

Building connections that last™



# Mining Products

We have the **solutions** to meet your needs.



**There's a reason everyone knows the name Gruvlok.** These products set the industry standard for grooved couplings, valves, fittings, and accessories. They are used in mining applications such as process, tailings and slurries for large O.D. steel pipe that is normally rubber lined. They offer an easy and quick way to replace damaged or worn pipe. Gruvlok couplings for grooved end pipe are available in nominal pipe sizes 1" through 30" and in metric sizes. The variety of coupling designs provides a universal means for the connection of pipe, fittings, and pipe system components. The wide assortment of Gruvlok couplings and gaskets permits selection of the most suitable combination for a specific application, thus providing the most versatile and economical pipe installation.

- Provides flexibility above ground and below
- Reduces pipe assembly time 50% or more
- Provides union at every joint for easy retrofit and maintenance
- Leak tight joints



## ASC Engineered Solutions™ understands the challenges the mining industry faces every day.

**We're committed to not only supplying quality, long-lasting products, but also on building strong connections with our customers by listening to those in the field and those leading their organizations. We know having a partner that you can rely on is critical for your business and your peace of mind.**

Hard rock mining necessitates grooved-end piping products that adapt to the corrosive atmosphere and facilitate easy installation, preventing costly mining accidents. The products have to be as tough as the environment they're installed in. The cornerstone of safety in the mining environment is selecting the best product for the operation.

ASC manufactures a broad range of products that protect against pipe deflection and movement. Our comprehensive line of durable products with a highly responsive customer service team, creates a level of support that is unmatched in the mining industry.

Our products are built to withstand the extreme conditions and safety requirements that mining presents. Corrosion, extreme temperatures, abrasive materials?

**We have the solutions to meet your needs.**

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### Material Specifications:

Housing: Ductile Iron conforming to ASTM A536, Grade 65-45-12 or Malleable Iron conforming to ASTM A47, Grade 32510

Gaskets: EPDM, Nitrile, Fluoro Elastomer, Silicone with properties as designated in accordance with ASTM D2000 for each gasket grade.



**Fig 7001**  
Standard Coupling

- Working pressures up to 1000 psi
- Ideal for process piping, mining and oil field piping
- Available in 1" - 30" diameters



**Fig 7003**  
Hingelock Coupling

- Working pressures up to 300 psi
- Designed for quick connection and/or disconnection of a pipe joint. Coupling halves are hinged for ease of handling and secured by a cam-action handle
- Available in 1" - 8" diameters



**Fig 7004**  
Coupling (Available with Endguard gasket)

- Working pressures up to 1200 psi
- Designed to provide a versatile, rigid grooved joint
- Available in 2" - 12" diameters



**Fig 7005**  
Roughneck Coupling

- Working pressures up to 750 psi
- Cost effective method joining plain or beveled end pipe. Enable complete piping system install without any pipe end prep
- Grippers bite into the outside diameter of the steel pipe
- Available in 2" - 18" diameters



- Fig 7022**  
**Weld Ring Gruv-Ring Coupling**
- Working pressures up to 175 psi
  - Designed for large O.D. mining applications like process tailings and slurries
  - Forms a flexible grooved end joint for use on 30" - 60" steel pipe



- Fig 7377**  
**Double Groove Coupling**
- Working pressures up to 4000 psi
  - Flexible coupling utilizing double groove technology designed for high pressure piping applications
  - Designed for use in high pressure applications like mining, oil, gas, slurry, sludge and hydraulic systems



- Fig 7401**  
**Rigidlok Coupling**
- Working pressures up to 750 psi
  - Designed for use with roll groove or cut grooved standard weight and roll grooved light weight pipe, and grooved end fittings and valves



- Fig 74**  
**SlideLOK ready for installation coupling**
- Working pressures up to 750 psi
  - Designed to reduce install time and allow for greater flexibility during installation
  - Available in 2" - 8" diameters



- Fig 7788**  
**Flange Adapter**
- Enables direct connection of class 125 or 150 flanged components to a grooved piping system
  - Alternative to Gruvlok fig 7012 flange



- Fig 7305**  
**HDPE Coupling**
- Designed for mechanically joining HDPE pipe and fittings
  - Pressure capabilities exceed that of HDPE pipe itself
  - Available in 2" - 18" diameters



- Fig 7307**  
**HDPE Transition Coupling**
- Enables transition from HDPE pipe or fittings to grooved end pipe prepared per standard or roll groove specification for steel pipe
  - Temperature and pressure capabilities exceed the highest ratings of HDPE pipe
  - Available in 2" - 12" diameters



