

## SC 16 Secondary Belt Cleaner

#### You need following tools for installation:

Complete Scraper including support pipe

- Cutting torch (possibly if not available on the site)
- Angle grinder (possibly if not available on site)
- Boilermaker square
- Boilermaker chalk
- · Hydraulic punch or magnetic drill
- · Hand Cradle on request
- Tape measure
- 2 x 19mm ring flat
- 1 x ratchet spanner
- 1 x 19mm socket
- 1 x 13mm socket
- 1 x 13mm swivel neck.
- 1 x straight edge.

# PLEASE ENSURE THAT YOU ARE WEARING THE NECESSARY PPE BEFORE ATTEMPTING INSTALLATION

STEP 1:Please make sure you have received all components according to paper work.



STEP 2: The scraper should be removed from packaging and moved to a level surface (concrete slab, conveyor platform or walkway) where assembly can be performed safely. Install the clamps on both ends of the pipe to prevent the pipe rolling during assembly.





STEP 3: Insert the blades into the rubber buffers and push them firmly down.



STEP 4: Place the rubber buffers onto the slotted section of pipe and insert the bolts and nuts that are provided to secure them. Do not tighten at this stage.



STEP 5: Starting with the middle buffer push the outer buffers toward the outer edges of the pipe. Tighten the centre buffer and then move the outer buffers toward the centre. The blades should not touch each other and should be 0,5mm apart from each other. Tighten the buffers until all have been fastened.





STEP 6: Start with the two outermost blades and lift them up as far as is possible. Finger tighten the bolts and nuts. Place the straight edge on the two outermost blades and by gently bumping the straight edge line and level them. When level, tighten the bolts and nuts.

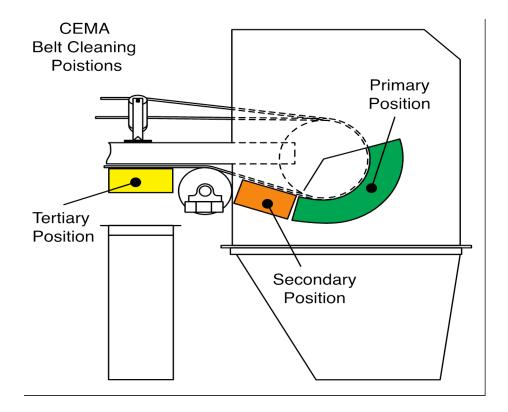


STEP 7: Continue working toward the centre by levelling two blades at a time. Tighten the bolts and nuts as you progress. Once completed and all the bolts and nuts have been tightened, test again with the straight edge to ensure that all blades are level.





STEP 8: As recommended by CEMA the secondary scraper is most effective when positioned as close as possible to where the belt exits the head pulley. If possible within 50mm of this would be the ideal position. If the scrapers are to be installed on a closed chute application then you would need to make a cut out of minimum 150mm x 300mm, if using a double scraper remember to measure the distance of both pipes and the distance of the bracket being used.



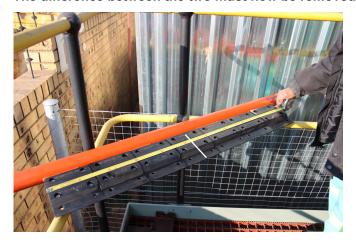
STEP 9: On an open chute application position the bracket as illustrated on the structure. The first scraper should be within 50mm of where the belt exits the head pulley. Attached the support pipe on the bracket and tighten the half clamp bolts. When using the support pipe it is necessary to cut the pipe in order for it to be in the correct position on the belt.

STEP 10: Place the pipe over the support pipe and push all the way across. If there is no space to install the support pipe, please use the hand cradle tool (fig. 1) The scraper will not be in the middle of the belt.



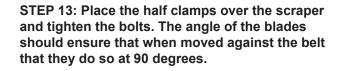


STEP 11: Measure the middle of the scraper and mark it, now measure the middle of the belt and mark it. The difference between the two must now be removed from the support side of the pipe.





STEP 12: The scraper is now inserted over the support pipe and ready for installation. Ensure that the tungsten on the blade is facing toward the head pulley. The direction from which the belt is coming(indicated with an arrow in image below).







STEP 14: Raise the scraper to the belt so that all blades are just touching the belt. The blades must be at 90 degrees to the belt. Fasten one of the half clamp bolts on either side to hold the scraper in place.



STEP 16: Loosen the bolts on the half clamp that were tightened earlier in order to secure the scraper.

The adjusting bolt must now be turned 2 to 3 turns to raise the scraper and to achieve the correct



STEP 15: Install the adjusting block onto the bracket. Ensure that the adjusting bolt is flush with the surface that will mate with the clamp. Fasten the adjusting block.



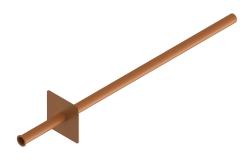
STEP 17: The lock nut on the adjusting bolt must now be fastened. All the bolts and nuts on the half clamps must now be fastened.



STEP 18: To check for correct tension push one of the blades in direction of belt travel, when released the blade should return and should have a negative angle of attack relevant to the belt. The deflection should not exceed 5 degrees. If it does the belt cleaner is over tensioned



Fig 1. Hand Cradle
Part Number: TOOL/INS/PIPE/CRDL



### Frequently Asked Questions (FAQ):

- What belt sizes? All imperial belt sizes. (450; 600; 750 etc.)
- Will it work on a reversible belt? Yes
- Will it work on clip joints? Yes but you need to use the sandwich type blade



Martin Engineering Africa
Cnr Antwerpen str & Arnhemsingel
Die Heuwel, Witbank, Emalahleni
Tel +27 13 656 5135
Fax +27 13 656 5129
www.martin-eng.co.za



