

ELECTRICAL SCORCHING MACHINE 1 WORK TRACK

MAIN FUNCTION

Scorch the friction surface of the brake pads.



DESCRIPTION

The operating sequence starts by dosage of the brake pads by means of suitable pneumatic cylinders mounted on a loader.

Afterwards, the brake pads are dragged to a hot-plate unit, to be then compressed by a thrust unit.

Once the cylinder reaches the setting pressure and exerts the preset force onto the brake pad during the preset time period, function of the pad type on process, the first scorching phase is performed.

The brake pads, already submitted to the first treatment, are then conveyed to the cold-plate station in order to be cooled; finally, their starting parallelism is restored.

The finished brake pads are unloaded by means of an out-feeding chute.

The scorching machine is equipped with control devices, so as to make it a multi-purpose machine suitable to accept any kind of brake pad; the pad limit dimensions is the only requirement to this purpose.

SPECIFICATIONS

WORKING CYCLE AUTOMATIC

IN: brake pads entering the machine by means of a manually filled loader.

OUT: automatic unloading of brake pads by means of an out-feeding chute.

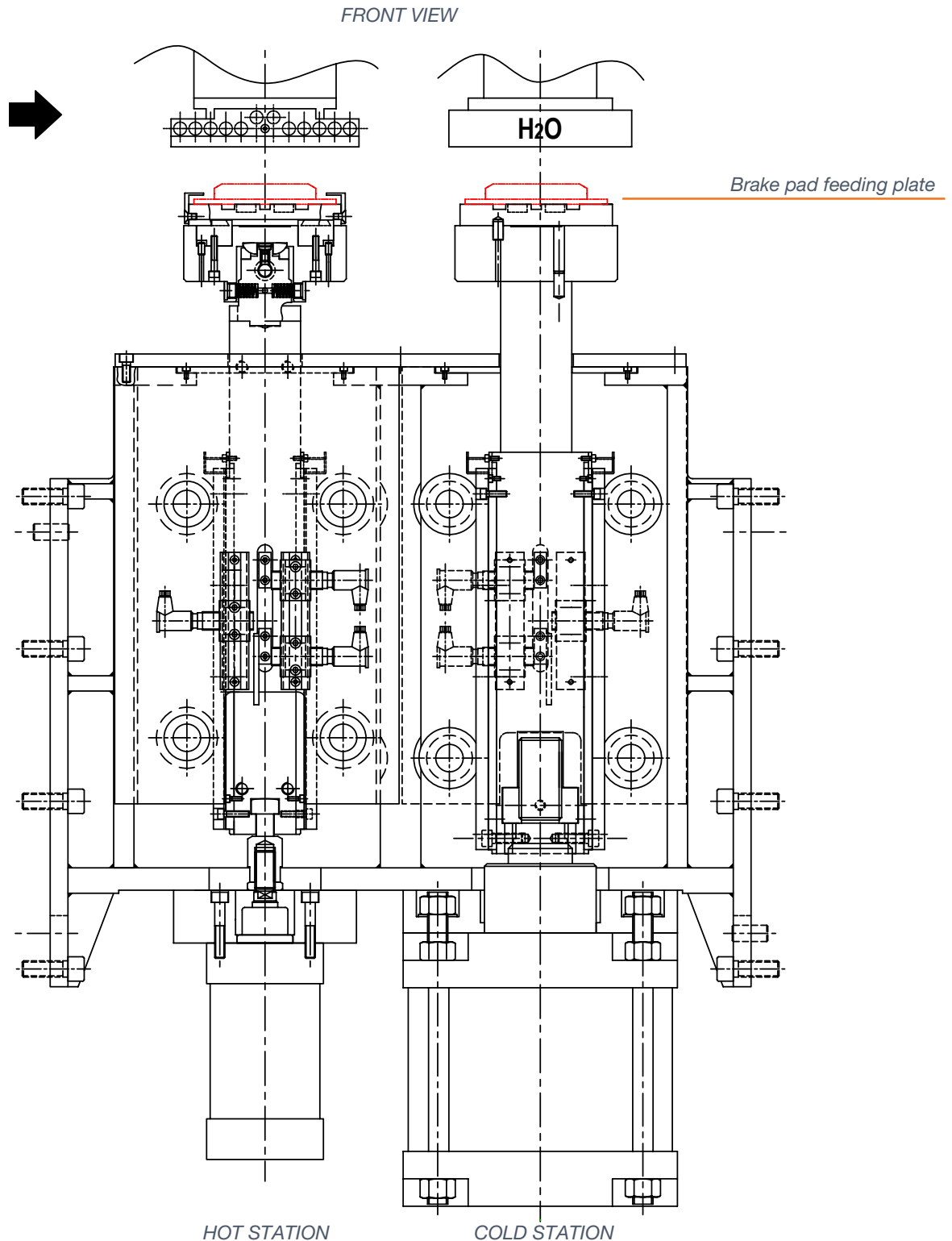
The cycle time is conditioned by two factors: the first one, that may be quantified in 5 seconds, is featured by the pad transfer and lifting up from the hot-plate station towards the coldplate station; the second factor is constrained to the pad sizes, therefore also to the duration time of the scorching operation, usually ranging from 30 to 60 seconds.