- Fig 7312**  
**HDPE Flange Adapter**
- Forms a cost effective, easy to assemble mechanical joint between HDPE pipe and fittings and ANSI Class 150 piping components without the use of fusion equipment
  - Pressure capabilities exceed that of HDPE pipe



- Fig 7042**  
**Outlet Coupling**
- Joins two sections of grooved end pipe and forms a reducing outlet connection
  - Available for 1-1/2" - 6" IPS or ISO run pipe sizes and outlet pipe sizes from 1/2" - 2"



- Fig 7045**  
**Clamp-T, FTP Branch**
- Provides a quick and easy outlet at any location along the pipe.
  - Provides for optimum flow performance
  - Working pressures up to 500 psi

Gruvlok ball and butterfly valves are valued in mining applications for their durability, long service life, and other features that make them ideal for the harsh environments mining entails.



- Series 7500 Ball Valve**
- Available in 2" - 6" diameters
  - Bubble-tight shut off
  - Blow-out proof stem for safety
  - Two position locking handle
  - Ductile iron body ASTM A395
  - Ball - stainless steel 304 or 316
  - Sizes 4" & 6" available with mining handle
  - Working pressures up to 800 psi



- Series 7600 Butterfly Valve**
- Epoxy lining
  - EPDM or nitrile coated disc
  - Two position, detent handle
  - Long service life
  - Low torque operation
  - End-of-line service capabilities
  - Available in 2" - 6" diameters
  - Working pressures up to 200 psi



- Series 7700 Butterfly Valve**
- Lockout handle
  - 300 psi, bubble-tight shut-off
  - Outstanding flow characteristics
  - Low torque operation
  - Superior flow control
  - Thin profile disc
  - Standard valve eliminates the need for stainless, bronze, or galvanized options
  - Available in 2" - 12" diameters



- Series 7800 Check Valve**
- Compact design
  - Swing clapper design
  - Quick, non-slam closure
  - Full flow
  - Ductile iron body
  - Sizes 2" - 12 psi 300
  - Working pressures up to 300 psi

Sharpe Valves portfolio for metals and minerals processing provides high performance at a low cost of ownership (TCO) and are trusted solutions for utility applications such as chemical feed, gas, steam, and numerous water applications.



**Series 80 & 89**  
**3-Piece Ball Valves**

- Series 80: Standard Port
- Series 89: Full Port
- Series M80 & M89: Metal Seated
- Series CF80 & CF89: with Cavity Fillers
- ASME Class 800 & 300
- 1/4"–4" (dependent on configuration)
- Carbon Steel & Stainless Steel
- End Connections: Threaded, Socket Weld, Butt Weld, Flush Mount Tank Bottom Connection
- Encapsulated body seal allows valve to be welded in line without disassembly
- Blow-out proof stem
- Live-loaded stem packing as standard
- Locking handle standard
- ISO 5211 Top Mounting Pad – Automatable



**Series 84 & 99**  
**3-Piece Ball Valves**

- Series 84: Standard Port
- Series 99: Full Port
- ASME Class 600 & 300
- 1/4"–4" (dependent on configuration)
- Carbon Steel, Stainless Steel, Hastelloy C
- End Connections: Threaded, Socket Weld, Butt Weld, Flush Mount Tank Bottom Connection
- Encapsulated body seal allows valve to be welded in line without disassembly
- Blow-out proof stem
- Live-loaded stem packing as standard
- Locking handle standard
- ISO 5211 Top Mounting Pad – Automatable



**Series V84**  
**V-Ball, 3-Piece Control Ball Valves**

- Sizes: 1/4"–4"
- Choice of 15°, 30°, 60°, 90° V-port balls
- Carbon Steel & Stainless Steel
- End Connections: Threaded, Socket Weld, Butt Weld, Flanged
- Encapsulated body seal allows valve to be welded in line without disassembly
- Blow-out proof stem
- Live-loaded stem packing as standard
- ISO 5211 Top Mounting Pad – Automatable



**Multi-Port Ball Valves**  
**Various flow configurations**

- Tight shut-off
- Up to 8"
- 600 CWP, 1000 CWP, Class 150, Class 300, & Class 600 Designs
- Carbon Steel & Stainless Steel
- End Connections: Threaded, Socket Weld, Flange
- Blow-Out Proof Stem
- Live-loaded stem packing as standard
- Lockable handle as standard
- ISO 5211 Top Mounting Pad – Automatable



