

N08825 • 2.4858 • TPS-Techalloy 825

Titanstabilisierte, hoch korrosionsbeständige Nickelbasis-Legierung mit Molybdän, Chrom und Kupfer. Ausgezeichnete Beständigkeit gegen Spannungsrissskorrosion, gute Beständigkeit gegen Lochfraß und Spalttrisskorrosion, oxidierende Säure wie Schwefel-, Phosphor- und Salpetersäure sowie organische Laugen, Alkalien und Meerwasser. Einsatztemperatur bis 425°C. Anwendung unter anderem in Phosphor- und Schwefelsäureanlagen, Wärmetauschern in der Petrochemie (Sauggas), Offshore Öl- und Gasgewinnung. Nach VD-TÜV Werkstoffblatt 432/2 ist ein Abnahmeprüfzeugnis 3.2 durch eine benannte Stelle erforderlich.

| Werkstoff | Norm | Chemische Zusammensetzung • Massenanteile in % | | | | | | | | | |
|-----------|-----------------------|--|------|------|-------|-------|---------------|---------------|-------------|-------------|---|
| | | C | Si | Mn | P | S | Cr | Ni | Mo | Ti | Sonst. |
| | | max. | max. | max. | max. | max. | min. – max. | min. – max. | min. – max. | | |
| 2.4858 | DIN 17744 / 1 7751 | 0,025 | 0,50 | 1,00 | 0,025 | 0,015 | 19,50 - 23,50 | 38,00 - 46,00 | 2,50 - 3,50 | 0,60 - 1,20 | Co 1,0; Cu 1,5-3,0; Al 0,2 Fe Rest |
| 2.4858 | VD-TÜV WB 4 32/2 | 0,025 | 0,50 | 1,00 | 0,020 | 0,010 | 19,50 - 23,50 | 38,00 - 46,00 | 2,50 - 3,50 | 0,60 - 1,20 | Cu 1,5-3,0; Al 0,2 max. Fe Rest |
| N08825 | ASTM B 163/4 23 | 0,050 | 0,50 | 1,00 | - | 0,030 | 19,50 - 23,50 | 38,00 - 46,00 | 2,50 - 3,50 | 0,60 - 1,20 | Cu 1,5-3,0; Al 0,2 max. Fe 22,0 min. |

| Werkstoff | Norm | Mechanische Eigenschaften und Wärmebehandlung | | | | | |
|-----------|-----------------------|---|--------------|-------------|-------|----------|-----------------|
| | | Rp 0,2 [MPa] | Rp 1,0 [MPa] | Rm [MPa] | A [%] | Härte | Wärmebehandlung |
| | | min. | min. | min. – max. | min | HRB max. | |
| 2.4858 | DIN 17744 / 1 7751 | 235 | 265 | 550 | 30 | 90 | weichgeglüht |
| 2.4858 | VD-TÜV WB 4 32/2 | 235 | 265 | 550 - 750 | 30 | 90 | weichgeglüht |
| N08825 | ASTM B 163/ 423 | 241 | - | 586 | 30 | 90 | geglüht |

| Fertigrohrtoleranzen | | | | |
|----------------------|-----------|-----------|------------|-----------|
| AD - Rohr | AD | WD | Spezial WD | 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 |

*** Bis max. Ø44,500 mm

- Toleranzen nach DIN EN 10305-1 können bestätigt werden bis AD 30 mm
- Toleranzen nach DIN EN ISO 1127 / DIN EN 10216-5 können bestätigt werden
- Toleranzen nach ASTM können generell bestätigt werden

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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

