

quality & competence



ABOUT OLEUM FLEX

OLEUM FLEX d.o.o. was founded in 2012 to leverage our 30 years of experience and knowledge in hydraulic and industrial installations. Together with our business partners, we excel in solving complex project tasks and technical challenges.

Our goal is to become the market leader in the oil industry across Croatia and Eastern Europe.

We offer design, production, installation, and sales of hydraulic and other media systems across a wide range of technical parameters for various product groups. In the following pages of this brochure, we present detailed information about our production and sales programs.

OLEUM FLEX d.o.o.'s key advantages over competitors include our employees' diligent and patient work ethic, extensive knowledge, professional expertise, and competencies. We pride ourselves on the quality of our services, technical solutions, quick delivery, and competitive products.

While our objective is to be the market leader, maintaining our position as a reliable business partner is our commitment to all companies that place their trust in us and choose to collaborate with our company.

We hope your company will join us in establishing a successful business relationship that benefits us both.

We look forward to hearing from you.

Best regards,

Director **Mario Kordić**





















FLEXIBLE HOSES



FLEXIBLE HOSES FOR LOW AND MEDIUM PRESSURE

Synthetic rubber hoses that are oil-resistant (Gč) or water-compatible with stainless steel wire braid cover (Gx EPDM INOX), reinforced with one or more textile braids (1TE, 2TE, 3TE), featuring external braids made of textile, zinc, or stainless steel wires (Mč, Hč), and suction line hoses (FLEXOR R4 604 or 634).

Application: oil, fuel, lubricants, gas and water



FLEXIBLE HOSES FOR HIGH AND VERY HIGH PRESSURE

Synthetic rubber hoses resistant to oil and reinforced with either 1 or 2 wire braids (1SN, 1SC and 2SN, 2SC) or 4-6 multispiral layers (4SP, 4SH, R13, R15), featuring a HALOGEN-FREE addition in the rubber mix for work pressures up to 800 bar.

The new generation of **ALFABIOTECH EVOLUTION HOSES** for very high pressure applications is specially constructed to be extra flexible (up to 50% better flexibility radius) and resistant to **BIODEGRADABLE HYDRAULIC OILS**. With a COMPACT DESIGN & MINETUFF COVER for excellent abrasion resistance and protection against external influences, these hoses exceed the requirements of the SAE 100R standard. They have been tested according to ISO 18752 for up to 1,000,000 cycles.

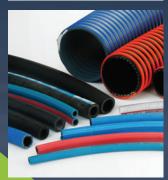
Application: hydraulic oil, engine oil, diesel, antifreeze, air, water



PTFE-TEFLON FLEXIBLE HOSES

Hoses made of smooth or convoluted PTFE with 1-2 stainless steel wire braids, featuring high mechanical and vibration resistance, low porosity, dielectric properties, and resistance to fire. These hoses are suitable for food products, chemically inert, and resistant to ozone and external influences. Temperature work range: -60 °C to +260 °C

Application: food, process, pharmaceutical, chemical and shipbuilding industries



INDUSTRIAL FLEXIBLE HOSES

We offer flexible hoses made from rubber, PVC, metal, linen, and paper for various applications, including: compressed air and water, food industry, ventilation and welding, liquids and agriculture, firefighting, hot water and steam, sandblasting, concrete, cement, and silos, oil and oil products, marinas and mines, refrigeration systems, boats and the automotive industry (including brake systems), wastewater and sewage, canal cleaning, air-conditioning technologies, polyamide pipes for air installations and floating roofs drainage.



METAL FLEXIBLE PIPES AND JOINTS

Flexible, corrugated stainless steel pipes (AISI 316 or AISI 321) with 1-2 stainless steel wire braids (AISI 304). Working pressure up to 400 bar, temperature range from -270°C to +700°C. Safety factor 4:1.

Application: chemical, textile, shipbuilding and food industry, gas, oils, fuel and lubricants

FITTINGS





PIPE FITTINGS FOR LOW, MEDIUM, HIGH AND VERY HIGH PRESSURES

Fittings and ferrules for hydraulic pipes are manufactured using top-notch technology with special surface protection without chrome (VI) and are tested for salt resistance for up to 400 hours. The connections are made of steel, stainless steel, and brass according to DIN, SAE, NPTF, BSPP, and JIC standards.



