Fully Molded Cups and Packing

Valve Cups

LUBRIKUP® Valve Cups are available in API design, Lip-Type and our original Wood-Type design in hard, medium and soft densities. Product compositions are duck and rubber, and our premium reinforced material is specially formulated for LUBRIKUP®, along with our Lo-Friction material.

The basic ingredient of all lo-friction materials, except the soft Type #58, is nylon-plastic. Nylon has general characteristics of strength, toughness, resiliency, plus abrasion and corrosion resistance. It also has a low coefficient of friction. Because of its high melting point, it is very good for operations requiring higher than normal heat resistance.

### Fabric Reinforced Materials

<table>
<thead>
<tr>
<th>Style</th>
<th>Density</th>
<th>Max. Temp.</th>
<th>Depth</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Standard (RC)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>537</td>
<td>Soft</td>
<td>250°F / 121°C Shallow wells approximately 600 feet</td>
<td>Well with average weight oil with low percentage of water</td>
<td></td>
</tr>
<tr>
<td>397</td>
<td>Medium</td>
<td>250°F / 121°C Well depth up to 2000 feet</td>
<td>Wells with heavy fluid with a high level of water</td>
<td></td>
</tr>
<tr>
<td>137</td>
<td>Hard</td>
<td>250°F / 121°C Depth greater than 2000 feet</td>
<td>Deep wells and heavy pressure conditions</td>
<td></td>
</tr>
<tr>
<td>Premium Grades (PR)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>378</td>
<td>Medium</td>
<td>250°F / 121°C Well depth up to 2000 feet</td>
<td>Wells with heavy fluid with a high level of water</td>
<td></td>
</tr>
<tr>
<td>218</td>
<td>Hard</td>
<td>250°F / 121°C Depth greater than 2000 feet</td>
<td>Deep wells and heavy pressure conditions</td>
<td></td>
</tr>
</tbody>
</table>

### Lo-Friction Materials

<table>
<thead>
<tr>
<th>Style</th>
<th>Density</th>
<th>Max. Temp.</th>
<th>Depth</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>58</td>
<td>Soft</td>
<td>200°F / 93°C Shallow wells approximately 600 feet</td>
<td>Well with average weight oil with low percentage of water</td>
<td></td>
</tr>
<tr>
<td>MS-15</td>
<td>Medium</td>
<td>300°F / 149°C Shallow to medium depth wells up to 2000 feet</td>
<td>Wells with heavy fluid with a high level of water</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Med. / Hard</td>
<td>300°F / 149°C Shallow to medium depth wells up to 2000 feet</td>
<td>Wells with heavy fluid with a high level of water</td>
<td></td>
</tr>
<tr>
<td>500</td>
<td>Hard</td>
<td>300°F / 149°C Depth greater than 2000 feet</td>
<td>Deep wells and heavy pressure conditions</td>
<td></td>
</tr>
</tbody>
</table>
Fully Molded Cups and Packing

Seating Cups

LUBRIKUP® Type HR Seating Cups are manufactured to comply with API Standard 11AX. Molded in proper density, the cups assure precision fit in a seat formed in accordance with API standards. Type HR Seating Cups are available in Regular Composition, Hi-Temp, and Nylon-Plastic.

LUBRIKUP® Type O Seating Rings are molded with the same precision as the Type HR seating cups and made in a similar design with the exception that the clamping flange is omitted. Type O Seating Cups are available only in nylon-plastic. Both types are available in most popular sizes.

<table>
<thead>
<tr>
<th>Style</th>
<th>Density</th>
<th>Max. Temp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Standard (RC)</td>
<td>Hard</td>
<td>250°F / 121°C</td>
</tr>
<tr>
<td>Premium High Temp (HT)</td>
<td>Hard</td>
<td>300°F / 149°C</td>
</tr>
</tbody>
</table>

FLUID-SEAL™ Rod Packing

FLUID-SEAL™ Rod Packing incorporates the proven theory of lip-type action (sealing from pressure), with space provided between each ring to assure a perfect, nonbinding fluid seal for lubrication of the rod.

This packing requires no tightening. It performs best when run loose (finger-tight). Normal operating pressure expands the lips to compensate for wear until the packing is completely worn out.

