

VULCANO 4000





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1. DESCRIPTION

Model VULCANO 4000 has been designed for oxy-fuel and plasma cutting, being able to assume extra functions like powder marking, punch marking or ink marking.

VULCANO 4000 is a great machine, it incorporates linear guides in all axes with self lubrication system.

Linear guide ways consists of a rail with ground ball tracks as well as a block. Continuously rotating balls ensure low friction and connect the block with the rail in two directions form-lockingly. The balls are kept in the slide way of the block by a cleat so that the installation of the components is possible without additional auxiliaries. The block is protected against the penetration of dust on every side by scrapers. The unit is lubricated by grease nipples that can be fitted on both sides.

In the transversal axis each cutting station is ported by 4 arc bearings moving trough linear guide.

The mechanical robustness on VULCANO 4000 model, offer us a new standard in precision, process speed, and low maintenance.

CNC is integrated on VULCANO model, as an option can be mounted separately using then, the video control system.

The controller installed in model VULCANO is an NUM,; it has all advantages about connectivity of a PC based controller but without their typical problems.

The Ethernet connection with the company network makes the loading of programs easy, fast and without limits of size.

Not having a PC is a big advantage in the industrial environment, no hard disc, no operating system, no problems.

Without problems but without losing capabilities until now only associated to PC based controllers, like remote control through internet or loading big files without waiting one second until 10Mb



In this offer are included the following elements:

2.1 MACHINE CHASSIS.

Heavy structure bridge type, transversal beam.



Longitudinal trains, machined, supported each one by 2 ball recirculation blocks, these blocks are suited with lubricating system.



2.2 LONGITUDINAL TRACK.

Longitudinal track is formed by modules of limited length supported by stands to floor. It has all possible calibration needed.

In the track are the linear guides and the racks, laying in machined housings. Also metal protections cover the linear guides and racks from possible impacts.



Longitudinal track is expandable in any moment, thanks to its design.



2.3 CABLE CHAINS SYSTEMS.

All conductions on the machine, cables or hoses are made trough cable chains.

Oxyser only uses high quality cable chains, all of them are closed format for preventing possible sparks in the conductions.



The inside area of the cable chains is structured with separators for guarantee cable life.



2.4 LUBRICATING SYSTEM.

Recirculation blocks on longitudinal axis are lubricated automatically thanks to oil dispense cartridges.



This detail is very important for having a long life in the moving systems of the machine. Reducing maintenance periods and avoiding any excess of oil, normal when manually lubricating. Also we save the time needed to manually lubricate the machine.

These cartridges are replaced every 6 months, work at one shift, and it is so simple as pulling them out by hand and installing a new one, without the need of any tool.





2.5 CNC

NUM AXIUM POWER

From CNC System to Total Solution Flexibly, precisely and quickly User interface extensively configurable Complete systems with operating panels, drives and motors

Key element - Axium Power CNC
The Axium Power CNC is highly expandable and flexible, purposely developed to satisfy a wide variety of applications. It is the answer for small demanding applications as well as large-scale complex ones. The most sophisticated configuration in a multi CNC arrangement can include more than 150 interpolated CNC axes. Due to the configurability of the NUMpass operator interface, the machine users can expect an intuitive layout that provides simple step-by-step operation

Available in various configurations and equipped with application specific functions and function packages, Axium Power can be customized to meet the specific requirements of most customers.

Adaptable to the application at hand, the combination of the Axium Power CNC with NUM servo drives and motors makes a strong argument. Together, they form an ideal system to transfer the precision of the CNC to the work piece.





2.6 PLASMA

HPR 400

The HPR400XD combines fast cutting speeds, rapid process cycling, quick changeovers, and high reliability to maximize productivity, and is now available with new patent-pending True Hole technology.

