

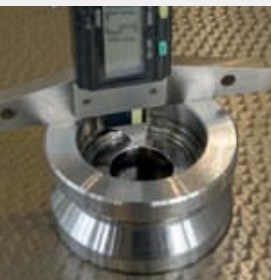


## Guide Rollers: a selection of different materials to optimize performances.



Materials	Features	Hardness (HRC)	Life time	Thermal shock resistance	Price	Roughing Mill	Intermediate Mill	Finishing Mill	High Speed Block	Slitting Rollers
<b>MHK-1H</b>	Hot-working tool steel with chromium, molybdenum and vanadium. Excellent resistance to thermal shocks, excellent deep hardening properties, high degree of hot toughness, high impact strength.	54-56	1	Best	Best	R	R	ST	-	ST
<b>MHK-1</b>	Cold-working tool steel, with high chromium, molybdenum and vanadium content. Excellent wear resistance, good toughness and dimensional stability; good edge retaining.	55-60	1.5-3	Standard	Good	-	P	R	P	R
<b>MHK-C</b>	Cold-working tool steel, with high chromium content. High wear-resistance, good dimensional stability and hardening properties. Moderate toughness.	60-62	1.5-2	Standard	Best	-	P	R	P	R
<b>MHK-X</b>	High-speed steel, centrifugally casted, with chromium, vanadium, molybdenum, tungsten and titanium content. Excellent wear resistance, good toughness, good thermal shock resistance.	54-61	2-4	Good	Medium	-	P	R	P	R
<b>Ferrodur</b>	Titanium carbide on a metal-based matrix containing chromium and molybdenum. Very high hardness and wear resistance. Excellent dimensional stability. 20% lighter than steel rollers. Reduced re-grooving thickness.	69-71	6-10	Critical	Highest	-	-	P	R	-

R: recommended    ST: recommended during plant startup    P: possible



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