

PtRh10 DPH-Flex

Pt-10%Rh DPH-Flex

PtRh10 DPH-Flex is an oxide dispersion hardened precious metal alloy specifically developed to combine creep strength and creep ductility. It is commonly used in demanding high temperature specialty glass applications, for example feeder cells or claddings. PtRh10 DPH-Flex offers significantly improved high temperature properties compared to standard alloys like Pt or PtRh through reinforcement via finely dispersed Zirconia particles. The modified DPH structure makes the material extremely resistant to corrosion especially under highly corrosive conditions like glass melts. Combination of the afore mentioned features of PtRh10 DPH-Flex allows for unparalleled degrees of freedom in designing and engineering of precious metal parts while simultaneously reducing the amount of precious metal needed in glass production.

General information

Applications	casting dishes, plunger, glass manufacturing, feeders, cladding components, feeder systems, crucibles, stirrers
Product Forms	sheet, tube, wire
Density, g/cm ³	19.83
Melting Range, °C	1840 - 1870

Forming Processes

Material Behaviour	ductile
Forming Process	machinable, formable

Mechanical Properties

Young's Modulus, GPa	210
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Contact

precious.metals@heraeus.com | www.heraeus-precious-metals.com
 Heraeus Precious Metals GmbH & Co. KG | Heraeusstrasse 12-14 | 63450 | Hanau | Germany



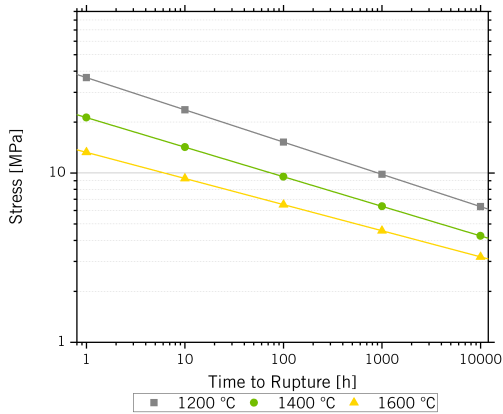
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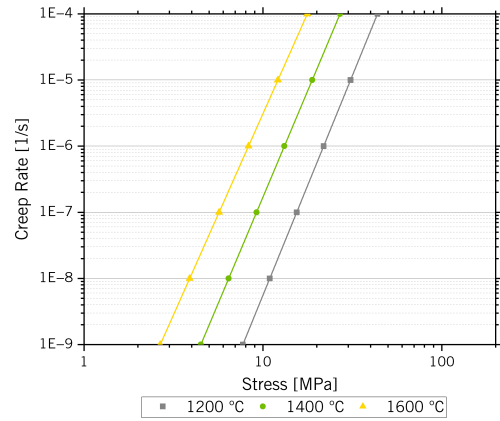
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Creep Rupture



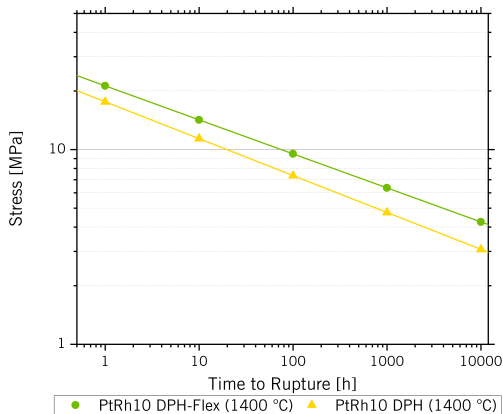
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Norton



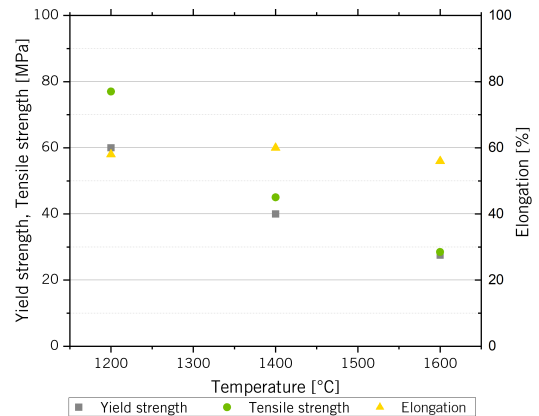
source: measured and extrapolated

Creep Rupture – Comparison



source: measured and extrapolated

High Temperature Tensile Test



source: measured

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