

BU Hydraulic Systems



Conventional Valves



Proportional Valves



IO-Link Solutions



Electric Cylinders



Hydraulic Servo-Cylinders



Hydraulic Pumps

Diplomatic Motion Solutions

Diplomatic Motion Solutions is one of the world's leading players in motion control.

The company, and its constantly growing group, has always maintained its pioneering spirit, focusing not only on the design and production of hydraulic components, but also on electromechanical solutions and smart systems, driving Industry 4.0.

Thanks to its international presence, Diplomatic Motion Solutions is able to guarantee the same level of efficiency, reliability, product quality and service worldwide. The same values of dependability, competence and technological progress are relayed across every continent.



Hydraulic Systems

The BU Hydraulic Systems is dedicated to the development of custom-made projects within the Group, at two modern facilities in Lainate (Milan) and Padua, Italy.

look to the future
to overcome
daily challenges

Within the Duplomatic Group, the BU Hydraulic Systems is the premier source for the design and construction of custom-made hydraulic power systems.



The **production site at Lainate** (Milan), Italy features a 3,000 m² facility stocked with modern production equipment, including assembly, welding, coating and testing areas. This is where the Hydraulic Systems team partners with customers to successfully address daily market challenges.

Technology and innovation are the tools that curious, experienced, and passionate people use to develop and accomplish each project.



The teams from the two facilities take care of:

- design
- production
- approval testing of power units, manifolds and cabinets.



innovation to reach objectives and goals



In the recently modernized 2,500 m² **Padua site**, we have been manufacturing extremely complex systems for over 35 years, requiring the design of hydraulic, mechanical and pneumatic details and in specialty projects the design of the software. These skills, combined with those of the Lainate plant, allow Diplomatic to tackle all possible requests from our customers.

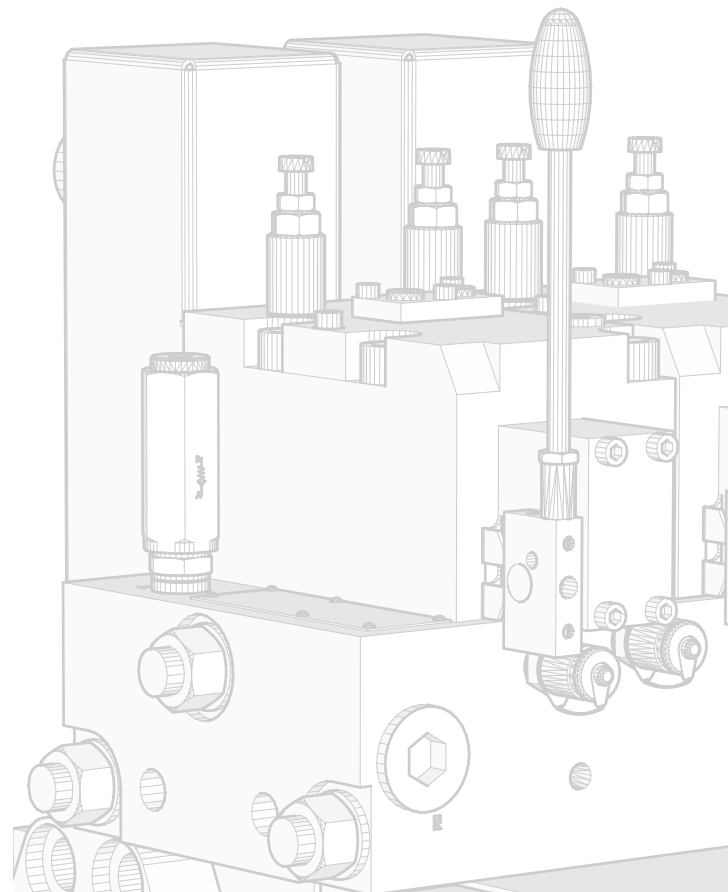
DESIGN

we shape the future

Thanks to modern 3D design systems, combined with the specific skills of a qualified technical team, each project takes shape and grows in close cooperation with the customer.