Virtually dross free cutting capacity - mild steel 38 mm (1 1/2")

Production pierce capacity - mild steel 50 mm (2")

Maximum cutting capacity (edge start)

- mild steel 80 mm (3.2")





2.7 FUME EXTRACTION TABLE WITH FILTRATION SYSTEM

In the plasma cutting process is strictly necessary to use filtering and fume extraction systems.

OXYSER's extraction tables are built with double suction channel; this ensures the correct extraction of the fume eliminated in the cutting process.



Complete fume absence

This offer includes 1 fume extraction table (3 m x 24 m of work area).





The machine incorporates one filter unit consisting of 12 filter cartridges.



The suitable design of this model is very important because it permits to avoid the problems related with fume elimination in the workspace.





3. SOFTWARE

OXYSER RCAM PRO

CAD/CAM system for true shape nesting, documentation creating and NC programming of thermal cutting. The system development is based on contemporary IT knowledge and many years experience in integrating effective MCAD/CAM solutions. With the help of Vintech RCAM, hundreds of factories today achieve immediate material saving, reducing the time for engineer preparation and the expenses for qualified specialists.

Functional specification

Coordinate systems

Blocks, including dynamic blocks

Multi-plates nesting

Parallel zones

Technological Knowledge Base (TKB)

Dataset Technological (overaly) tables in TKB

Interactive nesting with on-line control of overlap

Unbounded nesting of placed objects

Regular and matrix nesting

Interactive paths

Interactive rapid moves with tracing

Reports

Cost estimation of processing

Pre-processing – Vector marking, Engraving, Overcasting,

Centering

Automatic nesting

Automatic paths

Automatic route

Multiplicity and Variants of nesting layout

Extended capabilities for paths

Extended capabilities for route

Pre-piercing or dimensional punching

Postprocessors

NC-TC Verifier

Allowances

Frames on plates and parts longer than the machine step

Single and three torch bevels and bevel parts

Common cut for a multitude of parts

Automatic bridge placing

Risky zones' geometry

Raster marking

Automatic reorientation of Lead-in/Lead-out paths for avoiding collisions



4. INSTALLATION

The installation always will be effectuated by the Oxyser's staff; this is the only way we can ensure the correct functionality and maximum system accuracy.

The machines track is based on rigid supports every 2000mm. These supports are fixed to the installation floor by dowels; each support is fixed by 4 dowels.

The electrical power supply of 400v 3 phases should be in the range of 10% to ensure the correct work of machine.

Prior to installation, OXYSER will present plans of location, of dimensions, of gas's supply points and sketches of cabinets required for the machine's operation.

The electrical panels are not included in this offer and must be completed before assembly.

The gas supply lines are not included in this offer and must be activated before the installation of the machine.

This offer does not include any type of civil work that may be necessary for the installation of the machine.



4. INSTALLATION

REQUIRED ELEMENTS	
Gas supply lines:	
AIR	
OXYGEN	
Switchboard: 400 vac	max power 40 kW
Mounting Area: FLOOR	reinforced concrete flatness + - 35mm.

The offer does not include the network cable from the office to the machine, although is not strictly necessary for the operation of the machine, it is advisable.



5. WARRANTY

The warranty of OXYSER's machines is one year from commissioning.
The warranty includes the following sections:
Replaced parts
Transportation of items sent to the customer under warranty
Warranty excludes any expendables as nozzles and torches.
The warranty period of one year is not limited by hours of work of the machine;



6. TECHNICAL SERVICE

The OXYSER's technical assistance service is a fundamental part of our company' functions, it insures that our customers' production will be not compromised by any unforeseen.

In the case of a failure of a piece of the machine, provided that is easily replaced without the need for expertise, OXYSER guarantees the fast delivery of it.

OXYSER maintains a large stock of spare parts for all machines, including models for over 10 years.

Free remote assistance.

OXYSER offers a scheduled maintenance service. This service includes the OXYSER's technicians displacement every 6 months. This ensures the correct monitoring of maintenance and customer's tranquillity regarding the conditions of the machine.

The price of this service is offered in each case, depending on customer's location and type of machine.