





Tank Trucks







DDCouplingsBry Disconnect Couplings

Mann Tek Dry Disconnect Couplings are used for handling and transfer of liquids, gases and bulk powder in an economical, safe and environmental friendly way.

Dry Disconnect Couplings are available in sizes from 3/4" up to 6" and in a wide range of materials and seals to be the given choice for almost any application.

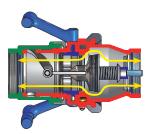
The self sealing design of the couplings guarantees both the highest level of safety and also the quickest way of connecting and disconnecting.



According to NATO STANAG 3756

How it works The coupling function

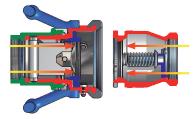
The principle of operation is similary for all types of Mann Tek Couplings



To connect

Push and turn

- it's coupled
- full flow



To disconnect

Turn and pull

- it's released
- no spillage

Size:

The couplings are available with BSP- and NPT-threads in sizes ¾" (DN 20) to 6" (DN 150). Other threads are available on request (S60X6, Acme etc.).

The tank units and Hose units are also available in flanged connections (DIN, ANSI, TW, TTMA, EN 1092-1:2001).

Materials:

Aluminium, Brass/Gunmetal, Stainless Steel, Hastelloy C and PEEK. Other materials on request.

Seals:

FPM (Viton®), EPDM, Chemraz®, Kalrez®, NBR (Nitrile). Other materials on request.

Maximum Working pressure:

MWP PN 10 / 16 / 25. MAWP 150 / 300 psi

Test Pressure:

15 / 24 / 38 bar 225 / 450 psi

Selectivity - Avoid mixing products:

To avoid product contamination caused by connecting a Hose unit to the wrong Tank unit, selective versions of the Hose and Tank units are available. Each unit has a number of selective positions, designated by a coded part number according to the coupling size.

Electrical conductivity

All DDCouplings® have electrical conductivity (<10 ohms).

Interchangeability:

Compatibility with other existing brands according to NATO STANAG 3756 and ATOFINA SGM 2049.TUY.C.

Special models:

With integrated break-away, pressure relief valve, etc. on request.





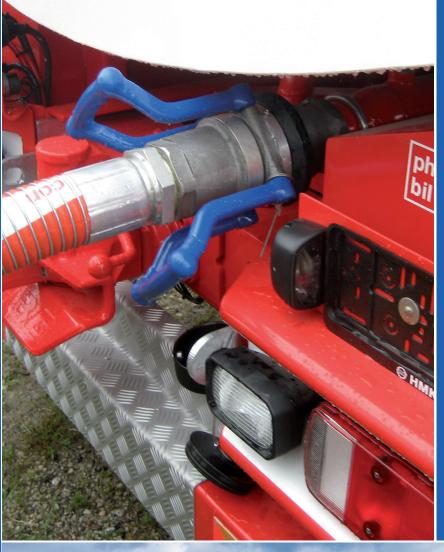












Advantages DDCouplings

- Easy to handle

 Push and turn free flow.

 Turn and pull closed.
- *Time saving*No need to drain hoses or pipe systems.
- Economical
 No loss or spillage of liquids at connection or disconnection.
- **Safe**The valve cannot be opened until the unit is coupled.
- Environmentally friendly Accidental spillage eliminated.
- Reliability
 No loss or spillage of liquids at connection or disconnection.



FFBall Valves

Full Flow Ball Valves

Ball Valves / 2-way Ball Valves in Aluminium

Full Flow Ball Valves and 2-way Ball Valves are specially designed for handling different types of fuels such as diesel, gasoline, Jet fuel etc. in Tank trucks.

Mann Tek Ball Valves in Aluminium offer weight saving benefits to the road tanker industry and they are also used in different types of fixed plant and mobile fuelling applications.

All sizes of Mann Tek Ball Valves and 2-way Valves are available with pneumatic actuation in either single or double acting form.



Applications for Ball Valves

- Petroleum tank trucks
- Tank trucks for solvents
- Dispenser and Tank trucks for aircraft refuelling
- Stationary and mobile equipment for aircraft refuelling
- Valves for the paint industry
- Valves for the oil industry
- Waste water for railwaggons

Sizes

2" (DN 50) to 4" (DN 100)

Connections:

Full Flow ball Valves and 2-way Ball Valves are available with BSP- and NPT-threads and with flanges (DIN, ANSI, TW, TTMA, EN 1092-1:2001).

Maximum Working Pressure:

MWP PN 10 MAWP 150 psi

Material:

Body: Aluminium
Ball: Aluminium
Spindle: Stainless Steel

Seals:

Teflon® (PTFE), Viton® (FPM). Other Seals on request.



Ball Valves in Aluminium.



Ball Valves in Aluminium with pneumatic actuator (springreturn or double acting).



