



Product

Twiflex MXEA type caliper

Application

Cross transfer Conveyor

Highlights

- MXEA calipers acting on a 610 mm disc
- Compact design and technical features
- Proven record of reliability

The continuous casting floor area at a major UK steel mill is situated some 10 metres below ground level. This means that the cast blooms need to be raised before being distributed to the stock pile or hot mills.

The lifting process is performed by a cross transfer conveyor which elevates the blooms from the lower run out roller table to the discharge bank table situated at ground level.

The conveyor consists of six heavy duty chains each driven by a 1.2 metre diameter sprocket. These are mounted on a common drive shaft which is driven at each end through gearboxes by two DC motors rated at 90kW at 1480 rpm.

A total of six blooms, each weighing over 10 tonnes, can be raised at any one time which means that safe locking and holding control is of paramount importance. The original installation was fitted with brake motors, but these were found to be unreliable. The gearbox back-stops were performing every holding duty rather than acting as an emergency back up, and this caused problems. Twiflex was consulted to provide an effective braking system and have installed on each motor a spring applied, electro-mechanically released MXEA caliper acting on a 610 mm disc.

Twiflex was chosen in preference to three other suppliers because of their compact design, technical features and proven record of reliability in all of the company's plants.