

ATWOOD & MORRILL® FORGED WYE GLOBE VALVE



DESIGNED FOR CHALLENGING ISOLATION APPLICATIONS

DESCRIPTION

Trillium Valves USA™ has developed a Forged Wye Globe Valve to add to the Atwood & Morrill® product offering.

These valves offer customers a forged material option for combined cycle, critical, super-critical and ultra super critical steam power applications.

Research and experience in combined cycle power plants have shown that cast ASTM A217 C12A valves exposed to elevated temperatures and increased thermal cycling typical of these applications fall short of customer expectations. Imperfections inherent in all castings has resulted in increased maintenance costs. Valves produced in forged ASTM A182 F91 material minimize material defects and provide improved quality and longer life valves.

By developing the Atwood & Morrill® Forged Wye Globe Valve, Trillium Valves USA™ has provided the power industry with a better option.

Trillium's investment in research and development delivered a high integrity solution at a competitive price and lead time. Using A&M's world class engineering processes, the valve offers minimal material defects, which lowers maintenance burdens and total cost of ownership, while ensuring maximum uptime throughout the service life.

KEY FEATURES

- One piece forged body - minimizes material defects and delivers a valve with exceptional durability
- Stem guided poppet eliminates the need for body rib guides
- Tight shut-off with non-jamming angled seats
- Hard faced seating surfaces with Inconel butter layer provides superior bonding to base material

DESIGN FEATURES

- Streamlined flow passage with no obstructions
- Faster operation due to shorter stroke than gate valves
- Yoke Rod Design - Provides easy access to packing gland
- Stem - High strength stainless steel stem with integral backseat and hard faced guide surfaces
- Anti-Rotation Device - Prevents stem rotation and provides position indication
- Seal Ring - Graphite pressure seal ring provides tight reliable closure of the cover



CONFIGURATIONS

- Stop-check valve
- Stop valve
- Lift check valve

APPLICATIONS

- Main steam isolation
- Hot reheat isolation
- Other critical isolation valve applications

SPECIFICATIONS

Design Standard: ASME B16.34

Applicable international specifications as required

PRESSURE CLASSES

ASME 600 to 2500

Special and Intermediate class ratings available

SIZES

Six to 28 inches

Larger sizes available upon request

TEMPERATURE RANGE

up to 1,150°F (up to 620°C)

MATERIALS

ASTM A105

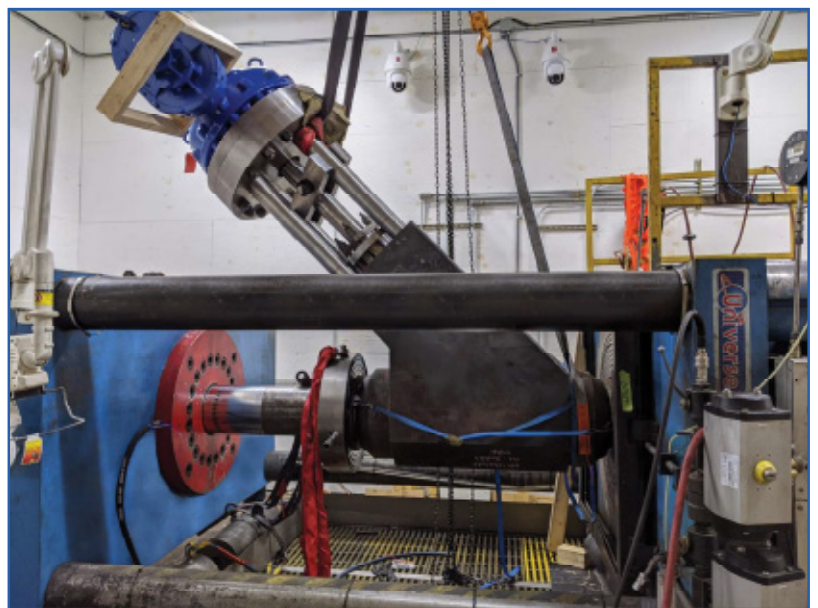
ASTM A182 F11

ASTM A182 F22

ASTM A182 F91



ASSEMBLY AND TEST IN IPSWICH, MASSACHUSETTS USA



ATWOOD & MORRILL® FORGED WYE GLOBE VALVES

TABLE OF DIMENSIONS AND CV CLASS 600

| SIZE INCHES | L (INCHES - END TO END) | WEIGHT (LBS) | CV |
|-------------|-------------------------|--------------|--------|
| 18 | 43.00 | 5,000 | 7,824 |
| 20 | 47.00 | 6,250 | 10,700 |
| 24 | 60.00 | 10,250 | 13,800 |
| 28 | 72.00 | 16,000 | 15,750 |



CLASS 900

| SIZE INCHES | L (INCHES - END TO END) | WEIGHT (LBS) | CV |
|-------------|-------------------------|--------------|----|
| 6 | 26.00 | 1,885 | * |
| 8 | 30.00 | 2,250 | * |
| 10 | 36.25 | 2,650 | * |
| 12 | 43.00 | 4,500 | * |
| 14 | 43.00 | 4,500 | * |
| 16 | * | * | * |
| 18 | 43.00 | * | * |
| 20 | * | * | * |
| 24 | 68.00 | * | * |
| 26 | 68.00 | * | * |

CLASS 1500

| SIZE INCHES | L (INCHES - END TO END) | WEIGHT (LBS) | CV |
|-------------|-------------------------|--------------|--------|
| 6 | 27.75 | 640 | 950 |
| 8 | 30.00 | 1,200 | 1,610 |
| 10 | 36.25 | 2,300 | 2,550 |
| 12 | 43.00 | 3,725 | 3,525 |
| 14 | 43.00 | 3,660 | 3,525 |
| 16 | 54.00 | 5,450 | 6,220 |
| 18 | 63.00 | 6,360 | 6,220 |
| 20 | 54.50 | 7,450 | 8,500 |
| 24 | 59.50 | 12,550 | 12,500 |

CLASS 2500

| SIZE INCHES | L (INCHES - END TO END) | WEIGHT (LBS) | CV |
|-------------|-------------------------|--------------|-------|
| 6 | 24.00 | 650 | 630 |
| 8 | 30.00 | 1,400 | 1,125 |
| 10 | 36.00 | 2,575 | 1,790 |
| 12 | 43.00 | 4,450 | 2,620 |
| 14 | 49.00 | 6,420 | 3,790 |
| 16 | 49.00 | 6,500 | 3,790 |
| 18 | 58.00 | 10,250 | 5,000 |
| 20 | 58.00 | 10,440 | 5,000 |
| 24 | 68.00 | 14,075 | 7,300 |



* Consult factory for additional data.

ATWOOD & MORRILL®

Engineered Isolation & Check
Valves

BATLEY VALVE®

Butterfly Valves

RED POINT®

Tailor-made Valves

BLAKEBOROUGH®

Control, Choke & Steam
Conditioning Valves

HOPKINSONS®

Isolation Valves

SARASIN-RSBD®

Safety & Safety Relief Valves

SEBIM®

Nuclear Pilot Operated Safety
Valves

TRICENTRIC®

Triple Offset Butterfly Valves



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