



JASTA



*Throttle and control valves for industrial ventilation systems
for all temperature and pressure ranges*

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JASTA-ARMATUREN GmbH & Co.KG

Your specialist for throttle and control valves of all materials and applications for gaseous media



Design and manufacturing of complete valve systems including actuators in Germany for over 60 years

- Shareholder-managed industrial company based in Essen
- In-house R&D department: Modeling, FEM simulation, manufacturing of customized valve systems
- Active customer orientation: Competent and dedicated team!

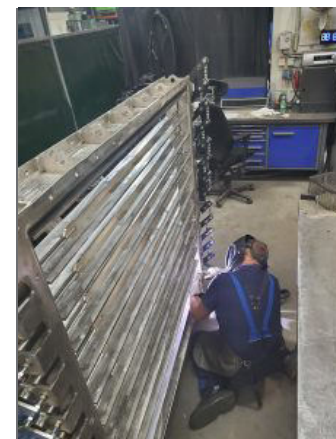


“

Being on par in terms of quality and price only gets you into the game. Service decides the game.

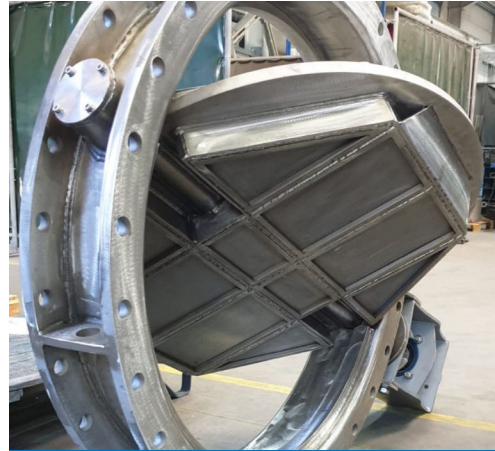
”

M. Karamahmut
CEO



Overview product range

The JASTA product range includes heat and pressure resistant High-performance, Bespoke and Allround valves

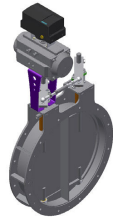


- Valve type: FLD high temperature
- Application: Gas power plant

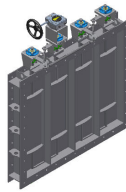
High-performance valves

FOR HIGHEST TECHNICAL REQUIREMENTS

Temperature: Up to 1100 °C
 Pressure: Up to 60 bar
 Sizes: DN 32 to DN 5000



Dual-disc valve



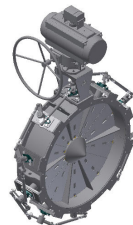
Blinds valve



AB-54



Chick cock valve



Turbine valve

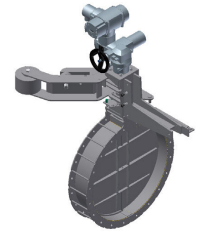
Bespoke valves

FOR SPECIFIC REQUIREMENTS

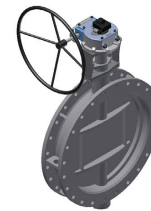
Temperature: Up to 1300 °C
 Pressure: Up to 60 bar
 Sizes: DN 32 to DN 5000



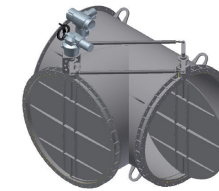
Cement valve



Emergency valve



FLD (high temperature)



T-valve



GD-6 (high-temperature)

Allround valves

FOR PRESSURE AND TEMPERATURE IN NORMAL RANGE

Temperature: Up to 1100 °C
 Pressure: Up to 60 bar
 Sizes: DN 32 to DN 5000



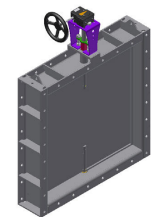
LDK -6, -4, -1



GD-6



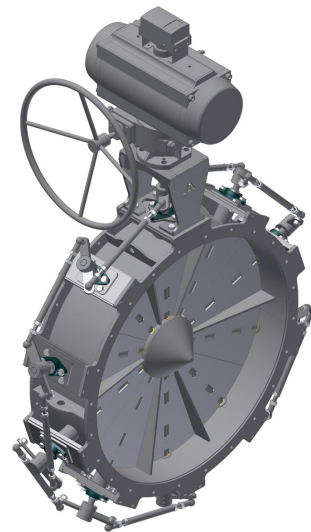
EDR



Blinds valve (RA)

