

Sapitflex - Power Transmission Couplings

The best technical solution in power transmissions

Sapitflex is in the business of engineering, manufacturing of power transmission couplings and/or complete revamping of small and medium-sized plants, mechanical production equipment and machine tools, transmission and drive units, cardan shafts, and freewheels, with the aim of increasing the efficiency of its customers' machinery and production facilities.

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Enter as many details as possible about the submitted request*

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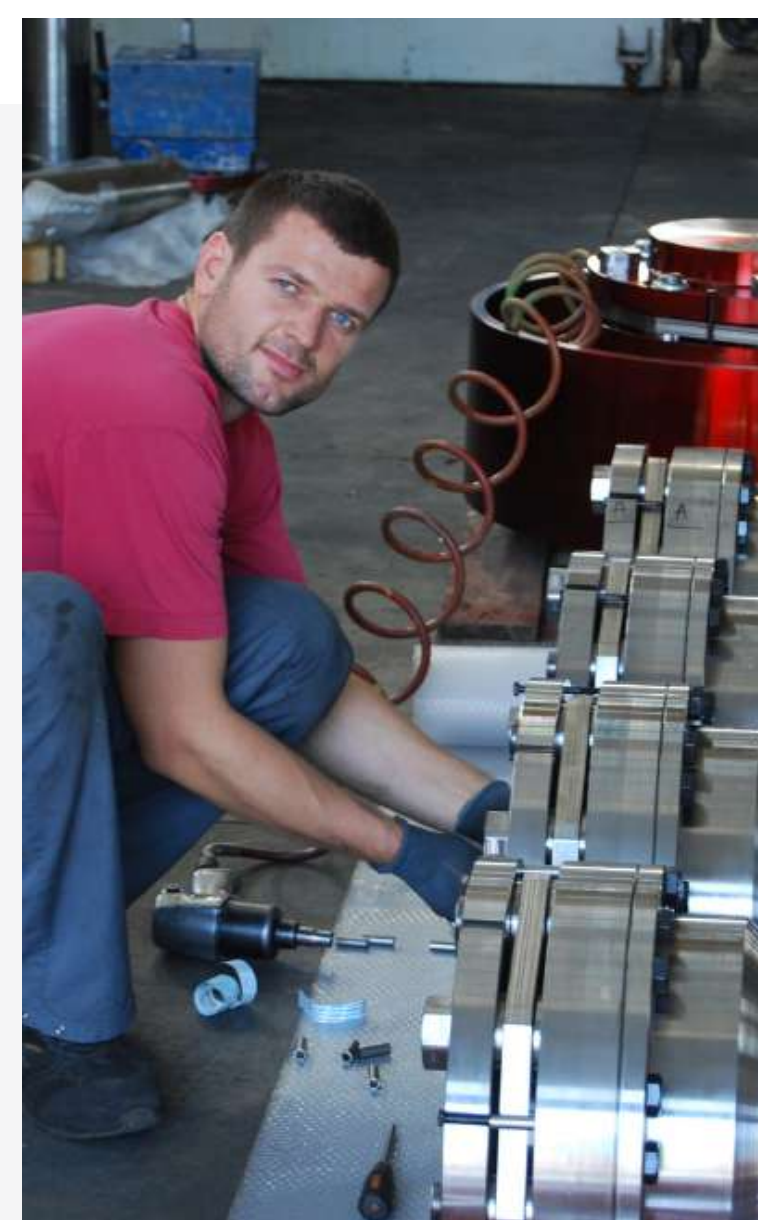
Contact us

+39 02 939 6831

Who is Sapitflex

For more than 60 years, we have been operating in the field of mechanical power transmission for high-tech applications.

Sapitflex is a manufacturer of transmission and power couplings of various types and is also able to design solutions to specific customer requirements. The Engineering division completes its technical offerings by producing mechanical overhauls, production of gearboxes, universal couplings, hydrodynamic couplings, pumps, valves plant parts. Specifically, we deal with the construction of mechanical complexes; overhaul of special pumps and valves, machine tools, heat exchangers; spare parts in special steels and specific treatments, assembly supervision, monitoring of mechanical transmissions and drive units.



We design and manufacture power transmission couplings

Sapitflex is a leader in the design and manufacture of a wide range of drive couplings including laminar couplings, elastic couplings, rigid couplings, gimbals, free wheels and drive assemblies.

