The background of the advertisement is a photograph of an industrial facility. Two large, white, spherical storage tanks are the central focus, supported by metal legs. They are surrounded by a network of pipes, walkways, and ladders. In the foreground, several large, dark red pipes run parallel to each other. The sky is a clear, bright blue. The overall scene is well-lit, suggesting a sunny day.

**Masoneilan**

a Baker Hughes business

# Masoneilan<sup>TM</sup> Engineered Control Valves

Valve Solutions and Services for the  
World's Toughest Applications

# Integrated Smart Engineered Solutions



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# Smart Severe-Service Technology



## 72000 Series Angle Valve with *Lo-dB™* and *V-LOG™* Trim

Sizes: 6" x 8" through 36" x 48"  
(150 x 200 through 900 x 1200 mm)

### Ratings and Connections:

- Flanged: ANSI 150 - 600  
UNI-DIN 10 - 100  
up to 600 mm
- Welded: BW

### Body Materials:

- Carbon steel
- Stainless steel
- Chrome-moly

### Actuator:

- Cylinder actuators

### Trims:

- Balanced cage guided trim  
(single or double cage)
- Lo-dB and V-LOG trims available

### Inherent Characteristic:

- Linear or equal percentage

**72000 Series valves** are designed for precise capacity control, while efficiently minimizing noise and outlet velocities using single or multiple cages or V-LOG trim.

### Specific applications:

- compressor antisurge
- flare to atmosphere



## 77000 Series Multi-Stage Valves

Sizes: 2" x 3" through 8" x 10"  
(50 x 80 through 200 x 250 mm)

### Ratings and Connections:

- Flanged: inlet ANSI 2500  
outlet ANSI 150 - 2500  
UNI-DIN 10 - 400
- Welded: BW or SW

### Body Materials:

- Carbon steel
- Stainless steel
- Chrome-moly

### Actuators:

- Model 37/38 spring-opposed  
diaphragm
- Cylinder actuators

### Trims:

- Axial flow technology
- Multi-stage trim  
(expanding area type)
- Anti-cavitation, flashing,  
de-gassing, and low noise

### Inherent Characteristic:

- Linear

**77000 Series valves** are multi-stage, expanding area control valves designed primarily for high-pressure compressible fluid or two phase flow applications. They effectively control erosion, de-gassing, and high noise levels.

### Specific applications:

- hot separator letdown
- well-head choke



## 18400 & 78400 Series *LincolnLog™*

Sizes: 1" through 12"  
(25 through 300 mm)

### Ratings and Connections:

- Flanged: ANSI 600 - 2500  
UNI-DIN 100 - 400
- Welded: BW or SW

### Body Materials:

- Carbon steel
- Stainless steel
- Chrome-moly

### Actuators:

- Model 37/38 spring-opposed  
diaphragm
- Model 87/88 multi-spring opposed  
diaphragm
- Cylinder actuators

### Trims:

- Axial flow technology
- Multi-stage, cage-guided,  
anti-cavitation trim
- Class VI available on request

### Inherent Characteristic:

- Linear

The **18400 and 78400 Series valves** used on liquid services eliminate cavitation.

### Specific applications:

- boiler feedwater recirculation
- desuperheater spray water



### 49000 Series Globe and Angle Style with Lo-dB or V-LOG Trim

Sizes: 4" through 36"  
(100 through 900 mm)

**Ratings and Connections:**

- Flanged: ANSI 150-2500  
UNI-DIN 10 - 400
- Welded: BW

**Body Materials:**

- Carbon steel
- Stainless steel
- Chrome-moly

**Actuators:**

- Model 37/38 spring-opposed diaphragm
- Model 87/88 multi-spring opposed diaphragm
- Cylinder actuators

**Trims:**

- Single or double stage Lo-dB and V-LOG energy management trim
- Available in low noise flow-to-open designs or anti-cavitation flow-to-close
- Variety of balanced trim options for Class IV and V shutoff

**Inherent Characteristic:**

- Linear or equal percentage

The **49000 Series valves** are designed with enlarged body galleries to accommodate large stroke lengths and up to 36 stages of pressure reduction. Specific applications: boiler feed water start up and control, steam letdown, pump discharge, water reinjection, gas recycle and vent applications.



