

HOSE SOLUTIONS FOR OIL&GAS INDUSTRY



ABOUT US



Company Headquarters



Services



Logistic Centre



Assembly production site



Products in use

Tubes International provides professional solutions concerning industrial hoses and couplings as well as hydraulic hose assemblies for all branches of industry. As early as the company was established (1993) its main focus was to provide specialist solutions for hoses and couplings for industry. Products and services are available through our own distribution network. The fact that from the very beginning Tubes International has been in cooperation with best manufacturers from all over the world ensures delivery of top quality products meeting highest technical, safety and environmental requirements.

Certificates:

Tubes International guarantees the quality of its products and services, which is confirmed by various certifications.

Most important certifications:

(for a complete list of certificates, visit www.tubes-international.com)

- Quality Management System - according to ISO 9001, certified by DNV
- Certificate No. WF 0410165 HH, qualification for: Welding of Pipelines
- Marking in accordance with Pressure Equipment Directive (2014/68/EU)
- NATO - supplier code 1767H

Safety and compliance with customers requirements are confirmed by Certificates of Quality and Conformity provided upon request.

Milestones:

1993 Tubes International Sp. z o.o. was founded

1993 - 1998 Sale and customer service from the company's head office

1998 The new strategy of the company is to develop its own distribution network in Poland

2001 A modern company's head office with warehouse and production facilities is built in Poznań at Bystra 15A

2002 Foreign market expansion strategy:

- 2002 Tubes International s.r.o. Czech Republic
- 2005 TOW Tubes International Ukraine
- 2007 Tubes International s.r.o. Slovakia
- 2007 UAB Tubes International Lithuania
- 2008 OOO Tubes International Russia
- 2010 TOO Tubes International Kazakhstan
- 2015 Tubes International Norge A/S, Norway

2003 Quality management certificate ISO 9001:2000 issued by DNV is acquired

2007 A new production branch manufacturing custom-made fittings opens in Białystok

2008 Authorisation to mark pressure hose assemblies with CE according to Pressure Equipment Directive 2014/68/EU

2012 The launch of a new logistic centre in Poznań

2015 The launch of an agency in Germany

2015 E-shop opens

2016 We have a team of 400 highly qualified employees

2017 The implementation of a new ERP software

2018 25 years of Tubes International operations

2019 The launch of the new version of E-shop

2020 Tubes Engineering - a newly opened Tubes company

2021 A new agency is launched in Italy

2022 Tubes International has closed its operations in Russia

PETROLEUM HOSE ASSEMBLIES

Hose assemblies for petroleum products comprise hoses designed for liquid substances - products of petroleum processing (mainly fuels and oils) and for crude or semi-processed petroleum. The range of petroleum products is very broad and includes: crude oil, petrol, kerosene, diesel oils, heating oils, hydraulic oils, lubricating oils, quenching oils, machining oils and emulsions, thermal oils (heat carrier), electrical insulating oils (e.g., transformer oil), solvents, maintenance substances, asphalt, other liquid bituminous substances. The applications of the hoses include: extraction and processing of crude oil and its products, transfer, loading and unloading of liquid petrochemical products (e.g., unloading of oil tankers, road and rail tankers), distribution and refuelling, all kinds of production processes, fuel systems of vehicles and industrial equipment, hydraulic systems and many other. When selecting the hose, special attention should be given to its resistance to aromatic hydrocarbons present in the fuel, additives used in the fuels and oils today (unleaded fuels, biodegradable oils, transformer oils), as well as requirements for protection against static electricity (use of conductive wires, antistatic and conductive rubber). Fittings and couplings for the petroleum hoses should be mounted with clamps, safety clamps or crimped with ferrules.



RIGSTAR SD DN100 RUBBER HOSE ASSEMBLY as one of the sections of BUNKERING HOSE ASSEMBLY

Robust, suction-delivery hose designed for the transfer, loading and unloading of petroleum, petrochemical products and drill cuttings mixed with crude oil (up to 50% aromatic compounds). With 4" NPT male thread at both ends. Overall length: 10 000 mm.

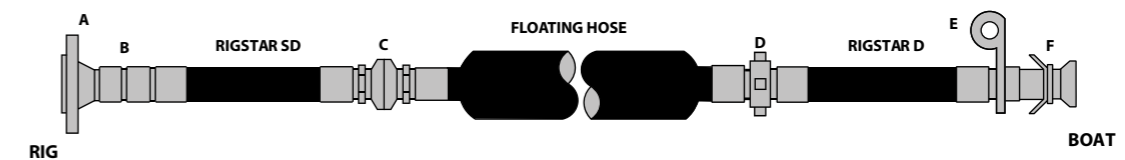


Medium: diesel oil
WP: 10 bar
WT: ambient
Application: bunkering operations between an oil rig and PSV (platform supply vessel)
Testing: 15 bar/hydrostatic



Application: 
Assembly technology: internal swaging

Schematic example of the application of RIGSTAR hoses between a platform (RIG) and a vessel BOAT



A - flange; B - swivel coupling; C - emergency coupling; D - HAMMER LUG union; E - HOOKIE HOOK hose lifter; F - dry disconnect coupling.

ALSO AVAILABLE

HAMMER LUG UNIONS AND FLOWLINE PRODUCTS



HAMMER LUG unions, also known as WECO couplings, are ideal for fast and easy connection of pipelines and flexible hose assemblies in the oil and gas industry. HAMMER LUG unions are forged from high-strength steel types either ASTM A105 carbon steel (for working pressure up to 414 bar - 6000 PSI) or 4130 chromium-molybdenum steel (for higher pressure values). They come in specific types (Figures). Each figure, regardless of its size, is intended for a specific working pressure and application, and the components of the union are painted with a specific colour for easy identification. The sizes of HAMMER LUG unions range from 1" to 12" (depending on the type of union). One-piece pipe unions (no welded parts) designed to transfer oil, gas, abrasive materials, drilling fluid, water, cement, etc. Widely used in fracturing, cementing, flushing, wireline services, choke and kill lines, etc. Available as pup joints, elbows, tees, crosses in 1" to 3" sizes with NPT thread or HAMMER LUG connection (male part with a nut or female part). A version designed for sour gas service also available.

HOSE ASSEMBLIES FOR CRUDE OIL EXTRACTION

Oil extraction, both onshore and offshore, requires a huge number of hoses for a variety of media, working pressures and applications. However, the main operations of drilling, removing drill cuttings, well bore protection, transfer of crude oil, gas, fluids and slurries, cement, etc. that run under very high pressure require the use of specialised flexible hose assemblies designed specifically for crude oil extraction in accordance with API (American Petroleum Institute) standards.

