

# CONVEYING SCRAP STEEL



## Design Requirements

1. Product Type: Scrap Steel
2. Material Density: 30-200 Pounds Per Cu Ft.
3. Capacity: 0-100 Tons Per Hour
4. Duty: 24/7

## Customer Challenge

A premiere producer of hot rolled coiled bands of steel was restarting a facility and needed a final conveyor in an Electric Arc Furnace charging system handling scrap steel directly into hot furnace.

Mounted on an indexing car, the conveyor can retract to allow tipping and pouring of molten steel for further processing. Alternatively, the car extends the conveyor into feeding position into the side of the furnace.

## Triple/S Solution

Horizontal differential motion allows smooth transfer of the scrap steel into the furnace and indexing of the mobile car in and out of feeding position. Variable speed operation provides tailored input rates into the furnace for optimum efficiency and flexibility.

Rugged construction for the very harsh environment of splashing molten steel and high temperatures.

Use of a water cooled pan prevents the melting of the tip of the pan when exposed to the 2500+F furnace temperatures

Rugged 4 shaft eccentric drive system produces non-harmonic slow forward-quick return differential motion on the horizontal plane only. This unique action reduces operating reaction loads into the structure and foundation - required for mobility in and out of feed position. Variable speed operation helps furnace charging efficiency and operation.

## Triple/S and the Customer

*There are 34 plants around the world that use the EAF furnace. The majority of those furnaces are fed with a very large Slipstick conveyor.*