



# Lubrication Schedule

**TD0141**



Fibre Draw Tower

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This document uses symbols and *warnings* and *cautions* to identify potential hazards to personnel and/or equipment. A *warning* defines a potential hazard to personnel that can cause INJURY or DEATH a *caution* defines a potential risk of damage to the equipment with no risk to personnel.  
**OBSERVE THESE HAZARDS AT ALL TIMES.**



This symbol identifies  
an electrical hazard.



This symbol identifies  
other hazards.

## End of Document Symbol

The ■ symbol indicates the end of the document.

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## Warnings and Cautions

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**Warning** The equipment supplied for the process of Preform and fibre manufacture uses materials and processes which, if the appropriate safety procedures are not enforced, may be hazardous. These materials include, but are not limited to, hydrogen, oxygen, chlorine, freon reagents, solvents, acids and alkalies. The equipment supplied may generate extreme temperatures, voltages and electrical currents. It is the customer's responsibility to comply with local, State or Federal Health and Safety regulations and ensure that all personnel are trained in the safe operation of any procedures which may involve contact with potentially hazardous substances or equipment.

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**Warning** The equipment supplied for the process of Preform and fibre manufacture is both delicate and sensitive. Excessive use of lubricants is neither adviseable or desirable. Lubrication should be applied sparingly ; little and often in preference to excessive amounts applied infrequently. This manual should be read in conjunction with the maintenance section of the user manual specific to the item of equipment requiring lubrication.

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**Warning** Sealed for life bearings do not require any additional lubrication and application of lubrication to such bearings could cause irreparable damage. Sealed for life bearings should be inspected regularly and replaced immediately upon presentation of symptoms such as excessive play, noise or stiffness.

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## CONTENTS

<b>INTRODUCTION</b>	<b>6</b>
<b>PREFORM FEED MODULE</b>	<b>6</b>
<b>FURNACE ASSEMBLY</b>	<b>6</b>
<b>BARE FIBRE DIAMETER GAUGE</b>	<b>6</b>
<b>CLEAN AIR SYSTEM</b>	<b>7</b>
<b>HELIUM COOLING SYSTEM</b>	<b>7</b>
<b>NON CONTACT TENSION MONITOR</b>	<b>7</b>
<b>MINI CAPSTAN</b>	<b>7</b>
<b>PRESSURISED COATING SYSTEM</b>	<b>7</b>
<b>UV CURING SYSTEM</b>	<b>8</b>
<b>ULTRA VIOLET CURING SYSTEM</b>	<b>8</b>
<b>COATED FIBRE DIAMETER GAUGE</b>	<b>8</b>
<b>CAPSTAN</b>	<b>8</b>
<b>LINEAR DANCER</b>	<b>8</b>
<b>DUAL DRUM WINDER</b>	<b>9</b>

## Introduction

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### Reference

Please refer to the relevant maintenance sub section of the Fibre Draw Tower User Manual when using this schedule.

### General

Shielded bearings are sealed for life. Any attempt to lubricate may cause overheating and harm.

### Daily

Check for general cleanliness, smoothness of operation, excessive play, noise or stiffness. Check all pulley wheels are clean and free from fibre fragments, dust or coating residue. Clean with a lint free tissue soaked in Methanol if required.

### Monthly

Check all bright metal shafts and slideways for general cleanliness and smoothness of operation. Wipe with a cloth lightly wetted with a light mineral oil, Shell Vactra No.2 or a direct equivalent.

## Preform Feed Module

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### Reference

Please refer to the maintenance sub section of the Preform Assembly section of the Fibre Draw Tower User Manual when using this schedule.

### 3 Monthly

Using the grease nipples provided apply Shell Alvania RA or R2 (or a direct equivalent) light grease as directed to the linear bearing blocks. Any surplus grease should be lightly smeared on the running surfaces of the guide rails.

Apply a light smearing of Shell Alvania RA or R2 (or a direct equivalent) light grease to the screw of the ball screw mechanism. Note the ball screw mechanism is pre-packed with grease on assembly and should not require any further, additional grease on a routine basis. Regular inspection of the ball screw mechanism will confirm if additional grease is required.

