

Drum Cover Installation Instructions

The drum cover was installed on the 8 X 14' face Dorr Oliver filters as follows:

1. All rope was removed from the division strips and then the ditch was cleaned of scale.

The drum cover was installed from the rear of the machine (agitator) for several reasons, but I would suggest rolling the cover up on a cardboard tube or spindle to keep from stepping on and contaminating the cover with the agitator bearing grease.
2. 3" strips were cut from the excess width and length to be installed between the top cloth and the 3/8" cotton jacket rope. This method would insure a good fit of the caulking rope and insure it would not be blown out under billow pressure max. 4 psi air pressure.
3. A temporary fastening of the leading edge was made in three places (about 1 foot) to secure the cover and allowing easy installation to the first full division strip.
4. The ropes and under strips started into the division strips manually at the center of the drum face. The remainder of the caulking was accomplished with the Roller Hammer from the center to the end of each division strip (there are no end caulking rings on this drum). This was done in the same fashion for the remaining 23 division strips. Note: The Roller Hammer was used most effectively by:
 - a. Lubricating it with 5-10 drops of non-detergent air power equipment oil as used in the sharpening area. Lubricate every 7-10 division strips.
5. Once the temporary caulk-in on the leading edge was reached, the excess to produce approximately 2" beyond the edge of the division strip was removed. The trailing edge was then placed over the temporary division strip media and the two layers of media were caulked in the last open division strip.
6. The excess rope and 3" strips were cut from each end of the drum and the ropes/strips were securely manually driven into the end of the division strips.
7. 1/2" clamping bands were installed in three equal segments and placed at the end of the division strip against the shoulder of the freshly silicone sealing surface. This positioning should assist in securing the end of the rope in the division strip. Slack should be taken out of the clamp assembly equally at the three screw clamp take ups.
8. I advised that another clamp should be placed on the sealing surface (not doubling back the filter media).
9. Three piece clamps will be placed on 12-18" centers across the drum face. In the future we might consider eliminating (only step No. 8) if the drum cover rope shows no signs of blow out and is still securely in the division strip at the end of the campaign.
10. Fill the tub to submerge the bottom of the drum with hot water (150°) and rotate the drum with the vacuum and feed off for 1-2 hours allowing the cotton rope to swell and better seal the filter media in the division strip.