

The background of the entire page is a photograph of an industrial refinery or chemical plant at night. The facility is illuminated with numerous bright lights, creating a complex network of pipes, towers, and scaffolding against a dark sky with some light clouds. The lights are primarily yellow and white, highlighting the intricate structure of the plant.

VALVES OVERVIEW

BLAKEBOROUGH®



General Service

Features

- Top and bottom guided
- Contour trim
- Low pressure applications

Class - ASME 150-600
Sizes - 1 1/2" - 6" (40mm-150mm)

BLAKEBOROUGH®



Choke

Features

- Stable cage guiding
- Erosion resistance
- Tungsten carbide trims
- High pressure drop control
- API designs available

Class - ASME 150-4500
Sizes - 1" - 24" (25mm-600mm)

BLAKEBOROUGH®



Small Size Control

Features

- Low Cv control
- High pressure drop
- Cage & seat guided
- Suitable for all applications
- Multi-stage trims available

Class - ASME 150-4500
Sizes - 1/2" - 1" (15mm-25mm)

BLAKEBOROUGH®



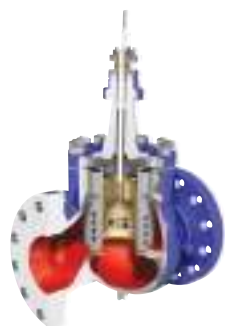
Mini Desuperheater

Features

- Steam conditioning for small pipe sizes
- Separate water control

Class - ASME 150-2500
Sizes - 1/2" - 12" (15mm-300mm)

BLAKEBOROUGH®



Cage Guided Control

Features

- Stable cage guiding
- Single & multi-stage trims
- Used to eliminate effects of cavitation, flashing, noise & medium pressure drops

Class - ASME 150-4500
Sizes - 1 1/2" - 36" (40mm-900mm)

BLAKEBOROUGH®



Pipe Desuperheater

Features

- Integrated water control
- Atomising nozzles
- Water is injected along the pipe centreline

Class - ASME 150-2500
Sizes - 6" - 36" (150mm-900mm)

BLAKEBOROUGH®



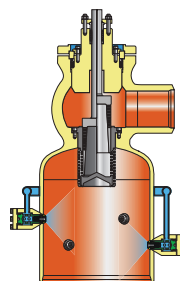
X-Stream™ Severe Service

Features

- Stable cage guiding
- Trim velocity control
- Patented flow path
- Used in high pressure drop applications

Class - ASME 150-4500
Sizes - 2" - 24" (50mm-600mm)

BLAKEBOROUGH®



Turbine Bypass

Features

- Pressure reducing & desuperheating as an integral unit
- Noise & stable pressure control
- Water atomising nozzles

Class - ASME 150-4500
Sizes - 1 1/2" - 36" (40mm-900mm)

BLAKEBOROUGH®



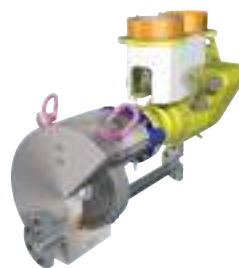
Double Seated Control

Features

- Top and bottom guided
- Contour trim
- Double seated valve for high capacities
- Ideal for mixing applications

Class - ASME 150-1500
Sizes - 1 1/2" - 36" (40mm-900mm)

MAC®



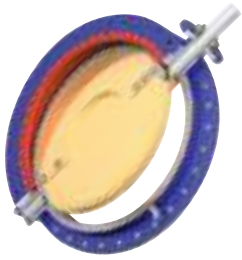
Rotary Gate

Features

- No displaced volume or cavity
- Straight through design: no bends
- Adaptable for isolation, chemical injection & throttling

Class - API 3000-15000
Sizes - 1" - 6" (25mm-150mm)

BATLEY VALVE® & BDK™ Softseal

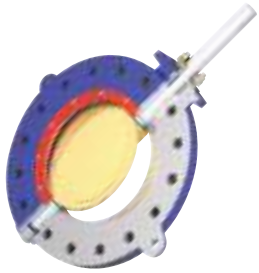


Features

- Low cost option for low temperature water sealing
- Rubber seal located on valve disk
- Single & double offset designs

Class - ASME 150-600
Sizes - 6" - 80" (150mm-2000mm)

