

Installation guidelines of TechPro ceramic belt cleaner

- Belt cleaner application
- Belt cleaner installation
- Belt cleaner maintenance
- Belt cleaner product life
- Belt cleaner problematic circumstances

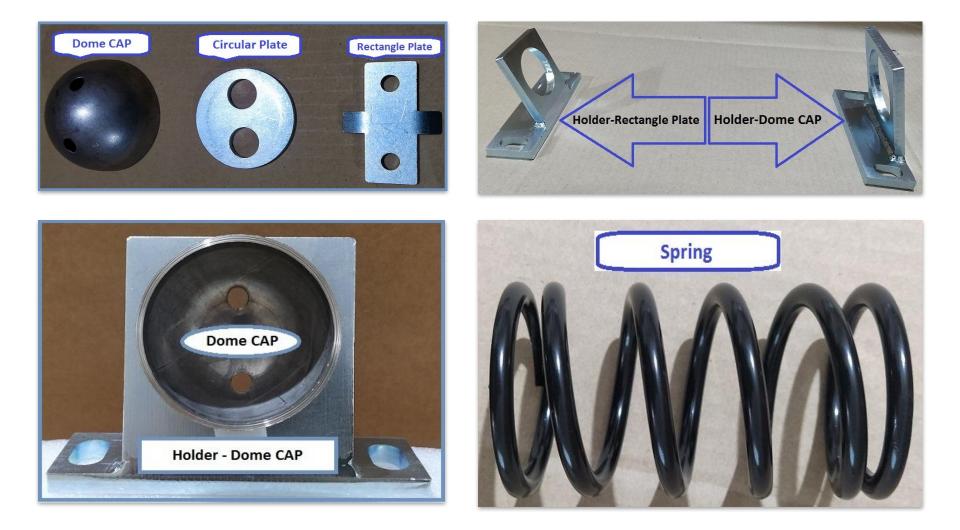




- Belt cleaner is suitable for dry material handling
- Belt cleaner is applicable for unidirectional application
- Belt cleaner can perform up to 2.5 MPS belt speed
- Belt cleaner is suitable for conveyor application in fly ash, coal, cement, etc.
- Belt joint method should be hot/cold vulcanized



TechPro ceramic belt cleaner – Component details





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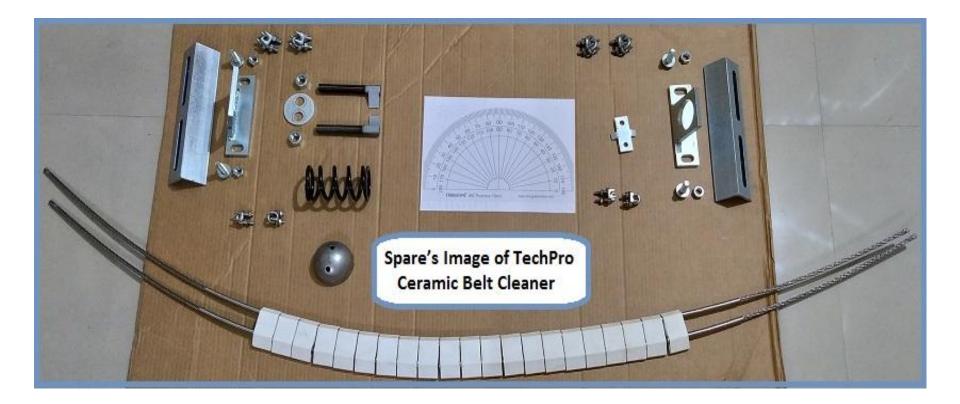




