

## TSA 350/400 M

*The TSA350/400 M is a wet manual abrasive cut off machine combining an assisted oscillating and a manual pendular movement. Designed for straight cutting under coolant of high alloy steel and difficult materials to cut which give a high quality finish, avoiding heat cracking and abrasive contamination.*

*The TSA 350/400 M is fitted with an oscillation carriage in order to give a movement of go and back of the grinding wheel : the finish is better , the cutter is faster, there is no heat on the cut up surfaces and the lubrication during the cut process is better*



### **MAIN FEATURES**

#### **Machine frame :**

*The machine frame is self standing and made from heavy gauge sheet metal designed for stability and sound retention.*

*The frame is placed on four jacks witch have to be adjusted for the levelling of the machine and its stability.*

#### **Cutting head :**

*Made from heavy gauge sheet metal. The motor gives 5,5 kW at 3000 rpm.  
7,5kW with  $\varnothing$  400 mm cutting disk on request.*

*The drive to the cutting disk is made by trapezoidal belts giving a peripheral speed on  $\varnothing$  350 mm disk of 57 m/s and 65 m/s on  $\varnothing$  400 mm disk.*

*This machine use unreinforced abrasive disk with boring diameter 1 inch and 3,5 up to 4,5 mm thickness.*

*The cutting disk housing is made of steel with one access door to replace the disk easily.*

#### **Cutting movement**

*The cutting movement is made by the handle witch is adjustable in height.  
One push button placed at the end of the handle start assisted oscillations.  
Stop oscillations when release the button.*

Oscillation stroke is 40mm moved by gear motor

## **Vice**

The vice is fixed with two slots on a main table (450x315mm). This main table is placed on four metallic blocs. The vice is a hydraulic quick acting type.

Quick interchangeable jaws allows to clamp square or round shaped pieces.

This vice is an double hydraulic jack model witch maintain the piece on each side of the cut.

Stroke of jacks 7mm.

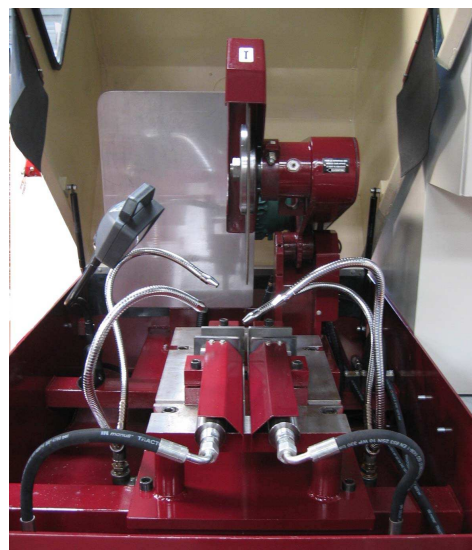
The rear parts of the vice have laterals adjustments, and the front part is quickly adjustable to the piece size.

Vice pressure is adjustable from 35 up to 205 kg.

The cutting height reference with the vice is 1020mm.

The hydraulic group is placed at the rear of the machine.

Option : a slotted table, easy to fit in place of the vice is available



## **Safety protection**

All the machine is protected by means of a fully enclosing witch is electrically interlocked.

This hood is hanged mounted and two spring jacks help the operator for is opening The front and the left side is fitted by a polycarbonate screen,.

Inside, a safety low current light device give a good vision of the work area.

## **Cooling**

The cooling liquid is distributed by four adjustable metallic taps.

The tank for the coolant fitted with its pump is placed inside the main frame of the machine and can be take off by the front side.

This tank is fitted with four wheels and can be easily moved to empty and clean.

The tank capacity is 120 l and the pump discharge 100 l/mn

## **Electrical equipment**

Electrical controls are low voltage and are housed in a sealed cabinet placed on the right side of the machine.

It enclose :

Electronic brake for the main motor

Electric command for interlocked

Control panel take place on the side of this cabinet.

Overall dimensions

Height 1880mm wide 1215mm prof 1500mm

Weight 500kg



*This machine comply with CE rules*

*Machine is delivered with:*

*Service tools,*

*Manual with electric drawing and complete spare part list*

*A two litres can of Record soluble cooling liquid.*

*One cutting disk.*

### **Description of functioning**

*The operator places the piece to be cut up in the vice of the machine and adjust it in depth and in side.*

*He close the vice by pushing the button on the control panel, and start the main motor by pushing another button.*

*The operator can now hand the lever and cut the piece manually with assisted oscillations by pushing the buttons on the lever.*









*Stop of the machine is command by pushing the stop button for the motor and the open button for the vice.*

### **Cutting capacities**



*Those capacities are available for 110kg/mm<sup>2</sup> steels materials with 5/10mm thickness surface hardened.*

*If needed more than 80% of those capacities, please contact us for test on your pieces*

<i>Vice capacity and space under disk</i>		<i>Cutting capacity for hollow profile</i>			<i>Cutting capacity for full profile</i>		
							
130	130 x 200	120	120	120 x 200	90	90	50 x 200

### **Options**

- *A mist extraction unit is available to give clear vision into the cutting area.*
- *System of filtration for coolant*
- *Inverter for main motor*
- *Additional work table with T slot*
- *Motor of 7,5 kW*
- *Housing for wheel Ø 400 mm*
- *5 litres can special "RECORD" cutting oil (with a 5% dilution ratio)*
- *10 litres can special "RECORD" cutting oil (with a 5% dilution ratio).*

**Drawing of the machine**

