Tube mill scarf solutions

The three main culprits for lost time accidents in welded tube production are injury by crushing, injury by burns, and injury by cuts & abrasions. These direct injury conditions are swiftly followed by indirect back and shoulder injury created by repetitive motion and awkward lifting. When one needs to extend their arms above shoulder height and pull the typical wound up OD bead scrap ball off the winder then turn to throw the hot, sharp object into the scrap container, injury becomes almost inevitable. Yet we see this almost every day in most welded tube operations. A typical shoulder injury can put an employee out of work for a week or more. Burns and cuts can be even more dramatic. In the end, both the employee and the company looses.

It doesn't have to be this way. There is a solution that is proven, by multiple installations, to reduce exposure to these major injury conditions. Feeding hot scarf to an inline chopper eliminates repetitive threading, eliminates scrap ball handling and gets the operator away from the moving scarf streams. Reduced exposure greatly minimizes the chance of injury, and the complete elimination of scrap ball handling does away with shoulder and back injuries. With the scarf-handling problem solved, the operator actually has more time to oversee the operation of the tube mill. Who doesn't need more time today? Customers expect better quality; quality takes attention to detail and time. Not having to run to the scarf station every 10 minutes to dump the scrap ball and rethread the line means less interruptions in process control. Better quality without more stress or adding people.





Simple integration. The SWEED OD Bead chopper mounts in about the same location as the scarf winder. Some installations are possible where both devices may be left on line. Once the operator gets used to the new process they do not want to go back to using the old winder.



Another installation, one of two units installed in one plant.

Note the incline chute base. Chopped scarf is directed towards the rear of the mill and into the scrap hopper by gravity. Not all installation can be arranged as shown. There are no two identical installations; all units must be adapted to fit the surrounding equipment.



Another installation chopping pre-galvanized tube OD scarf. The scrap chute in this installation is directed towards the rear of the mill and down stream to clear the HF weld power supply. In most cases, the chopper inlet height is less than that of the bead winder. Lower inlet height is easier to thread. With the SWEED chopper you thread only once per start, not repetitively like when utilizing a winder; greatly reducing exposure to hot sharp scarf and absolutely no scrap ball handling is now required.



Installation at 90 degrees to tube travel.



This installation has been in operation for over three years. Note the magnetic conveyor bringing chopped scarf to the scrap container. Chopped scarf is directed by a chute via gravity to the magnetic conveyor which is then pulled under the mill operator platform and dropped into the scrap container. Chopped scarf is dense and takes up much less space so the scrap container needs to now only be dumped once a shift. Chopped scarf is NOT sharp, would you dare do this with your scarf?



All of these applications are engineered to fit your particular line speed and integrated to the tube mill.



Typical "scarf ball" and mill operator "losing his shirt" to the scarf.



Scarf that has been processed through a Sweed chopper. The pieces are about 3" long.

Contact Welded Tube Pros or Recycle Consultants for more information.

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