Each phase of the design process is planned through a consolidated work method, in order to obtain results that are perfectly in line with customer expectations and optimised for any application.

Thanks to careful analysis of applicable regulations and job order specifications, each project is carried out in accordance to requirements and perfectly sized to its context.



PRODUCTION

efficiency and care in every production phase

We strive to bring together the efficiency of a modern industrial organisation with the passion and care expected of craftsmen and their work.

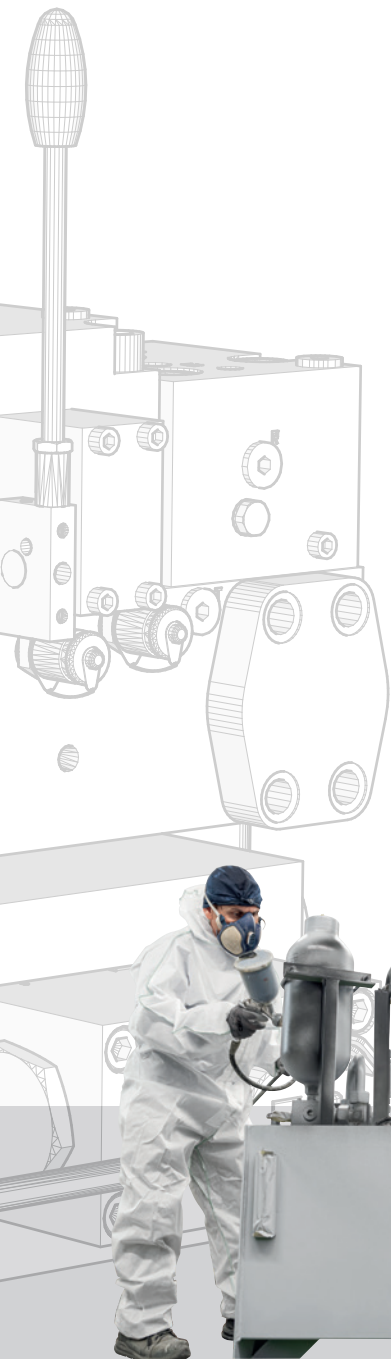
The assembly phases are simplified to facilitate the replacement of any part, should maintenance be required.

The coating processes are managed both internally, where a wide range of colours are available, compliant and performing in terms of rendering, durability and salubrity, and externally by selected suppliers holding the necessary certifications suitable for the strictest cycles.

Final checks and inspections are an essential phase of the production cycle.

The process includes a detailed and mandatory checklist that ensures that each and every product is fully compliant.

Customers are often invited to attend testing, to personally verify the compliance of the system with all established requirements.



SOLUTIONS FOR INDUSTRY

reliability and customisation

Industry has always been one of the primary sectors for hydraulic applications.

Duplomatic's solutions are employed in various fields: from machine tools to presses, from machines for processing rubber and plastic to paper mills.



Testing - power unit dedicated to move a servo cylinder during dynamic test



Power unit for punching machine with servo pump



Deformation - Energy Saving presses

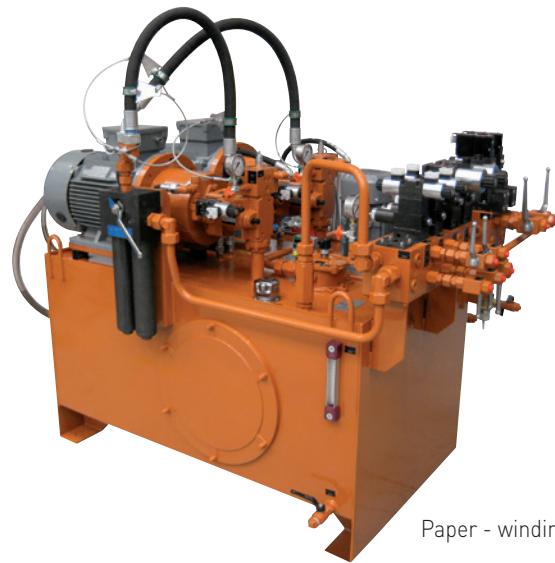


Deformation - CNC machines for cutting and removal on tubes and solids



Rubber - mixers and calenders

Our goal is to be a partner for machine manufacturers by offering highly reliable products, constantly improving technological solutions and delivering fast and proactive pre- and post-sales service.