**Standard Port, Two-Piece Ball Valves**  
**Series 5457 & 588**

- Bi-directional, bubble tight shut-off
- Sizes: 1/4"–2"
- Series 588: 800 CWP, Stainless Steel
- Series 5457: 1500 & 2000 CWP, Carbon Steel & Stainless Steel
- Body Materials: Cast Stainless Steel
- Standard: MSS SP-110
- Threaded End Connections
- Blow-Out Proof Stem
- Lockable Handle as standard



**Series 70 & 74**  
**Flanged Ball Valves**

- Series 70: Full Port, 2-Piece Design
- Series 74: Standard Port, Unibody Design
- Series M70 & M74: Metal Seated
- Series FS50 & FS54: API 607 Fire-Safe
- Series CF70 & CF74: with Cavity Fillers
- ASME Class 150 & 300
- 1/2"–4" (dependent on configuration)
- Carbon Steel & Stainless Steel
- API 608
- Blow-out proof stem
- Live-loaded stem packing as standard
- Locking handle standard
- ISO 5211 Top Mounting Pad – Automatable



**Series 50 & 54**  
**Flanged Ball Valves**

- Series 50: Full Port, 2-Piece Design
- Series FS50 & FS54: API 607 Fire-Safe
- Series 54: Standard Port, Unibody Design
- ASME Class 150, 300, 600 (dependent on configuration)
- 1/2"–12" (dependent on configuration)
- Carbon Steel & CF8M 316 Stainless Steel
- Blow-out proof stem
- Live-loaded stem packing as standard
- Locking handle standard
- ISO 5211 Top Mounting Pad – Automatable



**Actuation**  
**Series SPNII:**  
Pneumatic Rack & Pinion

**Series 4x4:**  
Four piston compact pneumatic

**Series SG:**  
Manual Gear Operators



Quadrant valves feature a broad range of floating ball valves, actuators, and actuation accessories. Quadrant valves delivers field proven, reliable shutoff isolation valves and automated valve solutions for mining applications.



ABZ Valve is an industry trusted source for shutoff isolation valves and automated valve solutions for use in demanding mining applications. ABZ offers a complete range of butterfly valves from general purpose rubber seated to high performance double and triple offset.



**Fig S3 QVA**  
Seal Welded High Pressure Ball Valves  
Size Range: 3/4" - 2"

- ASME B16.34 Class 1500, Fully Compliant
- 3705 PSI CWP Rating on WCB Construction
- 3600 PSI CWP Rating on CF8M Construction
- Full Port and Reduced Port Versions Available
- Materials: Seal welded stainless or carbon steel, Stainless steel locking handles
- NACE MR-01-75 Compliant
- API 607 Fifth Edition Fire Safe
- Delrin or PEEK Seats



**Fig S6 QVA**  
Seal Welded Extreme Pressure Ball Valves  
Size Range: 1/4" to 2"

- ASME B16.34 Class 2500, Fully Compliant
- 6170 PSI CWP Rating on WCB Construction
- 6000 PSI CWP Rating on CF8M Construction
- Full Port and Reduced Port Versions Available
- NACE MR0175 Compliant
- API 607 5th Edition Fire-safe
- API 608 compliant
- PEEK seats standard
- NPT, MxF NPT and socket weld ends



**Fig S10 QVA**  
Seal Welded Extreme Pressure Ball Valve  
Size Range: 1/4" to 1/2"

- ASME B16.34 Class 4500, Fully compliant
- Seal welded 10,800 PSI CWP stainless steel
- ISO 5211 mounting
- 304SS Locking Handles
- NACE compliant
- API 607 5th Edition Fire-safe
- PEEK Seats and Graphite Seals Standard
- Available in NPT, Socket Weld, or MxF NPT



**Fig F1 QVA**  
Unibody Flanged-End Ball Valves  
Size Range: 1/2" to 6"

- Fully compliant to ASME B16.34 and API 608
- Class 150 & 300 available
- NACE MR0175 compliant
- API 607 5th edition fire-safe
- API 641 Certified
- Patented top works design allows direct mounting of ISO actuators
- Standard 304SS latch lock handle
- "Extended" packing nuts for easy access when automated
- Electrically ground ball and stem
- TFM seats provide superior high temperature performance & chemical resistance