MATERIALS: Standard Material DURATUFF®

STANDARD MATERIAL: Material composition includes Nitrile elastomer and cotton fabric specifically formulated to be compatible with petroleum oils and gasoline commonly found in oil and gas production. Good abrasion resistance.

Temperature capability: 250°F / 121°C
-20°F / -20°C

DURATUFF®: Formulated with cotton fabric and the DURATUFF® elastomer for higher temperature and steam capability.

Temperature capability: 325°F / 162°C
-30°F / -30°C

Fabric Reinforced Materials

<table>
<thead>
<tr>
<th>Style</th>
<th>Density</th>
<th>Max. Temp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Standard (RC)</td>
<td>Hard</td>
<td>250°F / 121°C</td>
</tr>
<tr>
<td>Premium High Temp (HT)</td>
<td>Hard</td>
<td>300°F / 149°C</td>
</tr>
</tbody>
</table>

Lo-Friction Materials

<table>
<thead>
<tr>
<th>Style</th>
<th>Density</th>
<th>Max. Temp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Hard</td>
<td>250°F / 121°C</td>
</tr>
<tr>
<td>500</td>
<td>Hard</td>
<td>300°F / 149°C</td>
</tr>
</tbody>
</table>
Cone Packing

LUBRIKUP® has the quality and experience to satisfy your Cone Packing needs. Cone Packing is available in a wide range of materials: Regular, TEFLON® Flake, DURAGOLD™ (Brass Flake) Impregnated, a Blended DURAGOLD and TEFLON Flake, or DURATUFF®.

- Excellent resistance to petroleum oils and gasoline
- Good heat resistance
- Flexibility in low temperatures

MATERIALS:
- Regular
- Dura Gold™
- Teflon Flake
- DURATUFF®

*Teflon is a registered trade name of DuPont

REGULAR:
- Formulated specifically to be compatible with petroleum oils and gasoline. Good abrasion resistance.
- Temperature capability: 250°F / 121°C
-20°F / -20°C

DURATUFF®:
- Formulated with cotton fabric and the DURATUFF® elastomer for higher temperature and steam capability.
- Temperature capability: 325°F / 162°C
-30°F / -30°C

Fluid-Seal™ Cone Packing

The sensational performance of Fluid-Seal Rod Packing is now available for cone-type stuffing boxes. Lip-type sealing action and space between each ring (sealing from pressure) creates a perfect, nonbinding fluid seal, provides and holds rod lubrication, and prevents slippage. When packing is installed finger-tight, rod contact is reduced by one-third, greatly reducing friction and increasing rod and packing life.

MATERIALS:
- Standard Material
- DURATUFF®

STANDARD MATERIAL:
- Material composition includes Nitrile elastomer and cotton fabric specifically formulated to be compatible with petroleum oils and gasoline commonly found in oil and gas production. Good abrasion resistance.
- Temperature capability: 250°F / 121°C
-20°F / -20°C

DURATUFF®:
- Formulated with cotton fabric and the DURATUFF® elastomer for higher temperature and steam capability.
- Temperature capability: 325°F / 162°C
-30°F / -30°C
FULLY MOLDED CUPS AND PACKING

LONG-LIFE™ Packing

The proven performance of FLUID-SEAL™ Rod Packing is now available in LONG-LIFE™ Packing. LONG-LIFE™ Packing is available for Ratigan stuffing boxes in all rod sizes. The polished rod surface contact is reduced by one-third, greatly reducing friction and increasing rod and packing life.

Available in Regular, TEFON* Flake or DURAGOLD™ (Brass Flakes) Impregnated. Material is compounded for excellent oil and abrasion resistance, heat resistance, and flexibility in low temperatures.

MATERIALS: Regular
Dura Gold™
*TEFON Flake
DURATUFF®

REGULAR: Formulated specifically to be compatible with petroleum oils and gasoline. Good abrasion resistance.
Temperature capability: 250°F / 121°C
-20°F / -20°C

DURAGOLD™: Using the same compound as with our “Regular” formulation with the addition of brass flakes designed to eliminate foreign material build up on the polished rod.

TEFON-FLAKE: Using the same compound as with our “Regular” formulation with the addition of Teflon which adds lubricity for the high speed pumping units.