Paper - winding machines



Rubber and plastic - manifolds for presses



SOLUTIONS FOR ENERGY
technology
and continuity

Hydraulic systems play a crucial role in the energy sector, where continuity of service must be guaranteed at all times.



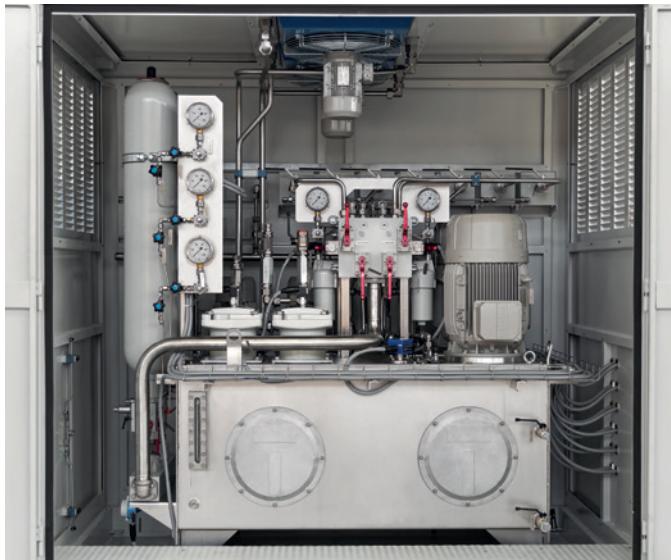
Steam turbines - lubrication

Gas turbines - power unit



Steam turbines for nuclear energy - power unit



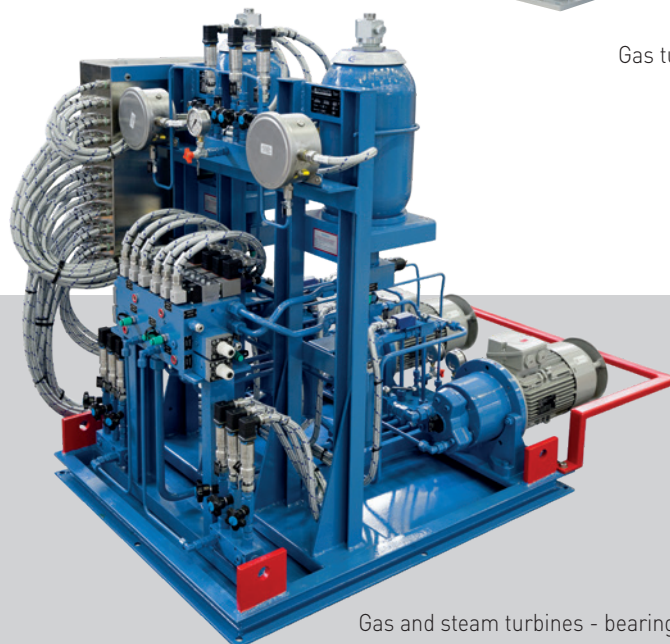


Steam turbines - HPU with cabinet

Since the early 1980s, the gas and steam turbine sector has been of strategic importance to Duplomatic BU Hydraulic Systems, which continues to invest in research and development to improve the performance and reliability of its systems.



