TAILOR-MADE SOLUTIONS FOR OIL & GAS DOWNSTREAM APPLICATIONS
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THE PAUL WURTH GROUP

With long-standing expert know-how, innovative concepts and professional project management, Paul Wurth serves the iron & steel industry as well as the refining and petrochemical industry as a strong and trustful partner. We turn industrial challenges into successful technological solutions. With these assets in hands, Paul Wurth today also offers tailor-made solutions for oil & gas downstream processes.
The Paul Wurth Group is a leading player in the global market for the design and supply of the full range of technological solutions for the ironmaking industry.

Headquartered in Luxembourg since its creation in 1870, the company has developed in the course of its history into an engineering company which is active on the international market. As a result of our growth and expansion policy, we are today an established technology provider and supplier of complete plants for the primary stage of integrated steelmaking.

MAKING THE OIL & GAS SECTOR PROFIT FROM OUR EXPERTISE

Since the start of 2016, Paul Wurth has been branching out with a new range of services as part of its mission to develop, manufacture and distribute special valve solutions for refineries and the petrochemicals sector through its new Oil & Gas Division. Up to now the company has offered a variety of valves for extremely harsh operating conditions in metallurgical plants such as blast furnaces. They are designed for long life, high reliability and ease of maintenance, operating under high temperatures, high pressure and abrasive and corrosive media. Utilising its existing know-how and a new team of experts, Paul Wurth will be able to offer modern solutions to the global oil and gas industry with comparable valves for refineries and petrochemical plants.

CLOSE TO OUR CUSTOMERS

With about 1500 highly qualified and committed employees, the Paul Wurth Group operates a global network of local set-ups in around 20 countries in the world. We have always striven to adapt our operational entities, branches, representation offices and joint ventures to the market situation in order to be able to respond quickly, flexibly and in a targeted way to our customers’ needs.

By operating servicing workshops in the USA, Brazil, Russia, India and China, and collaborating with worldwide service partners, we are able to be very reactive to local demands for maintenance services, spare parts, repairs and reconditioning of equipment. All our customers can count on our support and best advice for accompanying them throughout the entire lifetime of their equipment.
WHAT MAKES US YOUR PRIVILEGED PARTNER

• Thanks to our dedication to INNOVATION, we are the right partner when technically advanced solutions are required. Our teams of engineers are constantly on the lookout for new technological solutions that will best attend to our customers’ needs in terms of industrial performance and reliability.

• ENVIRONMENTAL and ENERGY-RELATED considerations are at the heart of our plant solutions, enabling you to reconcile profitability and sustainability.

• Always striving for excellent product QUALITY, our customers can rely on the performance and reliability of our equipment.

• Our expertise in efficient PROJECT MANAGEMENT allows our customers to complete their industrial projects in a record time with a minimum loss of production.

• Our profound knowledge of the market allows us to develop and offer ECONOMICALLY VIABLE concepts, boosting moreover the profitability of your operations.

• We are highly committed to the SAFETY standards in our products and services. We consider it as our duty to support our customers’ safety efforts on site as well as during operation.
In a first stage, Paul Wurth will utilise the already existing competence and the new team knowledge to offer special valve solutions for oil & gas downstream processes.

Our range of products currently includes valves for fluid catalytic cracking (FCC) plants, the most important conversion process used in petroleum refineries, dehydrogenation plants, ethylene production and delayed coking, where various types of residues are converted to lighter hydrocarbons.

At a later stage, Paul Wurth Oil & Gas will diversify its portfolio to further petrochemical and refining processes.
For the development of its products and continuous optimisation of its solutions, Paul Wurth can rely on a network of highly qualified and multidisciplinary engineers. The teams dedicated to the oil & gas business are mainly established in Germany, Czech Republic and Luxembourg. Using the most modern engineering tools, they also offer analytic services, such as FEA analysis, fluent analysis, temperature distribution analysis and feedback from operation.
HIGH PROFICIENCY FOR INTEGRATED SOLUTIONS

Thanks to our teams’ competencies, Paul Wurth is in a position to create and deliver integrated engineering solutions for complex valve systems.

