

# Valves Ship Fully Assembled



## Field Installation



# Vent & Pressurizing Valve Arrangement

The United Conveyor Corporation (UCC) Vent & Pressurizing Valve arrangement is designed as a superior replacement for the A-S-H Style II and III Equalizer Valves used in non-UCC pneumatic fly ash systems. The UCC Vent & Pressurizing Valve arrangement includes a 2½" Swing Disc Vent Valve and 1½" Pressurizing Valve to prevent leakage and minimize excessive wear seen in applications utilizing three-way A-S-H equalizer valves.

The Vent & Pressurizing Valve arrangement offers proven UCC swing-disc technology for superior sealing performance, ease of maintenance and extended service life. Both valves are fully assembled and can be shipped pre-piped to reduce field assembly and installation costs.

#### **FEATURES**

- Maximum Operating Temperature: 500 °F
- Maximum Operating Pressure: 20 PSIG with single air cylinder, 40 PSIG with dual air cylinder
- Valve Closure Leakage: Class IV Per ANSI/FCI 70-2-1991
- Valve Rated Capacity: 2570 SCFM

#### **ADVANTAGES**

#### Superior Sealing Performance

- Self-adjusting, spring-mounted ball pivot with machined flat disc provides optimal sealing performance
- Individual valve sequencing prevents leakage and high wear due to back flow conditions

#### Longer Service Life

- Replaceable tungsten carbide disc and seat improves wear resistance for extended service life
- Greased sleeve bearing and packing design prevents leakage and extends wear life of the shaft and packing
- > Tungsten carbide orifice controls vent pipe velocity and minimizes wear to vent valve components

#### Simple and Easy Installation and Maintenance

- > Dual access covers allow for easy on-line inspection and maintenance
- > Grease fittings on shaft allow for adjustments to be made easily



# Vent & Pressurizing

Technical Data Sheet TDS14-06RF

Valve Arrangement

#### **UCC COMPETITIVE ADVANTAGE**

#### **Piping Components Materials of Construction -**

**UCC:** Thick-walled pipe and DURITE® fittings are used to provide greater service life compared to standard pipe and hoses.

**A-S-H:** Hose with complex routing is often used in place of piping, causing plugging, excessive wear, frequent maintenance and safety concerns.

#### **Sealing Style**

**UCC:** Proven UCC swing-disc technology provides ten times the closing force compared to slide gate style valves and maintains tight seal tolerances. The seat shape minimizes surface area for optimal sealing.

**A-S-H:** Limited closing force of the slide gate valve causes sliding abrasion resulting in premature wear and improper sealing.

#### Valve Arrangement-

**UCC:** Individual valve sequencing, utilizing a 2 ½" Swing Disc Valve for venting and a 1 ½" Swing Disc Valve for pressurizing, minimizes wear due to separate flow paths.

**A-S-H:** A single, three-way equalizing valve pressurizes and vents the transfer vessel, causing turbulence and excessive wear inside the valve body.

#### - Service Life

**UCC:** A replaceable tungsten carbide orifice is used to manage flow and control the velocity in the vent line. The orifice receives the majority of impact and wear, therefore increasing the service life of valve components.

**A-S-H:** There is no mechanism used to reduce velocity in the vent line, therefore the valve components experience high wear and greatly reduced service life.

#### Valve Components Materials of Construction

**UCC:** Standard tungsten carbide seat and disc offer longer service life due to superior wear resistance. Tungsten carbide is a preferred material for high velocity applications.

**A-S-H:** Seat and gate materials are made of Ni-Hard, which is a softer material compared to tungsten carbide and is less suitable in applications where frequent pressurizing and/or equalizing is required.

#### **ORDERING INFORMATION**

Please contact your local UCC representative for more information.

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