

Standards

UNS	Alloy
R60705	Zr 705

Description

Zirconium Zr 705 is a zirconium alloy with niobium content.

Special properties

Excellent resistance to high corrosive environments such as highly concentrated acids and alkaline solutions. High ductility.

Chemical Composition

C %	Cr %	N %	Zr %	Fe %		
≤ 0.05	≤ 0.20 incl. Fe	≤ 0.025	95.5 (incl. Hf max. 4.5%)	≤ 0.20 incl. Cr		
<table border="1"> <thead> <tr> <th>Nb %</th> </tr> </thead> <tbody> <tr> <td>2.00 - 3.00</td> </tr> </tbody> </table>					Nb %	2.00 - 3.00
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Mechanical Properties 20°C

0.2% Yield strength $R_p \geq$ N/mm ²	Tensile strength R_m N/mm ²	Elongation $A_5 \geq$ %	Modulus of elasticity kN/mm ²
380	≥ 580	16	95

Physical Properties 20°C

Density g/cm ³	Specific heat capacity J/kg K	Thermal conductivity W/m K
6.5	280	17.1

Application

Chemical industry, nuclear industry, medical industry

Available forms for Zirkonium Zr 705 / R60705

Sheets/Plates	Bars	Wire	Tubes/Pipes	Fittings	Forged / cast parts	Finished part (drawing)
						