Gas turbines - starter unit



Gas and steam turbines - bearing jacking oil systems

Gas and steam turbines - trip block SIL3

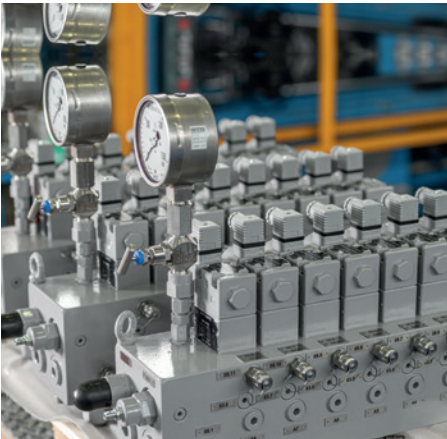


SOLUTIONS FOR OFFSHORE AND OIL & GAS

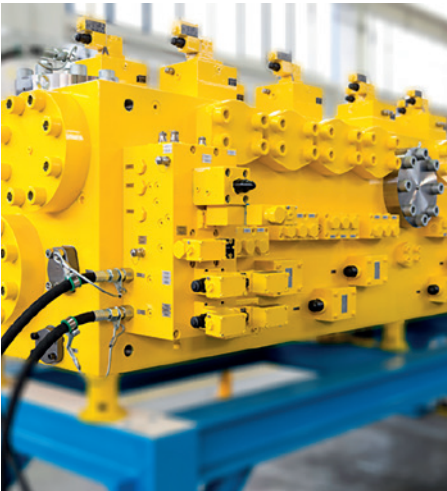
precision and safety

In the naval, marine and offshore sector, Duplomatic solutions are employed in all motion systems, such as mechanical arms on cranes, winches and mobile bulkheads and in auxiliary power generation systems.

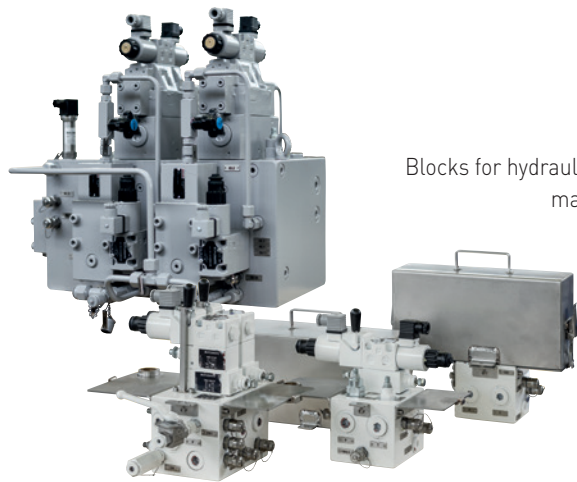
High reliability and precision must be pursued with incessant perseverance to meet the requirements imposed by extreme conditions such as those offshore, where particular attention to human safety and environmental protection needs to be paid.



Winch negative brakes management



Innovative system to quickly pull off the oil pipeline from the FPSO



Blocks for hydraulic winches management



Container with HPU, electric panel and PLC for FPSO marine vessel



Container with inside a group of hydraulic power units used for drilling in environments with strong temperature variations

High reliability and maximum attention to safety are given the utmost attention in design and manufacturing by Duplomatic when developing solutions for the Oil & Gas sector.

Control units and test benches feature a compact design; they are also suitable for explosive risk environments.



Hydraulic power station to control valve actuators used to isolating the oil pipeline