The most frequently used complete hose assemblies for drilling equipment according to API (American Petroleum Institute) classification:

- API 7K (FSL0) – designed to transfer cement under high pressure,
- API 7K (FSL1 and FSL2) – designed to transfer drilling mud,
- API 16C – designed for blow-out preventer systems,
- API 17K – designed for offshore applications including riser tensioners, jumpers (topside jumper, subsea production jumper)
- API 16D – hydraulic control of BOP.

All hoses for drilling applications are supplied as complete, pressure-tested hose assemblies, either crimped or vulcanized.



API 7K (FSL2) DN100 RUBBER HOSE ASSEMBLY

Robust and flexible hose designed for conveying crude oil, bentonite mud, drill cuttings. Assembled with 4" HAMMER LUG union FIG. 1502 at both ends (male part + nut at one end, female part at the other) in 4130 steel. Overall length 10 000 mm.



Medium: drilling mud
WP: 517 bar (7500 psi)
WT: ambient
Application: connection to a drilling swivel
Testing: 776 bar (11250 psi)/ hydrostatic



Application:
Assembly technology: vulcanisation

ALSO AVAILABLE

API 16C (FSL3) DN100 RUBBER HOSE ASSEMBLY



Robust and flexible hose designed for blowout preventers (BOP), i.e. systems used to monitor and eliminate uncontrolled and rapid increase in wellbore pressure. CHOKER hose allows mud to be pumped into the wellbore bypassing the normal circuit and, during an emergency, is used to feed the mud at high pressure to push gas back into the rock formation. KILL hose allows high-pressure cement to be pumped to plug the wellbore. Available as complete hose assemblies in 2", 2 1/2" and 3" diameters and 5000 psi (345 bar), 10000 psi (690 bar) or 15000 psi (1034 bar) working pressure.

API 17K DN75 RUBBER HOSE ASSEMBLY



Robust and flexible high-pressure hose compliant with API 17K standard for bonded flexible hoses (pipes). Hoses to API 17K requirements are used in many different parts of subsea oil and gas production facilities, submerged in water as deep as several thousand meters, connecting extraction equipment on the seabed to each other or to a production unit floating on the surface. Because of the application, the hoses must be extremely durable to last a multiyear service life. API 17K hoses can also be used for demanding loading/unloading applications. FLOWLINE high-pressure hoses are designed for high-pressure transfer or feeding of low-sulphur fluid, sour fluid, fluid with up to 30% aromatic hydrocarbons, transfer of crude oil and gas. They are used in risers, jumpers, flow lines, offshore loading and discharge lines. Available as complete hose assemblies in diameters from 2" to 8" and 3000 psi (207 bar) or 5000 psi (345 bar) working pressure.

WATER HOSE ASSEMBLIES



Water hose assemblies are designed for industrial water, cooling water. The hoses are made of rubber, PVC and polyethylene reinforced with a braid, cord, plastic or steel helix. The range of inner diameters of water hoses is from 4 to 320 mm. Working pressures up to 207 bar. Fittings for these hoses should be mounted with clamps, safety clamps or crimped with ferrules.



TORONTO LIGHT DN100 RUBBER HOSE ASSEMBLY

Suction – delivery, lightweight and flexible, kink-resistant hose assembly. Mounted with ANSI 150 LBS ASME B16.5 flange DN100 fixed / swivel in AISI 304 steel. Overall length 1 700 mm.



Medium: water
WP: 10 bar
WT: ambient
Application: injection of formation water
Testing: 15 bar/hydrostatic
Application:  
Assembly technology: internal swaging

Internal swaging – is a technique for attaching a fitting to a hose in a safe and permanent way. It ensures full and unrestricted flow through the fitting of a flexible hose assembly. The technique utilizes a cold forming method. Here, a hardened, cone shaped swaging tool is used. Its diameter in the widest, working part is slightly bigger than the internal diameter of the fitting before crimping. The tool is pulled down the inside of the fitting so it expands to a desired diameter. The tail of the fitting pushes the hose outwards and thus compresses it against the ferrule. The main advantage of internal swaging over external crimping is the increase of the flow through the hose. After swaging, the bore diameter of the fitting is equal to the inner diameter of the hose.

ALSO AVAILABLE

LOW-PRESSURE QUICK RELEASE COUPLINGS



Low-pressure quick release couplings used in all industries. Depending on the type, designed for fluids, compressed air and gases of various kinds. Available in many materials (brass, zinc-plated carbon steel, nickel-plated carbon steel, stainless steel) with different types of seals to choose the best combination for a specific application. The quick release couplings are available in a wide range of hose connection diameters and threads. Working pressure up to 100 bar.

COMPRESSED AIR HOSE ASSEMBLIES



Flexible hoses designed for compressed air (compressors, pneumatic tools, hose reels). The hoses are made of rubber, PVC, polyurethane, polyethylene and are reinforced with a textile braid or cord, plastic or steel wire helix. A special type of hose in this group is a lay-flat delivery hose with a thin wall, which is collapsible when unpressurized. Fittings for air hoses should be mounted with clamps, safety clamps, they can also be crimped with ferrules using crimping machines, fastened with a band or wire.



MANTEX HP DN50 RUBBER HOSE ASSEMBLY

High-pressure, extremely durable compressed air transfer hose. Assembled with Rd 65x1/6" female thread fitting at both sides, flat seal. The fitting in carbon steel. Overall length 40 000mm.



Medium: compressed air
WP: 40 bar
WT: ambient
Application: connecting a compressor
Testing: 60 bar/hydrostatic
Application:  
Assembly technology: mounting with special rings

ALSO AVAILABLE

MANTEX



Delivery hose designed to transfer compressed air, for compressors, hammers and other pneumatic tools. With its low weight, flexibility, strong construction and high working pressure, the hose is very popular and has been deployed in the construction industry (in demolition companies in particular) and mining for many years. High-quality materials and construction make it extremely heavy-duty and durable. Available in diameters from 20 mm to 76 mm.

CLAW COUPLINGS



Broadly used both for air and water in the construction and industry. With these couplings, only the elements of the same type with the same claw distance can be connected. There are 3 types of couplings: with 42 mm claw distance (typical European compressed air couplings), with 41 mm claw distance (US type, also called an offshore type), with 40 mm claw distance (typically used for water, often called GEKA coupling). The couplings are made of zinc-plated cast iron, brass, stainless steel and come with NBR oil-resistant rubber seal (Viton for stainless steel).