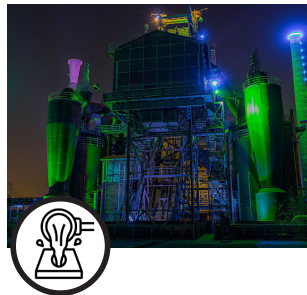
High-performance valves

JASTA High-performance valves withstand highest mechanical and thermal loads – up to 1100 °C



- Type: Turbine valve
- Material: Super Duplex
- Actuation: Manual

Fields of application – examples



METALLURGY

Regulation reci gas:
 • High temperature GD-6,
 Refractory GD-6

Primary air supply:
 • GD-6 high temperature damper



POWER PLANT CONSTRUCTION

Regulation reci gas:
 • Fireproof GD-6
 • Twin emergency valves

Steam regulation:
 • FLD-16



INDUSTRIAL FURNICES

Flue gas control:
 • Acid-resistant valves AB-54,
 GD-6

Regulation reci gas:
 • High temperature GD-6



SHIPBUILDING

Flue gas control:
 • RA emergency valve (delay water ingress in case of sinking)

Ballast water system:
 • FLD-16



AUTOMOTIVE INDUSTRY

Exhaust gas control:
 • RA-Blinds valves

Fresh air control:
 • FLD-16



VENTILATION SYSTEMS

Waste air discharge:
 • Blinds valve (RA)

Fresh air control:
 • FLD-16

High-performance valves - specifications

TEMPERATURE RANGE
 From -100 °C to 1100 °C

PRESSURE RANGE
 Up to 60 bar

DIFFERENTIAL PRESSURE RANGE
 Up to 16 bar

LEAKAGE (KV 90°-VALUE)
 Leakage G (acc. to DIN EN 12266): 0.05%
 Leakage A (acc. to DIN EN 12266): 0%
 (with sealing air application)

NOMINAL WIDTH
 DN: 32-5000

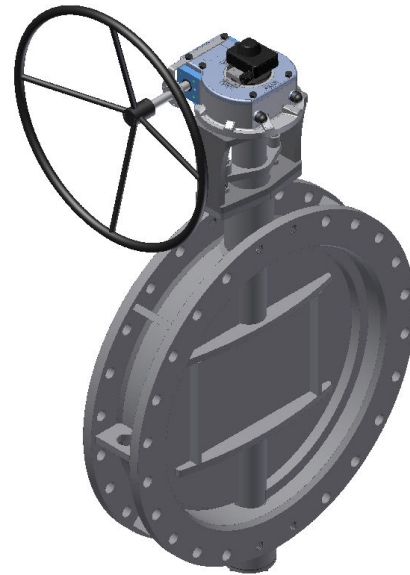
TYPES OF ACTUATION
 Electric, pneumatic, manual

MATERIAL
 Super Duplex, Hardox, Stainless steel, Steel



Bespoke valves

Our special designs are produced according to your technical specifications



- Type: FLD high temperature
- Material: Super Duplex
- Actuation: Manual

Fields of application – examples



INDUSTRIAL FURNICES

- Primary air control:
- FLD-16 high-temperature
- Primary air control:
- GD-6 high-temperature