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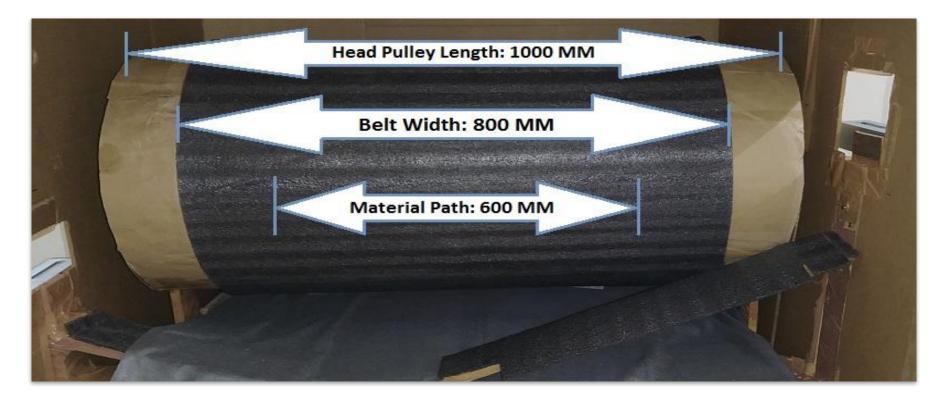


TechPro ceramic belt cleaner – Component details





TechPro ceramic belt cleaner – Conveyor belt, pulley dimension



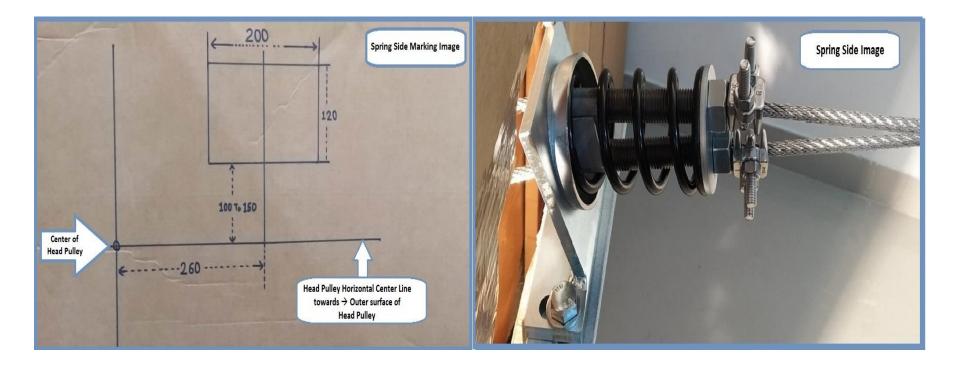
Verify following dimension:

1.Belt width 3. Belt direction

2. Pulley diameter 4. Conveying material path



TechPro ceramic belt cleaner – Marking on chute spring side



Considering pulley radius + belt thickness draw a straight line, this line will become outer surface of pulley. At spring side of chute draw a vertical line at 260mm. From the center line of head pulley, draw a horizontal line 100-150 mm. above the center line. Cut a square of 200 x 120 mm. to install the angle bracket.



TechPro ceramic belt cleaner – Angle on pulley



Draw a straight line considering head pulley center point, taking this line reference draw a straight line on belt. This will become center line of head pulley.

- 1.If the belt speed is medium to high, the recommended angle of rotation for the central chip alignment β ° is 0 °
- 2.If the belt Speed is low to medium, the recommended angle of rotation for the central chip alignment β° is greater than 0 °

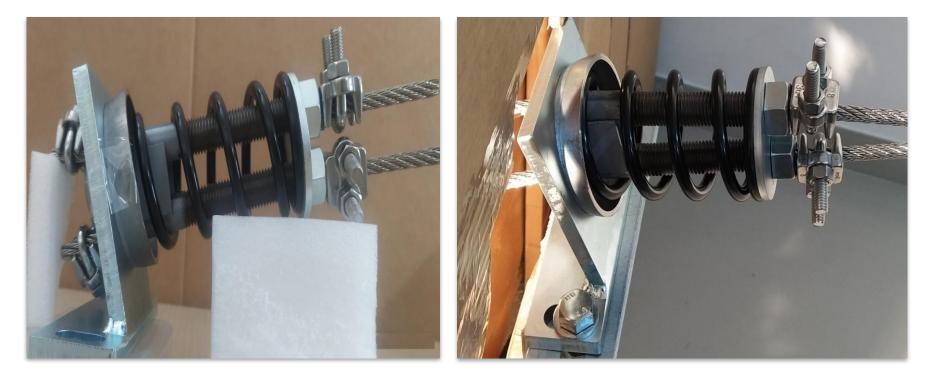


TechPro ceramic belt cleaner – Angle on pulley



- 1. If the pulley diameter is less than 500mm, the belt cleaner should be inclined to 10° to 15° from the center line of head pulley.
- 2. If the pulley diameter is more than 500mm, the belt cleaner should be inclined to 15° to 25° from the center line of head pulley.



