Union Electric Åkers
Forged and Cast Rolls

Product Data

SUPRA 6

PM High Speed Steel

Chemical composition

	C	Cr	Mo	W	Co	V
SUPRA6	**2.30**	**4.2**	**7.0**	**6.5**	**10.5**	**6.5**
SUPRA3	1.28	4.1	5.0	6.4	–	3.1
SUPRA4	1.28	4.2	5.0	6.4	8.5	3.1
SUPRA5	2.48	4.2	3.1	4.2	–	8.0

Properties

	Hardness HRC
SUPRA6	**≤ 68**
SUPRA1	≤ 64
SUPRA3	≤ 66
SUPRA4	≤ 67
SUPRA5	≤ 65

	Density g/cm3	Young's modulus GPa	Thermal conductivity W/m°C
SUPRA6	**7.9**	**250**	**24**

Comparative properties

	Wear resistance	Toughness	Grindability
SUPRA 6	▬▬	▬	▬
SUPRA 1	▬	▬▬	▬▬
SUPRA 3	▬	▬▬	▬▬
SUPRA 4	▬▬	▬	▬
SUPRA 5	▬▬	▬	▬

Description

Forged high speed steel produced by utilizing powder metallurgy technique. Manufactured according to Union Electric Åkers specification.

The powder metallurgy technique allows design of high wear resistance grades as high alloy levels can be reached without uncontrolled growth of carbides.

SUPRA6 is supplied in through hardened condition.

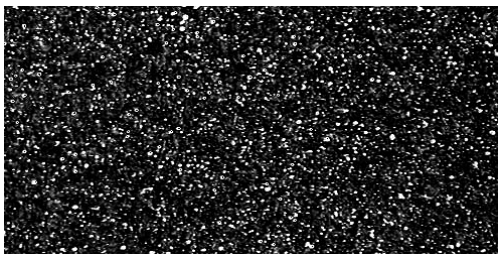
Applications

Work rolls in 20-high mills for cold rolling of ferrous and non ferrous products.

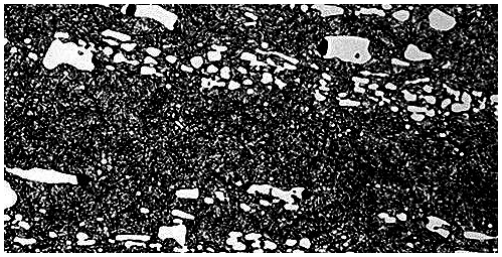
Work rolls in Z-high mills for cold rolling of ferrous and non ferrous products.

Features & Benefits

- Extremely high wear resistance.
- High toughness.
- High resistance to propagation of micro cracks.
- Even wear across entire roll barrel due to homogenous carbide distribution.
- Powder metallurgy steels maintain the surface finish longer before redressing will be necessary.



Microstructure PM Steel SUPRA



Microstructure Tool Steel AISI D2, 12% Cr

Union Electric Åkers
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