Cable Lubricants

Tube-Lube® 326

The benefits of DCD's premier cable lubricant include:

- Excellent lubrication and reduction of friction. Field tests show pulling loads can be reduced by over 50%, which is on par with the other leading brands.
- Proven to reduce the coefficient of friction tests on PVC duct with polyethylene jacketed cable show this to be 0.13.
- Lower friction means longer cable pulls and lower viscosity means less drag on the jacket.
- Clean and easy to use spray what you need where it's needed for less waste.
- Lubricant will flow around the cable when sprayed on, simply leaving a thin coating of lubricant all around
 the cable jacket, eliminating dry spots on the cable and further reducing friction. This also reduces usage
 by up to 50%.
- Can be used equally well for heavy power cable or CATV cable.
- Suitable for cable blowing. In Europe, it is recommended by Lancier, one of the original developers of cable blowing machines and equipment.
- Can be used with several different applicator systems now offered by DCD (see following page).
- Good for winter or summer temperatures (-4°F to 149°F / -20°C to 65°C).
- Minimal evaporation active ingredients do not dry out after application so cable removal years later is
 easy. Unfinished applications can easily be started up again the next day.
- Contains no Volatile Organic Compounds and no silicone oils, yet is compatible with silicone.
- Safe, non-toxic, biodegradable, and non-flammable.
- Successfully tested to IEEE standards for determining compatibility of pulling lubricants, including Low-Smoke Zero-Halogen jacket and Semi-Conductive materials.
- Successfully tested to ASTM standards for environmental stress cracking of cable jackets, also including Low-Smoke Zero-Halogen jacket.
- Price is competitive on a gallon-to-gallon basis alone, so when you figure in the much lower usage, there are excellent savings to be gained.
- Has a shelf life of approximately 2 years, but that can be extended even further with proper care.

Tube-Lube® Packaging

Tube-Lube® 326 is available in several different sizes and containers:

- 1 quart spray bottle for smaller premise type applications, sold only as a 12 pack.
- 4 pack of 1 gallon jugs (available in pallets of 44 packs) for larger users who prefer the 1 gallon jugs.
- Stackable 5 gallon container (available in pallets of 36 containers) for larger users who prefer the 5 gallon containers.
- In large 265 gallon totes, for the very large user who prefers to put the tote on the dock and let the crews fill up as needed. These totes have a spout and shut off valve located at the bottom of the tote and are returnable and can be re-filled, therefore saving even more costs.

Note: Discounts available on pallet quantities for the 1 gallon jugs and 5 gallon containers.







| | | ***** |
|-----------|---|----------|
| Part No. | Description | Weight |
| 35000-002 | 1 Quart Spray Bottle - 12 pack | 27 lb |
| 35000-410 | 1 Gallon Jug - 4 pack | 36 lb |
| 35000-050 | 5 Gallon Container | 38 lb |
| 35000-265 | 265 Gallon Tote (comes with spout and shut-off) | 2,500 lb |





Cable Pulling Lubricants

Tube-Lube® Applicators

The liquid consistency of Tube-Lube® 326 (SG = 1.04) minimizes viscous friction, which allows for easy application through the use of a spray applicator. DCD offers two different spray applicators:

Manual Applicator Kit

A manually pressurized spray tank with a pressure gauge allows the user to monitor the amount of lube being sprayed onto the cable via the included hand-held wand, or any of DCD's products fitted with a quick connect spray nozzle. Different pressures allow different volumes. A manual shut-off valve leads to a quick disconnect coupling.

A 20' long clear hose is included with the applicator with quick disconnect couplings at each end. This allows the applicator and operator to remain outside the manhole, while the connection to the duct is up to 20' away.



Power-Spray[™] Applicator Kit

This unit holds a little over four gallons and can be carried on the operator's back. A 4-speed pump controls the volume of lube applied. The pump is operated by a re-chargeable battery with about eight hours usage time. The unit comes complete with re-charger and a spare battery. The outlet hose also leads to a quick disconnect coupling.

A 20' long clear hose is included with the applicator with quick disconnect couplings at each end. This allows the applicator and operator to remain outside the manhole, while the connection to the duct is up to 20' away. Semi-clear tank allows visibility of the lube level.



| Part No. | Kit Type | Kit Contents | Weight |
|-----------|-----------------------------|---|---------|
| 35100-003 | Manual Applicator Kit | Comes with applicator and 20' hose assembly | 20.0 lb |
| 35100-002 | Power-Spray™ Applicator Kit | Comes with applicator, 20' hose assembly, battery and charger | 16.4 lb |

