

Dust Control, Inc.

Product Information

Protector Plate - Description:

The protector plate or wear liner is a critical part to any skirtboard system. This plate should run approximately 1/8" to 3/8" from the belt to contain the majority of the material on the belt. The protector plate should be checked for wear along the bottom of the plate and should be replaced or lowered if the space between the belt and the plate exceeds more than 3/8". It may not be necessary to replace all of the protector plate. There may be a wear point and only that area would need to be replaced. If wear liner needs to be replaced just cut out the old plate, grind down any rough edges, and install new plate and weld securely.

Protector Plate - Technical:

DCI Protector Plate is constructed of 3/8" thick AR400. The plate has a brinell hardness of 360 to 380. Per piece dimensions are 48" long by 8" tall. Each piece has a twenty degree break six inches below the top edge of the plate. In addition each liner has two 1-1/2" x 3" slots to allow the plate to be plug welded in place. Protector Plate can also be made with bolt-in studs on the back.

Protector Plate Bullets:

- - Create the proper dead air space for the Pos-A-Seal skirting.
- - Long wear life.
- - Keeps heavy material off skirting rubber for long rubber life.

Pos-A-Seal Skirting - Description:

The rubber skirting maintains a tight seal between the skirting and the conveyor belt. Rubber skirting is not designed to contain heavy material on the belt. Its job is to contain any small fines or dust that may escape under the protector plate. That is why it is very important to maintain the protector plate. The rubber will eventually wear out and need to be replaced. Our skirtboard bracket is installed at an angle which allows the rubber to lay onto the belt and form a seal. The bottom portion of the rubber skirting will eventually wear off and no longer be in contact with the conveyor belt. The rubber should be changed out before this gap is created.

Pos-A-Seal Skirting - Technical:

DCI Pos-A-Seal skirting consists of five different components: 1)Bracket, 2)Retaining Rod, 3)Rubber Skirting, 4)Plated pins, 5)Foam Inserts. The bracket is constructed of 1/4" thick A-36 mild steel in four foot sections and has two breaks. Along the top face of the bracket 1" x 1/4" pieces of mild steel are welded in place to hold the retaining rod. Also along the top plane holes are punched to accept the plated pins. The retaining rod is made of 3/8" mild steel round with three 1" x 3/8" attachment tabs welded in place. The rubber skirting is made of SBR 70 Durometer High Temp rubber. The rubber comes in three varying heights of 6", 8", and 10". Maximum length of rubber available is 200' continuous. Longer sizes can be spliced, if necessary. The pins are zinc plated mild steel spring tension pins. The foam is used to seal the tail end of the skirting bracket to prevent dust blow out during start-up. Note: Stainless Steel Pos-a-seal Skirting is available.

Pos-A-Seal Skirting Bullets:

- - Simple to install and will fit all applications.
- - Low replacement rubber costs.
- - Rubber is self adjusting and requires no maintenance.
- - Rubber will last a year or more before replacement.
- - Rubber is soft and will seal between belt between the idlers.
- - Brackets available in mild or stainless steel.
- - Rubber available in any length.

Blow Out Preventer (BOP) Box - Description

The BOP Box creates a seal at the rear of the load chute to stop any spillage or dusting in this area. The rubber is installed to lay against the conveyor belt. This rubber will eventually wear off to where there is no seal between the rubber and the conveyor belt and spillage can result. When this happens a new piece of BOP rubber should be installed.

Blow Out Preventer (BOP) Box - Technical

The Blow Out Preventer Box is constructed of 1/4" thick A-36 mild steel. The lid has a 2" x 2" x 1/4" angle welded in place and has 5/8" diameter holes punched to mount the rubber. The side pieces generally have a 2" break along the top edge to form a flat area to bolt the lid. The rubber is SBR 80 Durometer 1/2" thick. The back plate is also has 5/8" diameter holes punched to mount the rubber with 1/2" diameter grade five bolts.

Blow Out Preventer Box Bullets:

- - Seal rear end of load chute to prevent spillage and dusting.
- - Allows material to pass underneath seal in case of clean up.

Inspection Doors - Description

The rubber seals inside the inspection door are designed for long life. If a door is used often it may become necessary to change out the seal. The seal can be changed by pulling out the old rubber and removing the old silicone type sealant inside the seal channel. Apply approximately a 1/4" bead of silicone sealant inside the seal channel and insert the rubber. Be careful not to get any silicone on the top portion of the rubber seal. If the door latch is not sealing the door tight it may be necessary to tighten the lock nut until the proper seal is obtained. The door lids are removable and if removed it is recommended that a lubricant be applied to the hinges before the lid is replaced.

Inspection Doors – Technical

The DCI Inspection door is made with a flat 3/8" mild A-36 frame which may be welded to the chute material. The frame has a 1" wide channel used to protect the door seal. The seal is made from a automotive neoprene type material to resist freezing and sticking. The frame and door size is determined by the opening spec which is based on the inside dimension or opening required in the frame. This size can be custom made. The door is made of 1/4" mild A-36 material. The hinges are weld on with brass pins. The door can be removed after installation with this type of hinge. The latch assembly is adjustable to increase the seal firmness, if needed. Inspection door are available in Stainless Steel and Heavy Duty styles.

