

Database of Steel and Alloy (Marochnik)

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Characteristics for grade 36N (36H).

Grade :	36N (36H) (36H-BN)
Classification :	Precision alloy with specified temperature coefficient of linear expansion
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Chemical composition in % for grade 36N (36H)

C	Si	Mn	Ni	S	P	Cr	Mo	V	Al	Cu
max 0.05	max 0.3	0.3 - 0.6	35 - 37	max 0.015	max 0.015	max 0.15	max 0.1	max 0.1	max 0.1	max 0.1

Mechanical properties under T=20°C for grade 36N (36H)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Band cold-worked , GOST 14080-78			930					

Technological properties of the material 36N (36H).

Melting temperature :	1450 °C
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Physical properties for grade 36N (36H)

T	E 10 ⁻⁵	α 10 ⁶	λ	ρ	C	R 10 ⁹
Grade	MPa	1/Grade	Watt/(m·Grade)	kg/m ³	J/(kg·Grade)	Ohm·m
20	1.5			8200		800

Equivalent steels for grade 36N (36H)

Warning! Indicated both exact and nearest equivalents.

USA	Germany	England	Poland	Czechia
-	DIN, WNr	BS	PN	CSN
NILO36	1.3912 Ni36	NILO36	FeNi36Pr	17536

Specification : Mechanical properties :

- σ_B - Tensile strength , [MPa]
 σ_T - Yield stress , [MPa]
 δ_5 - Specific elongation at fracture , [%]

ψ	- Reduction of area , [%]
KCU	- Impact strength , [kJ / m ²]
HB	- Brinell hardness , [MPa]

Physical properties :

T	- Test temperature , [Grade]
E	- Young modulus , [MPa]
α	- Coefficient of linear expansion (range 20° - T) , [1/Grade]
λ	- Thermal (heat) condition coefficient , [Watt/(m·Grade)]
ρ	- Density , [kg/m ³]
C	- Specific heat (range 20° - T) , [J/(kg·Grade)]
R	- Electrical resistance , [Ohm·m]

Database of steels and alloys (Marochnik) contains information about chemical composition and properties more then 2500 steels and alloys (stainless steel, alloy steel, carbone steel, structural steel, tool steel, cast iron, aluminum alloy, titanium alloy, copper alloy, nickel alloy, magnesium alloy and others).
Helpfull for specialists in grade technology, structural engineer, mechanical engineer, metallurgy and metal trader

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