STEAM HOSE ASSEMBLIES



Rubber hose assemblies for steam are made of top grade rubber compounds (EPDM mainly) reinforced with a textile or steel braid (or cord) depending on the working pressure. These hoses are designed for saturated steam with working pressures up to 18 bar and temperatures up to +210°C, and in some cases also for superheated steam up to +232°C. The internal diameters of rubber hoses for steam range from 8 to 102 mm. The rubber hoses for steam are used in all kinds of industrial systems of heating or process steam and for steam cleaning. The hoses can only be safely used if mounted with special steam fittings. When used for hot water, the temperature of the water must not exceed +100°C. For rubber steam hoses, special fittings intended for this application must be used. These fittings, of a suitable, robust design, are mounted to the hose with special safety clamps joined by bolts. Thus, the clamps can be retightened after the first cycle of operation, also allowing periodic inspection of the fittings and hose beneath the clamps. Proper selection of the fittings and clamps according to the diameter and wall thickness of the hose, proper installation and periodic inspection of the connection have a major impact on safety.



VICTORIA DN19 RUBBER HOSE ASSEMBLY

Hose assembly designed to convey superheated steam. Assembled with PN16 flange at one end, and 3/4" BSP male thread fitting in carbon steel at the other end a steam gun is screwed on the male thread fitting. The steam gun has as an insulated handle and shields to protect against contact with hot metal. Overall length 6 000 mm.



Medium: steam
WP: 10 bar
WT: up to +180°C
Application: unfreezing rig components with steam
Testing: 54 bar/hydrostatic
Application:  
Assembly technology: reusable safety clamps according to DIN 2826

ALSO AVAILABLE

STEAM ACCESSORIES



There are many accessories used in steam systems such as special guns and lances for steam cleaning, swivel couplings and quick release couplings for steam. All these accessories must be carefully selected in terms of their sealing material, which must be resistant to temperature, exposure to steam, and in terms of safety in the intended operating conditions.

FOOD GRADE HOSE ASSEMBLIES

Hose assemblies for food substances are made of materials approved for contact with food. The inner layer of these hoses is made of white, taste-free and odour-free rubber compounds or PVC, polyethylene and other polymers with a high degree of purity. They are free of harmful substances, do not deteriorate the nutritional and organoleptic properties of the transferred food products.

The range of inner diameters is from 3 to 200 mm. Working pressure up to 27 bar. Fittings for these hoses should be mounted with clamps, safety clamps, they can also be crimped with ferrules using crimping machines.




POTABLE HARDWALL DN 75 RUBBER HOSE ASSEMBLY as one of the sections of BUNKERING HOSE ASSEMBLY

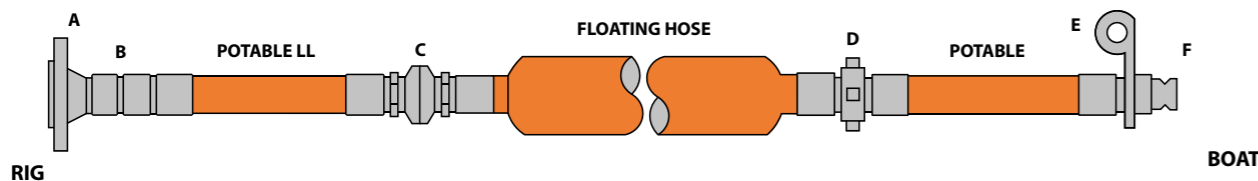
Suction-delivery hose that can withstand a tensile force of 4 tons. Assembled with 3" HAMMER LUG union FIG. 200 at both ends (male part + nut at one end, female part at the other). As the fittings are internally swaged, the hose assembly features full-bore flow rates. Overall length 15 000 mm.



Medium: potable water
WP: 10 bar
WT: ambient
Application: bunkering operations between an oil rig and PSV (platform supply vessel)
Testing: 26 bar/hydrostatic

Application: 
Assembly technology: internal swaging

Schematic example of the application of POTABLE hoses between a platform (RIG) and a vessel (BOAT)



A - flange; B - swivel coupling; C - emergency coupling; D - HAMMER LUG union; E - HOOKIE HOOK hose lifter; F - CAMLOCK coupling.

ALSO AVAILABLE

HOOKIE HOOK



Special suspension device for loading/unloading hose assemblies which allows lifting with a hook. Widely used in marine loading/unloading systems for handling hoses between an oil rig and ship, in ports, etc. It is typically used for floating hoses. The hose lifter is made of steel forging pivotally mounted on special fittings with the use of clamps.

COLOUR CODING FERRULES



The hose assemblies can be marked with a coloured ferrule according to their purpose in the internal swaging technique. Since the ferrule is not mechanically deformed in the internal swaging process and its powder-coated outer layer remains undamaged, the colour-coding for industrial hoses in offshore applications can be easily applied. For example, the system recommended by the United Kingdom Offshore Operators Association (UKOOA or Oil & Gas UK) is as follows: yellow (cement), orange (barite), blue (potable water), brown (diesel), red (seawater), purple (glycol).

HOSE ASSEMBLIES FOR CHEMICALS

Hose assemblies for chemicals comprise hoses designed for liquid chemicals (acids, bases, inorganic and organic compounds, hydrocarbons, etc.). They are used for conveying chemicals during their processing in chemical plants, transferring, loading and unloading liquid substances, and for all kinds of manufacturing processes in the chemical industry.

The hoses (inner layer) for chemical substances are made of EPDM or EPM rubber, Viton, polyamide, polyethylene, fluoropolymers (PFA, MFA, FEP). Reinforced with a textile braid or cord, or alternatively, with a steel helix. The range of inner diameters is from 6 to 152 mm. Working pressure up to 50 bar. Fittings should be mounted with clamps, safety clamps, they can also be crimped with ferrules using crimping machines.



MANICHEM DN50 RUBBER HOSE ASSEMBLY

Antistatic ($R < 10^6 \Omega$) suction – delivery hose assembly with UPE inner layer. Assembled with 2" CAMLOCK coupling (coupler at one end and adapter at the other) in stainless steel. Overall length 3 000 mm.