Inspection Doors Bullets:

- - Doors can be custom made.
- - Provide an air tight seal.
- - Door lid is removable.
- - Rust Proof hinges.
- - Doors can hinge or swing open to any side.
- - Available in mild or stainless steel.
- - Heavy Duty – built to last.

Material Center Plates - Description

These plates will need to be checked for wear and replaced as necessary. The Center Plates are installed inside a chute where the material drops a long distance and spreads out flat on the belt. This pattern can also show up after a vibrating feeder. The Center Plates will take the flatten material and roll it back to the center of the belt. This centering of material will also assist in keeping the belt tracking in the center of the trough.

Material Centering Plates - Technical

DCI Centering Plates are constructed of 3/8" thick AR400. The plate has a brinell hardness of 360 to 380. Per piece dimensions are 18" long by 8" tall. Each piece has a twenty degree break six inches below the top edge of the plate. For installation 2" x 2" x 1/4" angles 4" long each are included to be welded to the chute extension and the centering plates at the end of the centering plates.

Material Center Plate Bullets:

- - Eliminates spillage due to off center belt loading
- - Helps insure belt center troughing alignment

Guidler Package - Description

The guidlers are installed to protect against belt misalignment at the load point. Guidlers are not designed to correct belt misalignment problems. Conveyor belts should be properly aligned prior to guidler installation. Once properly tracked, the guidlers will keep the belt aligned for correct loading of material. The guidlers should be adjusted so that there is approximately 1" between the conveyor belt edge and the guidler roller.

When the belt comes into contact with the roller there should not be excessive pressure. If there is too much pressure against the roller the belt may curl and work out under or over the roller. If this is the case the belt needs to be realigned.

Guidler Package - Technical

The guidler mounting bracket assembly is fabricated from all A-36 mild steel materials. The mounting bracket itself is made of channel and 3/16" wall tubing. The frame mounted bracket is 1/4" thick plate with 5/8" diameter grade five studs welded in place. The guidler roll itself is cast steel mounted on a grade 8 shaft/stud. The bearings for the guidler roll are sealed for life bearings.

Guidler Package Bullets:

- - High Endurance Bearings.
- - Provides secure adjustment.
- - Assist in maintaining belt alignment.
- - Long Lasting, Rust Proof, will run in any environment.

Anti-Surge Plate - Description

The anti-surge plate is designed to take the high mounds of material and spread it along the belt (as the belt moves) so the material will not spill on the floor after it leaves the chute work. The anti-surge plates are located inside a chute cover after a some type of feeder or where a loaded flat belt may coast material onto a incline belt in a conveyor system during an emergency shutdown. The anti-surge plate holds the excess material inside the chute until it can clear out after start-up. The anti-surge plate will need to be adjusted down as the plate wears from material flow. To adjust, loosen the adjustment bolts and slide the plate down to the desired coal flow height. Retighten the bolts.

Anti-Surge Plate – Technical

The plate is made of minimum 3/8" thick AR400. The plate has a brinell hardness of 360 to 380. The plate is made as wide as the chute work covering the belt. The vertical height will extend from just above the material flow to 6" above the chute cover. The AR400 plate is mounted to vertical 2" x 2" x 3/8" mild angles with 5/8" holes drilled in them for vertical adjustment. The AR 400 plate shall also have the matching hole pattern on the vertical edges for adjustment purposes. The plate shall have 1/2" bolts used to mount it in place after the correct height adjustment is determined.

Anti Surge Plate Bullets:

- - Reduces clean up time.
- - Prevent large spills due to conveyor system surges.
- - Keeps material centered on the belt

Roller Bed – Description

The Roller Bed is designed to create a impact area under a conveyor load point to prevent material impact damage to a conveyor belt. The Roller Bed design also creates no friction and creates no wear to the back cover of a conveyor belt. The slide out design allows the impact rolls to be changed or checked with minimal effort. It is not necessary to unbolt the roller bed from the conveyor frame to change impact rolls. Remove the set screw located on each of the three frame rails and remove. This will allow the roll frame to slide out for access.

Roller Bed - Technical

The roller beds use a support frame constructed of A-36 mild steel. The frame rails and troughing frames are 1/4" thick material. The side support braces use 3/8" thick material. All fasteners are grade five or better. The hinges used to connect the sides to the center section are mild steel with a brass pin and brass washer to prevent rust. The standard impact idlers used are Svedala or Strongco idlers. Assemblies made for a belt width or 48" or smaller use CEMA C or D sealed bearing idlers. Any assembly made for a belt width of 54" or greater use CEMA D or E sealed bearing idlers in the Strongco brand or a regreasable idler in the Svedala brand..

Roller Bed Bullets:

- - Easy maintenance access, bed slides out from under belt.
- - Creates no friction drag on conveyor.
- - Promotes long belt life due to impact damage.
- - Creates no conveyor belt cover damage compared to slider beds.
- - Maintains a perfect seal for skirting system, seal does not fail due to slide bar wear.
- - Built to any specification.