POWER PLANT CONSTRUCTION

- Primary air control:
- T-valve
- Flue gas regulation:
- Concrete valve

Bespoke valves – specifications

TEMPERATURE RANGE
From -100 °C to 1300 °C

PRESSURE RANGE
Up to 60 bar

DIFFERENTIAL PRESSURE RANGE
Up to 16 bar

LEAKAGE (KV 90°-VALUE)
Leakage G (acc. to DIN EN 12266): 0.05%

NOMINAL WIDTH
DN: 32-5000

TYPES OF ACTUATION
Electric, pneumatic, manual

MATERIAL
Super Duplex, Hardox, Stainless steel, Steel



SHIPBUILDING

- Flue gas discharge:
- GD-6
 - Turbine valve

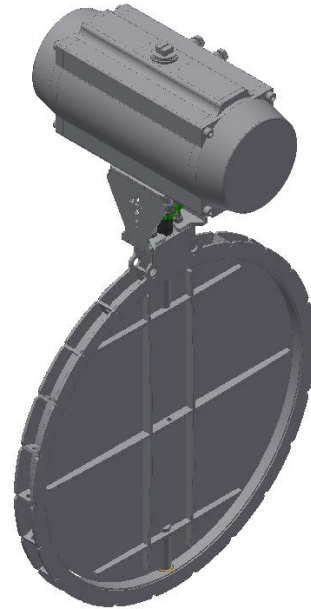


ENVIRONMENTAL ENGINEERING

- Exhaust gas control:
- Ceramic valve
- Exhaust gas control:
- Concrete valve

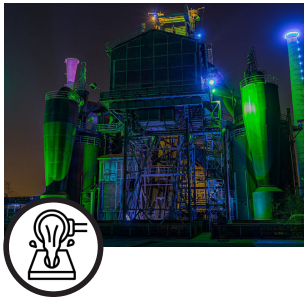
Allround valves

Our allround valves are used for all regular applications



- Type: LDK-6
- Material: Steel
- Actuation: Electric

Fields of application – examples



METALLURGY

Exhaust gas discharge:
• GD-6

Exhaust gas regulation:
• LDK-4



POWER PLANT CONSTRUCTION

Exhaust gas removal:
• GD-6

Regulation of CO2 stream density:
• LDK-4



CHEMICAL INDUSTRY

Regulation of methyl methane cryate inflow:
• GD-6

Regulation process air:
• GD-6

Allround valves – specifications

TEMPERATURE RANGE
From -100 °C to 1300 °C

PRESSURE RANGE
Up to 60 bar

DIFFERENTIAL PRESSURE RANGE
Up to 16 bar

LEAKAGE (KV 90°-VALUE)
Leakage G (acc. to DIN EN 12266): 0.05%

NOMINAL WIDTH
DN: 32-5000

TYPES OF ACTUATION
Electric, pneumatic, manual

MATERIAL
Super Duplex, Hardox, Stainless steel, Steel



SHIPBUILDING

Exhaust gas removal:
• GD-6

Exhaust gas discharge:
• Rectangular valve



AUTOMOTIVE INDUSTRY

Exhaust gas discharge:
• GD-6

Fresh air control:
• Rectangular valve



HOUSING TECHNOLOGY

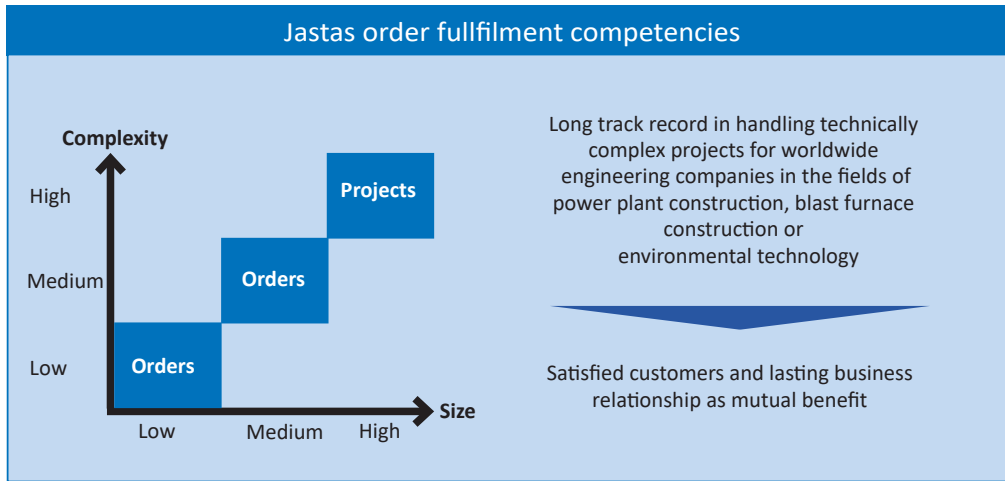
Fresh air supply:
• GD-6, double leaf

Fresh air control:
• Rectangular valve




Technical project management




We handle your orders and complex large-scale projects with equal professionalism

Our small and medium-sized individual orders range from single valves to a large number of technically identical valves.



Complex large-scale projects range from a large number of high-performance valves in different sizes with different actuators up to 150 valves of different series, media and actuators.

