



## COBALT ROUGHING END MILLS

## REC350M



METRIC MULTI FLUTE  
SUPER FINE-PITCH  
ROUGHER

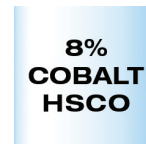
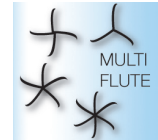
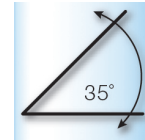
### Features

- Super Fine-Pitch Profile
- Center-Cutting
- Corner Chamfer

### Applications

- All Materials / High Temp Alloys
- Profile / Slotting

Price Code B						REC350M		
Flute Dia	Shank Dia	Length of Cut	Overall Length	#F	Corner Chamfer	Unc EDP	TiAlN EDP	AlCrN EDP
6mm	6mm	13mm	57mm	3	0.50	48044	48045	48046
8mm	8mm	19mm	69mm	3	0.50	48047	48048	48049
10mm	10mm	22mm	72mm	4	0.50	48050	48051	48052
12mm	12mm	26mm	83mm	4	0.50	48053	48054	48055
14mm	12mm	26mm	83mm	4	0.50	48056	48057	48058
16mm	16mm	32mm	92mm	4	0.75	48059	48060	48061
18mm	16mm	32mm	92mm	4	0.75	48062	48063	48064
20mm	20mm	38mm	104mm	4	0.75	48065	48066	48067
22mm	20mm	38mm	104mm	5	0.75	48068	48069	48070
25mm	25mm	45mm	121mm	5	1.00	48071	48072	48073
32mm	25mm	45mm	121mm	6	1.00	48074	48075	48076
32mm	32mm	45mm	121mm	6	1.00	48077	48078	48079



REC350M - Recommended Starting Point Speed & Feeds (Slotting) METRIC																
Material	m/min	6mm Diameter			10mm Diameter			12mm Diameter			20mm Diameter			25mm Diameter		
		RPM	CPT	mm/min	RPM	CPT	mm/min	RPM	CPT	mm/min	RPM	CPT	mm/min	RPM	CPT	mm/min
<b>Steels</b>																
1018 / 1020	46	2,424	0.015	148	1,455	0.023	133	1,212	0.030	148	727	0.038	111	582	0.046	106
1045	40	2,101	0.013	107	1,261	0.019	96	1,050	0.025	107	630	0.032	80	504	0.038	77
4140	38	2,020	0.013	103	1,212	0.019	92	1,010	0.025	103	606	0.032	77	485	0.038	74
4340	38	2,020	0.013	103	1,212	0.019	92	1,010	0.25	103	606	0.032	77	485	0.038	74
<b>Plastics</b>																
Polycarbonate	91	4,848	0.064	1,232	2,909	0.095	1,108	2,424	0.127	1,232	1,455	0.159	924	1,164	0.191	887
<b>Copper</b>																
High Silicon Bronze	122	6,465	0.038	985	3,879	0.057	887	3,232	0.076	985	1,939	0.095	739	1,551	0.114	709
<b>Copper Alloys</b>																
Beryllium Copper	107	5,657	0.038	862	3,394	0.057	776	2,828	0.076	862	1,697	0.095	647	1,358	0.114	621
<b>Cast Iron</b>																
Ductile	46	2,424	0.019	185	1,455	0.029	166	1,212	0.038	185	727	0.048	139	582	0.057	133
Gray	42	2,747	0.025	279	1,648	0.038	251	1,374	0.051	279	824	0.064	209	659	0.076	201
<b>Inconel</b>																
625	18	970	0.013	49	582	0.019	44	485	0.025	49	291	0.032	37	233	0.038	35
718	11	566	0.013	29	339	0.019	26	283	0.025	29	170	0.032	22	136	0.038	21
<b>Titanium</b>																
6AL-4V/Comm Pure	18	970	0.015	59	582	0.023	53	485	0.030	59	291	0.038	44	233	0.046	43
<b>Tool Steel (Annealed)</b>																
A2	23	1,212	0.013	62	727	0.019	55	606	0.025	62	364	0.032	46	291	0.038	44
D2	20	1,050	0.013	53	630	0.019	48	525	0.025	53	315	0.032	40	252	0.038	38
H13	21	1,131	0.013	57	679	0.019	52	566	0.025	57	339	0.032	43	272	0.038	41
P20	18	970	0.013	49	582	0.019	44	485	0.025	49	291	0.032	37	233	0.038	35
S7	20	1,050	0.013	53	630	0.019	48	525	0.025	53	315	0.032	40	252	0.038	38
<b>Stainless Steel</b>																
303	18	970	0.013	49	582	0.019	44	485	0.025	49	291	0.032	37	233	0.038	35
304	20	1,050	0.013	53	630	0.019	48	525	0.025	53	315	0.032	40	252	0.038	38
316	17	889	0.013	45	533	0.019	41	444	0.025	45	267	0.032	34	213	0.038	33
15/5	17	889	0.013	45	533	0.019	41	444	0.025	45	267	0.032	34	213	0.038	33
17/4	15	808	0.013	41	485	0.019	37	404	0.025	41	242	0.032	31	194	0.038	30
416	15	808	0.013	41	485	0.019	37	404	0.025	41	242	0.032	31	194	0.038	30

Speeds and Feeds are based upon ADOC = 1/2 x Diameter, RDOC = 1 x Diameter  
For Profiling with 25% of the tool diameter increase speed by 15% and feed by 15%