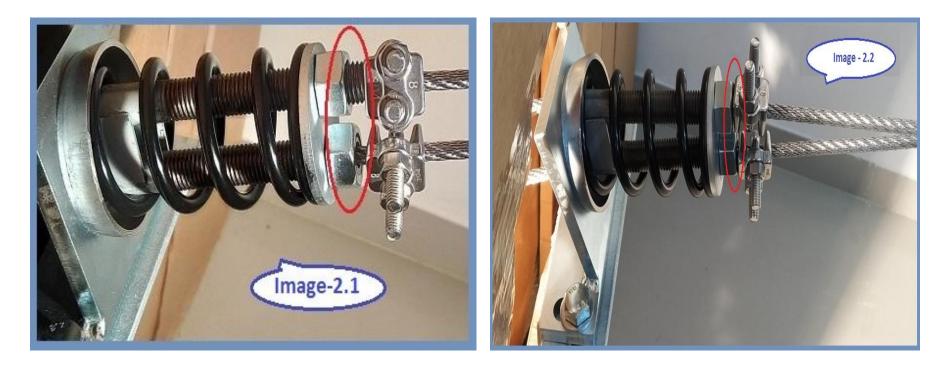


On the spring side of belt cleaner Insert the dome cape in holder, put the spring, insert spring bolt inside the spring, put the circular plate (As shown in above pic.)

Fix the nut on the spring bolt at 0 (zero) tension initially. Pull the wire ropes as much as possible and tighten the U-clip M8.



TechPro ceramic belt cleaner – Initial O(zero) tension on spring

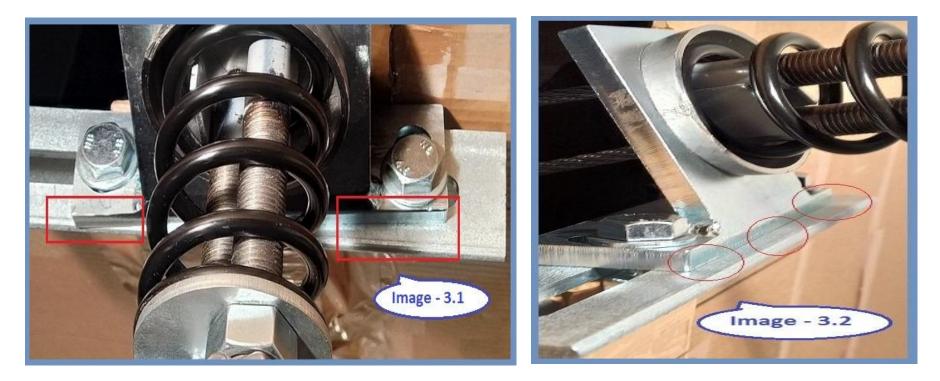


Initially keep the tension as zero on both the wire ropes.

The left picture shows more tension on the upper side of wire rope, whereas the bottom wire rope is at 0 tension. This gives different tension in both the wire ropes, making the wire rope to get twisted while in the operation.



TechPro ceramic belt cleaner – Align holder dome plate

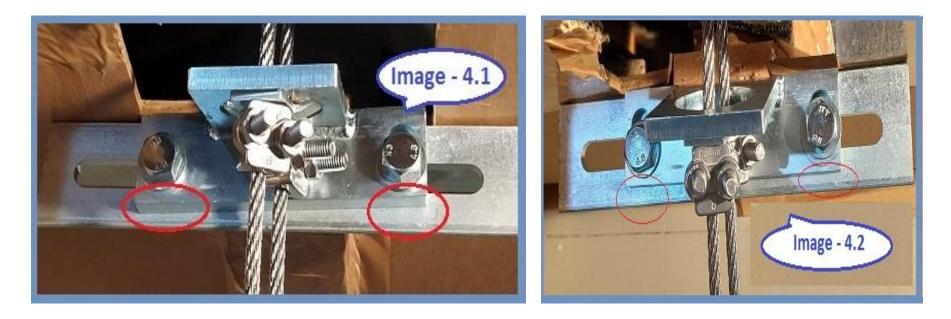


On both sides of the belt cleaner, the holder rectangle plate and holder dome cap should be in line (uniformly fitted) on the angle bracket as shown in image 3.2

As shown in image 3.1 if the spring side holder dome cap is not fitted properly, it can lead to different tension on the wire rope, eventually twisting the belt cleaner.