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Our products

The transmission coupling is Sapitflex SRL's flagship product because the technical features allow the coupling to be maintained and serviced without stopping the plant and production.



Disc couplings

The SAPITFLEX disc coupling is of the continuous ring type made of high-strength stainless steel. Torque is transmitted by means of alternating conducting and driven pins.

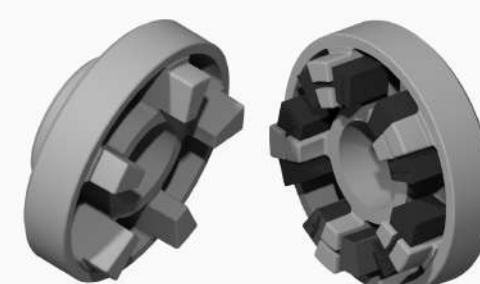
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Hydraulic couplings

Rotofluid is a hydrodynamic coupling that provides safe operation and durability. Hydraulic couplings have single or double delay chambers.

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Elastic couplings

Coupling composed of two geared crowns (male and female) joined together. Elastic dowels working under compression are inserted on the female half-coupling.

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Self-lubricating gear couplings

Couplings with driving elements (rods) made of special self-lubricating material, suitable for high working loads.

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Do you want to make a customized product for your mechanical system?

Sapitflex is available to make, without obligation, a technical-economic proposal for your plant, machine revamping or for production and design of spare parts or transmission couplings.

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Products

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Disc coupling, elastic coupling, rigid coupling, cardan shaft, freewheels and drive units

Specialists in manufacturing transmission couplings

The disc coupling is Sapitflex's flagship product which, combined with other types of mechanical transmissions, allows us to offer a wide range of solutions for various applications on plants in different sectors.

- [Disc Couplings](#) ▶
- [Elastic Couplings](#) ▶
- [Rigid Couplings](#) ▶
- [Self-lubricating gear Couplings](#) ▶
- [Hydraulic Couplings](#) ▶
- [Cardan Shafts](#) ▶



Disc couplings



Elastic couplings



Rigid couplings



Self-lubricating gear couplings



Hydraulic couplings



Cardan shaft



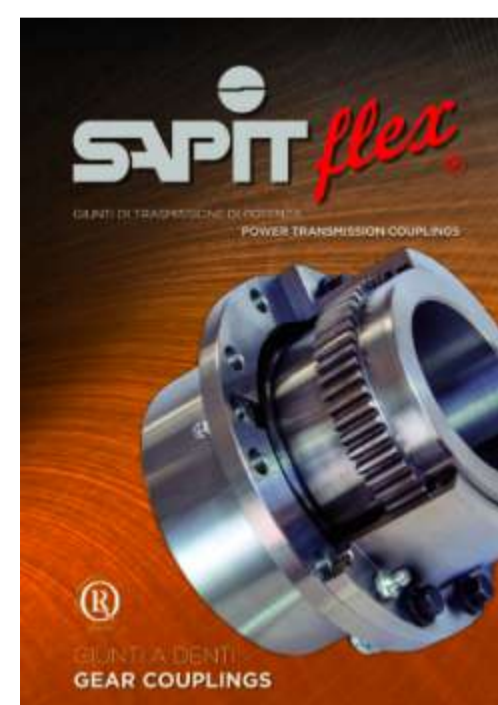
Gear couplings



Pin bush couplings



Our catalogs



Do you need to make a mechanical transmission of motion?

Our engineering department is at your disposal for the design and manufacture of power transmission couplings.

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Services

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Overhaul, Maintenance, Revamping, Special Products

Mechanical engineering professionals at your service

SAPITFLEX, also through its sister company SAPITFLEX Engineering, provides on-site services and assistance to customers. SAPITFLEX is active in the area of complete mechanical plant services/systems, ranging from the overhaul of specific equipment to the supply of mechanical or system components to replace existing ones, to the revamping of machines or plant parts.

