

A detailed 3D rendering of several tungsten carbide mill rolls and guide rollers. The rolls are cylindrical with various surface textures, including smooth, grooved, and knurled finishes. They are arranged in a stack, with some showing internal features like grooves and chamfered edges. The background is a gradient of blue with subtle wave patterns.

**TUNGSTEN CARBIDE MILL ROLLS
and GUIDE ROLLERS**

TUNGSTEN CARBIDE MILL ROLLS

Advanced technology for hot rolling

NOMINAL TECHNICAL DATA								
GRADE	WC	Co	Ni	Cr	CARBIDE GRAIN SIZE	DENSITY g/cm ³	HARDNESS HRA	TRS N/mm ²
HR 10	90	4,5	4,5	1	Extra coarse	14,5	88	2500
HR 15	85	7	7	1	Extra coarse	14	86	2700
HR 20	80	9	9	2	Extra coarse	13,55	84,5	2800
HR 25	75	11	12	2	Extra coarse	13	83	2900
HR 30	70	13	15	2	Extra coarse	12,75	79,5	2900

FROM THE VERGIN POWDER TO THE FINISHED ROLL

In its subsidiary, MULTICARB, and starting from the finest materials available, ATOMAT manufactures the complete range of grades for the most cost effective rings used nowadays in every modern rod and rebar rolling mills.



MACHINED TO YOUR SPECIFICATION

MULTICARB rolls are available both in standard and Sinter-HIP (Hot Isostatic Pressing) materials in any diameter up to 305 mm (12") and can be supplied also fully finished, with smooth and notched grooves.

MULTICARB TUNGSTEN CARBIDE GRADES FOR HOT ROLLING
STANDARD AND SINTER (HOT ISOSTATIC PRESSING) QUALITY

ATOM — TITANIUM CARBIDE GUIDE ROLLERS

Developed starting from 1976 ATOM T36 is a sintered Titanium Carbide specially designed for the demanding operating conditions of today's high speed roll mills. ATOM T36 rollers are suitable for high speeds, up to 140m/s, with rotation of approx. 35,000 rpm. All ATOM T36 rollers are produced by SINTER HIP (Hot Isostatic Press) technology to assure the best sintering quality.

- EXCELLENT WEAR RESISTANCE
- FREE OF MICRO POROSITIES
- LIGHTER THAN TUNGSTEN CARBIDE BY 55%
- LIGHTER THAN STEEL BY 20%
- EXCELLENT HIGH TEMPERATURE CORROSION RESISTANCE

PROPERTIES

TiC & W content	50% Weight
Hardness	85.5 Hra
Density	6.4 g/sq.cm
T.R.S.	2.700 N/mm2



MACHINING GUIDELINES

By grinding with:
resin bond / electroplated diamond wheels
Diamond size:
D151 - 100/120 mesh
To be assured a good cooling system



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