DURATUFF®: Formulated with higher temperature capability and the resistance against steam.
Temperature capability: 325°F / 162°C
-30°F / -30°C

LUBRIPAK™ Packing

LUBRIPAK™ rubbers (2 sets per package) are made in all polished rod sizes for Type “B” and “X” stuffing boxes. Special rubber compounds of proper durometer assure excellent service under all operating conditions.

Available in Regular, TEFON* Flake, DURAGOLD™ (Brass Flakes) Impregnated and Blended DURAGOLD™ TEFON Flake.

MATERIALS: Regular
Dura Gold™
*TEFON Flake
DURATUFF®

REGULAR: Formulated specifically to be compatible with petroleum oils and gasoline. Good abrasion resistance.
Temperature capability: 250°F / 121°C
-20°F / -20°C

DURAGOLD™: Using the same compound as with our “Regular” formulation with the addition of brass flakes designed to eliminate foreign material build up on the polished rod.

TEFON-FLAKE: Using the same compound as with our “Regular” formulation with the addition of Teflon which adds lubricity for the high speed pumping units.

DURATUFF®: Formulated with higher temperature capability and the resistance against steam.
Temperature capability: 325°F / 162°C
-30°F / -30°C

* TEFON is a registered trademark of DuPont.
LUBRIKUP, LOCK-PACK, LUBRIPAK, DURAGOLD, FLUID-SEAL, and LONG-LIFE are trademarks of LubriKup Company.
Fully Molded Cups and Packing

**Style 8950 Pressure Actuated Ring**

The LUBRIKUP® “PA” ring is designed to give superior service in the time-tested pressure-actuated plungers used extensively in the oil industry. Field tests have shown excellent ring life and high pump efficiency.

- Precision-molded nylon-plastic material
- Resistant to hydrocarbons
- Available in all popular sizes from 1-1/4” to 2-1/4”
- Temperature range from -40°F to +350°F (-40°C to +177°C)
- No special tools needed for installation

**Type “B” and Resistoil Composition Rings**

LUBRIKUP® Type “B” flange and split composition rings are made from a blend of duck and rubber especially compounded for oil well pumping. Each ring is precision ground to assure uniformity of bearing contact in precision barrel tube or working barrel. The rubber is compounded to resist bloom that gives unnatural swell. The material will resist temperatures up to 270°F (132°C) with excellent results.

LUBRIKUP® RESISTOIL flange and split rings are made from a special composition of neoprene and cotton duck. Engineering a composition ring that resists swell was another LUBRIKUP® first.
AUTHORIZED REPRESENTATIVE

WARNING:
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.
© Garlock Inc 2012. All rights reserved worldwide.

Other facilities within the Garlock family of companies including Technetics Group and GPT are located in:

Columbia, SC, USA
Phone 1.803.783.1880 Fax 1.803.783.4279

Houston, TX, USA
Phone 1.281.840.4800 Fax 1.281.840.4756

Sydney, Australia
Phone 61.2.9793.2511 Fax 61.2.9793.2544

Auckland, New Zealand
Phone 64.9573.5651 Fax 64.9573.5636

São Paulo, Brazil
Phone 55.11.4352.6161 Fax 55.11.4352.8181

Sherbrooke, Canada
Phone 1.819.563.8080 Fax 1.819.563.5620

W. Yorkshire, England
Phone 44.1422.313600 Fax 44.1422.313601

Saint-Étienne, France
Phone 33.4.7743.5100 Fax 33.4.7743.5151

Neuss, Germany
Phone 49.2131.3490 Fax 49.2131.349.222

Mexico City, Mexico
Phone 52.55.50.78.46.00 Fax 52.555.368.0418

Singapore
Phone 65.6285.9322 Fax 65.6284.5843

Shanghai, China
Phone 86.021.62789702 Fax 86.021.62787826

Dubai, UAE
Phone 971.4.8833652 Fax 971.4.8833682

Pune, India
Phone 91.20.3061.6608 Fax: 91.20.3061.6699

© Garlock Inc 2012. All rights reserved worldwide.

Garlock Sealing Technologies
1666 Division Street
Palmyra, New York 14522 USA
1-315-597-4811
1-800-448-6688
Fax: 1-800-543-0598
1-315-597-3039

www.garlock.com