**Fig F2 QVA**  
Two-Piece, Full Port, Flanged-End Ball Valves  
Size Range: 1" - 10"

- Fully compliant to ASME B16.34 and API 608
- Class 150, 300 & 600
- NACE MR0175 compliant
- Fire safe to API 607 and ISO 10497

- API 641 Certified
- ISO 5211 mounting pads and patented "Square Drive" stem design allow direct mounting of ISO operators without brackets or adapters.
- "Submerged" packing adjustment allows packing adjustment with operators and actuators mounted.
- Standard 316 stainless steel ball, stem and packing system
- Electrically ground ball & stem
- TFM seats provide superior high temperature performance and chemical resistance



**ABZ 400**  
Double Offset  
ABZolute 400 series

- Size range: Class 150 (2"-60"), Class 300 (2"-48"), Class 600 (3"-24")
- Available in: Wafer, Lugged and RF Double Flanged Short & Long Pattern
- Free floating pressure assisted soft seat designed for Bi-directional and Double Dead End service (Class VI shut off)
- Metal Seat available for severe service applications
- Bidirectional and Unidirectional service
- Stem Extensions available upon request
- Available materials: - A216 WCB, - SS A351 CF8M, - Hastelloy, - Duplex 2205, - ALX6N, - SMO 254/255, - Monel, - Other materials available on request



**ABZ 6000**  
Triple Offset Extreme  
6000 Series

- Size range: Class 150 (3"-56"), Class 300 (3"-48"), Class 600 (4"-36"), Class 900 (8"-24")
- Field-maintainable
- Severe Service and high temperature options available
- Available in: Wafer, Lugged, RF Double Flanged Short & Long Pattern
- Available materials: - A216 WCB, - SS A351 CF8M, - Hastelloy, - Duplex 2205, - ALX6N, - SMO 254/255, - Monel, - Other materials available on request



**ABZ 396/397**  
Rubber Seated  
Butterfly Valves

- Size range: 2"-72" In stock 2"-36"
- 2"-12" 200-250 PSI rated One-piece stems Long neck for insulation Full dead-end service rated
- 14"-48" 150 PSI rated Two-piece stems Full dead-end service rated
- Seat forms a seal against all standard ANSI 125/150 flanges eliminating separate gasket requirements
- Available in: Wafer and Full Lug style body
- Available materials: EPDM, Buna-N, Viton, Ductile Iron, 316 SS, Aluminum Bronze, Nylon 11 Coated Ductile Iron, Nickel Plated Ductile Iron, 416 SS
- Additional materials are available for a wide selection of applications





## Pipe Hangers & Supports

Our current line of pipe hangers and supports is a result of more than a century of experience in the industrial piping field. ASC's extensive product portfolio include hangers and supports for any suspension problem encountered in piping systems in the mining industry. Our line for mining applications includes roller hangers, adjustable supports, heavy duty beam attachments, welded brackets, pipe alignments and pipe slides and guides.



**Fig 181**  
**Adjustable Steel Yoke Pipe Roll**

- Size Range: 2-1/2" - 24"
- Material: Cast iron roll; carbon steel yoke, roll rod and hex nuts
- Finish: Plain, Hot-Dip Galvanized Yoke with Zinc Plated Parts or Resilient Coated
- Maximum Temp: 400° F at roller, 300° F at resilient coated roller



**Fig 134**  
**Heavy Duty Beam Clamp**

- Size Range: 4" through 12"
- Material: Carbon steel
- Finish: Plain or Hot-Dip Galvanized with Zinc Plated Fasteners



**Fig 199**  
**Heavy Welded Steel Bracket**

- Material: Carbon steel
- Finish: Plain or Hot-Dip Galvanized



**Fig 255**  
**Pipe Alignment Guide**

- Size Range: 1" through 24" pipe and insulation thickness of 1" through 4"
- Material: Carbon steel
- Finish: Plain or Hot-Dip Galvanized with Zinc Plated Bolts & Nuts



**Fig 439**  
**Structural "H" Slide Assembly**

- Size Range: 6" through 36"
- Material: Carbon steel "H" section, PTFE bonded slide plates and carbon steel base.
- Finish: Plain, Painted or Hot-Dip Galvanized (Welded after Galvanizing and Cold Spray Touched-up)



**Fig 63**  
**Pipe Stanchion**

- Material: Carbon steel
- Finish: Plain or Hot-Dip Galvanized
- Maximum Temperature: Plain 650° F, Galvanized 450° F



**Fig 264**  
**Adjustable Pipe Saddle Support**

- Size Range: 2-1/2" through 36"
- Material: Cast iron saddle, locknut nipple and special cast iron reducer, assembled
- Finish: Plain or Zinc Plated (Nipple Reducer Assembly cannot be Hot-Dipped)



## Strut & Strut Fittings Continuous Metal Framing



Anvil-Strut® is a complete line of continuous slot metal framing with channels, fittings and accessories for any framing or support problem – large or small, heavy or light.