Medium: chemical substances
WP: 16 bar
WT: ambient
Application: chemical flushing
Testing: 24 bar/hydrostatic

Application: 
Assembly technology: external crimping

ALSO AVAILABLE

CAMLOCK, SAFLOK® COUPLINGS



CAMLOCK and SAFLOK® couplings made according to the US Military Specification MIL-C-27487 (A-A-59326). They are simple in design and operation. To lock a CAMLOCK coupling adapter in a coupler both cam levers must be pulled down at the same time. A flat seal in the groove of the coupler seals the connection. The couplings (couplers and adapters) come in versions with BSP female and male threads, with a hose tale, with a flanged connection, and as caps and adaptors. They are made of aluminium, brass, 316 steel, polypropylene. Sizes from 1/2" (DN13) to 6" (DN150). Working pressure from 4 to 18 bar depending on the size and material of the coupling. All types of CAMLOCK couplings are widely used as loading/unloading couplings, especially in the petrochemical industry. SAFLOK® couplings are a variation of CAMLOCK couplings with a safety feature protecting against accidental opening of the coupling. This safety feature consists of a spring-loaded latch located in the levers of the coupler. While the levers are being pulled down, the latches engage automatically. The latches must be pulled back to release on opening.

ABRASIVE MATERIAL HANDLING HOSE ASSEMBLIES

Material handling hose assemblies are used to convey bulk materials with a high abrasion coefficient e.g., for sandblasting, shot blasting, dry ice blasting, transferring plaster, concrete, cement, sand and gravel. Depending on the medium to be conveyed, the material handling hoses are made of the following, abrasion-resistant materials: SBR/NR rubber compound, PU/PVC plastic material or ceramic plates embedded in natural rubber. The abrasion resistance of the inner rubber layer ranges from 36 to 80 mm³ (the smaller the value - the better the abrasion resistance) as specified by DIN 53516 standard. The inner diameters of material handling hoses range from 13 to 500 mm, working pressure up to 80 bar (concrete hoses). Fittings for material handling hoses should be mounted with clamps, safety clamps, they can also be crimped with ferrules using crimping machines.



SHANNON DN100 HOSE ASSEMBLY

Reinforced with several layers of steel cord, robust hose designed for abrasive materials. Assembled with 4" HAMMER LUG union FIG. 400 at both ends (male part + nut at one end, female part at the other) in carbon steel. Overall length 10 000 mm.



Medium: cement
WP: 30 bar
WT: ambient
Application: cementing unit
Testing: 45 bar/hydrostatic
Assembly technology: external crimping

ALSO AVAILABLE

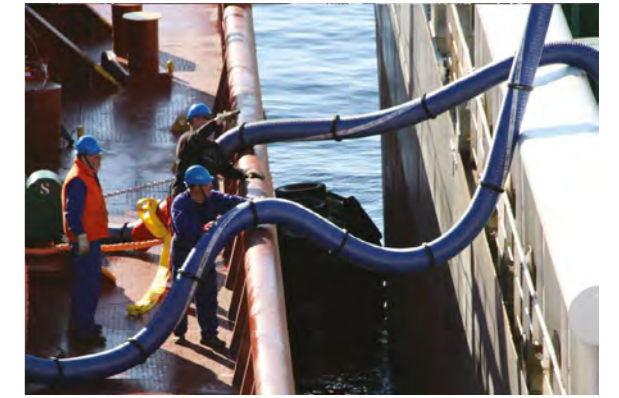
API 7K FSLO HIGH-PRESSURE CEMENT TRANSFER HOSES

A hose designed to transfer cement under high pressure in well cementing operations (stabilization and sealing). Used in offshore and onshore drilling rigs between a cement pump and cementing head. The inner layer of black, smooth CR rubber is resistant to abrasion, temperature, diluted acids and bases. Reinforcement with layers of high-strength, steel wire braids provide a safety factor of 2.25. The outer layer of black, chloroprene-based rubber compound, resistant to fire, abrasion, ozone, aging, UV radiation and oil - in compliance with marine environmental regulations. Available as complete, pressure-tested hose assemblies with API 7K certificate, with fittings according to customer's specification (HAMMER LUG, API flange, NPT thread) vulcanized to the hose or with crimped fittings in diameters from 2" to 4" and working pressure of 10000 psi (690 bar) or 15000 psi (1034 bar).



COMPOSITE HOSE ASSEMBLIES

Composite hose assemblies are very lightweight and very flexible, they have unique, multi-layer construction. They consist of several layers of plastic film wound helically as strips between two steel wire helices: inner and outer. Depending on the material of the film (polypropylene, polyamide, ECTFE, polyester, glass fibre or aramid fibre) and wire (zinc-plated steel, stainless steels, aluminium), they are designed to convey chemicals (also aggressive), petroleum products, liquid gas, etc. They are used in industrial systems and for the unloading of road, rail and marine tankers. The hoses are supplied as complete, pressure-tested hose assemblies with a variety of fittings.



FUEL STAR DN50 COMPOSITE HOSE ASSEMBLY

Suction-delivery hose designed for conveying, unloading and loading petrochemical products including: fuel, petrol, diesel oil, lubricating oils, kerosene and aromatics (up to 50%) under standard operating conditions. Assembled with 2" emergency breakaway coupling and 2" dry disconnect coupling at one end, and DN50 ball valve at the other. Overall length 10 000 mm.

Medium: diesel oil
WP: 10 bar
WT: +20°C
Application: feeding diesel to power units on a drilling rig
Testing: 15 bar/hydrostatic

Application: 
Assembly technology: external crimping



ALSO AVAILABLE

DRY DISCONNECT COUPLINGS

Dry disconnect couplings are used for spill-free connection of industrial systems and flexible loading/unloading hose assemblies. Compatible with AVERY HARDOLL, TODO - MATIC couplings. Made according to NATO STANAG 3756 standard. The couplings meet the requirements of ATEX, TDT, Pressure Directive 2014/68/EU, safety, environment protection and reliability for the transfer of hazardous fluids. Couplings made of: aluminium, brass, AISI 316 steel, PEEK, PVDF, Hastelloy, Titanium. Available in DN25 - DN150 sizes.



BREAKAWAY COUPLINGS

Emergency breakaway couplings, often called emergency release couplings, protect against the effects of accidental over-tensioning of the hose connected to the system. The coupling does not allow the hose to be strained and protects it from bursting, as it first disconnects, the valves in both halves of the coupling close, preventing the discharge of the transferred medium to the outside. The couplings are made of: aluminium, brass, AISI 316 steel, AISI 316 steel with ECTFE coating, Hastelloy alloy. Available in DN25 - DN150 sizes.