### 79003 Series Angle Style with VRT™ Trim

Sizes: 1" through 6"  
(25 through 150 mm)

**Ratings and Connections:**

- Flanged: ANSI 600 - 2500  
UNI-DIN 100 - 400
- Welded: BW

**Body Materials:**

- Carbon steel
- Stainless steel
- Chrome-moly

**Actuators:**

- Model 87/88 multi-spring diaphragm
- Model 37/38 spring diaphragm
- Cylinder actuators

**Trim:**

- Multi-stage VRT trim design and VRT partial stack design for control over a wide range of applications

**Inherent Characteristic:**

- Linear

The **79003 Series valves** are designed for anti-cavitation service with control over a wide range of operating conditions, such as the ramp-up transition of a normal feedwater pump.

**Specific applications:**

- Feedwater control
- Feedwater pump start-up valve



### 84003 Series SteamForm™ Valve

Trim Sizes: 3" through 24"  
(80 through 600 mm)

Pipe Sizes: 3" through 48"  
(80 through 1200 mm)

**Ratings and Connections:**

- Flanged: ANSI 150 - 2500  
UNI-DIN 10 - 400
- Welded: BW

**Body Materials:**

- Carbon steel
- Chrome-moly

**Actuators:**

- Model 87/88 multi-spring diaphragm
- Model 37/38 spring diaphragm
- Cylinder actuators

**Trims:**

- Single or double stage Lo-dB with optional diffuser, and V-LOG energy management trim
- Available with thermally compensated high temperature trim options for long life in high-cycling environments
- Variety of balanced trim options for Class IV and V shutoff

**Inherent Characteristic:**

- Linear or equal percentage

The **84003 Series SteamForm valve** is designed with a wide range of features, including a patented water injection system for best performance in steam conditioning applications.

**Specific applications:**

- Turbine bypass
- Process steam conditioning



## 72000 Series Streamlined Angle Valve

Sizes: 2" x 3" through 10" x 12"  
(50 x 80 mm through  
250 x 300 mm)

Ratings and Connections:  
• Flanged: ANSI 150 - 2500

Body Materials:  
• Carbon steel  
• Stainless steel  
• Chrome-moly

Actuator:  
• Model 87/88 spring-opposed diaphragm  
• Cylinder actuators

Trims:  
• Heavy top plug guiding coupled with a threaded seat ring design to form an outlet Venturi flow path for outlet area protection

Inherent Characteristic:  
• Linear

The **71000 Series valve** is a modified sweep angle valve designed to minimize fluid impingement through the body. This design includes very heavy guiding and durable trim

**Specific applications:**  
• visbreaker, hot hydrocarbon fluid and coking applications



## 73000 Series Sweep Angle Valve

Sizes: 1" x 1" through 10" x 12"  
(25 x 25 mm through  
250 x 300 mm)

Ratings and Connections:  
• Flanged: ANSI 150 - 2500

Body Materials:  
• Carbon steel  
• Stainless steel  
• Titanium  
• Hastelloy  
• Others

Actuators:  
• Model 87/88 spring-opposed diaphragm  
• Cylinder actuators

Trims:  
• High-capacity single stage  
• Reduced port Venturi outlet  
• Ceramic and tungsten carbide optional

Inherent Characteristic:  
• Linear

The **73000 Series valves** control valve is especially suited to throttle highly erosive, flashing, and two phase flows.

**Specific applications:**  
• mining  
• coal slurry  
• ash handling  
• hydrocarbon bottoms



## 75000 Series Tank-Drain Valve

Sizes: 1" x 1" through 10" x 12"  
(25 x 25 mm through  
250 x 300 mm)

