

Database of Steel and Alloy (Marochnik)

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Characteristics for grade NP3 (НП3).

Grade :	NP3 (НП3)
Classification :	Semis nickel
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Chemical composition in % for grade NP3 (НП3)

Ni+Co	Fe	C	Si	Mn	S	Cu	Mg	Impurity
min 99.3	max 0.15	max 0.15	max 0.15	max 0.2	max 0.015	max 0.15	max 0.1	all 0.7

Mechanical properties under T=20°C for grade NP3 (НП3)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Sheet hotrolled, GOST 6235-91			370		15			
Sheet, GOST 6235-91			370		35			
Sheet, GOST 6235-91			540		2			
Bar hotrolled, GOST 13083-77			440		10			
Bar, GOST 13083-77			370		30			
Bar, GOST 13083-77			540		5			
Band, GOST 2170-73			390		35			
Band, GOST 2170-73			540		3			

Technological properties of the material NP3 (НП3).

Melting temperature :	1455 °C
Forging temperature :	1140 - 1250 °C
Annealing temperature :	700 - 800 °C
Casting temperature :	1550 - 1650 °C
Linear shrinkage :	1 %

Equivalent steels for grade NP3 (НП3)

Warning! Indicated both exact and nearest equivalents.

Germany
DIN, WNr

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]

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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