SOLUTIONS FOR THE STEEL INDUSTRY

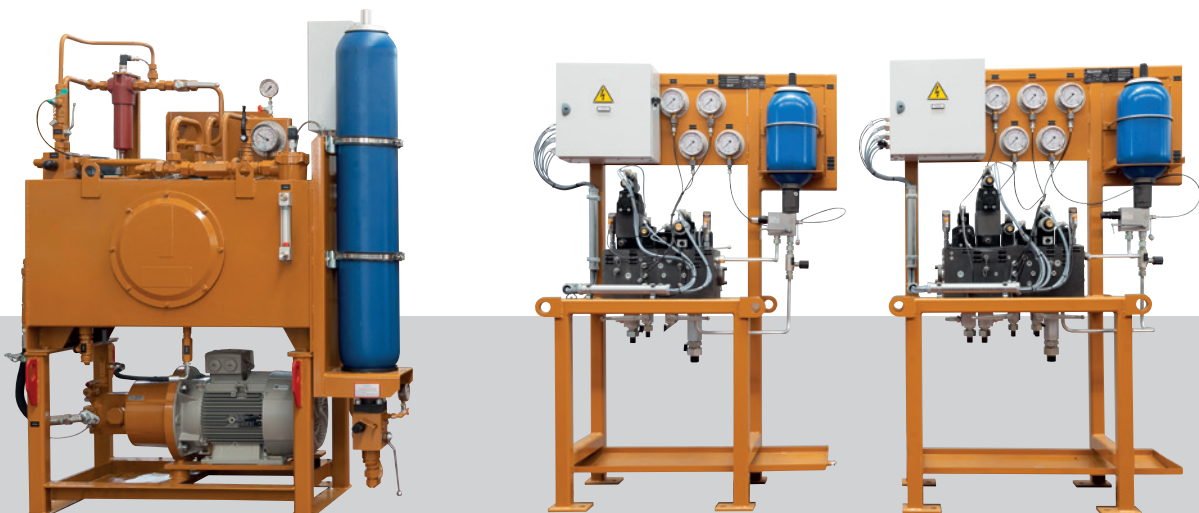
responsibility and innovation

Duplomatic solutions are also employed in the steel industry, which, due to extreme working conditions, requires products with specific characteristics. Even in this field, we supply products that are technologically advanced and reliable.



Iron and steel industry -
EAF furnace electrode control bench

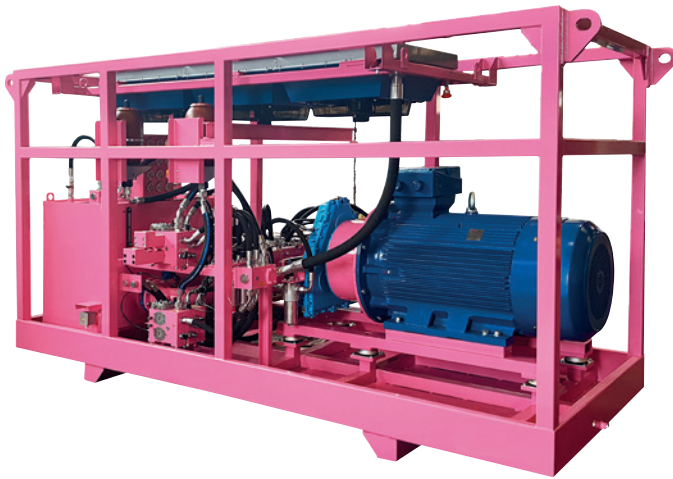
Steel industry - service unit



Steel industry - control benches for CCM segments

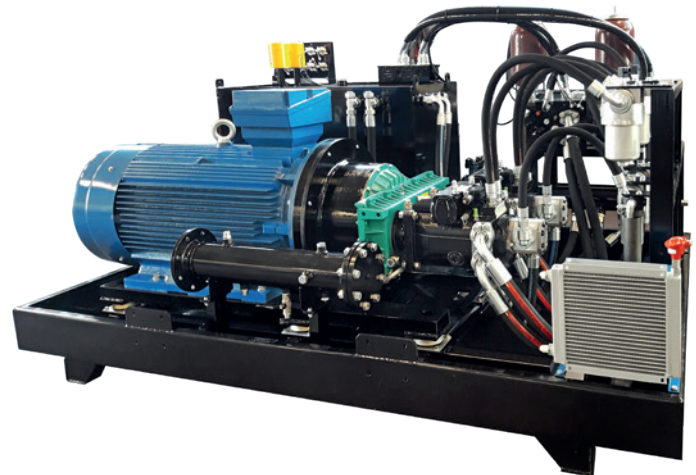
SOLUTIONS FOR RECYCLING

sustainability and environment



Power unit working in closed circuit
for a shredder (hydraulic power 250KW)

BU Hydraulic Systems is a consolidated supplier for shredders, shears, compactors operating in particular working conditions and which must guarantee continuity of service. Diplomatic solutions are available both in closed circuit and in open circuit.