STEEL HOSE ASSEMBLIES

Flexible metal hose assemblies made of austenitic stainless steels by mechanical forming as well as hydroforming methods. They are used for chemically aggressive media, and where the temperature of the conveyed medium reaches up to +800°C. Working pressure up to 293 bar. Available without braid or as single and double braid versions in diameters from ¼" to 10". Offered as complete hose assemblies with standard thread or flange fittings, as well as special fittings custom engineered for a given construction design. Their high quality is confirmed by DNV (Det Norske Veritas) certificates and compliance with Pressure Directive 2014/68/EU.



PARNOR DN50 STEEL HOSE ASSEMBLY

Steel hose assembly with DNV type approval. Comes with 2" HAMMER LUG FIG. 206 union in carbon steel welded at both ends (male part + nut at one end, female part at the other). The parallel corrugations of the hose are hydroformed to ensure highest resistance to material fatigue and stress corrosion so that the hose can be used in dynamic applications. Overall length 6 000 mm.



Medium: gas
WP: 20 bar
WT: +180°C
Application: oil gas burner on a drilling rig
Testing: 45 bar/hydrostatic

Application: 
Assembly technology: TIG welding certified by DNV

ALSO AVAILABLE

FLANGES, RING GASKETS AND OTHER PETROLEUM COUPLINGS

High-pressure flanges made in compliance with API 6A type 6B and type 6BX standard. The flange has a sealing face with a groove, which is sealed with RTJ steel rings type R, RX, BX. The flanges come as fixed flanges with welding necks, as blind flanges and as many other round flanges and flange adaptors.

RTJ (Ring Type Joint) metal ring gaskets are designed to seal API 6A groove flanges. Made of low-carbon steel as standard and cast iron, stainless steel, Duplex steel, Inconel and Hastelloy alloys, titanium as an option.

Couplings for mud tanks are used for drilling operations around the world. The connection of a steel mud tank and pipeline must be leak tight and uninstal quickly and suit pipe diameters from 4" to 16". There are two types of connections. The first type is activated with air (SEAL-O-GRIP) - a rubber seal is inflated to achieve a leak-tight connection between the pipe and the tank. The second type of connection, HAMMER SEAL union, seals on a thick, solid O-ring when the nut is tightened.



FLOATING HOSE ASSEMBLIES

Floating hose assemblies are used for many different applications in all types of water basins. Some of the most common applications include oil loading and unloading in ports, transportation of crude oil between an oil rig and a ship, dredging of waterways. With various technical solutions (floats attached to the hose or a layer of foam under the rubber cover), the hoses stay afloat, which prevents them from being damaged by the ship's propeller and allows the vessel to manoeuvre.



BUNKERING RUBBER HOSE ASSEMBLY DN100 WITH A FLOATING SECTION (WITH AN INTEGRATED FOAM)

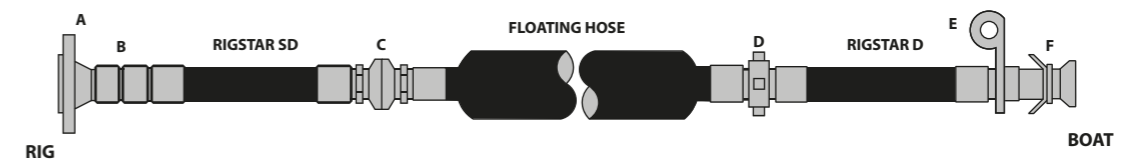
The hose assembly consists of: BOAT section produced using RIG STAR D rubber delivery hose with two antistatic wires, assembled with 4" dry disconnect socket (aluminium/Viton) and HOOKIE HOOK hose lifter, and 4" HAMMER LUG union FIG. 200 at the other end (male part + nut); FLOAT section, which is produced using a floating rubber hose with an integrated non-absorbent foam RIG section made from RIG STAR SD suction-delivery hose with two antistatic wires, assembled with DN100 PN16 flange at one side and aluminium MARINE breakaway coupling at the other. Overall length 45 000 mm.

Medium: light diesel oil
WP: 10 bar
WT: ambient
Application: loading/unloading operations between a drilling platform and PSV (platform supply vessel)
Testing: 15 bar/hydrostatic

Application: 
Assembly technology: internal crimping



Schematic example of the application of RIGSTAR and FLOATING hoses between a platform (RIG) and a vessel (BOAT)



A - flange; B - swivel coupling; C - emergency breakaway coupling; D - HAMMER LUG union; E - HOOKIE HOOK hose lifter; F - dry disconnect coupling.

ALSO AVAILABLE

FLWSAFE

FLWSAFE floats are suitable for all hoses used in the marine industry. They are intended for the supply lines between ships and oil rigs in particular. The floats keep the hoses afloat so that the hoses cannot be damaged by the propeller of the ship and the vessel can safely manoeuvre. The floats are also an excellent protection against hose wear and can therefore serve as a protective cover. They can be used for both delivery hoses (without helix) and suction-delivery hoses (with steel helix) in 3", 4" and 5" sizes. They are attached with stainless steel straps placed in the groove of the float. When floats are used for the delivery hoses, it is necessary to attach them to the hose with a steel wire to prevent any movement or displacement when the hose is handled and there is no pressure in it. They are flexible, do not sink or absorb water (100% closed cells). They do not shrink or deform. UV-resistant.



HOSE REELS

The main purpose of hose reels is fast unwinding of the required section of a hose (flexible hose assembly), which is ready for operation and connected through the reel to the power supply (e.g., water, air). When the work is completed, the hose is wound back onto the reel.

Advantages of using hose reels:

- increasing work safety,
- minimizing leakage,
- reducing hose wear,
- increasing work efficiency,
- improving working conditions.



UTILITY STATIONS

Utility stations consist of spring hose reels complete with DN25 hoses of 15 m length, for water, air, nitrogen and diesel oil. The colour of the outer layer of each hose corresponds to a particular medium. In automatic spring hose reels, the hose is unrolled manually by pulling the hose to the desired length and locked with a ratchet mechanism.



