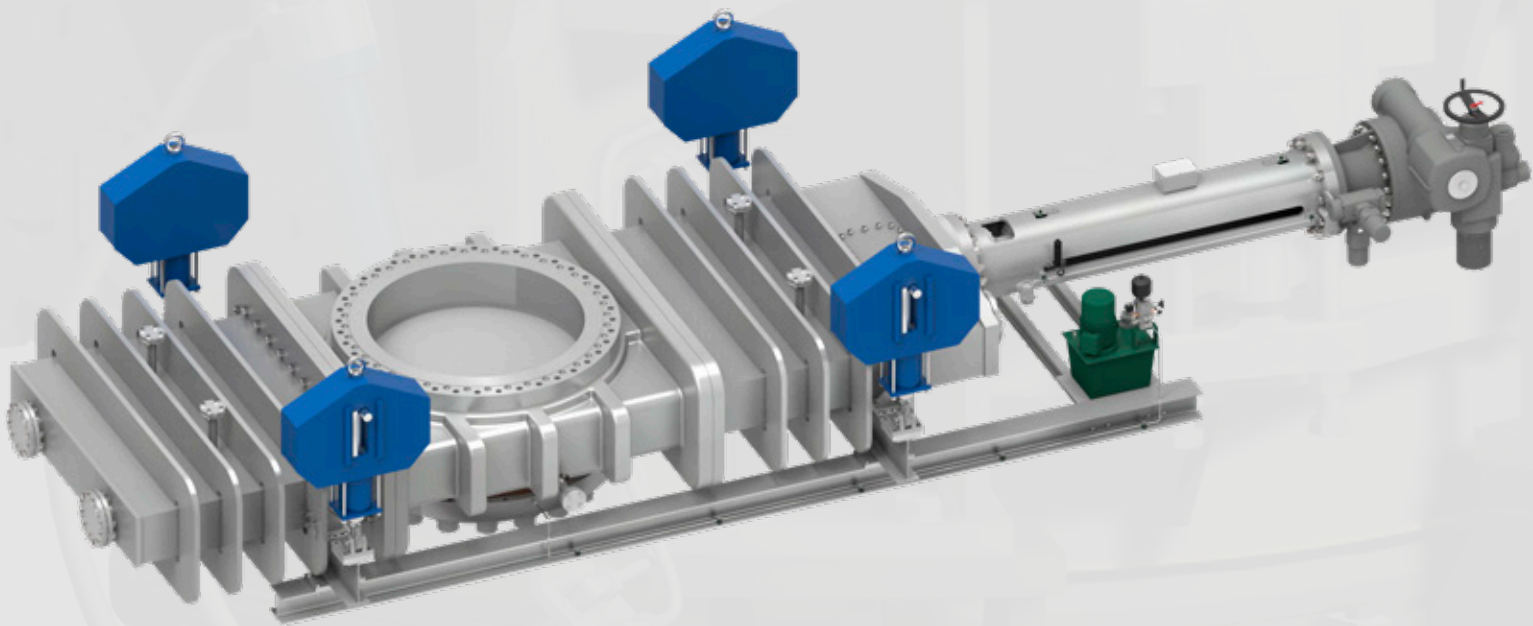


# PAUL WURTH

SMS group

## Valves for Delayed Coking

Oil & Gas Downstream Processes



Taking advantage of its long-standing know-how in designing and supplying special valves for severe operating conditions for metallurgical plants like blast furnaces, the Paul Wurth Oil & Gas division today develops, manufactures and distributes special valve solutions for refineries and petrochemical plants.

### Automatic Bottom Unheading Valves

In the field of **Delayed Coking** process, Paul Wurth offers Automatic Bottom Unheading Valves tailored to your needs. Given the innovative design features, a patent application was introduced by Paul Wurth.

The unique Paul Wurth design combines the tightness of the classical Double Disc design and the low weight and small footprint of the classical single gate design.

The Paul Wurth Double Disc/Gate design with an external, active sealing force applied to the floating lower valve-body seat together with a circular

shaped lower disc, guided by spherical caps, combines the advantages of the single-plate design with those of the double-disc design.

Subsequently, it offers an important innovation to the industry eliminating the disadvantages of competing classical concepts.

