

## SLAB CONTINUOUS CASTING MACHINE

Cc1 Continuous Casting Machine. Slab Continuous Casting Machine, 1 vertical strand with bending and straightening.

### TECHNICAL FEATURES

Installation Year      2000

Supplier              Voestalpine

Bending radius        6 meters

Number of strands    1

Min slab section      800 x 200 mm

Max slab section      1600 x 200 mm

Slab length Min. – Max.    4,5 – 12 meters

Mold level control    eddy current

Steel Flow Control    Stopper

Oscillator            Hydraulic

secondary cooling     water mist

dummy bar          dummy bar chain

Cut                    Oxycutting

cooling bed          1 walking beam

### COMPONENTS

Ladle turning turret. No. 1 available. Revolving turret with 180 °arms, that can be moved independently, equipped with load cells and lifting with stroke end. The rotation is encoder controlled.

Tundish turret. Rotating turret with rotation and independent lifting of the arms, equipped with load cells. Encoder controlled rotation and lifting with stroke end.

Mold No. 1 available. Plate Mold with automatically variable taper and profile (816-1655 mm), 50mm right-left max. taper adjustment. Handling of wide and narrow faces with independent motors and position control with resolver.

Mold oscillation. CC1 Slab Continuous Casting Machine. No. 1 available. Double oscillating bench consisting of No. 2 cylinders equipped with hydraulic proportional valves. Adjustment: width 0-12mm (+/- 6mm) Frequency 40-300colpi / min.

Bender. No.1 available. Joining segment between the vertical and the curved area provided with rollers on the wide sides.

Curved sector. No.4 available. Curved segment with idle rollers on the wide sides.

Straightening sector 1. No.1 available. Straightening sector with idle rollers on the wide sides and 2 motorized rollers in the curved part, 1 on the upper side and 1 on the lower side.

Straightening sector 2. No.1 available. Straightening sector with idle rollers on the wide sides and 2 motorized rollers in the straightening part, 1 on the upper side and 1 on the lower side.

Straightening sector 3. No.1 available. Straightening sector with idle rollers on the wide sides and 4 motorized rollers in the straightening part, 2 on the upper side and 2 on the lower side.

Middle roller table. No.1 available. Section of the roller table consisting of No. 1 idle roller with hydraulic control for the disconnection of the dummy bar and No. 2 motorized rollers.

Cutting roller table. No.1 available. Section of the roller table composed by 5 motorized rollers and 2 side hydraulic pistons for translation.

Roller Table. No.1 available. Section of the roller table composed by motorized rollers.

Cutting Machine. No.1 available. Cutting machine composed of structure that falls on the slab during cutting. The machine is, equipped with 2 oxygen torches placed at the machine sides that move linearly with an electric motor and with resolver position control. The return movement is controlled by an electric motor.

Marking Machine. No.1 available. Marking machine placed at the side of the roller table. The movements are motorized and resolver controlled. Marking system with alphanumeric characters that uses molten metal spray.

Transfer machine. No.1 available. System composed of 4 trucks with hydraulic lifting whose translation is chain drive motorized.