BATLEY VALVE® & BDK™ Hyperseal/Metalseal

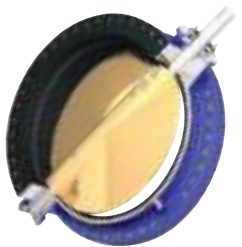


Features

- Single & double offset designs
- Seal clamped into valve body
- Resilient seated, metal seated, fire safe & swing through options

Class - ASME 150-900
Sizes - 3" - 64" (80mm-1600mm)

BATLEY VALVE® & BDK™ Rubber Lined



Features

- Low cost solution for controlling low temperature corrosive fluids
- Body & shaft material fully isolated from fluid

Class - ASME 150-300
Sizes - 3" - 64" (80mm-1600mm)

BATLEY VALVE® Anti-cavitation Disk



Features

- Swing through & Hyperseal designs
- Anti-cavitation cowl to prevent cavitation at reduced valve openings

Class - ASME 150-2500
Sizes - 4" - 64" (100mm-1600mm)

TRICENTRIC® Triple offset



Features

- Metal seat design
- Long life seats
- Bi-directional tight sealing
- API 598 - zero leakage

Class - ASME 150-900
Sizes - 2" - 120"

ATWOOD & MORRILL® FREE FLOW™ Reverse Current



Features

- Free-swinging disk allows independent movement with assured closure
- Inclined seat design
- Self aligning disk & disk arm

Class - ASME 150-1500
Sizes - 3" - 48" (80mm-1200mm)

ATWOOD & MORRILL® Boiler Feed Check



Features

- Double protection including positive closure & power-assisted closure
- Streamlined flow passages minimises pressure drop

Class - ASME 900-2500
Sizes - 4" - 24" (100mm-600mm)

ATWOOD & MORRILL® Compressor Check



Features

- Tight sealing pressure
- Low pressure drop
- Power-assisted
- Quick closure

Class - ASME 150-300
Sizes - 8" - 56" (200mm-1400mm)

ATWOOD & MORRILL® Wye Type Check



Features

- Y for lower pressure loss
- Bevelled seats for tight sealing
- Large seat bore for reduced pressure drop
- Prevents failure of valve stem

Class - ASME 900-2500
Sizes - 6" - 24" (150mm-600mm)

ATWOOD & MORRILL® Three Way



Features

- Allow two different flow directions from the same valve
- Simplifies piping layout
- Installation & maintenance savings

Class - ASME 150-2500
US Sizes - 6" - 24" (150mm-600mm)
UK Sizes - 2" - 24" (40mm-600mm)

HOPKINSONS®

Full Bore Parallel Slide



Features

- Full bore straight through design
- Complete flow isolation in either direction
- Suitable for any temperature

Class - ASME 150-3100

Sizes - 1/2" - 36" (15mm-900mm)

HOPKINSONS®

Flexi-Wedge Gate



Features

- Bonnet over-pressure protection
- Flexible wedge design
- Precision body guides
- Bi-directional operation

Class - ASME 150-2500

Sizes - 3" - 24" (80mm-600mm)

HOPKINSONS®

Venturi Parallel Slide



Features

- Smooth transitional flow
- Anti-vibration disk arrangement
- Minimum pressure drop
- Self aligning disks
- Sealing achieved by fluid

Class - ASME 150-3100

Sizes - 1/2" - 26" (15mm-650mm)

HOPKINSONS®

Globe Isolation



Features

- High integrity shut-off
- Patented high grade nickel alloy seats
- Linear rising stem

Class - ASME 2500-3100

Sizes - 1/2" - 2" (15mm-50mm)

HOPKINSONS®

Forged Parallel Slide



Features

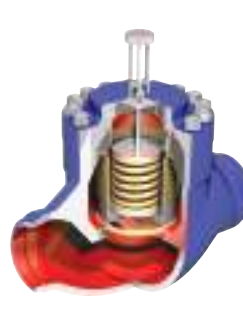
- Superior forged material
- Ideal for high temperatures
- Minimum pressure drop
- Isolation in both directions

Class - ASME 900-4500

Sizes - 3" - 26" (80mm-650mm)

HOPKINSONS®

Feed Heater Bypass



Features

- Recognised industry standard for extraction steam turbine protection
- Positive, tight sealing, fast closure & low pressure drop

Class - ASME 900-2500

Sizes - 1" - 36" (25mm-900mm)

HOPKINSONS®

High Performance Drain



Features

- Can be installed singly or in a master and martyr configuration
- Winged seats
- Square gates

