



# Klinger 40

An exceptional packing combining carbon and Inconel<sup>®</sup> to produce a product for sealing valve glands in high pressure and high temperature applications.

Klinger 40 is one of the Klinger TopLine range of compression packings.

This is an optimised range introduced to provide users with gland sealing products that meet todays demanding services, offering effective and trouble-free sealing during application. To achieve this we have selected the best materials and the best production methods. The result is the Klinger TopLine range.

Ongoing test and development in line with the Klinger philosophy will ensure the continued improvement of the TopLine products. Klinger 40 is manufactured from a base yarn of high purity carbon which incorporates microfine wires of Inconel<sup>®</sup> and a lubricant of selected non-migratory graphite.

■ The additional graphite lubricant improves the sealing effect of Klinger 40, producing a dense non-porous matrix. It also improves the frictional properties of the packing, to allow easy operation of any valve stem once installed.

■ The incorporation of Inconel wire enhances the packings performance in high-pressure applications. The wire is encapsulated to ensure excessive stem wear is eliminated. ■ K40 has excellent chemical resistance and is unaffected by the majority of acids, alkalis, solvents and greases. (For further information on chemical compatibility please contact Klinger)

■ Often employed on its own Klinger 40 can also be incorporated as part of a composite set with either K3222 or die-moulded K35 rings. Within this configuration the main function of K40 is to act as anti-extrusion rings and to provide a stem cleaning action.



Certificate No FM. 10571

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# **TopLine Packing 40**

# Service Capabilities

When used in equipment in good mechanical condition and installed using our product guidelines the undernoted values apply:

Minimum operating Temperature	-100 <sup>0</sup> C
Maximum operating temperature	430°C
Maximum steam temperature	650°C
■ pH	0-14
Maximum static pressure	200 bar
Maximum Speed	1.5 m/s

**Note:** The packing should not be subjected to the maximums of temperature, pressure and speed simultaneously. For further advice please contact our technical department.

## Forms of Supply

operating at high temperatures and pressures, within Klinger packings are offered in for example: a range of standardised packages: Petrochemical Plants Size: Chemical Processing 3mm to 25mm Power Stations Length: 8 metres per box Refineries by weight: Steel Mills sizes under 9.5mm 1kg/box 9.5mm to 12.5mm 2kg/box Boiler Houses sizes over 12.5mm 4kg/box

Alternative lengths and weights can be offered upon request, please contact Klinger for further details.

### **Technical Advice**

If you require additional technical information or would like Klinger to advise you on a particular application, please contact our Technical Department at the address shown.

Klinger 40 is suitable for use as a packing in valves

It is advantageous to provide the following details:

- 1. Type of valve or pump e.g. gate etc.
- 2. Working and test pressure
- 3. Temperature steady or cycling
- 4. Rate of pressure & temperature increase
- 5. Medium and concentration
- 6. Operating speed
- 7. Special requirements
- 8. Details of stuffing box design