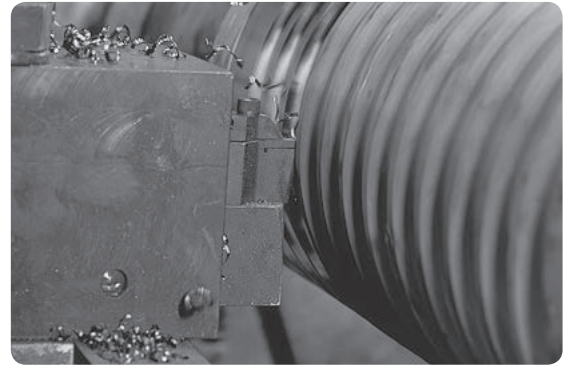


Machining Mill Rolls with Ceramics

Improve Productivity

Features

- Several ceramic and CBN grades for all mill-roll turning applications
- In addition to standard grade "HC2", NTK offers "HC5" and "HC7" for higher productivity



Recommended Cutting Conditions

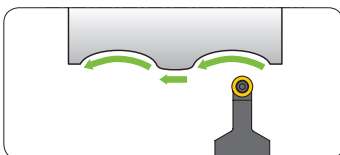
Material	Choice		Cutting speed (SFM)				Feed (IPR)	Depth of cut (inch)	DRY	WET
			Shore Hardness Scale							
			Grade	55-65	65-72	72-				
Steel ex. D2	1st	HC7	450-600	100%	80%	60%	.004-.012	.025-.075	●	
	2nd	HC5	450-600	100%	80%	60%	.004-.012	.025-.075	●	
	3rd	HC2	350-450	100%	80%	60%	.004-.012	.025-.075	●	
Chilled Cast Iron	1st	HC7	450-600	100%	80%	60%	.004-.012	.025-.075	●	
	2nd	HC5	450-600	100%	80%	60%	.004-.012	.025-.075	●	
	3rd	HC2	350-450	100%	80%	60%	.004-.012	.025-.075	●	
Ductile Cast iron	1st	HC7	300-600	100%	80%	60%	.004-.012	.025-.075	●	
	2nd	HC5	300-600	100%	80%	60%	.004-.012	.025-.075	●	
Carbide	1st	B99	100-200				.004-.012	.010	●	
	2nd	WA1	100-200				.004-.012	.010	●	
CPM Rolls ex. Powdered Metal	1st	ZC4	400-500				.004-.012	.025-.075	●	
	2nd	HC7	400-500				.004-.012	.025-.075	●	

Key Points

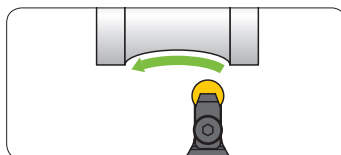
- Hardness of the roll is an important factor. As the roll gets harder, reduce SFM.
- RCGX style inserts are the preferred insert style for rigidity and cost savings.
- DOC will depend upon the amount of material to remove. When making multiple passes with one edge, vary your DOC to move the wear on the insert edge and reduce notching wear.
- If you encounter chatter, increase your feed rate. Variable RPM controllers are helpful to reduce harmonics.

Holders

■ HRCD



■ VRAON



U.S. rebar size chart

Imperial bar size	Metric size	Nominal diameter	
		(inch)	(mm)
#2	#6	0.250 = 1/4	6.35
#3	#10	0.375 = 3/8	9.525
#4	#13	0.500 = 1/2	12.7
#5	#16	0.625 = 5/8	15.875
#6	#19	0.750 = 3/4	19.05