Class - ASME 900-3600

Sizes - 3/4" - 4" (20mm-100mm)

BDK™

Low Pressure Wedge Gate



Features

- Sealing by wedge disk
- High integrity closure
- Ideal for general service shut-off applications
- Flanged bonnet

Class - ASME 150-2500

Sizes - 1/2" - 120" (15mm-3000mm)

HOPKINSONS®

Uniflow Slide



Features

- Globe design with parallel slide design seating technology
- Ideal for isolation in small process lines
- Uni-directional sealing

Class - ASME 2500-3100

Sizes - 3/8" - 2" (10mm-50mm)

BDK™

Pressure Seal Bonnet Wedge Gate



Features

- Sealing by wedge disk
- High integrity closure
- Pressure seal bonnet
- Bypass designs available

Class - ASME 900-2500

Sizes - 12" - 120" (300mm-3000mm)

SARASIN-RSBD®

Spring Loaded Safety Relief



Features

- Full lift
- Full nozzle design
- Metal or soft seat
- Cast of forged body

Class - ASME 150-2500
Sizes - 1/2" - 12" (15mm-300mm)

BDK™

2 Piece Trunnion Ball



Features

- Ability to offer in smaller sizes
- Low emission & positive sealing
- Constant operating torques
- Proven design
- Smooth operation

Class - ASME 150-2500
Sizes - 2" - 48" (50mm-1200mm)

SARASIN-RSBD®

Spring Loaded Safety



Features

- Operating pressure up to 95% of the set pressure
- Slide rods design allows ease of maintenance
- Electronic valve tester adaptor

Class - ASME 150-4500
Sizes - 1" - 8" (25mm-200mm)

BDK™

3 Piece Trunnion Ball



Features

- Ability to offer in smaller sizes
- Low emission & positive sealing
- Constant operating torques
- Proven design
- Smooth operation

Class - ASME 150-2500
Sizes - 2" - 48" (50mm-1200mm)

SARASIN-RSBD®

Pilot Operated Safety Relief



Features

- Semi or full nozzle design
- Metal or soft seat
- Non flowing pop or modulating action
- Operating pressure upto 95%

Class - ASME 150-2500
Sizes - 1/2" - 12" (15mm-300mm)

BDK™

Check



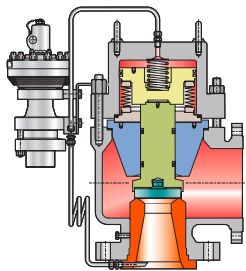
Features

- Heavy duty cover
- Pressure seal cover available
- Integral seat ring

Class - ASME 150-2500
Sizes - 2" - 48" (50mm-1200mm)

SARASIN-RSBD®

Pilot Operated Safety



Features

- Full metal design (no elastomer) for very high temperatures
- Up to 180 barg of steam
- Non flowing pop action

Class - ASME 150-2500
Sizes - 1" - 8" (25mm-200mm)

BDK™

Diaphragm



Features

- Manually operated or diaphragm operated
- Trillium type design option
- Straight type design option
- Can be instrumented for control

Class - ASME 150-300
Sizes - 1/2" - 14" (15mm-350mm)

SEBIM®

Nuclear Pilot Operated



Features

- Excellent stability across steam, gas, liquid & two-phase conditions
- Design standard: RCC-M, ASME III, NP-068-05, OTT 87

Class - ASME 150-2500
Sizes - 1/2" - 34" (15mm-850mm)

BDK™

Plug











Features

- PTFE sleeved
- Fully jacketed with higher size flange
- Complies to API 599, BS 5353, API 6D

Class - ASME 150-600
Sizes - 1/2" - 16" (15mm-400mm)

