



## Product

## Spring Applied Type VCS 60 Calipers

## Application

## Ladle Hood Winches

## Highlights

- Spring applied type VCS 60 calipers installed on winch barrels
- Motor rated for 55 kW at 1500 RPM
- 112:1 ratio gearbox connected to winch drum

A modern steel plant in the UK invests substantially in being an environmentally friendly producer, an example being the de-sulphurizing unit at their Port Talbot works.

Twiflex technology contributes with a system for controlling the winch mechanism needed to raise and lower a ladle hood winch in the BOS plant.

A single, spring applied MXSH type disc brake, released by hydraulic pressure is employed between a motor rated for 55 kW at 1500 RPM and a 112:1 ratio gearbox connected to a winch drum. The winch ropes are drawn over a series of idler pulleys which run down several floors to the main ladle hood.

Three Twiflex spring applied type VCS 60 calipers, also released by hydraulic pressure, provide the emergency brake installed on the winch barrel. These also serve to lock and hold the drum when the driving motor is de-energized.

The molten iron is transported from the blast furnace to the BOS plant in torpedo ladles pulled by locomotives. It is then poured into ladles and scrap iron and various fluxes are added. The ladles, when full, weigh over 400 tonnes and hold about 300 tonnes of hot metal which is eventually converted to steel.

Without these hoods, highly toxic gases would be discharged into the atmosphere.