

Garlock Compression Packing

Molten Salt application in the solar power plants

Description

Concentrated solar power (CSP) plants generate energy by heating up a media with mirrors. The heated media can store the energy so that the power plant can convert this heat into electricity over an entire day. Molten salt is often the media used to make this process efficient but presents challenges to seal. Depending on the system, working temperature can be in two ranges: The lower temperature is around 450°C and the higher temperature can be up to 585 °C. This high temperature can be reached in solar tower plants.

Main Challenges

» High temperature
» Abrasive, oxidizing media
» Lifetime in between scheduled maintenance

Key Benefits

» Field tested solutions
» Lifetime to meet scheduled outages
» THERMa-PUR® heat shielding engineered set
» Solutions designed specifically for the temperature ranges

1220 MS POWERPACK

1220 MS (Molten Salt) POWERPACK is designed for the lower temperature applications in the solar power plants around 450°C. The packing set combines SYNTHETPAK™ temperature resistant performance fiber with an oxidation inhibitor and a THERMa-PUR® insulation ring.



Features 1) 2)

» Temperature: up to +450 °C
» Pressure: up to 172 bar
» Estimated lifetime 5 years

9020 HMS POWERPACK

9020 HMS (Hot Molten Salt) POWERPACK is designed for the higher temperature applications in the solar power plants up to 585°C. The packing design combines two Garlock „Cup&Cone“ technology sets with a high performance valve stem packing rings and THERMa-PUR® insulation spacer rings.



Features 1) 2)

» Temperature: up to +585 °C
» Pressure: up to 690 bar
» Estimated Lifetime 12 months

1) Depending on product and application details.

2) See Garlock resistance table.

Note:
Properties/applications shown throughout this brochure are typical. Your specific application should not be undertaken without independent study and evaluation for suitability. For specific application recommendations consult Garlock. Failure to select the proper sealing products could result in property damage and/or serious personal injury. Performance data published in this brochure has been developed from field testing, customer field reports and/or in-house testing. While the utmost care has been used in compiling this brochure, we assume no responsibility for errors. Specifications subject to change without notice. This edition cancels all previous issues. Subject to change without notice GARLOCK is a registered trademark for packings, seals, gaskets, and other products of Garlock.
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