

N08800 • 1.4876 • TPS-Techalloy 800

ALLOY 800 is a nickel-chromium-iron alloy with good resistance to oxidation, retains its strength at elevated temperatures, has good workability and welding properties. Superior to ALLOY 600 in resistance to sulfur, green rot, and cyanid salts, inferior on resistance to nitriding, halogen gases and molten caustics. Excellent corrosion resistance can be expected under oxidizing conditions which are most harmful to ordinary steel and nonferrous metals, good resistance can also be expected in many organic acids and their compounds. Limited resistance may be expected under reducing acid conditions. Applications in calrod units, furnace muffles and heat exchangers.

Material grade	Norm	Chemical composition • mass in %									
		C	Si	Mn	P	S	Cr	Ni	Mo	Ti	Sonst.
		max.	max.	max.	max.	max.	min. – max.	min. – max.	min. – max.		
1.4876	EN 10297-2	0,120	1,00	2,00	0,030	0,015	19,00 - 23,00	30,00 - 34,00	-	-	Al 0,15 - 0,16
1.4876	VD-TÜV WB 4 12	0,040 - 0,100	1,00	1,50	0,030	0,020	19,00 - 23,00	30,00 - 34,00	-	0,15 - 0,60	Cu 0,75 max.; Al 0,15-0,60; Co 1,0 max.
N08800	ASTM B 163/4 07	0,100	1,00	1,50	0,030	0,150	19,00 - 23,00	30,00 - 35,00	-	0,15 - 0,60	Cu 0,75 max.; Al 0,15-0,60; Fe 39,5 min.

Material grade	Norm	Mechanical properties and heat treatment					
		Rp 0,2 [MPa]	Rp 1,0 [MPa]	Rm [MPa]	A [%]	Härte	Wärmebehandlung
		min.	min.	min. – max.	min	HRB max.	
1.4876	EN 10297-2	170	210	450	28	-	geglüht
1.4876	VD-TÜV WB 4 12	170	200	450 - 700	30	-	lösungsgeglüht
N08800	ASTM B 163/ 407	207	-	517	30	-	geglüht

Tolerances				
AD - Rohr	AD	WD	special WT	ID
ab Ø4,550 mm	±0,050 mm	±0,150 mm	±0,100 mm	X
ab Ø9,530 mm	±0,050 mm	±0,100 mm	±0,080 mm	±0,050 mm
ab Ø30,001 mm***	±0,100 mm	±0,150 mm		±0,050 mm

*** to max. ø44,500 mm

- Tolerances acc. to DIN EN 10305-1 can be confirmed to OD 30mm
- Tolerances acc. to DIN EN ISO 1127 / DIN EN 10216-5 can be confirmed
- Tolerances acc. to ASTM can be confirmed generally

Abmessungsbereich*

		Abmessungsspektrum																												
	WD	[mm]	1,20	1,24	1,40	1,50	1,65	1,82	2,00	2,11	2,20	2,30	2,35	2,41	2,50	2,64	2,77	2,80	2,87	3,00	3,20	3,25	3,35	3,50	3,60	3,85	3,91	4,00		
AD		[inch]	0,048			0,065	0,072		0,083			0,093	0,095		0,104	0,109		0,113		0,126	0,128						0,154			
[mm]	[inch]																													
10,00																														
11,00																														
12,00																														
12,70	0,500																													
13,00																														
13,50																														
14,00																														
15,00																														
15,88	0,625																													
16,00																														
16,80																														
17,15	0,675																													
18,00																														
19,00																														
19,05	0,750																													
20,00																														
21,34	0,840																													
21,40																														
22,00																														
22,23	0,875																													
23,00																														
24,30																														
25,00																														
25,20																														
25,40	1,000																													
26,00																														
26,67	1,050																													
28,00																														
30,00																														
31,75	1,250																													
32,00																														
33,40	1,315																													
35,00																														
36,00																														
38,00																														
38,10	1,500																													