TechPro ceramic belt cleaner – Align holder rectangle plate



On both sides of the belt cleaner, the holder rectangle plate and holder dome cap should be in line (uniformly fitted) on the angle bracket as shown in image 4.2

As shown in image 4.1 if the spring side holder dome cap is not fitted properly, it can lead to different tension on the wire rope, eventually twisting the belt cleaner.



TechPro ceramic belt cleaner – Align angle bracket



On both side of the belt cleaner, the angle bracket should be welded horizontally straight as shown in Image 5.2

If the angle bracket is inclined on either side, it can effect the tension on the wire ropes. This can create the gap on upper side or lower side of ceramic tips.



TechPro ceramic belt cleaner – Spring bolt & wire rope



Spring bolt and wire rope should not get twisted during the operation as this can lead to spillage of material with the return belt.

Spring bolt and wire ropes should be fitted as shown n Image 1.4





TechPro ceramic belt cleaner – Position of M5 & M8 clip



Steel wire rope clip M5 should face opposite to the pulley as shown in right Image.

Steel wire rope clips M5 should not face towards the pulley (As shown in left image 6.2)

If the tension on wire rope is loose, it may come in contact with the belt, damaging the wire-rope & belt.





TechPro ceramic belt cleaner – Spring bolt



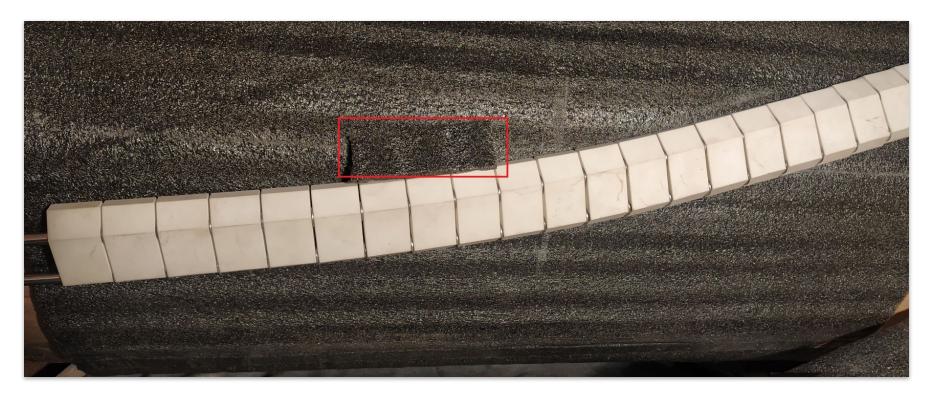




Due to the less tension the foreign particle may get stuck in between the belt cleaner and belt surface. This can lead to twisted belt or material spillage. To prevent this inspect the belt surface and check the spring tension periodically.



TechPro ceramic belt cleaner – Patch on belt



If the belt is damaged and repaired by putting a patch, this may lead to uneven belt surface. The rubber patch may get stuck with belt cleaner and lead to damage the belt and the ceramic cleaner. If the belt's either side is torn, it may lead to damage the cleaner's wire-rope.