Anvil-Strut brand products are created according to exacting standards of research, design, engineering and manufacturing. Maximum recommended load ratings for channels have been

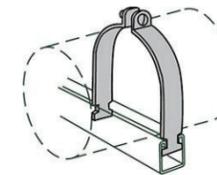
established through testing and are based on allowable stresses applicable to strut material specifications.

Beyond the versatility that strut and strut fittings offer as a basic building material, metal framing is a popular choice for rack support systems, storage racks, tunnel stanchions, catwalks and trapeze style hangers for multiple systems.



**Fig AS200, AS100 and AS150**  
**Channels**

- 12 gauge channel, wt./100 ft
- Stocked in pre-galvanized, plain and powder coated
- Supr-green, in both 10 and 20 ft. lengths
- Other materials, finishes and lengths are available upon request



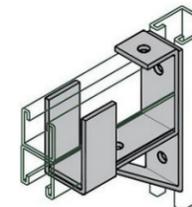
**Fig AS1100**  
**Rigid Steel Conduit Clamps**

- Manufactured to fit into the standard openings of 1-5/8" channel to support runs of piping where desired, to secure the pipe in place



**Fig. AS3033, AS3033SQ, AS3064, AS3064SQ**  
**Post Bases**

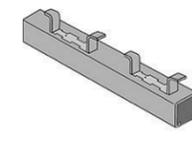
- Designed to fit Anvil-Strut 1-5/8" wide channels
- Used to securely fasten channels to a surface



**Fig AS3164, AS651**  
**Strut Brackets**

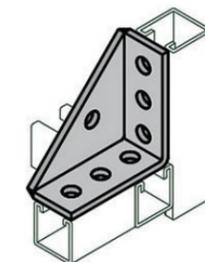
- Designed to support pipe or conduit either suspended from threaded rod or supported as a cantilever from the wall

*Note: These brackets can also be used in conjunction with electrical fittings.*



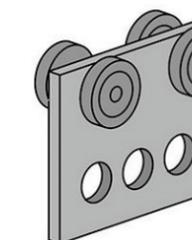
**Fig AS249**  
**Continuous Concrete Inserts**

- Designed for the attachment or suspension of framing, piping or equipment to concrete structures where a continuous insert slot is required



**Fig AS3373**  
**Strut Angle Fittings and Connectors**

- Designed to fit with all Anvil-Strut 1-5/8" wide channels.
- Manufactured from 1/4" thick carbon steel, 1-5/8" wide, all holes are 9/16" diameter, spaced 1-7/8" on center and 13/16" from the end unless otherwise noted



**Fig AS 2522**  
**Four Wheel Trolley (Strut Accessories)**

- Designed to fit Anvil-Strut 1-5/8" wide channels

For a complete list of **Pipe Hangers & Support Products**, please see our catalog.

For a complete list of **Anvil-Strut Products**, please see our catalog.



For more information about ASC Engineered Solutions products for the mining industry, visit [asc-es.com](http://asc-es.com) or contact an ASC Engineered Solutions representative.

**About ASC Engineered Solutions**

ASC Engineered Solutions is defined by quality—in its products, services and support. With more than 1,400 employees, the company’s portfolio of precision-engineered piping support, valves and connections provides products to more than 4,000 customers across industries, such as mechanical, industrial, fire protection, oil and gas, and commercial and residential construction. Its portfolio of leading brands includes ABZ Valve®, AFCON®, Anvil®, Anvil EPS, Anvil Services, Basic-PSA, Beck®, Catawissa, Cooplet®, FlexHead®, FPPI®, Gruvlok®, J.B. Smith, Merit®, North Alabama Pipe, Quadrant®, SCI®, Sharpe®, SlideLOK®, SPF® and SprinkFLEX®. With headquarters in Commerce, CA, and Exeter, NH, ASC also has ISO 9001:2015 certified production facilities in PA, TN, IL, TX, AL, LA, KS, and RI.



[asc-es.com](http://asc-es.com)

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