ADAPTERS, REDUCTIONS, ERMETO-FITTINGS, VEBEO FITTINGS

Adapters, reductions, ermeto-fittings, VEBEO fittings, straight fittings, elbow fittings, T-pieces, cross-shaped and rotating fittings, as well as nuts and cutting rings, are manufactured from steel, stainless steel, duplex, and brass using top-notch technology according to SAE J514 (JIC), SAE J1453 (ORFS), BS 5200 (BSP), METRIC ISO 6149, SAE UNF J 1926-1, and METRIC DIN 2353 standards.



THE FLANGE SYSTEM

OLEUM FLEX pipeline flange systems are clean, environmentally acceptable, and adapted to the requirements of limited work spaces. They feature simple installation without requiring heat at the installation location.

These systems are used in ship hydraulics, lubrication, sea water systems, fire-protection systems, drainage systems, and air systems, as well as in corresponding systems in the offshore industry.

The components include flanges, retaining rings, O-rings, and T-blocks that conform to SAE J518 standards, with SAE 50 bars at 3000 and 6000 PSI (350-400 bar). They are manufactured from steel and stainless steel and confirmed by Type approval from Classification societies.



AUTOMATIC QUICK COUPLINGS

For quick and simple connection of aerial and hydraulic installations, we offer automatic quick couplings that conform to international standards ISO7241-1 A/B and ISO 16028, featuring ball joints, screw joints, and flat face joints. Our standard service includes replacement compatibility with all existing joints on the market.

These couplings are commonly used in agriculture, construction, shipbuilding, and process industries, with working pressures from 350 to 1,200 bars. They are available in sizes from 1/4" to 2", with M, BSP, NPT, and UNF thread types, and are manufactured in both steel and stainless steel.



"PUSH-IN" AIR ADAPTERS

The "push-in" air adapters are designed for quick and simple connection of aerial installations in accordance with international standards.

They are available for inside hose diameters ID 4, 6, 8, $\overline{10}$, 13, and 16 mm, and come with male-female thread combinations of 1/8", $\frac{1}{4}$ ", $\frac{3}{8}$ ", and $\frac{1}{2}$ ".

These installations operate at working pressures up to 14 bars and temperatures up to 80°C. The adapters are manufactured from plastic, nickel-plated brass, and stainless steel.

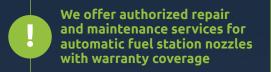
ELAFLEX



ELAFLEX

As the official distributor of ELAFLEX company, we offer their complete product and sales range, specifically:

- Automatic nozzles for fuel gas stations
- Rubber industrial hoses for chemical, food, petrochemical, and oil industries
- Fittings, adapters, and equipment for flexible hoses and tanks
- Rubber expansion joints
- Mann Tek quick-disconnect couplings
- Carter nozzles for jet fuel dispensing















HOSE & TUBING PROCESSING EQUIPMENT













O + P

In cooperation with O + P company from Italy, we offer a complete range of hose and tubing processing equipment for flexible and rigid hydraulic and industrial installations.

Our equipment includes:

- Crimping machines for flexible hoses for low, high, and very high pressure, with swaging force up to 1,000 tons, capable of processing hydraulic hoses up to 3" inside diameter and industrial hoses up to 16" inside diameter
- Cutting and skiving machines for flexible hoses
- Machines for marking and fitting assembly
- Filtering and washing machines for pipeline cleaning
- Test benches for hose pressure testing
- Multifunctional units for pipe bending, external deburring, and flaring, as well as pre-mounting cutting rings
- Devices for pre-assembling cutting rings
- Complete mobile and fixed workshops for hose and tubing processing











We offer comprehensive logistical support for all purchased devices and machines, including training, technical support, spare parts and required work materials

PIPES



SEAMLESS HYDRAULICS PIPES

We recommend precise cold-rolled seamless hydraulic pipes with additional heat treatment for simpler, easier, and safer bending. Most standard dimensions are available directly from our warehouse.

We offer steel seamless pipes (black or zinc-galvanized) in qualities DIN 2391 C/DIN 2445 ST 37.4 (E235N) or ST 52.4 (E355N), and stainless steel seamless pipes in qualities AISI 304, AISI 316, AISI 316L, and AISI 316Ti. Other materials such as duplex or super duplex are available upon individual request.