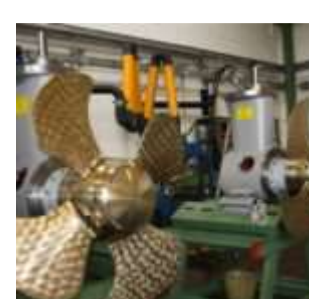
- Revamping on Cardan Shafts ▶
- Revamping on Hydraulic Couplings ▶
- Reverse Engineering on Speed Reducers ▶
- Production of Gears ▶
- Laser Alignment Assistance ▶
- Rebalancing the Rotating Organs ▶
- Parts Design and Production ▶



[DISCOVER ALL SERVICES >>](#)



On-site hydraulic coupling alignment



Construction of maneuvering propellers for construction sites



Balancing rotating organs



Balancing rotating organs



Babcock reducer overhaul for mill

Design, rebuilding and overhaul of complete cardan shafts

- Components status check (forks, pins and transverse bearings, groove profiles) also with NDT (non destructive testing)
- Survey and reverse engineering for components to be rebuilt with a design different from Sapitflex standards.
- Design verification of components with shearage or abnormal wear and redesign.
- Drawings of all components to be rebuilt.
- Recovery of components to be reused.
- Replacement of commercial components (rollers, bearings, seals, screws, etc.).
- Reassembly, painting and functional testing.

Various mechanical constructions and revamping of plants

- Revamping of the robotic welding system.
- Construction of the SL10GX precision rotary lift interconnected with the robot.
- Revamping and retrofitting of machine tools.
- Overhaul of hydraulic couplings.
- Overhaul of blast furnace gas purification system.

Overhaul of pumps and valves

- Overhaul of all brands of gate, disc, retaining, ball valves and testing according to standards with internal certificate.
- Replacement of gaskets: performed using seals suitable for the product.
- Replacement of damaged or worn components with original spare parts.
- Application of electric, pneumatic, hydraulic actuators to all types of valves.
- Overhaul of single-stage and multi-stage centrifugal, positive displacement, gear, vertical submersible, dispensing, liquid ring vacuum, vacuum, piston, diaphragm pumps.
- Special tests: certified tests are carried out, RT industrial radiography, UT defect and thickness ultrasounds, ET eddy currents, LT helium leak tests, MT magnetoscopy, PT liquid penetrants, PMI chemical analysis of materials in the field, IT thermographic inspections.

Component construction

- Shaft inspection, metallisation, adjustment, balancing.
- Checking and replacing main and thrust bearings.
- Replacement of carbon seal rings.
- Overhaul of speed control system, check of adjustment masses and possible replacement.
- Overhaul of the steam inlet control box.
- Overhaul of hydraulic or mechanical servomechanisms.
- Reverse engineering and rebuilding of components.
- Overhaul of turbine gearboxes/multipliers, alternator, gear design and rebuilding.
- Design and construction of mechanical transmission couplings.

Design, construction and overhaul of complete special gears and gearboxes

- Design skills for the dimensioning and diagnostic verification of all the mechanical components of a gearbox and in particular the various types of gears;
- Systematic processing of the reverse engineering activity, allowing design tools to be available at all times for current and future interventions on the same machine;
- Internal and outsourced availability of the best specialised skills and production means for the construction of components, with particular reference to specific types of gears;
- Precision mechanical assembly and installation with particular reference to the mechanical parts of kinematic chains and accessories (gears, shafts, bearings, non-return devices, lubrication systems).

All these interventions serve to:

- Obtain from a reconditioned machine performance and durability comparable to that of a new machine;
- Contain overhaul costs by adopting suitable solutions for the recovery and reuse of damaged components (for example, it is almost always possible to reuse wheels with non-worn gear or rotating them 180° to make the non-functioning side of the gear work, or the gearing of the wheel and the rebuilding of the pinion with an increase so as to recover the correct clearance between the gear coupling profiles).

Design, reconstruction and overhaul of complete gimbal spacer

- Component condition check (forks, pins and bearings crosses, spline profiles) also with CND;
- Surveying and reverse engineering for components to be rebuilt of designs other than Sapitflex standards;
- Design verification of components with cracks or abnormal wear and tear and their redesign;
- Drawing construction of all components to be rebuilt;
- Restoration of components for reuse;
- Replacement of components from trade (rollers, bearings, seals, hardware, etc.);
- Reassembly, painting and functional testing.

Areas of intervention

The work methodology, oriented towards proposing solutions designed to meet specific customer requirements, combined with the high quality level of the products offered, have enabled significant success and an increase in the number of applications supplied to customers in various plant engineering and construction sectors. manufacturing industry.

Do you need to make a mechanical transmission of motion?

Our engineering department is at your disposal for the design and manufacture of power transmission couplings.

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