Depending on the application and process, it is mandatory to have electric, hydraulic or pneumatic valve actuators along with the corresponding power stations, local or central control stations for remote actuation and PLC systems, indoor and outdoor, which are to be integrated into the complex control and safety systems of the refineries or petrochemical plants.

Supply and control systems for utilities, connected to our heavy duty valves, e.g. for cooling water, condensate disposal, steam or nitrogen purging stations are as well part of our scope in order to provide complete packages to our customers.
Paul Wurth’s main production facility is located in Mönchengladbach, close to Düsseldorf, in Germany. Here we use the well-fitted workshops of the SMS group for welding, machining, assembling and testing activities. Depending on where the customer is located, the global network of Paul Wurth and SMS workshops is of course ready to treat our demands.
WELDING
- Unit weight up to 250 tonnes
- Welding processes: E, MIG, MAG, TIG, UP, RES, special welding
- Annealing furnace (3.5 x 5.5 x 7 m)
- Blasting enclosure
- Painting booth
- Hard surface welding
- Heat treatment
- Cladding

MACHINING
- Unit weight up to 180 tonnes
- Most modern precise machinery
- In total about 100 big machine tools
- Five axis turning mill center
- Vertical lathe, up to Dia 4,500 mm
- CNC machining centers
- Portal milling machine

ASSEMBLING & TESTING
- Unit weight up to 400 tonnes
- Crane hook height up to 12 m, including assembly pit up to 16 m
- Functional testing hydraulics up to 600 bar
Being committed to assist the customer whenever needed, Paul Wurth offers a broad range of in-plant and in-line services, such as refurbishment, overhaul and equipment modernisation, on-site inspection and preventive maintenance, complex turnarounds, in-shop hot stroke testing and, of course, spare parts.

In order to meet local needs and provide top-quality services on demand, Paul Wurth can count on the expertise of worldwide service teams and partners, all applying the highest standards in terms of quality, safety and environmental compliance.
Out of its broad portfolio of lever valves, pressurising isolation valves, wedge valves, double eccentric valves, goggle valves, butterfly valves, louver valves or gate valves developed for metallurgical plants, Paul Wurth offers today special valve solutions for the oil & gas industry:

- **Fluidized Catalytic Cracking**
  - Catalyst Slide Valves
  - Flue Gas Slide Valves
  - Fractionator Isolation Valves
  - Flue Gas Diverter Valves
  - Flue Gas Butterfly Valves
  - Goggle Valves
- **Delayed Coker Process**
  - Delayed Coking Top & Bottom - Unheading Valves
- **Ethylene Production Units**
  - Transfer Line Valves
  - Decoking Valves
- **Dehydrogenation Reactor Isolation**
  - Wedge-within-wedge type Gate Valves
    - HC/Air Inlet & Outlet Valves
    - Evacuating Valves
    - Steam Purge Valves
    - Reduction Gas Valves
    - Gas Injection Valves
FCC slide gate valve for fluid catalytic cracking

Automatic bottom unheading valve
All high-performant and reliable valves developed and supplied by Paul Wurth are designed to meet the technological requirements with regard to:

- High temperature resistance
- High pressure resistance
- Vacuum capability
- Dirt and toxic gas, high oxygen environment
- Abrasive & corrosive attack

Typical design features for these severe operating conditions are e.g.:

- Metal-to-metal seats
- Hardfacing & surface coating
- Large range of diameters
- Many different types and functions

System certifications:

- PED 2014/68/EU Module H1
- AD 2000 HP0
- EN ISO 3834-2
Transfer line and de coke line isolation valve for ethylene production

Wedge-within-wedge type isolation valve
INTERNATIONAL PRESENCE

Paul Wurth’s global presence is today expressed through a tightly structured network of operational entities, representation offices and affiliated companies in the world.
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