



Soft carbon fiber with self-lubricating fluorinated coating.

CARBO:KING® MS is an inter-braided packing made from high-quality carbon fibers, capable of resisting most chemicals within the pH range of 0-14 (not compatible with strong oxidizers) and temperatures up to 650°C* (*Inert Atmospheres).

It features a high-density fluorinated resin impregnation to protect the fibers and improve sealing.

CARBO:KING® MS has a very low coefficient of friction, allowing it to withstand peripheral speeds of up to 15 m/s and increasing its service life due to its low heat dissipation.

Competitive Advantages:

Inventory Reduction: Its wide pH range (0-14) allows replacing up to 5 different types of packings with a single part number.

Low Shaft Wear: The matrix is designed to be gentle on the shaft or sleeve, reducing mechanical repair costs. **Constant Sealing:** The high coefficient of thermal expansion, very similar to that of steel, allows it to operate without requiring major adjustments.

Applications:

Condensate and Steam Systems: Ideal for steam traps, auxiliary valves, and return pumps.

General Chemical Processes: Handling caustic solutions, dilute acids, and solvents.

Effluent Treatment: Resistant to chemical sludge and hot wastewater.

Paper Industry: Excellent for green and white liquor in process pumps.

Common equipment:

- High-speed centrifugal pumps.
- High-temperature and steam control valves.
- Agitators and mixers in heavy chemical processes.
- Soot blowers.
- Refiners.

Common fluids:

- High-pressure steam, condensate, and feedwater.
- Hydrocarbons.
- Thermal oils.
- Heavy oils.
- Solvents.
- Black and white liquor.
- Boiler feedwater.

TECHNICAL DATA

| Properties: | CARBO:KING® MS | Packing |
|-------------------------------|---|-----------|
| Composition: | CARBO:KING® XT Carbon Fiber + Self-Lubricating Fluorinated Coating. | |
| Temperature, Max: | 1,202 | °F (peak) |
| Temperature, Continuous: | 842 | °F |
| Temperature, Min: | -400 | °F |
| Max. Pressure, Rotating: | 377 | psi |
| Max. Pressure, Reciprocating: | 1,450 | psi |
| Max. Pressure, Valves: | 3,626 | psi |
| Shaft Speed: | 2,954 | fpm |
| pH Range: | 0-14 | |

****The maximum temperature and pressure limits should not occur simultaneously.**

AVAILABILITY:

| Availability: | CARBO:KING® MS | Packing |
|-----------------------------|---|-----------|
| 1/8", 5# Boxes: | 68.46 | ft / lbs. |
| 3/16", 5# Boxes: | 38.69 | ft / lbs. |
| 1/4", 5# Boxes: | 28.28 | ft / lbs. |
| 5/16", 5# Boxes: | 17.86 | ft / lbs. |
| 3/8", 5# Boxes: | 13.39 | ft / lbs. |
| 7/16", 5# Boxes: | 9.67 | ft / lbs. |
| 1/2", 5# Boxes: | 7.44 | ft / lbs. |
| 9/16", 5# Boxes: | 5.80 | ft / lbs. |
| 5/8", 11# Boxes: | 4.61 | ft / lbs. |
| 3/4", 11# Boxes: | 3.42 | ft / lbs. |
| 7/8", 11# Boxes: | 2.53 | ft / lbs. |
| 1", 11# Boxes: | 1.64 | ft / lbs. |
| Thickness Tolerance: | ±10 % | |
| Notes: | The packaged product may have a variation of ±10%. *Other millimeter measurements and larger cross-sections are available upon request. | |