

# ELECTRICAL SCORCHING MACHINE 2 WORK TRACKS

## 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 unloading of the finished elements is automatic and is carried out through the relative tipper.

A conveyor conveys the brake pads to the cooling tunnel, so that at the end the brake pads can be recovered at a temperature of around 35-40 ° C.

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.

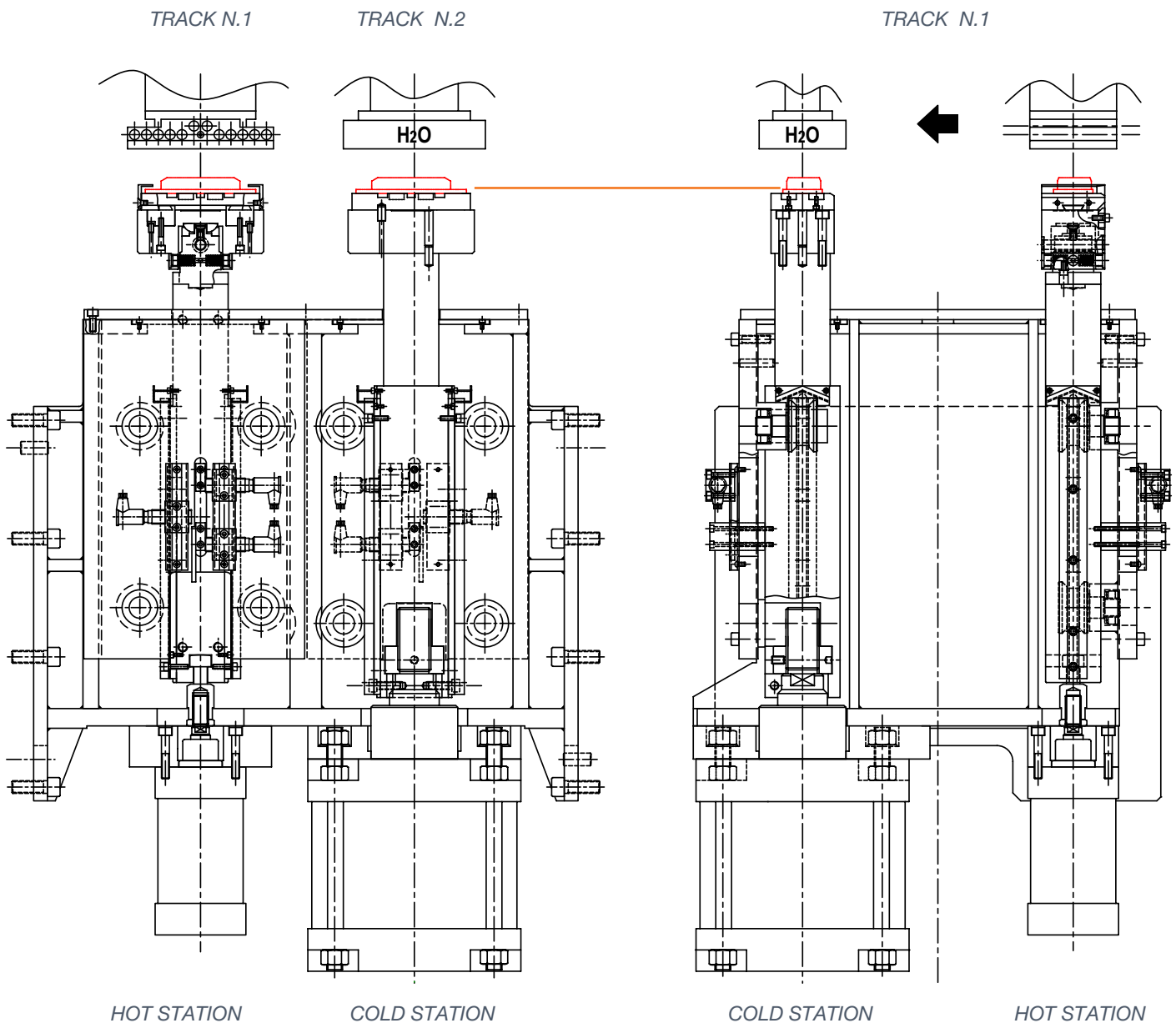
$$T_{tot} = T_1 + T_2 = 7 + 30 = 37 \text{ sec.}$$

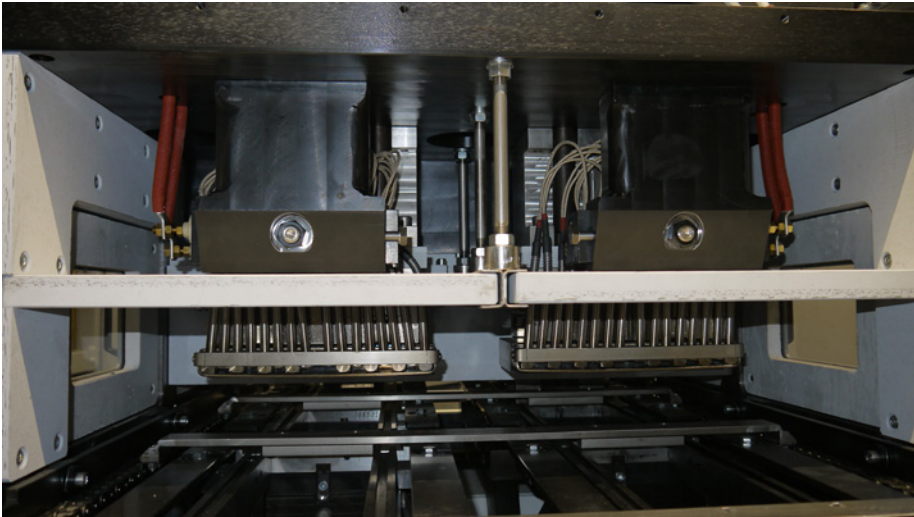
### HOURLY OUTPUT

~ 103 pcs/hour

(at 100% efficiency), for each track, so 206 pcs/hour.

## DIAGRAM

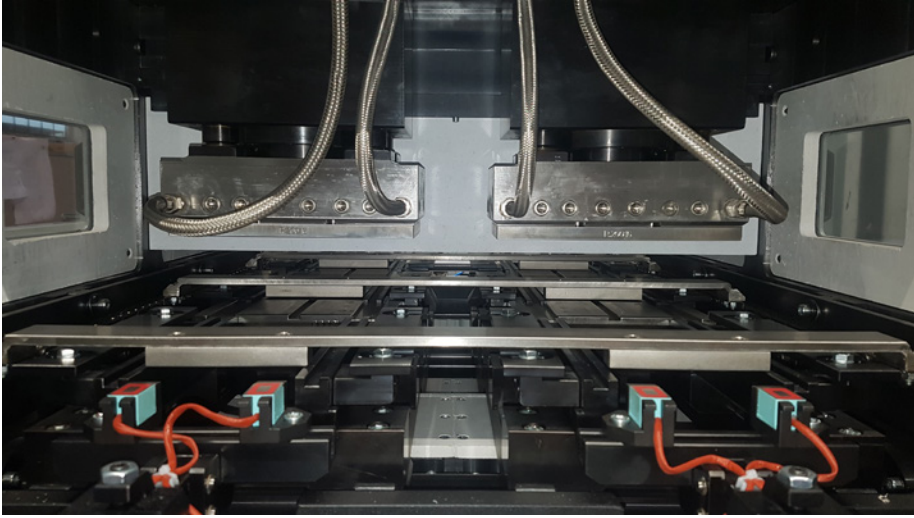




**HOT STATION**

*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*