



Zirconium Zr 705

R60705

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
Nb %				
2.00 - 3.00				

Mechanical Properties 20°C

0.2% Yield strength R_p ≥ N/mm ²	Tensile strength R_m N/mm ²	Elongation A_5 ≥ %	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 Zirconium Zr 705 / R60705

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