	Spindle Speed (rpm)	Feed Rate (mm/min)	Spindle Speed (rpm)	Feed Rate (mm/min)	Spindle Speed (rpm)	Feed Rate (mm/min)
øD (mm)																
1,0	19.600	300	19.600	300	19.600	300	18.300	210	12.700	130	9.000	80	11.000	90	9.000	65
2,0	11.200	410	11.200	410	11.200	410	10.500	280	7.300	170	5.300	100	6.400	120	5.300	90
4,0	6.400	550	6.400	550	6.400	550	6.000	370	4.200	230	3.000	140	3.600	150	3.000	120
6,0	4.600	670	4.600	670	4.600	670	4.300	460	3.000	270	2.200	170	2.700	180	2.200	130
8,0	3.400	670	3.400	670	3.400	670	3.200	460	2.200	270	1.600	170	2.000	180	1.600	130
10,0	2.800	670	2.800	670	2.800	670	2.600	460	1.800	270	1.300	170	1.600	180	1.300	130
12,0	2.300	670	2.300	670	2.300	670	2.200	460	1.500	270	1.100	170	1.300	180	1.100	130
16,0	1.700	550	1.700	550	1.700	550	1.600	370	1.100	230	800	140	1.000	150	800	100
20,0	1.350	490	1.350	490	1.350	490	1.300	330	900	210	650	120	800	130	650	90
Shoulder cutting	d_{bc}		$1,5 D$		$0,05 D$						$1,0 D$		$0,02 D$			

Grooving

Work Material Cond.	Structural Steel		Carbon Steel (150 to 250HB)		Cast Iron		Alloy Steel (25 to 35HRC)		Tempered Steel, Hardened Steel (35 to 45HRC)		Hardened Steel (45 to 55HRC)		Stainless Steel		Heat Resistant Steel, Titanium Alloy	
	Spindle Speed (rpm)	Feed Rate (mm/min)	Spindle Speed (rpm)	Feed Rate (mm/min)	Spindle Speed (rpm)	Feed Rate (mm/min)	Spindle Speed (rpm)	Feed Rate (mm/min)	Spindle Speed (rpm)	Feed Rate (mm/min)	Spindle Speed (rpm)	Feed Rate (mm/min)	Spindle Speed (rpm)	Feed Rate (mm/min)	Spindle Speed (rpm)	Feed Rate (mm/min)
øD (mm)																
1,0	19.600	240	19.600	300	19.600	300	18.300	210	12.700	130	9.000	80	11.000	65	4.500	25
2,0	11.200	320	11.200	410	11.200	410	10.500	280	7.300	170	5.300	100	6.400	85	2.650	35
4,0	6.400	450	6.400	550	6.400	550	6.000	370	4.200	230	3.000	140	3.600	100	1.500	50
6,0	4.600	540	4.600	670	4.600	670	4.300	460	3.000	270	2.200	170	2.650	130	1.150	55
8,0	3.400	540	3.400	670	3.400	670	3.200	460	2.200	270	1.600	170	2.000	130	800	55
10,0	2.800	540	2.800	670	2.800	670	2.600	460	1.800	270	1.300	170	1.600	130	650	55
12,0	2.300	540	2.300	670	2.300	670	2.200	460	1.500	270	1.100	170	1.300	130	500	55
16,0	1.700	440	1.700	550	1.700	550	1.600	370	1.100	230	800	140	1.000	110	400	45
20,0	1.350	390	1.350	490	1.350	490	1.300	330	900	210	650	120	800	90	320	40
Grooving	d_{bc}		$0,2 D$		$0,5 D$				$0,2 D$		$0,05 D$		$0,2 D$			