### 6 Monthly

Apply a thin film of Silicone grease as directed to the O ring seals in the actuator assembly.

## Furnace Assembly

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**Lubrication of the Furnace Assembly is not required.**

## Bare Fibre Diameter Gauge

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**Lubrication of the Bare Fibre Diameter Gauge is not required.**

## Clean Air System

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**Lubrication of the Clean Air System is not required.**

## Helium Cooling System

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### Reference

Please refer to the maintenance sub section of the Helium Cooling System section of the Fibre Draw Tower User Manual when using this schedule.

### Monthly

Using a light mineral oil, Shell Vactra No.2 or a direct equivalent, clean and lightly lubricate the 3 pairs of slide bearings fitted to each cooling tube, allow the oil to penetrate then clean off any excess.

## Non Contact Tension Monitor

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**Lubrication of the Non Contact Tension Monitor is not required.**

## Mini Capstan

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### Reference

Please refer to the maintenance sub section of the Mini Capstan section of the Fibre Draw Tower User Manual when using this schedule.

### Weekly

Using a light mineral oil, Shell Vactra No.2 or a direct equivalent, clean and lightly lubricate the carriage guides and roller bearings, allow the oil to penetrate then clean off any excess.

## Pressurised Coating System

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### Reference

Please refer to the maintenance sub section of the Pressurised Coating System section of the Fibre Draw Tower User Manual when using this schedule.

### Monthly

Using a light mineral oil, Shell Vactra No.2 or a direct equivalent, clean and lightly lubricate the Gimbals of the Applicator Tilt Mechanism and the Adjustment Screw and Pivot Bearing of the X-Y axis Mechanism, allow the oil to penetrate then clean off any excess.

## Ultra Violet Curing System

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### Reference

Please refer to the maintenance sub section of the Ultra Violet Curing System section of the Fibre Draw Tower User Manual when using this schedule.

### Monthly

Using a light mineral oil, Shell Vactra No.2 or a direct equivalent, clean and lightly lubricate the Ultra Violet Lamp VAM Pivot Hinges, allow the oil to penetrate then clean off any excess.

## Coated Fibre Diameter Gauge

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**Lubrication of the Coated Fibre Diameter Gauge is not required.**

## Capstan

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### Reference

Please refer to the maintenance sub section of the Capstan section of the Fibre Draw Tower User Manual when using this schedule.



### Warning

**Sealed for life bearings do not require any additional lubrication and application of lubrication to such bearings could cause irreparable damage. Sealed for life bearings should be inspected regularly and replaced immediately upon presentation of symptoms such as excessive play, noise or stiffness.**

## Linear Dancer

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### Reference

Please refer to the maintenance sub section of the Linear Dancer section of the Fibre Draw Tower User Manual when using this schedule.

### Monthly

Using a light mineral oil, Shell Vactra No.2 or a direct equivalent, clean and lightly lubricate the Outrigger and Dancer Pulley Spindles and the Pulley Bearings using the holes provided, allow the oil to penetrate then clean off any excess.

## Dual Drum Winder

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### Reference

Please refer to the maintenance sub section of the Dual Drum Winder section of the Fibre Draw Tower User Manual when using this schedule.

### Monthly

Using a light mineral oil, Shell Vactra No.2 or a direct equivalent, clean and lightly lubricate the Winder Drum Clamp Mechanism, the Fibre Input Guide Pulleys and spindles, the Layering Arm Pulleys and Spindles and all the Pulley Bearings using the holes provided. Allow the oil to penetrate then clean off any excess

### 3 Monthly

Using the grease nipples provided on each Drum Bearing Housing apply two strokes of a grease gun filled with Shell Alvania RA or R2 (or a direct equivalent) light grease. Ensure that all surplus grease is removed prior to using the unit,

### Note

The Stepper Motor Drive Mechanism of the Layering Pulley is sealed for life and should not be tampered with.



**Warning** Sealed for life bearings do not require any additional lubrication and application of lubrication to such bearings could cause irreparable damage. Sealed for life bearings should be inspected regularly and replaced immediately upon presentation of symptoms such as excessive play, noise or stiffness.

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