Pipe dimensions range from 4×0.75 mm to 273×6.0 mm and are delivered in standard 6-meter lengths, protected, with the manufacturer's certificate according to EN 10204.3.1 and pressure test documentation. Upon request, we can provide inspection or type approval certificates from Classification societies (DNV, BV, LR, GL, RINA, ABS, RMRS, CRS).



PIPE MATERIAL

We offer flanges according to ASTM, ASME/ANSI B16.5, DIN, GOST, BS, and UNI standards, available straight or with raised face (RF), fixed or swivel, manufactured from wrought or cast iron and stainless steel.

We provide connections, both screwed and welded, including: short-radius bends 2D, long-radius bends 3D, T-pieces reductions, caps, concentric and eccentric reductions and saddles.

Classification society certificates (DNV, BV, LR, GL, RINA, ABS, RMRS, CRS) are available upon request.

Application: chemical and petrochemical industry, refineries, cement plants, shipyards and other industrial complexes



HOSE CLAMPS AND PIPE CLAMPS

Our hose and pipe clamps for flexible or rigid installations are available in standard, double, or heavy-duty series, manufactured from: polypropylene (green or black), self-extinguishing polyamide, rubber (for severe vibrations) and aluminum.

Plates, screws, nuts, and other hardware are made from galvanized steel or stainless steel AISI 304 or 316L.

From our complete range of clamps, we feature ABA Nova, ABA Original, ROBUST, Safe, Twist III, Breeze Aero Seal, Norma GBS, Norma clamps for spiral pipes, Norma connect RFP, and fire-resistant clamps, as well as clamps for repair pipelines.



FLEXIBLE HOSES PROTECTION

We offer three types of protection:

- Metal spiral protection made of galvanized steel wire and HDPE-PVC polyethylene spirals for external protection of hydraulic and industrial flexible hoses, protecting against mechanical damage by reducing stress and wear
- Fiberglass sleeves coated with red silicone for high-temperature protection, providing insulation and temperature resistance, significantly extending hose service life



CONVEYOR BELTS RUBBER SHEETS & MATTINGS RUBBER PROFILES





CONVEYOR BELTS

Conveyor belts are produced in several qualities based on their purpose. The most frequently used types are:

Textile Conveyor Belts: these feature 2 to 5 textile reinforcement layers with cut or closed edges, in EP or EPP quality, up to 3,200 mm width. They are commonly used in construction, quarries, cement factories, ports, steelworks, and process industries.

Heat Resistant Conveyor Belts: these belts include an insulation layer for temperature control and demonstrate high longevity even at extreme temperatures. Their innovative design reduces the transferred temperature of transported materials by up to 40°C. The reinforcement layers, made of glass or basalt fibers (SV/BV) with high melting points, protect the belt when transporting heated materials.

These conveyor belts are also available in fire-resistant, oil-resistant, and chemical-resistant versions.

Steel Cord Conveyor Belts provide for a maximum efficiency of transporting materials even in extreme conditions. A robust design guarantees high sturdiness, a maximum transport capacity and resistance to impact with very little maintenance.

The used steel cords have ST 500-ST 10,000 sturdiness, the belts are up to 6,400 mm width, resistant to fire and antistatic, resistant to wearing, corrosion and chemicals.

Conveyor Belts For Special Purposes – vehicle belts, food industry belts, wood industry belts, elevator belts for cement and food industries, ski area transport belts, amphibian vehicle transport belts.



RUBBER SHEETS, RUBBER ROLLS, AND RUBBER MATTINGS

Our complete range of rubber and technical products is manufactured from high-quality materials meeting European standards, including NBR, SBR, EPDM, CSM, NR, VITON, BUTYL, and NEOPRENE.

Commercial rubber rolls and sheets are available with or without reinforcement, with 1-4 layers of textile inserts and in thicknesses from 1 to 50 mm.

Electroinsulating Rubber Mattings Available in two basic types:

- 1. Up to 20 kV, thickness up to 3.5 mm, black or grey, with or without pattern, certificate included
- 2. Up to 50 kV, thickness up to 4.0 mm, black or grey, with or without pattern, certificate included

Additional Rubber and Technical Products:

- Oil-resistant roll rubber
- Wear-resistant roll rubber
- Spongy roll rubber
- Food-grade roll rubber
- Self-vulcanizing roll rubber
- Drum-layering rubber for transport systems
- Para rubber
- Chemical and alkali-resistant rubber
- Patterned rubber mattings (round protrusions, wave grips, grooves, etc.)
- Rubber cork.