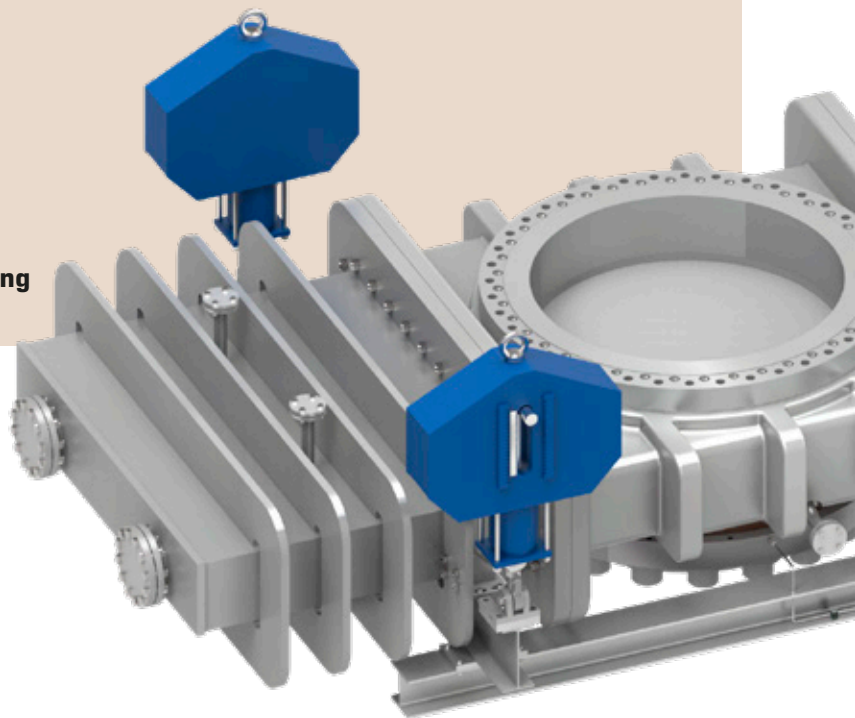
The new Paul Wurth sealing is a “floating” system, which is unaffected by any deformations caused by thermal stress or pressure issues.

The valves are available with different actuator systems, with hydraulic power and control units as well as with steam purge systems.

#### Typical Figures

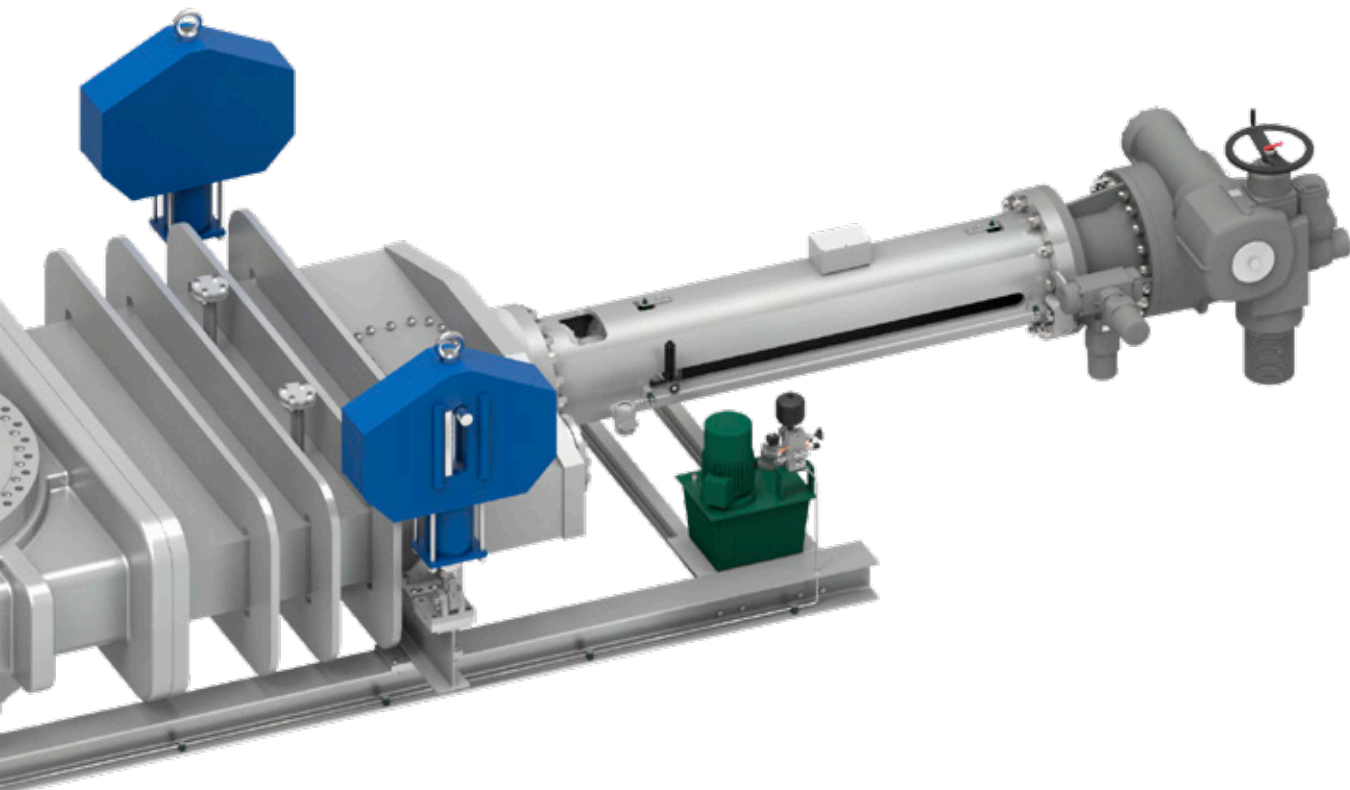
- ▶ typical size 60"
- ▶ outside dimensions: 9,500 × 2,900 × 1,100 mm
- ▶ weight: approx. 42,000 kg
- ▶ operating temperature up to 550°C
- ▶ operating pressure up to 10 bar(g)
- ▶ actuation: hydraulic or electric