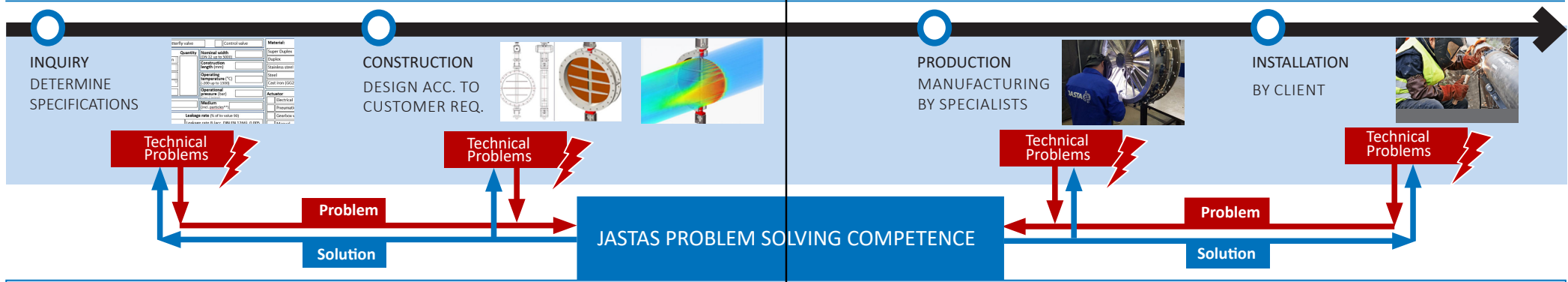
| Order – examples | | |
|---|--|---|
| Client | Application | Product |
| Exchange traded German steel group | Fresh air supply control in blast furnace |  |
| Well-known German manufacturer of control and automation technology | Exhaust gas discharge control in chemical plant |  |
| Global market leader for gas measurement and pressure control | Bypass valve for fresh air supply control in blast furnace |  |

| Complex Projects – examples | | |
|--|---|---|
| Client | Application | Product |
| Major manufacturer of components for energy generation and waste disposal plants | Control valves for fresh air and exhaust air control in gas power plant |  |
| Global manufacturer of control and automation technology | Control valves for exhaust air control in paint factory in China |  |
| Conglomerate in the field of natural gas and oil production technology | Control valves for fresh air supply in natural gas processing plant in Russia |  |

Technical problem solving competence

The customer benefits from JASTA's technical competence built up over decades. At all stages of the process, any problems arising are solved by our expert engineers

JASTA Valves Since 1959



Qualified engineers with relevant experience (e.g. power plant construction, welding engineer)

Technical Manager Dr.-Ing. Yildirim Karamahmut with over 20 years of experience in R&D (e.g. space and aviation industry)

| | | |
|---|--|--|
| <p>1. Customer: A globally leading high performance steel producer (for various industries with specifically demanding requirements)</p> | <p>1. Customer objective: Ensured continuous, i.e. problem-free operation of the process</p> | <p>1. Jasta approach: • Analyzed given operating parameters</p> |
| <p>1. Customer: International Germany-based Maritime engineering and technical services company</p> | <p>1. Customer objective: Accurately controlled pressure and volume flow control in the ballast water</p> | <p>1. Jasta approach: • Captured specific requirements</p> |

Customer description


1. Customer: A globally leading Chemicals company

2. Applications:

- Regulation of Methylmethacrylat inflow
- Regulation of process air loaded with Chlorohydrocarbon particles

3. Jasta Products:

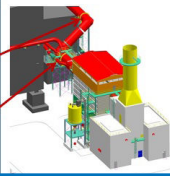
- AB-54
- GD-6



Technical problem description

1. Customer objective:
Ensured process security with acid resistant and long living valves

2. Customer technical challenge:
Existing valves in pipeline were not acid resistant and created need for frequent maintenance and repair intervention thus reducing plant productivity



JASTA technical solution description

1. Jasta approach:

- Determined composition of medium
- Identified environmental conditions
- Captured other customer technical needs (e.g. process security, longevity)

2. Jasta solution:
Designed valves with appropriate materials composition to ensure maximum longevity of valves under given process conditions and guaranteeing process security at the same time

3. Value added by Jasta:
Provided very economic technical solution right on spot on customers


| | | |
|--|--|--|
| <p>1. Customer: International Germany-based Maritime engineering and technical services company</p> | <p>1. Customer objective: Accurately controlled pressure and volume flow control in the ballast water</p> | <p>1. Jasta approach: • Captured specific requirements</p> |
| <p>2. Application: system</p> <p>3. Jasta Product: European natural soda producer (DNV GL)</p> <p>4. Jasta product:</p> | <p>1. Customer objective: Accurately controlled pressure and volume flow control in the ship's system</p> | <p>1. Jasta approach: • Identified the required (max.) volume</p> |

Customer description

1. Customer: Leading German Engineering company

2. Application: Flue gas regulation in gas power plant

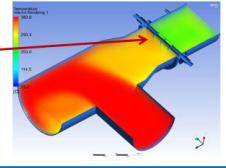
3. Jasta Products: Massive bespoke high temperature valves: FLD 1000°C