Ratings and Connections:  
• Flanged: ANSI 150 - 1500

Body Materials:  
• Stainless steel  
• Titanium  
• Hastelloy  
• Others

Actuators:  
• Cylinder actuators

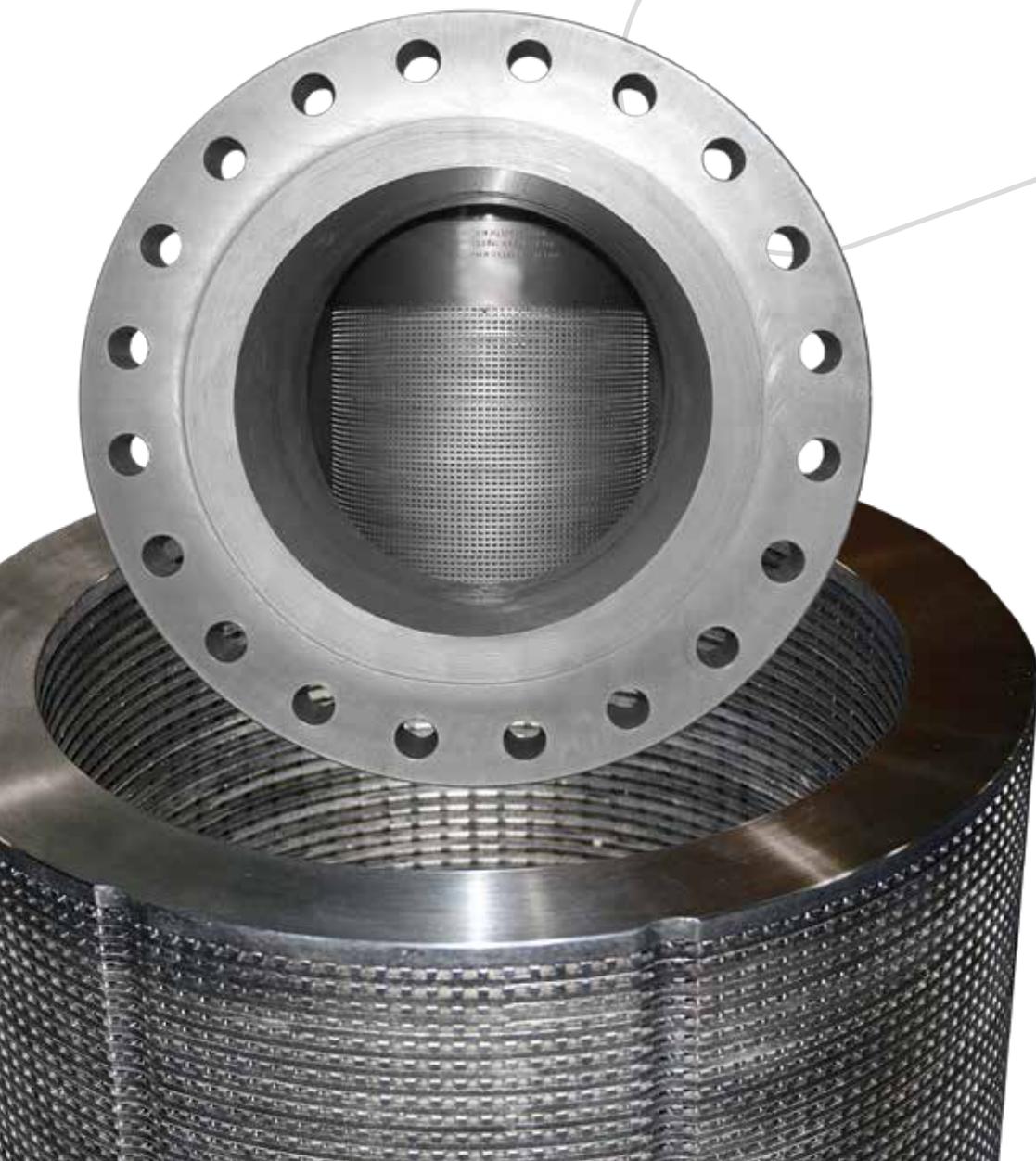
Trims:  
• Single-piece stem and plug design with both top and bottom guiding to eliminate trim vibration at high pressure drops

Inherent Characteristic:  
• Linear or contoured

The **75000 Series** tank-drain valves includes a full sweep-angle design and heavy-duty plug design to minimize erosion impact from solids or debris found in tank bottoms. Valves are available in 45-, 60-,

**Specific applications:**  
• tank level control and pressure letdown applications commonly found in reactor or crystallizer tanks

# Valve Solutions and Services for the World's Toughest Applications



# Direct Sales Office Locations

## Australia

Brisbane  
Phone: +61-7-3001-4319

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## Singapore

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