# ATWOOD & MORRILL® / HOPKINSONS® FORGED PARALLEL SLIDE GATE VALVE









# DESIGNED FOR PERFORMANCE IN HIGH PRESSURE, HIGH TEMPERATURE APPLICATIONS

#### **DESCRIPTION**

Our Atwood & Morrill Forged Parallel Slide Gate Valve was developed for combined cycle, critical, super-critical, and ultra-super-critical steam applications. Valves made of C12A castings when exposed to elevated temperatures and increased thermal cycling have been found to have a propensity to develop stress cracking or linear indications necessitating field repairs that result in a decrease in useful life of the valve.

Forgings help minimize material defects and provide better quality resulting in longer useful life for valves — a high-integrity solution at a competitive price and lead time. Using Trillium Flow Technologies world-class engineering processes, the valve offers minimal material defects, lowering maintenance needs and costs while ensuring maximum uptime throughout its lifecycle.

#### **KEY FEATURES**

- One piece forging process helps minimize material defects and delivers a valve with exceptional durability.
- Yoke Rod Design Provides easy access to packing gland and rigid support for operator.
- Packing Gland Two piece packing gland loads packing evenly, reducing possible damage to the stem.
- Independent Discs are free to rotate, and non-wedging design prevents thermal binding
- Inconel Butter Layer Seating Surfaces (seat rings and discs) provide superior bonding to the base material and support a longer life
- Seats Wide, flat seating surfaces are relatively immune to minor damage that can easily cause leakage in valves that utilize line contact seating.
- Stem High strength heat treated stainless steel stem with backseat.
- Anti-Rotation Device Position indicator eliminates torque wear of seats.
- Seal Ring Tight reliable closure of the cover is assured by the use of a graphite seal ring.
- Carrier Ring Durable carrier ring is securely threaded and pinned to the stem.
- Disc Spring A light, fully captured, non-corrodible spring keeps both discs in close contact with the seats at all times.





#### **APPLICATIONS**

- Main Steam Isolation
- Hot Reheat Isolation
- Other critical isolation valve applications

#### **SPECIFICATIONS**

Design Standard: ASME B16.34 and applicable international specifications as required

#### PRESSURE CLASSES

ASME 600 to 2500 Special and Intermediate ratings available Sizes:  $6\mbox{\tt "}$  to  $28\mbox{\tt "}$ 

Larger sizes available upon request

#### **SIZES**

6" to 28"

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

#### HISTORY

TRILLIUM Valves USA<sup>TM</sup> is a pioneer in valve design with nearly 120 years of experience.

#### PROVEN TRACK RECORD

The overall A&M® installed base is unparalleled. Our valves are integral in Coal, Combined Cycle and Nuclear plants worldwide.

#### **QUALITY**

We hold the following quality certificates: ISO 9001, ASME N & NPT Stamps, SIL3 (FREE FLOWTM) and PED.

#### **PARTS & SERVICE**

As the OEM, TRILLIUM Valves USA<sup>TM</sup> offers spare parts and field service to support our valves long after the sale



## ATWOOD & MORRILL FORGED PARALLEL SLIDE GATE VALVES

# TABLE OF DIMENSIONS AND CV CLASS 600

SIZE INCHES	L	Н	CV
16	39.00	49.00	15,920
18	43.00	53.88	20,005
20	47.00	75.63	24,536
24	55.13	73.62	36,005

#### **CLASS 900**

SIZE INCHES	L	Н	CV
6	20.00	25.38	2,300
8	26.00	30.38	3,950
10	31.00	37.50	6,200
12	36.00	42.88	8,700
14	39.00	48.88	10,550
16	43.00	52.50	13,800
18	48.00	58.69	17,500
20	52.00	63.75	21,550
24	61.00	73.63	31,000

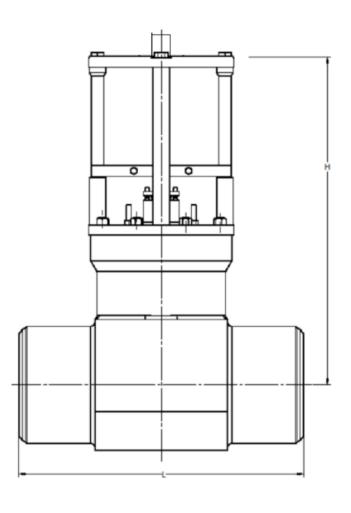
#### **CLASS 1500**

Size INCHES	L	Н	CV
6	22.00	25.63	1,900
8	28.00	31.75	3,250
10	34.00	38.69	5,100
12	39.00	45.00	7,150
14	42.00	47.25	8,600
16	47.00	55.50	11,300
18	53.00	59.00	14,250
20	58.00	65.75	17,900
24	66.00	74.88	25,700

#### **CLASS 2500**

Size INCHES	L	Н	CV
6	24.00	28.25	1,150
8	30.00	36.69	1,950
10	36.00	38.50	3,150
12	41.00	44.00	4,450
14	44.00	49.00	5,400
16	49.00	57.00	7,050
18	55.00	65.00	8,950
20	60.00	66.63	10,900
24	68.00	76.38	15,750











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