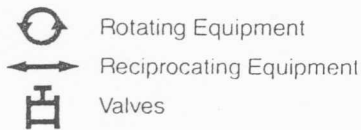


PACKING FOR PUMPS – VALVES

Explanation of Symbols.

In addition to their most common application, most packings have secondary applications where they perform at an equally high level. For example, many pump packings can also be used as valve packing. To allow the user to readily identify multiple applications, we have used symbols as follows:



PxV (Pressure (PSI) x Velocity (FPM)).

Two significant variables in rotary pump service are (1.) the surface velocity of the shaft and (2.) the pressure of the medium at the stuffing box. We have established recommended upper limits to both of these variables for each style of packing; however, the user should not assume a packing will perform properly in service when both shaft velocity and stuffing box pressure are at their upper limits. To

enable the user to more easily identify service limitations imposed by these two variables, JM Clipper has included PxV limits for each style of packing used in rotary service. This recommended limit is not a precise factor determined in a laboratory, but rather a guide based on tests, experience, and the unique characteristics of the materials used in manufacturing the packing. The user should always conduct their own test.

C-17



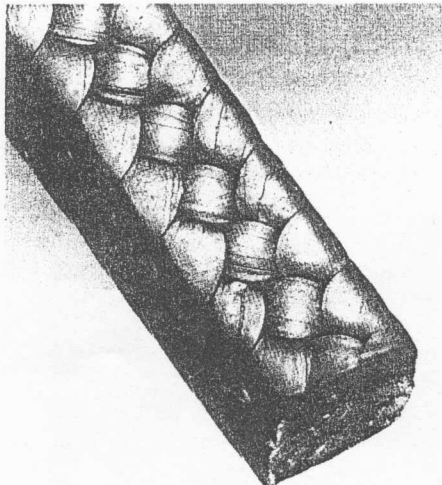
Constructed from high strength, PTFE treated, aramid fiber yarns, this square braided interlock packing is treated with a high temperature break-in lubricant. Designed too be used in centrifugal pumps where tough abrasion resistant performance is required from a packing, it is particularly effective in the paper, petroleum, steel, and chemical industries in pumps handling wood pulp, caustic paper stock, acids, pigments and dye stock, waste effluent, and demineralized and boiler feedwaters.

Temperature Limit	500°F (260°C)
pH Range	3 to 11
Shaft Speed	1900 FPM
Pressure	500 PSI
PV Limit †	325,000

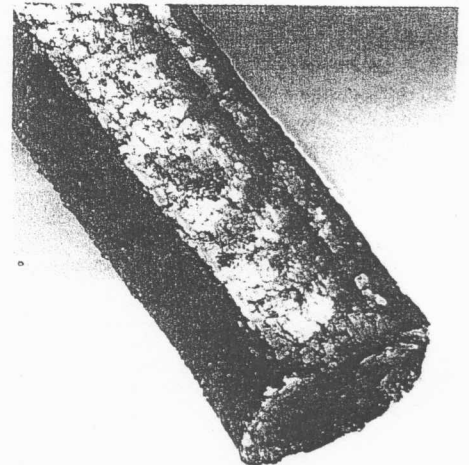
C-26

100% GFO™ fiber packing. GFO™ fiber, a patented nonasbestos fiber designed specifically for use in compression packing, is braided into a square interlock pump and valve packing. A low coefficient of friction, combined with good thermal conductivity, allows it to be used at higher surface speeds than pure PTFE packing. Style C-26 can be used in a wide range of applications such as petroleum and synthetic oils, acids, alkalis, solvents, steam, water, or in air and dry gas service.

Temperature Limit	500°F (260°C)
pH Range	0 to 14
Shaft Speed	3600 FPM
Pressure	300 PSI
PV Limit †	525,000



V-50



A strong and resilient square braided carbon core is jacketed with an inconel wire reinforced PBI yarn. To this is added a special compound that lubricates, blocks, and protects against valve stem corrosion. A final treatment of graphite gives V-50 the very low friction necessary for actuator operated valves.

V-50 Valve Packing is easy to install and remove. Its resilient core, soft jacket, and lubrication system won't harden in high temperature, so its excellent sealability remains constant. Since the V-50 corrosion inhibitor protects without using a sacrificial metal, stem torque does not increase with time. Style V-50 is designed primarily to handle high temperature, high pressure steam. However, the broad chemical resistance of inconel, carbon, and graphite also make V-50 an excellent general service valve packing.

Temperature Limit	1200°F (650°C) steam
Temperature Limit	650°F (345°C) air
pH Range	1 to 12
Pressure	4500 PSI