ROLL MATERIAL DATA SHEET

Adamite Steel Base

GRADE

Adamite

01 FIELD OF APPLICATION

Mill Type	Position
Hot Strip Mill	Edger

02 MECHANICAL PROPERTIES

HARDNESS RANGE	TENSILE STRENGTH	BENDING STRENGTH	YOUNG'S MODULUS
40-55 ShC	> **500** MPa	> **900** MPa	approx. **200,000** MPa

Adamite steel base rolls are classified as high carbon alloy steel rolls, with a carbon content ranging from 1.4% to 2.1%, along with specific alloy additions. The microstructure consists of a pearlitic matrix and a discontinuous hypoeutectic carbide phase, along with secondary carbides, which are generated through a specialized heat treatment process.

The presence of semi-continuous hypereutectic carbides within the microstructure significantly enhances wear resistance.

When subjected to the appropriate heat treatment, these rolls achieve an optimal hardness and strength throughout the material's depth, making them particularly ideal for deep, heavy sections.

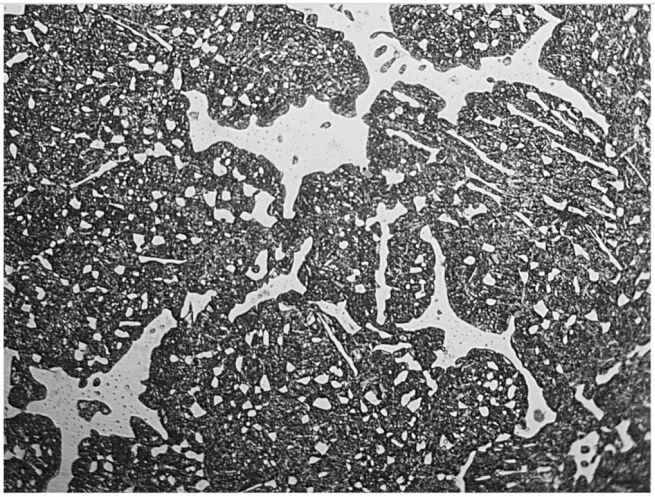
PRODUCT HIGHLIGHTS

- Spall resistant
- High Strength
- Uniform Hardness

03 CHEMICAL COMPOSITION

wt. %	C	Mn	Si	P	S	Ni	Cr	Mo
Min	1.40	0.40	0.30	0	0	0.30	0.70	0.20
Max	2.10	1.00	1.00	0.10	0.050	1.60	1.80	0.80

04 MICROSTRUCTURE



■ *400 X – etched*