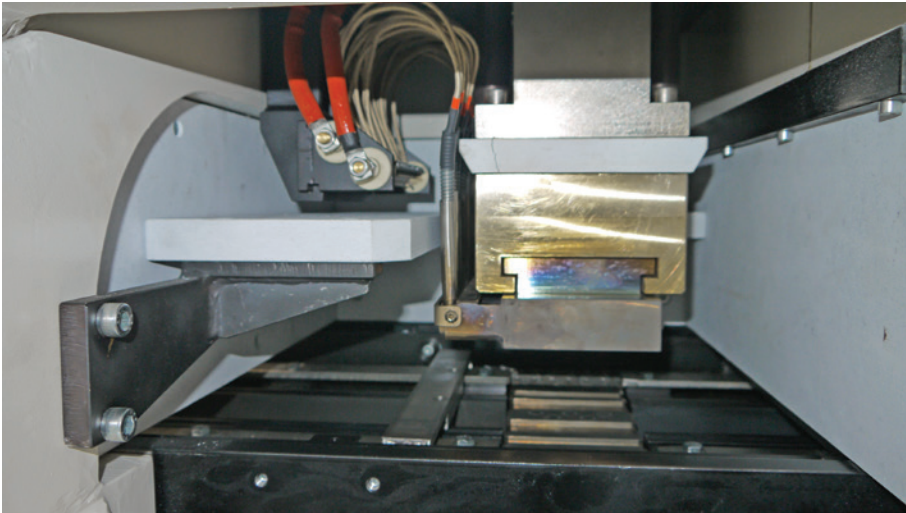
$$T_{tot} = T_1 + T_2 = 5 + 30 = 35 \text{ sec.}$$

HOURLY OUTPUT

~ 103 pcs/hour (at 100% efficiency).

DIAGRAM

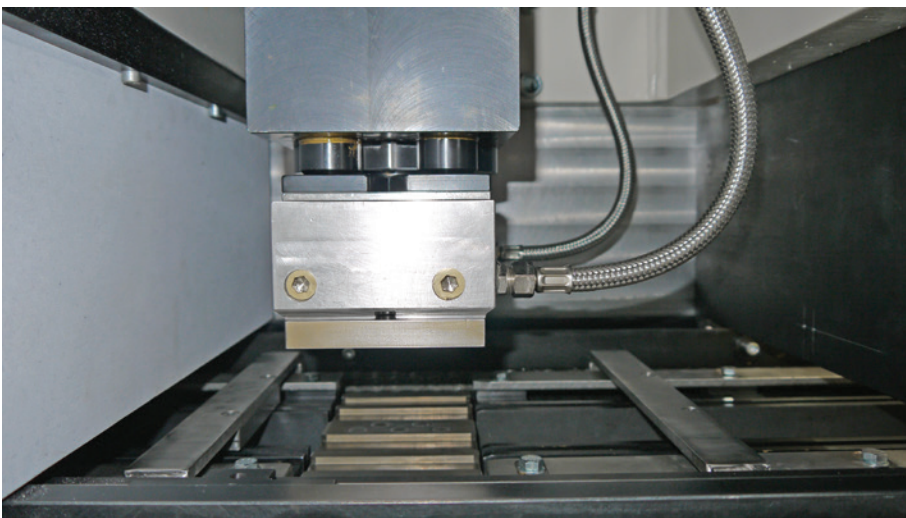




HOT STATION

Operating pressure of plates: from 1000 to 4000 N.

Working temperature of plates: 750° C (adjustable).



COLD STATION

Working temperature of plates: 25° C (obtained by circulating industrial water inside the plates).

Operating pressure of plates: from 5000 to 29000 N.



Machined pads