Technical problem description

1. Customer objective:
Controlled regulation of high temperature and high pressure environment

2. Customer technical challenge:
Valves withstanding a thermal ramp rate of ΔT 50 K/min in the long-term



JASTA technical solution description

1. Jasta approach:

- Analyzed process conditions
- Designed adequate valve (material and coating)
- Confirmed design in FEM analysis

2. Jasta solution:
High temperature/pressure FLD valves tailored to customer requirements (high Cr content steel and additional resilience via ribbed discs)

3. Value added by Jasta:
Delivered high temperature/high pressure throttle valves resisting extreme temperature and pressure differences (AD2000)

Technical problem solving – Practical example

Our customers always get the best solutions for their technical challenges

Project description: Flue gas control in gas power plant

TECHNICAL PROBLEM CUSTOMER

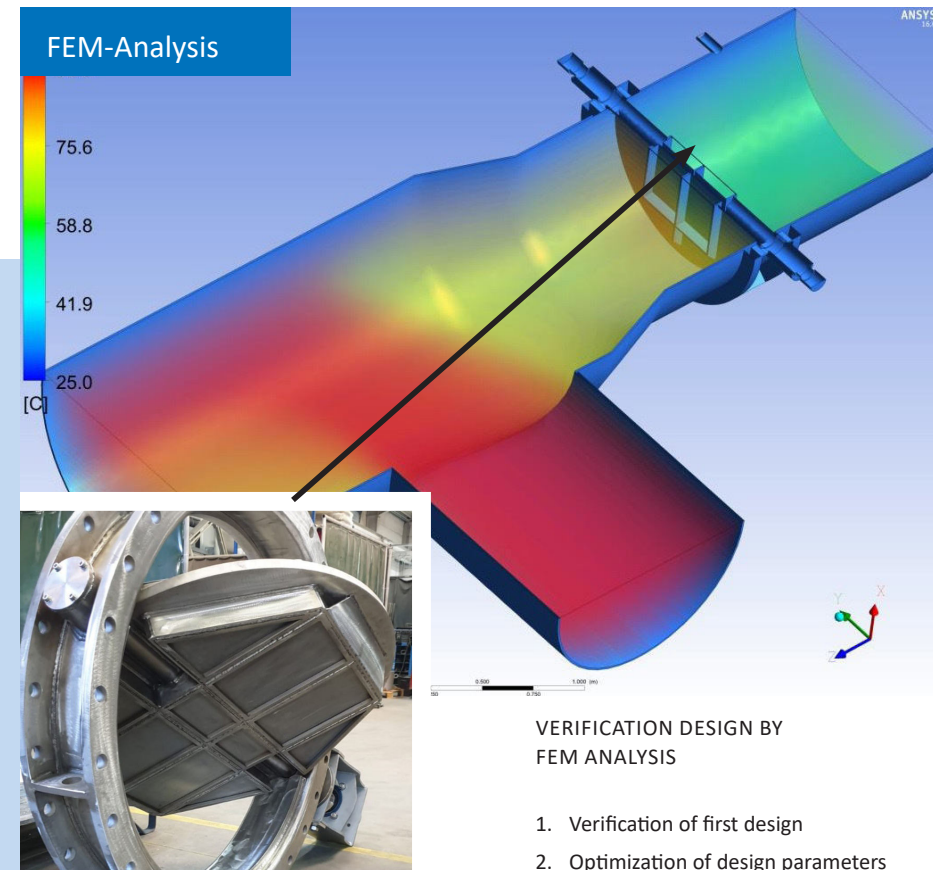
Leading German engineering company required long term resistant valves for flue gas control under extreme conditions (thermal ramp rate of ΔT 50 K/min) in gas power plant

PROBLEM SOLUTION JASTA:

- Analysis of extreme process conditions (high pressure, differential temperature)
- Design of an adequately sized valve (material and coating), in particular:
 - » Increase of the chromium content in the steel to increase the hot strength of the valve
 - » Strength increase of the valve disc by insertion of additional structural elements
- Verification of design by FEM calculation
- Construction of special butterfly valve according to FEM-verified technical specifications

ADDED VALUE CUSTOMER:

Flue gas control under extreme conditions with long-term resistant valves at an excellent price-performance ratio



FLD HIGH TEMPERATURE THROTTLE VALVE

Temperature resistance:
1000 °C

Pressure resistance:
60 bar

Diameter:
DN 3000

“

Customers whose expectations we exceed remain loyal to us.

”

James Loos
Sales Manager





Please challenge us. We look forward to working with you!



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