Medium: water, air, nitrogen, diesel oil

WP: 10 - 15 bar

WT: ambient

Application: water, air, nitrogen, diesel oil

Testing: 15 bar/hydrostatic

Application: 

Assembly technology: external crimping

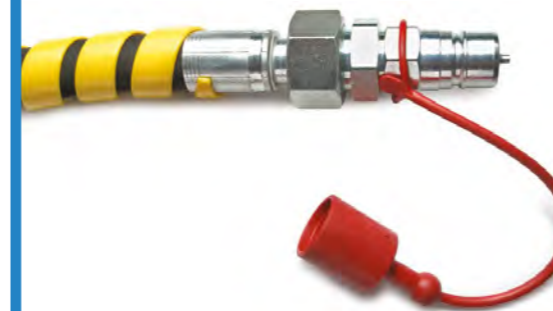
HIGH-PRESSURE HOSE ASSEMBLIES (HYDRAULICS)

Hydraulic hose assemblies are used in high-pressure hydraulics systems for power transmission and control. They are primarily intended for hydraulic oil. Basically, the hose assemblies produced using rubber hydraulic hoses work in the temperature range from -40 °C to +100°C and working pressures up to 420 bar (42 MPa). The hydraulic hoses are manufactured to standards in imperial internal diameter sizes. The most popular standards setting the requirements for the hoses are the American SAE, international ISO and European EN standards. Apart from standard hydraulic hoses manufactured according to these standards, there are hoses that feature: higher flexibility, higher pressure parameters, higher temperature resistance, lower abrasion of the outer layer and higher chemical resistance. The hydraulic hoses are available as complete flexible hose assemblies crimped with fittings using crimping machines.



4SP DN38 HYDRAULIC RUBBER HOSE ASSEMBLY

Multispiral hydraulic rubber hose assembly. Assembled with 1½" DP - PVV3 quick release coupling at both ends (socket at one end, plug at the other), in zinc-plated steel with NBR seal. An additional PROTECTOR spiral, resistant to oils, acids, solvents and UV radiation, eliminates the problems of abrasion, impact and compression of the hose thus extends its service life. Overall length 40 000 mm.



Medium: hydraulic oil

WP: 210 bar

WT: +20°C

Application: connecting a hydraulic power generator for a top drive

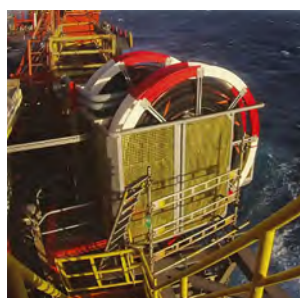
Testing: 420 bar/hydrostatic

Application: 

Assembly technology: external crimping

ALSO AVAILABLE

HOSE REELS – SPECIAL SOLUTIONS BY TUBES INTERNATIONAL



Reel for fuel bunkering station – drilling platform.



Reel for water jetting - a vessel (HLJV) for the construction of wind farms and maintenance operations



Reel for diesel refuelling - warship

Special reels for offshore applications (mounted on ships, oil rigs, etc.) and military applications. Where an alternative mounting system, non-standard flow path, non-standard manufacturing material, dimensional limitations, non-typical drive or medium is necessary, it is possible to tailor a solution according to customers requirements.

ALSO AVAILABLE

HIGH-PRESSURE QUICK RELEASE COUPLINGS



High-pressure quick release couplings made of carbon steel, stainless steel or brass. Designed to work at pressures up to several hundred bar. They are used both for oil in hydraulic power systems and for other liquid or gaseous media. They are available as push-in and screw-to-connect versions. Most often made according to ISO - A; ISO - B; ISO - F standards. Depending on the application, quick release couplings can be single shut-off, double shut-off or free passage. Optionally, the valve of the plug (socket) comes with a static pressure eliminator or a flat face for spill-free connection/disconnection of the quick coupling.

THERMOPLASTIC HOSE ASSEMBLIES

Hose assemblies for medium and high pressures. They are made of thermoplastic polymers (usually polyester, polyamide, polyurethane), and reinforcement is provided by one or two textile or steel braids. Usually the hoses are manufactured to standards, the most common of which are: SAE J517 (sets specifications for SAE 100R7 and SAE 100R8 hoses), DIN 24951, ISO 3949 and PN-EN 855. These standards cover two types of hoses: with two textile braids (R7) and two aramid braids (R8). The thermoplastic hoses are used for high-pressure hydraulics, air, compressed gases, and other applications. Thermoplastic hoses come with Z-type fittings for high-pressure hoses - crimped using crimping machines. In some cases, S-type reusable fittings can be used.



TEST DN8 THERMOPLASTIC HOSE ASSEMBLY

Lightweight, flexible thermoplastic hose assembly designed for hydraulic measurement and control systems. Assembled M16x2 female thread fitting in carbon steel at both ends. Overall length 6 000 mm.



Medium: hydraulic oil

WP: 300 bar

WT: ambient

Application: measurement system for TOP DRIVE hydraulic unit

Testing: 600 bar/hydrostatic

Application:  

Assembly technology: external crimping

ALSO AVAILABLE

MEASURING SYSTEMS AND PRESSURE GAUGES



Measuring system designed to monitor static, dynamic pressure and vacuum in hydraulic and pneumatic systems. The system consists of a basic set and optional elements: additional measuring nipples, extension hoses, adaptors, pressure gauges, etc. that enable convenient measurement even in hard-to-reach places. An air vent removes air from the system and guarantees correct readings. Quick release coupling designed to connect to the measuring nipple has shut-off valves ensuring spill-free connection and disconnection of the measuring system. Glycerine pressure gauges designed for measuring pressure in liquid and gas systems in accuracy class 1.6.

FITTINGS FOR HIGH-PRESSURE HOSES

Hydraulic fittings comprise the fittings mounted to hydraulic hoses using ferrules. The fittings are designed for high-pressure hoses (rubber hydraulic hoses, thermoplastic hoses). They can also be used for industrial hoses. Assembly is carried out by crimping in hydraulic crimping machines.

The fittings are made of zinc-plated carbon steel or stainless steel. There are many types of fittings, depending on the connection and type of sealing e.g., fittings with metric thread, imperial thread, etc.



R15 DN50 HYDRAULIC RUBBER HOSE ASSEMBLY

R15 DN50 general-purpose hydraulic rubber hose assembly. Assembled with 2" HAMMER LUG union FIG. 1502 integrated with a fitting (male part + nut at one end, female part at the other) in 4130 steel. Overall length 25 000 mm.

Medium: drilling mud, cement

WP: 350 bar

WT: ambient

Application: general-purpose „utility“ hose assembly

Testing: 700 bar/hydrostatic

Application:  

Assembly technology: external crimping



Integrated fitting crimping – a version of the HAMMER LUG union that can be crimped on 2" hydraulic hose (R13, R15 type) using an integrated ferrule. This version eliminates the danger of union unscrewing when it is screwed onto NPT male thread fitting.

ALSO AVAILABLE

INTEGRATED FLANGE COUPLINGS



API flanges (6A, 6B) and API LINE 2" thread flanges are also available in a version with an integrated ferrule. Supplied as complete solutions crimped on 2" hydraulic hoses type R13 and R15.