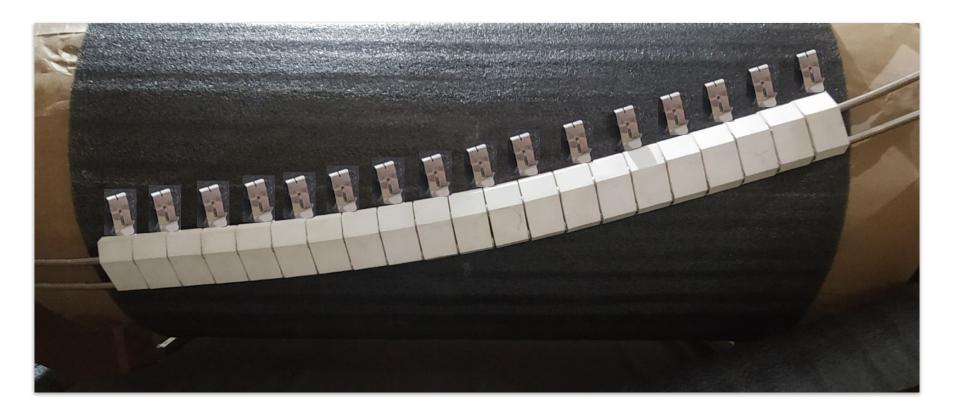
TechPro ceramic belt cleaner – Metal part on belt



If the metal part/rod is travelling with conveying material and get in contact with the belt cleaner, it may get stuck at the cleaning point. This can lead to tear the rubber belt and damage the belt cleaner.



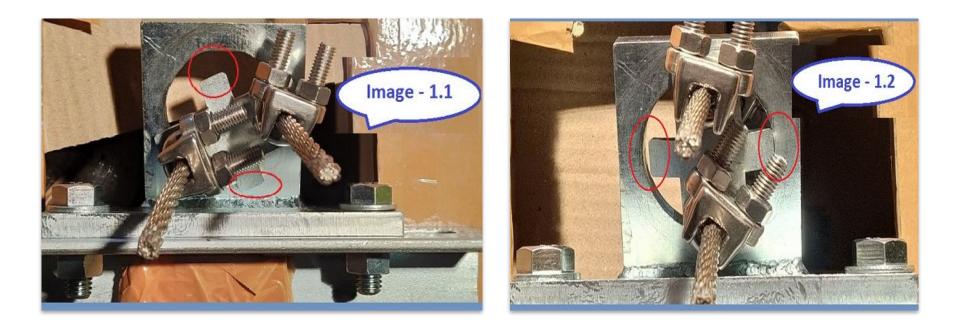
TechPro Ceramic belt cleaner – Mechanical Fastener



Ceramic belt cleaner is not recommend for belt joint methods such as - mechanical fastener, staples or spliced.



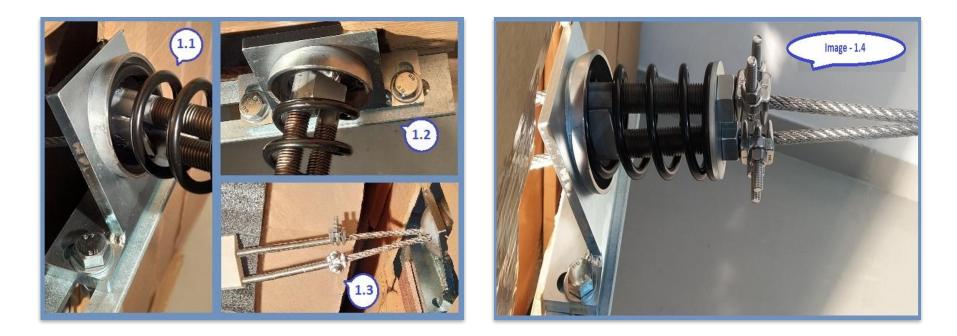
TechPro ceramic belt cleaner – Rectangle plate



Rectangle plate should be fitted properly into holder rectangle plate. As shown in right side picture.

If the rectangle plate is not properly fitted in holder rectangle plate belt cleaner may not remain in contact with belt.





Rectangle plate should be fitted properly into holder rectangle plate. As shown in right side picture.

If the rectangle plate is not fitted in holder rectangle plate belt cleaner may not remain in contact with belt.



Dear Customer,

Thank you very much for choosing the unique Ceramic Belt Cleaner for your conveyor belt. Request you to please see the steps of installation to install and maintain TechPro Ceramic Belt Cleaner.

- 1. Spare's brief
- 2. Site dimension
- 3. Spring side marking
- 4. Rectangle holder bracket marking
- 5. Pre-checking of belt cleaner

- 6. Angle bracket welding
- 7. Marking on belt
- 8. Insert belt cleaner into chute
- 9. Spring adjustment
- 10. Final tuning of belt cleaner