

## HIGH PERFORMANCE

# PLATE STRAIGHTENING MACHINES



Multiple roller-type machine for cold straightening of plates

Available in 2 to 60 mm thickness in spans of 1000 to 5000 mm.

Himalaya Plate straightening machines are extremely efficient, work with great accuracy & reliability, and are easy to operate and maintain.

Each straightening roll is crowned to compensate for deflection resulting into small diameter of straightening rolls, smallest possible distance between the straightening rolls, increased straightening range and best straightening results.

All rolls are mounted in high grade bronze bearings resulting into low drive power, low side pressure and low maintenance costs for the bearings.

### Construction

Main components of the 'Himalaya' plate straightening machines are fabricated machine body with the roll system and the driving gears.

Body housings are rigid and made from welded steel plate construction which is resistant to torsion even under peak loads in continuous service.

## **Roll System**

The roll system consists of 5/4/3 upper and 4/3/2 lower straightening rolls and the two auxiliary (side) rolls. The two auxiliary rolls, one of them arranged at the entry side and another at the exit side in the top part of the machine body, can be vertically adjusted independent of each other. They are well supported (against backlash), even when thin plates requiring correspondingly low straightening force are being processed.

## The Adjustment

The upper roll system is brought into working position by reversible induction motors. The reversing motors similarly mounted on the drive side of the machine effect the adjustment of the two side rolls. The upper part of the body contains the drive system for the vertical adjustment, the upper straightening rolls and the two auxiliary (side) rolls. All transverse forces are absorbed by guides built into the upper and lower part of the body.

#### Drive

The main drive is effected by a reversible induction motor. The transmission to the spur gears is through a heavy coupling. All high speed shafts including the spur gears are mounted in anti-friction bearings.

#### The Indicators

Distance between the upper edge of the lower roll and the lower edge of the upper roll is indicated on the dials mounted at the non-driving side of the machine. The degree of adjustment of side rolls is also indicated on two dials at the feed side of the machine. The adjusting ranges of the upper roll system and of the auxiliary rolls are limited by limit switches.

## Operating & Maintenance

The machine can easily be operated and supervised and the straightening process can be watched closely from a control desk containing all controls.

The machine requires little maintenance. All lubrication points which are not connected to the oil circulating lubrication system of the main drive or to the oil plunge

lubrication for the adjusting gear of the upper roll system are supplied by an automatic central force feed lubrication system. All machine elements requiring occasional cleaning or readjusting are easily accessible.



#### HIMALAYA MACHINERY PVT. LTD.

601, G.I.D.C., Makarpura Industrial Area, Vadodara - 390 010, Gujarat, India Tel.: +91 265 2643224, 3043224, 6541774 • Fax: +91 265 2638778 email: info@himalayamachine.com • www.himalayamachine.com