

TP 316H • UNS S31609 • 1.4919/1.4918 • TPS-INOX 316H

This grade with guaranteed carbon content of min. 0,04% enhances strength at elevated temperatures. Similar oxidation resistance to TP 316. Main applications: Heat exchangers, furnaces, chemical and petrochemical plant.

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.		
1.4918	EN 10216-5	0,040 - 0,08 0	0,75	2,00	0,035	0,015	16,00 - 18,0 0	12,00 - 14,0 0	2,00 - 2,50	-	N 0,10 max .
TP316H	ASME SA / AS TM A 213	0,040 - 0,10 0	1,00	2,00	0,045	0,030	16,00 - 18,0 0	11,00 - 14,0 0	2,00 - 3,00	-	-

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.	
1.4918	EN 10216-5	205	245	490 - 690	35	-	lösungsgeglüht
TP316H	ASME SA / AS TM A 213	205	-	515	35	90	lösungsgeglüht

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

AD	WD	[mm]	0,89	1,00	1,20	1,24	1,65	1,82	2,00	2,11	2,30	2,35	2,50	2,60	2,64	2,77	2,87	3,00	3,20	3,25	3,60	3,85	3,91	4,00	4,40	5,50	6,35	7,00
[mm]	[inch]	[inch]	0,035			0,048	0,065	0,072		0,083		0,093			0,104	0,109	0,113		0,126	0,128			0,154				0,250	
6,00																												
6,35	0,250																											
7,00																												
7,50																												
8,00																												
9,00																												
9,53	0,375																											
10,00																												
11,00																												
12,70	0,500																											
13,00																												
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																											
22,00																												
22,23	0,875																											
23,00																												
25,00																												
25,40	1,000																											
26,00																												
26,67	1,050																											
28,00																												
30,00																												
31,75	1,250																											
32,00																												
33,40	1,315																											
36,00																												
38,10	1,500																											
42,00																												
44,50	1,750																											

