



ALPHA 7 (ESR)

Forged High Speed Steel

Chemical composition

	C	Cr	Mo	W	Co	V
ALPHA7	1.0	4.0	8.6	1.8	-	1.9
ALPHA1	0.8	4.0	8.5	1.7	-	1.2
ALPHA2	0.9	4.2	5.0	6.5	-	1.9
ALPHA3	1.2	4.1	5.0	6.2	-	3.0
ALPHA4	1.3	4.2	4.5	5.5	-	4.0

Standards; AISI M7. Werkstoff 1.3348. JIS SKH58

Description

Conventional high speed steel manufactured according to Union Electric Åkers specification.

ALPHA7 is also available further refined by ESR (Electro Slag Remelting).

ALPHA7 is supplied in through hardened condition.

Features & Benefits

- High hardness.
- Excellent surface characteristics.
- ALPHA7 is recommended for less severe applications.

Properties

	Hardness HRC
ALPHA7	≤ 66
ALPHA1	≤ 65
ALPHA2	≤ 64
ALPHA3	≤ 66
ALPHA4	≤ 66

	Density g/cm ³	Young's modulus GPa
ALPHA7	8.0	225

Applications

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

Comparative properties

	Wear resistance	Toughness	Grindability
ALPHA7	————	————	————
ALPHA1	————	————	————
ALPHA2	————	————	————
ALPHA3	————	————	————
ALPHA4	————	————	————