

1.4959

Material No.	1.4959
EN symbol (short)	X8NiCrAlTi32-21
AISI/SAE	—
UNS	N 08811
AFNOR	Z 8 NC 33-21
BS	—
alloy	alloy 800HT
Registered work's label	Incoloy® alloy 800HT, Microfer® 3220HT
Standards	—

DESCRIPTION

The elevated-temperature alloy 1.4959 (alloy 800HT) is mainly used in high-temperature plants. Our product range in 1.4958 (alloy 800HT) are tubes and pipes, fittings and flanges, accessories.

CHEMICAL COMPOSITION ¹

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %	Cr %	Mo	Ni %	V
0,05-0,10	0,70	1,5	0,015	0,010	19,0-22,0		30,0-34,0	
Nb	Ti ² %	Al ² %	Co ≤ %	Cu ≤ %	N ≤ %	Fe		
	0,25-0,65	0,25-0,65	0,5	0,5	0,03			

¹ in accordance with Key to Steel 2001 ² Al + Ti ≤ 0,70%

SPECIAL CHARACTERISTICS

Temperature range	Density kg/m ³	Hardness(HB)
1000°C (not suitable for the long-term operation under 700°C)	7,94	

Highest creep resistance at temperature range 700°C to 1000°C

WELDING FILLER

covered rod electrode 2.4648, 2.4621

MAIN FIELDS OF APPLICATION (depending on the specific conditions of use)

industrial furnaces, thermal treatment facilities, chemical industry, pressure bomb, building of steam boilers, petrochemical industry, power plants, superheaters, reheating tubes, coal gasification

(all aforementioned specifications serve as a general orientation and have to be reviewed depending on the specific conditions of use)