2-way Ball Valves in Aluminium.



2-way Ball Valves in Aluminium with pneumatic actuator double acting.





Swivels Swivel Joints



Hose swivels

Sizes

3/4" (DN20) to 8" (DN200)

Maximum Working pressure:

MWP PN 10 / 16 / 25. MAWP 150 / 300 psi

Test Pressure:

15 / 24 / 38 bar 225 / 450 psi

Materials

Aluminium, Brass, Stainless steel, Hastelloy, Titanium. Others on request.

Connections

Female and Male BSP / NPT, ACME, Witworth threads and flanged DIN and ANSI. Others on request.

NOTE

Unsuitable for high bending moments. Heavy Duty Swivels should be used in these applications. The use of swivel hose avoids torsion of hose assemblies, i.e. in filling machines, and improves the handling and coupling of nozzles for refuelling of petroleum based products and chemicals.

Features

- Simple design, low maintenance. Each unti consist of two body halves. Stainless Steel balls and a single spring assisted O-ring seal.
- Compact external dimensions
- ▶ High flow rate / low pressure drop
- Full range of sizes, materials, seals and connections
- Minimal maintenance requirements
- Safety Swivel function allows the hose to relax to it's natural rest position whilst allowing freedom of movement without imparting torque stress at the point of connection - Torque stress is the largest single cause of Composite, PTFE and Stainless Steel convoluted hose failure.
- **Economical** Cost effective solution to prolong lifetime of hoselines.

Dust Cap

Dust protection in rubber

A Dust Cap gives very good protection against corrosion, and withstands both hot and cold environments.

Dust Cap for increased safety

It's only possible to remove the cap from the Tank unit /Adapter after pulling the securing stift and at the same time twisting the cap. The Dust Cap is manually lockable with padlock.

Standard Caps in Composite (Polyeten PE-HD 300).

It covers the widest range of chemical and petroleum products.

- Elastic v-ring seal in standard NBR that makes disassembly easier and seals of a larger surface than conventional O-rings
- Lockable and sealed
- Patented design

Caps are also available in Stainless Steel and Aluminium. Other materials on request.





Dust Plug to prevent ingress of dirt and water

Use the Mann Tek Dust Plug to prevent ingress of dirt and water in the couplings.

The material in the Dust Plug is Composite, Aluminium and Stainless Steel.



Pressure Cap for Tank unit / adapter

- Working pressure PN 10 bar / PN 25 bar

Can be used as a second or third <u>closing device</u> according to ADR/ RID par 6.8.2.2.2



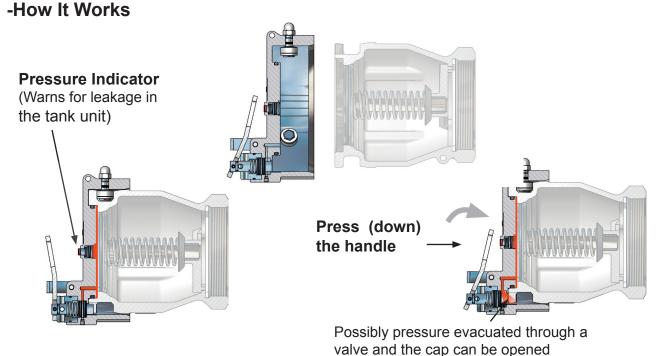
Working pressure PN 10 bar / PN 25 bar The Mann Tek Pressure Cap for Tank units / Adapters is designed to maximize operator safety and containment safety.

Should the possibility of an upstream closure leakage occur, the Pressure Cap provides identification of a system pressure and will hold this pressure until the problem can be safely resolved. Should the operator still choose to remove the cap it will reduce the static pressure to zero thus preventing the forceful expulsion of the transfer media.

Features

- Pressure indicator
- Depressurization
- Customs / tamper seal feature
- Automatic locking
- Manually lockable (with padlock)

Pressure Cap for Tank unit / adapter





About Mann Tek

Mann Teknik AB is a Swedish company located in Mariestad, Sweden.

Mann Teknik AB designs, manufactures and markets products for safe and environmentally friendly handling of aggressive fluids for the chemical and petrochemical industries.

The main product is the Dry Disconnect Couplings, DDCouplings®, for spill free liquid handling. The products are marketed through independent representatives in more than 30 countries.

Company Approvals

Mann Teknik AB are certified to ISO9001:2008. The products are CE-labeled. The main products are certified to PED, the European Pressure Equipment Directive and ATEX, the European directive for Equipment intended for use in Potentially Explosive Atmospheres.

The products are produced in accordance with several important standards, e.g. the NATO STANAG 3756





Product and company information

















Approvals



ISO 9001, PED 97/23/EC, TDT, TÜV, Apragaz, FMV. Gost. ATEX e.t.c

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Mann-Tek is a certified ISO9001-company.