**Other sizes, design features and/or operating features are available on request.**



## Key features

- ▶ Small footprint, light weight
- ▶ Special disc / gate design in combination with active, mechanical sealing force provides positive, tight shut-off when shut
- ▶ True Double Block and Purge performance within one valve body
- ▶ Open throughway without flow restrictions in open position
- ▶ Valve design according to customer demands and licensors/customers specifications
- ▶ Electrical, hydraulic or pneumatic options available for valve actuation
- ▶ On/off as well as modulating service possible
- ▶ Paul Wurth provides system package comprising Valves, Actuators, Hydraulic Power Station, Hydraulic manifolds, Steam Purge Systems and PLC control system out of one hand



# Engineering & Technology worldwide

The Paul Wurth Group is today one of the world leaders in the design and supply of complete plants, systems and processes as well as specialised mechanical equipment for

## ■ the iron & steel industry:

Blast Furnaces & Auxiliary Plants  
Coke Making Plants  
Agglomeration Plants  
Direct Reduction Plants  
Environmental Protection, Recycling & Energy-Saving Technologies

## ■ other industries:

Valve Solutions for Oil & Gas Downstream Processes  
Solutions for Decentralised Energy Production  
Intralogistics Solutions for Heavy Loads  
Engineering & Project Management for Civil Construction and Infrastructure Projects

**Feasibility Studies – Conceptual, Basic and Detail Engineering – Project Management – Plant and Components Supply – Turnkey Projects – Assistance in Plant Assembly and Commissioning – Technology and Operations Consultancy – On-site and Remote Operational Assistance – After-sales Services**

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# PAUL WURTH

SMS group

oil-gas@paulwurth.com • www.paulwurth.com

### Paul Wurth Deutschland GmbH

Paul Wurth Oil & Gas Division  
Mönchengladbach, GERMANY  
Phone: (+49) 2161 4785824  
oil-gas@paulwurth.com