Applicator Kit Replacement Parts & Add-ons

| Part No. | Description | Weight |
|-----------|--|---------|
| 35100-043 | Spray Wand Replacement (for Manual Applicator) | 0.5 lb |
| 35100-040 | 20' Hose Assembly (can be used with either sprayer) | 1.57 lb |
| 35100-050 | Battery Pack for Power-Spray™ Applicator | 6.14 lb |
| 35100-051 | Battery Wall Charger for Power-Spray™ Applicator | 0.30 lb |
| 35100-042 | Spray Wand Replacement (comes with 6' hose) | 1.0 lb |
| 35100-052 | Spray Wand Replacement (for Power-Spray™ Applicator) | 0.5 lb |

In both above Applicators, the exit hose disconnect coupling and 20' long hose can attach to any of several other DCD products, such as:



Duct Entry Guide (32500 series): This product fits right into the duct opening and has a roller that the cable must pass over. The unit is fitted with a spray nozzle that when hooked up, places the lubricant right onto the cable as it passes under the nozzle.



Flexible Guides (32600 series): This product attaches to duct entry adaptors and these parts also have a spray nozzle to apply the lubricant right onto the cable as it enters the duct.



Split Entry Bells (32550 series): This cable entry guide, available in aluminum and bronze, can be removed easily after installation. Also available with a spray nozzle for direct application of the lube right onto the cable.



Manual Spray Wand (35100-043): This wand included with both types of applicator kits so that the hose may be connected to the spray wand and then applied onto the cable drum itself or any other point in the cable travel before entering the duct.

Tube-Lube® 346

This product is a gel consistency lubricant that is designed for heavy duty application, such as laying large-section power cables inside plastic or concrete ducts. It is also useful in situations that require very little spillage or mess such as indoor applications.

Available only in 5 gallon pails, Tube-Lube® 346 is compatible with all cable jackets and all types of ducting. The product is a heavy duty gel that should be applied to the cable as it enters the ducting and will stay on the cable throughout the pull. This product can be used in temperatures between $14^{\circ}F$ and $120^{\circ}F$ / $-10^{\circ}C$ and $48^{\circ}C$.



| Part No. | Description | Dimensions | Weight |
|-----------|-------------------------------------|-----------------------------------|---------|
| 35300-050 | 5 Gallon Container of Tube-Lube 346 | 21-7/8" L x 14-3/8" W x 14-3/8" H | 43.5 lb |

Tube-Lube® Summary

Although the importance of proper lubrication is known, sometimes it is difficult to figure out which lubricant would best suit the application at hand. DCD's two lubricant varieties are each best suited to a particular style of usage. The chart below will give you some guidance with choosing the right lubricant for your application. If you have any questions or concerns, please contact Customer Service.



| Tube-Lube® Type & Series No. | Installing Cables by Pulling | Installing Cables by Blowing | Installing Large Section Power Cables |
|---------------------------------|---------------------------------|---------------------------------|--|
| Tube-Lube® 326 (35000) | Excellent | Good | Good |
| Tube-Lube® 346 (35300) | Good | Not Suitable | Excellent |

Lube Spreader

This two-part product is designed to spread DCD Tube-Lube® 346 (or similar) around the walls and along the length of the duct, while also acting as a connector. The body is constructed out of stainless steel and the polyurethane disc has angular grooves which allow better distribution of lubricant.

How to Order

- 1. Select disc from Table A to fit the internal diameter of conduit to be lubricated.
- 2. Select connector body from Table B to match selected disc from Table A.

Table A: Spreader Disc

| Part No. | Disc Diameter | Weight | Connector Body |
|-----------|---------------|----------|----------------|
| 00515-100 | 1-1/16" | 0.011 lb | 00510-010 |
| 00515-125 | 1-3/16" | 0.014 lb | 00510-010 |
| 00515-150 | 1-5/16" | 0.018 lb | 00510-010 |
| 00515-175 | 1-7/16" | 0.023 lb | 00510-010 |
| 00515-200 | 1-7/8" | 0.045 lb | 00510-025 |
| 00515-250 | 2-3/16" | 0.063 lb | 00510-025 |
| 00515-300 | 2-13/16" | 0.118 lb | 00510-025 |
| 00515-350 | 3-1/4" | 0.165 lb | 00510-035 |
| 00515-400 | 3-3/4" | 0.257 lb | 00510-035 |
| 00515-500 | 4-11/16" | 0.433 lb | 00510-035 |
| 00515-680 | 5-1/2" | 0.624 lb | 00510-035 |
| 00515-640 | 5-13/16" | 0.719 lb | 00510-035 |



Table B: Connector Body

| Part No. | 3:1 Safe Working Load | Body Diameter | Overall Length | Weight | Clevis Pin |
|-----------|--------------------------|---------------|----------------|---------|------------|
| 00510-010 | 1,500 lb | 7/8" | 3-3/16" | 0.24 lb | 00010-SLT |
| 00510-025 | 4,000 lb | 1-3/8" | 9-3/16" | 0.99 lb | 00025-HEX |
| 00510-035 | 7,200 lb | 2" | 6-1/2" | 2.73 lb | 00035-HEX |