DRILLING EQUIPMENT





CPTDC

As representatives of China Petroleum Technology & Development Corp. (CPTDC) for Southeastern Europe, a wholly owned subsidiary of China National Petroleum Corporation (CNPC), we offer high-quality equipment, materials, and maintenance services for oil and servicing companies' projects.

Based on the long-term experience and quality of manufacturers in the CNPC group, we offer a complete range of products and equipment for upstream and downstream, offshore and onshore operations, conforming to API, ASME, and GOST standards, including: Drilling rigs and Workover Rigs, BOP and Beam pumping units, Sucker rods, Wellhead & ChristmasTtrees, Casing, Tubing, and Drill pipe, Drill collar and Kelly bar, Non-magnetic drill collar, Heavy weight drill pipe, Line pipes and Stabilizers, Down hole motors, Mud pumps, Handling tools, Exploration equipment, Oilfield chemicals, Refining equipment and additives, Power units...











PAPARELLI

Paparelli Alessandro e Figlio began producing pipes and well screens in the 1950s. Today, Paparelli sells 35% of their products in the Italian market, with the remaining 65% distributed across European, Asian, African, and South American markets.

Paparelli manufactures all components necessary for line formation, including: casing, spiral screens, bridge slotted screens, simple slotted screens and additional equipment (collars, flanges, reductions, centralizers, caps, etc.)

Casing and screens are manufactured from tin between 3 and 10 mm thickness, with a minimum diameter of 114 mm. Available materials include: carbon steel (FE 37 – FE 52), black or galvanized and stainless steel (304, 304L, 316, 316L)

Material selection depends on various factors: line purpose (potable water, drainage, desalination, spas and pools, industry, research, etc.), geological conditions, drilling power requirements, water chemical aggressiveness and corrosion considerations.

MULTICORE TUBES





MULTICORE TUBES

Multicore tubes efficiently facilitate installation, maintenance, and control simultaneously. They are made of stainless steel, cunifer, or copper. These tubes are available in bundles containing up to 10 tubes, with dimensions ranging from 6 to 15 mm ($\frac{1}{4}$ " to $\frac{1}{2}$ "), and can withstand a maximum operating pressure of 440 bar.

They are primarily used in shipbuilding, offshore plants, and for the transportation of liquids, gases, or electricity.

One of the key advantages of multicore tubes over conventional 6-meter-long flat seamless tubes is their continuous length of up to 1,200 meters, manufactured without seams. This provides several benefits:

- Reduced installation time and space savings in tube bundling
- Significant reduction in the number of tube seams, as well as installation and inspection time
- Compact design that allows easy bending in any direction—up, down, left, or right
- Triple-layered protection of outer tubes, ensuring effective resistance against mechanical damage
- A simple and effective solution to corrosion issues compared to conventional tubes, which are exposed to seawater and shipyard environments



Multicore tubes are most commonly used in shipbuilding for:

- Remote control systems for hydraulic and pneumatic valves in cargo tanks, ballast tanks, and service tanks
- Remote control systems for on-deck equipment such as winches
- Fixed gas detection systems
- Instrumentation control, sampling, and return line systems
- Tank liquid level measurement systems
- CO₂ or dry powder fire prevention systems

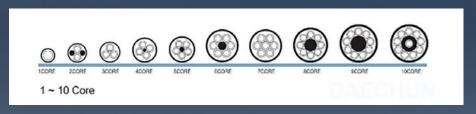
Tube Materials:

304, 316, 316L, 317L, 321, 347, 904L, 6 Mo, Monel 400, Nickel 200, Inconel 600, Inconel 625, Inconel 825, Hastelloy C22, Hastelloy C276, Duplex, Super Duplex, Copper, Cu-Ni 90/10.

Covering Materials

PVC, PVC TCR, FR PVC, HFFR TPU, HFFR PE, PEHD, MDPE, LDPE, XLPE.

Multicore tube types are approved by all renowned classification societies, including ABS, DNV-GL, BV, CCS, Lloyd's, KR, RINA, RMRS, and CRS. They come with a multi-year warranty.





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