### EUROPE

#### Paul Wurth S.A.

Luxembourg, LUXEMBOURG  
Phone: (+352) 4970-1  
paulwurth@paulwurth.com

#### Paul Wurth Italia S.p.A.

Genoa, ITALY  
Phone: (+39) 010 640 91  
pwit@paulwurth.com

#### Paul Wurth Deutschland GmbH

Essen, GERMANY  
Phone: (+49) 201 245300  
pwdeutschland@paulwurth.com

#### Mainz-Kastel, GERMANY

Phone: (+49) 6134 606 6  
pwdeutschland@paulwurth.com

#### Mönchengladbach, GERMANY

Phone: (+49) 2161 4785824  
oil-gas@paulwurth.com

#### Paul Wurth, a.s.

Ostrava, CZECH REPUBLIC  
Phone: (+420) 595 155 100  
pwcz@paulwurth.com

### Paul Wurth Moscow Representation Office

Moscow, RUSSIA  
Phone: (+7) 495 721 1553  
pwmoscow@paulwurth.com

### Paul Wurth Kovrov

Kovrov, Vladimir region, RUSSIA  
Phone: (+7) 49232 97099  
pwkovrov@paulwurth.com

### Paul Wurth Metallurgical Services LLC

Cheliabinsk, RUSSIA  
Phone: (+7) 351 799 60 60  
pwms@paulwurth.com

### Paul Wurth Ukraine Representation Office

Mariupol, UKRAINE  
Phone: (+380) 629 41 18 99  
pwua@paulwurth.com

### Paul Wurth International Site Services S.r.l

Genoa, ITALY  
Phone: (+39) 010 640 9700  
pwis@is.paulwurth.com

Joint company of  
Dango & Dienenthal and  
Paul Wurth:

**TMT –  
Tapping Measuring Technology**  
Luxembourg, LUXEMBOURG  
Phone: (+352) 261920 0

Siegen, GERMANY  
Phone: (+49) 271 4014 0  
contact@tmt.com •  
www.tmt.com

Joint Company of  
SAB and Paul Wurth:

**VCL –  
Valve Competence Luxembourg**  
Grevenmacher, LUXEMBOURG  
Phone: (+352) 27 68 54  
info@vcl.lu • www.vcl.lu

Joint company of  
SMS group and Paul Wurth

**AMOVA**  
Lentzweiler, LUXEMBOURG  
Phone: (+352) 2685 2000

Netphen, GERMANY  
Phone: (+49) 2738 21 0  
info@amova.eu • www.amova.eu

### AMERICAS

#### Paul Wurth Inc.

Valparaiso, Indiana, USA  
Phone: (+1) 219 756 1061  
pwus@paulwurth.com

#### Paul Wurth do Brasil

Belo Horizonte, M.G., BRAZIL  
Phone: (+55) 31 3228 2800  
pwbr@paulwurth.com

#### Paul Wurth do Brasil Montagens e Manutenção Ltda

Vespasiano, M.G. BRAZIL  
Phone: (+55) 31 3228 2799  
pwbm@paulwurth.com

#### Paul Wurth de Mexico SA de CV

Atizapan, MEXICO  
Phone: (+52) 55 1106 3463  
pwmx@paulwurth.com

### ASIA

#### Paul Wurth Metal Technology (Beijing) Co., Ltd

Beijing, P.R. CHINA  
Phone: (+86) 10 8405 4400  
pwbeijing@paulwurth.com

#### Beijing Paul Wurth Trading Co., Ltd

Beijing, P.R. CHINA  
Phone: (+86) 10 8405 4699  
china.trading@paulwurth.com

### Shanghai Paul Wurth Metallurgical Equipment Manufacture Co., Ltd

Shanghai City, CHINA  
Phone: (+86) 21 61186300  
pwshanghai@paulwurth.com

### Paul Wurth India Pvt. Ltd

Gurgaon, INDIA  
Phone: (+91) 124 4523200  
pwindia@paulwurth.com

### Paul Wurth International S.A. Taiwan Branch

Kaohsiung, TAIWAN  
Phone: (+886) 7 33 93 309  
pwtaiwan@paulwurth.com

### Paul Wurth International S.A. Korea Branch

Seoul, KOREA  
Phone: (+82) 2 553 9450  
pwkorea@paulwurth.com

### Paul Wurth Vietnam Co., Ltd

Ho Chi Minh City, VIETNAM  
Phone: (+84) 8 73 000 514  
pwwietnam@paulwurth.com

Joint company of  
IHI Corporation and Paul Wurth:

### PAUL WURTH IHI Co., Ltd.

Tokyo, JAPAN  
Phone: (+81) 3 6630 4785  
contact@ihi-pw.jp