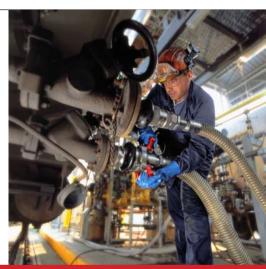


For safe fluid handling of oil, gas & chemicals





The world's leading manufacturer of DRY-BREAK® couplings



# FOR SAFE FLUID HANDLING



TODO® is the world's leading manufacturer of DRY-BREAK® couplings. We have achieved this position through many years of working in close collaboration with our customers, developing products that meet their current and future requirements.

TODO® was established in 1971 as a family company based in Töreboda, central Sweden. In 2006 TODO® became a prominent brand within the Gardner Denver Inc. Fluid Transfer Division.

In addition to our own sales operations TODO® provide products internationally through a comprehensive, certified distributor network.

### Certificates and standards

TODO® design and manufacture to EN ISO 9001:2000 accredited procedures and our product range conforms to all relevant international quality, performance and safety standards.

TODO-MATIC® couplings carry the highest level of certification and approvals available.

DRY-BREAK® is registered trademark of TODO AB and SYLTONE.
TODO®, TODO-MATIC® and TODO-GAS® are registered by TODO AB.

#### Certificates and standards

European Directive 97/23/EC category II or SEP as appropriate. European pressure equipment law ensuring harmonised levels of design, testing, risk analysis, materials control, safety factors and quality management. Products certified towards category II are subject to external monitoring / control and suitable for higher pressure applications such as some liquefied gasses.

ISO 9001: 2000. Our quality procedures and management along with design are subject to external monitoring / control by Swedish national testing and research institute.



TÜ AGG 162 93 towards ADR (transportation by road), RID (transportation by rail), IMDG (transportation by water) and TA Luft (fugitive emission air quality standard). Externally monitored and controlled by

E4 67R 00002. European standard covering equipment suitable for use in propane fuelled vehicles. Externally evaluated by and marked accordingly to



# **PRODUCTS / APPLICATIONS**

TODO® operate within todays expanding global market. Our range of products are supplied into a diverse range of industries including road and railcar loading/unloading, container filling, ship to shore transfer, offshore supply vessels, chemical and pharmaceutical industry, LPG industry, aviation and military refuelling.

## For the most demanding applications

Our TODO-MATIC® and TODO-GAS® coupling range offers the largest selection of sizes and material available. Together with supporting products such as TODO® SAFETY BREAK-AWAY couplings and swivels we offer an unequalled range of fluid and gas transfer solutions to satisfy the most demanding of applications.

### Safety and operational benefits

TODO-MATIC® DRY-BREAK® couplings provide easy, quick, safe and environmentally friendly handling of liquids and gasses. They minimise risk of operator exposure to emissions, provide better ergonomics, reduce human error and achieve commercial benefits through time saving / clean up costs.



Major offshore exploration, chemical, pharmaceutical and petrochemical companies rely on TODO-MATIC® couplings to safely transfer their most aggressive and valuable liquids.



TODO-GAS® DRY-BREAK® couplings are designed specially for the safe an efficient handling of LPG in both liquid and vapour phases. Certified towards European Directive 97/23/EC (P.E.D.) category II.



The TODO® SAFETY BREAK AWAY coupling are designed to eliminate spillage and damage associated with drive / pull away incidents. Offer exceptionally high flow capacity for their size.

# **TODO® PRODUCTS OVERVIEW**



**TODO-MATIC®** The first choice for the safe handling of hazardous, valuable or environmentally sensitive media. TODO-MATIC® are available in aluminium, gunmetal and stainless steel 316L with special materials such as hastelloy C276 available to order.

Sizes: 1" (DN 25) to 6" (DN 150).



**TODO-GAS®** The TODO-GAS® couplings are designed especially for the transfer of LPG in both liquid and vapour phases. The couplings are available in stainless steel and brass / gunmetal with thread or flange connection. Handling and operation are as simple as for the TODO-MATIC® DRY-BREAK® coupling. Sizes: 1" (DN 25), 2" (DN 50) and 3" (DN 80).



**TODO® SAFETY BREAK AWAY couplings** Designed specifically to minimise spillage and damage associated with drive / pull away incidents. Also allows rapid removal of the mobile tankage in emergency situations. The coupling automatically senses an excessive load, closes its valves and then permits disconnection. Very high flow rate / low pressure drop. Sizes: 2" (DN 50) and 3" (DN 80).



**TODO-45 aviation couplings** An ISO 45 standard ground unit from TODO® and a special version of the TODO-MATIC® 2½" coupling available for connection to ground units conforming to standard ISO 45. This gives, for the first time, an economical alternative to ISO 45 standard hose couplers for aviation fuel transfers.



**PTC - Safety Pressure Tight Cap** The TODO® PTC is specifically designed to enhance operator safety and containment security in chemical and gas transport. Designed in close collaboration with leading chemical and gas companies, the PTC offers safety and operational benefits beyond those offered by existing closure technologies. Sizes: 2" (DN 50) to 4" (DN 100).



**BALL VALVES** These lightweight ball valves were the first products to be developed by TODO®. This valve offers obvious weight saving benefits for the road tanker industry but can also be used in a variety of plant applications. A wide selection of end connectors are available and valve changeover is rapid due to the simple sandwich design. All sizes are available with pneumatic actuation in either single or double acting form. Sizes: 2" (DN 50) to 4" (DN 100).



**FUEL NOZZLES** The TODO® fuel delivery nozzles are specifically designed to deliver high volumes with total security. Rugged cast aluminium alloy body, high strength swivel and robust handle all help this nozzle to offer reliable long term performance.

Size: 1½" (DN 40).



**API couplings** TODO® API hose couplers and tank adaptors are interchangeable with other products manufactured to standard API RP 1004. The TODO® hose coupler is a high pressure design with five claw closure connection for strength and two interlocks for security and safety. The moulded lipseal configuration is used for long leak-free performance. TODO® API tank adaptors are available with or without operating handles or sightglasses. Size 4" (DN 100).



**SWIVELS** Developed originally as part of the TODO-MATIC® coupling construction then subsequently as a stand alone product, the TODO® swivel has proved itself in the toughest applications for over 20 years. Used mainly to allow free hose movement without imparting torque stresses to the assembly (one of the biggest causes of premature hose failure). Sizes: ¾" (DN 19) to 4" (DN 100).