Power unit working in closed circuit
for a shredder (hydraulic power 315KW)



Application where the power unit is working
in closed circuit (hydraulic power 220KW)

POST-SALES DIAGNOSIS
**service
that makes
the difference**

The Diplomatic team supports all of its customers worldwide from design and manufacturing, to the commissioning and after-sales service phases.

We are with you when you conceive your product, when you see it turning into something real but, above all, when it starts being used and requires assistance.

At times, the most suitable solutions are found by visiting the customer and assessing the situation as-is, which may lead to proposing renovations and improvements to the customer's currently-installed machines or to providing useful suggestions to replace machinery with more modern and efficient technologies.



Contact us for a post-sales
diagnosis of your current system

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quality culture

International and quality standards

- ISO 9001:2015 for quality management
- ISO 14001:2015 for environmental management
- ISO 45001 for occupational health and safety management
- PED 2014/68/EU for hydraulic systems (module H)
- ATEX 2014/34/EU
- IECEx according to IEC 60079
- ASME IX and ISO 9606-1:2017 for welding processes

Special certifications

- ABS Certification of conformity to ABS rules for facilities on offshore Installation
- ALGERIA DPEM Passport for pressure vessel
- Australian MEPS for electrical motors
- Australian pressure vessel standard according to AS4343 e AS1210
- CU-TR 010 Technical Regulation on the safety of machinery
- CU-TR 012 Safety of the equipment for operation in explosive atmospheres
- EAC/GOST Certification
- GOST U Certification of conformity to Uzbekistan National Standards
- TUNISIA Passport for pressure vessel
- UL-CSA Certification
- 2006/42/EC Machinery safety

At Diplomatic, all company departments are involved in a challenging quality process for the continuous improvement of our products, services and people.

This critical attitude towards each process and the constant drive for advancement regard the following aspects:

- Product and service quality (UNI EN ISO 9001) through constant analysis and implementation of corrective actions, but also by promoting the transfer of information, supporting appropriate training, and monitoring customer satisfaction, in pursuit of a “zero defects” goal;
- Protection of the environment (ISO 14001) is pursued through a culture of respect and by means of intelligent management of environmental resources;
- Safety management (OHSAS 18001) guarantees the safety of individuals through organisation and risk reduction models that enable risk analysis and the identification of the necessary risk avoidance measures.



Turnkey projects

These are engineering solutions completely developed and realized by Duplomatic. These projects are distinctive for size, complexity and level of service offered to the customer. In the turnkey projects Duplomatic supplies both the mechanical and hydraulic parts and the control system. The supply includes installation, commissioning and, where required, maintenance and operational support.

The most significant project to date is the UAE Pavilion at Expo 2020 Dubai, for which the company created the roof motion system, designed by architect Santiago Calatrava in the form of falcon wings.

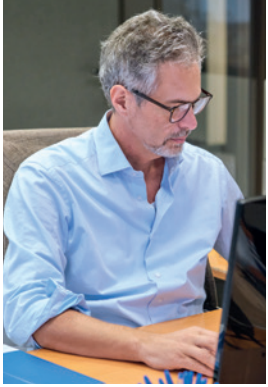


EXPO 2020 Dubai, UAE
Hydraulic motion system to control the opening and closing of the roof of the UAE Pavilion



Archimede project, Syracuse, Italy
A hydraulic motion system moves and controls the huge parabolic mirrors to capture the sun's rays at the solar field

**WE,
adventurers
together**







Diplomatic MS Spa
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