		Application														Manufacturing Location									
		Acid service	Chemical processing	Corrosive gases	Cryogenic	Fire protection	Gas pressure	Marine Seawater	Molten Salt	Oil & Gas	Petrochemical	Pharmaceuticals	Power Generation	Water treatment	Steam pressure	Steam conditioning	Subsea	Nuclear	China <small>(Trillium Flow Technologies Suzhou Ltd.)</small>	UK <small>(Trillium Flow Technologies UK LTD.)</small>	France <small>(Trillium Flow Technologies France SAS.)</small>	India <small>(Trillium Flow Technologies India Private Ltd.)</small>	South Korea <small>(Trillium Flow Technologies Korea, Inc.)</small>	USA <small>(Trillium Valves USA)</small>	
	Full Bore Parallel Slide		■				■				■	■	■		■			■	■	■		■		■	
	Venturi Parallel Slide		■				■				■	■	■		■			■	■	■					
	Forged Parallel Slide		■				■				■	■	■		■			■	■	■		■		■	
	High Performance Drain											■		■				■	■	■		■			
	Uniflow Slide											■		■				■		■					
	Flexi-Wedge Gate											■		■				■	■	■					
	Globe Isolation		■				■				■	■	■		■			■	■	■		■			
	Feed Heater Bypass												■					■		■					
	Low Pressure Wedge Gate	■	■	■	■	■	■		■	■	■	■	■	■	■				■	■			■		
	High Pressure Wedge Gate	■	■	■	■	■	■		■	■	■	■	■	■	■				■	■			■		
	Spring Loaded Safety Relief	■	■	■	■	■	■	■	■	■	■	■	■	■				■	■		■	■			
	Spring Loaded Safety											■		■				■			■				
	Pilot Operated Safety Relief	■	■	■	■	■	■	■	■	■	■	■	■	■				■			■				
	Pilot Operated Safety	■	■	■	■	■	■	■	■	■	■	■	■	■				■			■				
	Nuclear Pilot Operated	■	■	■	■	■	■	■	■	■	■	■	■	■				■			■				
	2 Piece Trunnion Ball	■	■	■	■		■	■	■	■	■	■	■					■				■			
	3 Piece Trunnion Ball	■	■	■	■		■	■	■	■	■	■	■					■				■			
	Check	■	■	■	■		■	■	■	■	■	■	■					■				■			
	Diaphragm		■				■		■	■	■	■	■					■				■			
	Plug		■		■	■		■	■	■	■	■	■					■				■			

		Application														Manufacturing Location							
		Acid service	Chemical processing	Corrosive gases	Cryogenic	Fire protection	Gas pressure	Marine Seawater	Molten Salt	Oil & Gas	Petrochemical	Pharmaceuticals	Power Generation	Water treatment	Steam pressure	Steam conditioning	Subsea	Nuclear	China <small>(Trillium Flow Technologies Suzhou Ltd)</small>	UK <small>(Trillium Flow Technologies UK Ltd)</small>	France <small>(Trillium Flow Technologies France SAS)</small>	India <small>(Trillium Flow Technologies India Private Ltd)</small>	South Korea <small>(Trillium Flow Technologies Korea, Inc)</small>
Control Valves		General Service	■	■	■		■	■	■	■	■							■	■				
		Small Size	■	■	■	■		■	■	■	■	■		■	■			■	■		■	■	
		Cage Guided	■	■	■	■		■	■	■	■	■		■	■			■	■		■	■	
		Severe Service	■	■	■	■		■	■	■	■	■		■	■			■	■		■	■	
		Contour Trim	■	■	■	■		■	■	■	■	■		■	■					■		■	
		Choke			■			■	■	■									■	■		■	
		Rotary Gate								■										■			
		Mini Desuperheater				■							■		■				■	■			■
		Pipe Desuperheater				■							■		■					■			■
		Turbine Bypass											■		■				■	■			■
Butterfly Valves		Softseal					■		■										■				
		Hyperseal/Metalseal	■	■	■	■	■	■	■	■	■	■	■	■	■	■			■	■			
		Rubber Lined		■					■	■									■				
		Anti-cavitation	■	■	■	■	■	■	■	■	■	■	■	■	■	■			■	■			
		TRICENTRIC®	■	■	■	■	■	■	■	■	■	■	■	■	■	■			■			■	■
Check Valves		FREE FLOW™ Reverse Current		■				■	■	■	■		■	■				■	■			■	■
		Boiler Feed Check											■						■			■	■
		Compressor Check						■											■			■	■
		Wye Type											■		■				■				■
		Three Way											■						■				■



Valve Services

Site Service	Workshop Services	Service Plans
Outage, shutdown and turnaround management	Mechanical valve overhaul and refurbishment	24hr Customer Service Number
Overhaul and refurbishment	Valve pressure testing	48hr Service Response Engineer
Installation and commissioning	Upgrades and modifications	L TSA (Long Term Service Agreement)
In-situ valve seat replacement	Control valve service, maintenance and monitoring	Embedded engineering programmes
In-situ testing and monitoring	Actuator servicing and torque testing	Asset management
Turnkey project management	Service exchange programmes for valves and actuators	Bespoke service management