HOSE PROTECTION COVERS

Hose protection covers made of strip-shaped plastic (PE, HDPE, PVC) or steel (galvanized, stainless) in the form of wire, strip and braid.

Used as external covers for hoses (cables) in order to protect against mechanical damage, such as abrasion, kinking, crushing. Plastic covers (available in yellow and black) are intended also for holding a group of hoses (cables) in a bundle.



BOP DN25 HYDRAULIC RUBBER HOSE ASSEMBLY

BOP DN25 multispiral hydraulic rubber hose assembly. Assembled with 1" HAMMER LUG union FIG. 602 at both ends (male part + nut at one end, female part at the other) in 4130 steel. Protection against abrasion is provided by GRIPOCK/304 hose cover. Overall length 12 000 mm.

Medium: hydraulic oil
WP: 210 bar
WT: +20°C
Application: BOP control
Testing: 420 bar/hydrostatic

Application: 
Assembly technology: external crimping



ALSO AVAILABLE

API 16D CERTIFIED HYDRAULIC RUBBER HOSE ASSEMBLIES

Fire-resistant hydraulic hose assembly used for controlling valves of the preventer (blowout preventer head, BOP - Blow Out Preventer). Used in offshore and onshore equipment. Available as complete hose assemblies in diameters from 3/8" to 2" and working pressure of 5000 psi (345 bar) in STANDARD version (red rubber outer layer) or in an ARMoured version with an outer armour of coiled/strip-wound hose made of stainless steel.



UHP HOSE ASSEMBLIES (ULTRA HIGH PRESSURE)

UHP (Ultra High Pressure) hose assemblies comprise hoses, complete flexible hose assemblies, fittings, adaptors and accessories designed to operate at working pressures equal to or greater than 700 bar. The range includes WATERBLAST rubber hoses (working pressures from 700 to 1250 bar), thermoplastic hoses (working pressures from 700 to 800 bar), SPIR STAR® hoses (working pressures up to 3200 bar). Depending on the application, working pressures are achieved with different safety factors (waterblasting applications n = 2.5, power hydraulics n = 4, gases n = 4 to 6). The special fittings, adaptors, quick couplings used for UHP hoses, as well as the way they are connected to each other, must be designed for the corresponding operating pressure. Finished, complete hose assemblies must always be pressure-tested.



SPIR STAR® DN6 HOSE ASSEMBLY

UHP (ULTRA HIGH PRESSURE) hose assembly, intended for ultra-high pressure (3200 bar), assembled with 3/8" UNF LH male thread fitting in stainless steel. Overall length 3 000 mm.

Medium: methanol
WP: 1000 bar
WT: +20°C
Application: dehydration – natural gas treatment
Testing: 1560 bar/hydrostatic

Application:  



Assembly technology: external crimping using a special crimping machine and special dies (very slow crimping of the ferrule during the crimping process to avoid micro-cracks that could occur with the standard crimping process).

ALSO AVAILABLE

QUICK RELEASE COUPLINGS FOR ULTRA HIGH PRESSURE



Hydraulic quick release couplings designed to operate at pressure of up to 3000 bar. They have small external dimensions and are easy to connect. The construction of hardened steel ensures a long service life. For protection against contamination, both the socket and the plug are equipped with caps as standard. Examples of applications: bearing pullers, bolt tensioners, rescue equipment, cable cutters, precision actuators, rotary tools, hydraulic wrenches.

CUSTOM-MADE HOSE ASSEMBLIES

Tailor-made solutions, made according to the customers requirements at the manufacturer's or at Tubes International's manufacturing workshop, which are not included in the standard product portfolio.

OFFSHORE SEAWATER DN 200 RUBBER HOSE ASSEMBLY

Rubber hose assembly with DN200 PN10 flanges in carbon steel vulcanised at both ends. Overall length 12 500 mm.



Medium: seawater
WP: 10 bar
WT: ambient
Application: cooling an engine on a drilling rig
Testing: 30 bar/hydrostatic

Application: 
Assembly technology: vulcanised fittings

ISO 15540 / ISO 15541 DN125 RUBBER HOSE ASSEMBLY

Seawater hose assembly for offshore oil rig fire protection systems. Assembled with 5" HAMMER LUG union FIG. 1502 in 4130 steel at both ends (male part + nut at one end, female part at the other). Overall length 4 000 mm.



Medium: water
WP: 20 bar
WT: ambient
Application: fire protection system
Testing: 30 bar/hydrostatic

Application: 
Assembly technology: external crimping

CO2 DN100 RUBBER HOSE ASSEMBLY

Rubber hose assembly DN100, for CO₂. Assembled with 4" integrated, vulcanised HAMMER LUG union FIG. 602 at both ends (male part + nut at one end, female part at the other). CE marked, category II according to Pressure Directive 2014/68/EU. Overall length 6 000 mm.



Medium: CO₂
WP: 42 bar
WT: ambient
Application: unloading CO₂ from a tank truck (pump connection)
Testing: 63 bar/hydrostatic

Application: 
Assembly technology: vulcanised fittings

ADDITIONAL PRODUCTS IN THE OFFER

BELLOWS

Used in all kinds of industrial applications. Designed to absorb any kind of movements: axial, lateral and angular or their combinations. A compensator consists of a bellow made of different kinds of material (elastomers reinforced with synthetic cord, steel, PTFE or fabric) and parts that connect it with a pipeline (most often steel flange). They compensate for thermal elongation and misalignment of a pipeline. They isolate vibrations, dampen noise and pressure surges coming from hydraulic impact.



Type of compensators: general purpose, lateral, axial, angular
Temperature range: to +600°C
Pressure rating: from – 1 bar (full vacuum) to 40 bar
Diameter range: from DN15 to DN6000mm



PNEUMATIC

„Industrial pneumatics“ concerns not only couplings and hoses, but also air preparation units, control valves, actuators and other necessary equipment.

Externally calibrated hoses are usually made of polyamide, polyurethane, polyethylene but also of PVDF and PTFE. Due to a wide range of diameters, they can be easily connected by e.g. push-in fittings designed for pneumatics in particular. These fittings in nickel-plated brass or plastic as a standard, can also come in stainless steel for unlimited application in every industry branch.



Push-in fittings are designed for connection of pneumatic hose (with calibrated external diameter). The connection is achieved by pushing the hose into the fitting. To disconnect, the releasing collet must be pressed down. The most suitable hose material for push-in fittings is polyamide. Series R push-in fittings and series Fox miniature fittings are the best elements for connecting pipes and actuators in pneumatic systems. Quick and easy to use, the push-in fittings can be re-used thousands of times without affecting the pneumatic and mechanical seal in any way. Coming in various configurations and guaranteeing a virtually unlimited, highly flexible use. The clamping spring of special shape grips the pipe without scratching or deforming it, which facilitates release.



