| Trade name | Ti 2 Pd |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Standards | Material No. EN Designation ASTM UNS <br> 3.7235 Titan Grade 7 Ti-Grade 7 R52400 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Ti-Grade 7: Unalloyed titanium +0.12 \% to 0.25 \% Pd, standard oxygen,

Special properties
Low-alloy titanium materials were mainly developed for use in the chemical industry. They offer the same excellent properties as pure titanium grades together with improved corrosion resistance. This is achieved by means of minor additions of Pd and $\mathrm{Ni}+\mathrm{Mo}$, which raise their resistance to reducing solutions and reduce their susceptibility to crevice corrosion, especially in chloride-containing media.
Chemical Composition

| C | N | Ti | Fe | O |
| :---: | :---: | :---: | :---: | :---: |
| $\%$ | $\%$ | $\leq \%$ | $\mathrm{\%}$ |  |
| 0.08 | $\leq 0.03$ | Rest | $\leq 0.30$ |  |
| H | Pd |  |  |  |
| $\%$ | $\%$ |  | 0.25 |  |
| 0.015 | $0.12-0.25$ |  |  |  |

## Mechanical Properties

 $20^{\circ} \mathrm{C}$Hardness HB 30
$\leq$ HB
150
Tensile strength $\mathrm{R}_{\mathrm{m}}$
$\mathrm{N} / \mathrm{mm}^{2}$
$\geq 345$

| Elongation $\mathrm{A}_{5}$ <br> $\geq \%$ | Modulus of elasticity <br> $\mathrm{kN} / \mathrm{mm}^{2}$ |
| :---: | :---: |
| 20 | 108 |

Physical Properties $20^{\circ} \mathrm{C}$

| Density <br> $\mathrm{g} / \mathrm{cm}^{3}$ | Specific heat capacity <br> $\mathrm{J} / \mathrm{kg} \mathrm{K}$ | Thermal conductivity <br> $\mathrm{W} / \mathrm{m} \mathrm{K}$ | Electrical resistivity <br> $\Omega \mathrm{mm}^{2} / \mathrm{m}$ |
| :---: | :---: | :---: | :---: |
| 4.5 | 520 | 17 | 0.5 |

## Application

Chemical industry, especially in chloride-containing media

Available forms for 3.7235 / Ti-Grade 7

| Sheets/Plates | Bars | Wire | Tubes/Pipes | Fittings | Forged / cast parts | Finished part (drawing) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H. |  |  |  |  |  |

