

## TODO-MATIC® installation advice

Before you install any TODO-MATIC® equipment it is essential to check that the material and performance specifications are acceptable for your specific application. The pressure ratings and primary materials of construction are clearly indicated on the identification plate of each TODO® product. A drawing showing the materials of construction relating to each individual component is available upon request. The technical department at TODO® is always happy to provide guidance on material suitability. Our data is taken from published chemical resistance information as well as our own application experiences. Specification checks should always be carried out before the product is supplied, but if unsure, ask!

Do not assume that a TODO-MATIC® product supplied for one specific application will automatically be suitable for other similar applications. Many variables affect the performance of materials. Should you wish to use a TODO-MATIC® product for a different application than the one originally specified, check with TODO® to ensure compatibility before installation. Please remember, the application details should include all media transferred through the coupling, not just the primary transferred media.

As with all equipment, a check should be made to ensure the installation fulfils the requirements of applicable prevailing industry, local, national and international standards. Particular attention should be paid to pressure ratings, safety factors and the position of upstream and downstream affiliated closures.

### Installation

The correct installation of all TODO-MATIC® equipment is essential to ensure safe and satisfactory operation. Checks should be made to ensure that the fitting of TODO-MATIC® equipment does not interfere with the correct operation of affiliated equipment (i.e. isolation valve, excess flow valves, etc). Before securing the flange or thread connection to mating equipment (i.e. hose, loading arm, storage tank) ensure that no foreign objects, dirt, grit, etc are present in the coupling.

All flange and thread connections should be made without imparting excessive strain to the equipment and pressure checked at least to 1.5 times the maximum application working pressure prior to use. All gaskets and sealing materials used to make the permanent connection should be of suitable material and able to operate at least up to the maximum parameters of the TODO-MATIC® equipment.

When installing TODO-MATIC® equipment to new pipe work, tanks, etc, ensure the system is free from debris that may be transferred through the coupling. Where the hose or loading arm assembly is the primary static dissipation or earth route, the electrical continuity value of the assembly shall be checked to ensure regulatory compliance.

### Balancing loading arms

Special attention should be paid to the balancing of **loading arms**. The weight of the coupling plus transfer media should be taken into account at the specification stage. It is usual for loading arm balance settings to account for weight variations due to differences in the full/empty cycle. The loading arm should be set to balance in the condition present at the time of connection. For example, should the loading arm be empty at the time of connection then it should be balanced in the empty condition.

Each TODO-MATIC® coupling is designed to take reasonable axial loads associated with good handling practice but is not designed to accept continuous excessive load values associated with maladjustment or poor installation. Continuous excessive strain will equate to increased component wear and possibly premature failure if not corrected.

When TODO-MATIC® equipment is used with hoses, attention should be paid to hose length to ensure correct handling characteristics. The hose assembly should be designed such that the minimum hose length is supported by the coupling or the operator. Hoses should be of sufficient length to ensure operation well within the stipulated hose minimum bend radius up to the maximum operation envelope.

*Once all the above elements are satisfactory, a function check should be carried out to prove the system. The hose unit or coupler should connect and disconnect without physical interference or difficulty. Please remember that the higher the static pressure, the greater the effort needed to make a connection. The TODO® technical department is happy to advice on this subject at the specification stage.*

## General recommendations for TODO® Tank and Hose units

### Inspection

#### *Daily inspection*

1. Inspect the couplings surface for cleanliness and corrosion.
2. Inspect the O-ring in the Hose unit connection for serviceability and correct seating in the groove.
3. Inspect the Hose unit swivel for free rotation.
4. Inspect the Tank and Hose unit for faults and external signs of leaking.
5. Inspect the Hose unit rollers for easy rotation when the Hose unit is connected and for external signs of wear.

#### *Three months inspection*

1. Exterior cleaning of the coupling halves with a neutral cleanser.
2. Careful "daily" inspection of cleaned units.
3. Refill the Hose unit ball bearing grooves with grease. Our greases are 6632 TODO Grease (blue), 6633 TODO Grease for high temperature applications (red), and 6634 TODO food quality grease (white). 6259 Cargo Flour (white) Grease, 6262 Cargo Super Lube (transparent), 6266 Klüber Flour (white) and 6258 Rigging Screw Oil.

Please see service manual for further information

### Internal faults

The Tank and Hose unit must be overhauled by a qualified person whenever a fault is indicated or suspected.

## Lubricating grease

### TODO 6632 Blue (standard)

This is a synthetic low temperature grease adapted for arctic conditions. The grease is totally waterproof.

#### FEATURES

1. Good low temperature properties
2. Water-proof
3. Good adhesive.

This grease is particularly recommended for use in machinery operating in sub zero conditions.

Appearance: Smooth grease  
Operating temperature range:  
-58°C to +142°C

**Code no: 6632**

### TODO 6633 Red (standard)

This is a high-tech lithium complex grease based on synthetic oils. It exceeds most of the specifications required for advanced machinery and equipment.

#### FEATURES

1. Water-proof
2. Good adhesion
3. Endures high pressure
4. Wide temperature working range
5. Good protection against acid
6. Chemically stable

This grease is suitable for heavy industry applications, high temperature applications, extreme applications etc.

Appearance: Tacky grease  
Operating temperature range:  
-36°C to +208°C (258)

**Code no: 6633**

### TODO 6634 White (standard)

This is a food grade grease with exceptionally high water resistance, manufactured and developed mainly for lubrication in food-processing plants.

#### FEATURES

1. Water-proof
2. Endures heavy loads
3. Wide temperature working range
4. Food-grade lubricant
5. Good mechanical stability

Suitable for the lubrication of ball-bearings, bushings, joints, chucks etc

Appearance: Tacky grease  
Operating temperature range:  
-24°C to +157°C

**Code no: 6634**

### Cargo Flour

PTFE based grease. The grease is chemically stable against the majority of chemicals and is resistant to acids, steam, high temperatures, oxygen, inert gases, radioactive surroundings etc. BAM-tested.

#### FEATURES

1. Water-proof
2. Endures extreme workloads
3. Thermally stable
4. Food-grade product

This grease is suitable for ball-bearings, cylinder bearings, bushings, chains and application involving vacuum and oxygen.

Appearance: Tacky grease  
Operating temperature range:  
-20°C to +250°C (280)

**Code no: 6259**

### Super Lube

This is a universal grease based on synthetic oils and PTFE.

#### FEATURES

1. Good adhesion
2. Wide working temperature range
3. Mechanically stable
4. Water-proof
5. Non-toxic
6. Resists oxidation

This grease is recommended for use in high temperature applications, food-processing industry, vehicles etc.

Appearance: Transparent grease  
Operating temperature range:  
-43°C to +232°C (continuous)  
-45°C to +260°C (temporary)

**Code no: 6262**

### Rigging Screw Oil

Castrol ILOFORM BWN 205 is a very high viscosity, heavy duty, chlorinated, straight oil designed for difficult drawing and metal forming operations.

#### FEATURES

Castrol ILOFORM BWN 205 possesses the extreme pressure properties necessary for operations such as wire and tube drawing on stainless steel as well as deep drawing, forming, and cold heading.

Appearance: Liquid  
Operating temperature range:  
-30°C to +150°C (200)

**Code no: 6258**