Distribution valves and actuators are usually selected to match a particular application, function and flow rate. The actuators, compliant with ISO standard among other, are manufactured of different materials, with standard piston diameters, different working stroke lengths, with an option of sealing selection, can be applied to all machines – those in the making as well as already in use



The pneumatic elements sold, utilized in European Union and intended for operation in potentially explosive atmospheres are always marked (according to Directive 2014/34/EU – ATEX) and supplied with the certificate of conformity.

ADDITIONAL PRODUCTS IN THE OFFER

PRECISION PIPES

Cold drawn seamless precision pipes according to DIN 2391 made of toughened steel (three grades - 37.4, 44.4 and 52.4). Available (external diameter) from 6 mm to 42mm with different wall thicknesses and lengths to 6 meters. Widely used in hydraulic systems for control and power transfer. Assembled in hydraulic systems with DIN 2353 pipe fittings (connection with a cutting ring) and SAE-J514 or SAE-J51453 where connection is possible due to pipe ends 74° or 90° flaring.



DIN 2353 PIPE CONNECTORS

Threaded (pipe) fittings with 24° cone sealing and cutting ring are widely used in many branches of industry to connect steel and non-ferrous metal pipes with outside diameter from 4 to 42 mm. Fittings according to DIN 2353 can also be used to connect flexible hose assemblies (as a body without a nut and cutting ring). Manufactured according to ISO 8437-1 or DIN 2353. Used in hydraulic and pneumatic drive and control systems as well as general industrial applications.



WALTERSCHEID™ PIPE CONNECTORS

DIN2353 Eaton Walterscheid™ pipe connectors are designed to the most demanding applications with 24° cone sealing. Eaton Walterscheid™ ensures full leak tightness till 800 bar (for heavy series) and 500 bar (for light series). DIN2353 Eaton Walterscheid™ pipe connections are made of carbon steel with additional nickel free galvanized Guardian Seal™ layer. Eaton Walterscheid™ system is available in 3 types depending from working conditions: WalPro, WalRing and WALFORMplus.



ADDITIONAL PRODUCTS IN THE OFFER

INSTRUMENTATION: CONNECTORS

LET-LOK® connectors for pipes and threaded connectors are designed mainly for chemical, petrochemical, pharmaceutical and power industry, nuclear power plants and process engineering. Designed to work under high pressure, vacuum, vibration, high temperatures, and where high leak tightness of connections is required. LET-LOK® connectors are available as couplings (to connect several tubes) and connectors (to join tubes with fittings with male or female thread), made of stainless steel AISI 316, brass, Monel 400 alloy and Hastelloy C-276. Threaded connectors made of AISI 316 stainless steel and brass with NPT threads.



INSTRUMENTATION: QUICK RELEASE COUPLING

Top grade single shut-off and double shut-off quick connectors. Used in laboratories, aircraft, gas, medical and pharmaceutical industry. Available in three sizes QC4, QC6 and QC8. Connections: male and female thread NPT (BSPT, BSP), LET-LOK® tube connection. Every quick connector is factory tested for proper assembly by leakage detection. Interchangeable with quick connectors Instrumentation standard from other manufacturers.



VALVES

Industrial valves are used in many industries. We offer many types of valves, including: ball valves, gate, butterfly, check valves in diameters from 5.5 to 300 mm. They come in numerous material versions: brass, stainless steel or other available on request. This group also includes valves from the US manufacturers dedicated exclusively to the Oil&Gas sector with reinforced construction and extended service life e.g., plug valves from American Block; swing check valves, floating ball valves or trunnion mounted valves from BALON. Available materials: 4130 chromium-molybdenum steel (for plug valves) and carbon steel, cast iron and bronze (for other valves).



CONTACT AND SALES NET:

Tubes International Sp. z o.o. sales net includes 25 branches in biggest industrial cities in Poland and 13 branches in industrial cities in Czech Republic, Slovakia, Lithuania, Ukraine, Kazakhstan and Norway.

HEADQUARTERS:

Tubes International Sp. z o.o.
ul. Bystra 15A, 61-366 Poznań
phone: +48 61 653 02 22,
fax: +48 61 653 02 20
e-mail: tubes@tubes-international.com



BRANCHES

Białystok, Bielsko-Biała, Bydgoszcz, Częstochowa, Gdańsk, Gdynia, Gliwice, Kalisz, Katowice, Kielce, Koszalin, Kraków, Lublin, Łódź, Olsztyn, Płock, Poznań, Poznań-Przeźmierowo, Rzeszów, Szczecin, Toruń, Tychy, Warszawa, Wrocław, Zielona Góra

HEADQUARTERS IN FOREIGN COUNTRIES:

Tubes International s.r.o.
ul. Bohumínská 172/151
712 00 Ostrava-Muglinov
CZECH REPUBLIC
phone: +420 596 133 329
mobile: +420 774 761 212
e-mail: ostrava@tubes-international.com

BRANCHES:

Prague, Brno, Hradec Králové

TOO Tubes International Kazakhstan
Reznika 16
100000 Karaghandy
KAZAKHSTAN
phone: +7 7 212 909 395
fax: +7 7 212 909 396
mobile: +7 7 775 777 027
e-mail: karaganda@tubes-international.com

BRANCH:

Almaty

Tubes International, s.r.o.
Kragujevska 12
01001 Žilina
SLOVAKIA
phone: +421 911 923 711
mobile: +421 911 285 688
e-mail: zilina@tubes-international.com

BRANCH:

Bratislava

Tubes International Norge AS
Kvålkroken 38
4323 Sandnes
NORWAY
phone: +47 51 32 92 17
mobile: +47 90 05 44 51
e-mail: stavanger@tubes-international.com

UAB Tubes International
Savanorių pr. 176 C
LT-03154 Vilnius
LITHUANIA
phone: +370 52 639 372
fax: +370 52 639 373
mobile: +370 62 018 826
e-mail: vilnius@tubes-international.com

TOW Tubes International
Khmelnyskoho 106
79024, Lviv
UKRAINE
phone: +380 32 245 93 41
fax: +380 32 245 93 42
mobile: +380 504 329 392
e-mail: lviv@tubes-international.com

BRANCHES:

Kiev, Dnipropetrovsk