

Brand name | NILO® 42, Invar 42

Trade name | Alloy 42

Material No.	EN Designation	UNS	Alloy
1.3917	Ni 42	K94100	42

Description | Alloy 42 / 1.3917 is a nickel-iron alloy with low expansion. (42% nickel)

Special properties | Low coefficient of expansion in low temperatures of 300°C.

C %	Si ≤ %	Mn ≤ %	Ni %	Fe %
≤ 0.12	0.30	1.00	41.0-43.0	Rest

Hardness HB 30 ≤ HB	0.2% Yield strength R _p ≥ N/mm ²	Tensile strength R _m N/mm ²	Elongation A ₅ ≥ %	Modulus of elasticity kN/mm ²
130	300	≥ 500	30	145

Density g/cm ³	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm ² /m
8.15	500	12.5	0.63

Application | Tanks for liquid natural gas, measuring and thermostatic instruments

Available forms for 1.3917 / ALLOY 42

