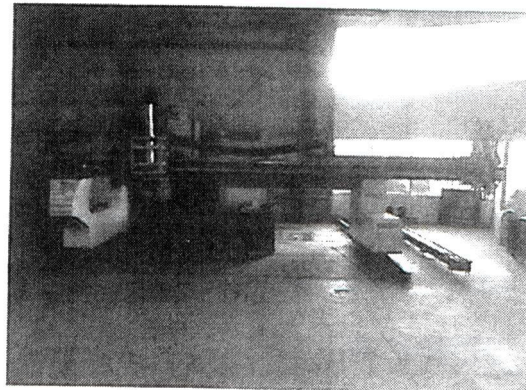| 1 | **Stako BV Cutting machine** |

### MAGNUM

The Magnum is an industrial CNC cutting machine built for heavy duty jobs. The cutting machine is available with a plasma power source which has the latest fine cutting technique for high quality cutting jobs. The cutting machine is also available for other cutting processes.

### The Track
In order to achieve a best precision in the cutting direction, the track is very important. Stako BV uses for this a 5-side grinded rail track. In this track the precision racks are integrated.

### The Portal
The portal consists of a traverse beam and two robust constructed wheel houses. In these wheel houses the adjustable wheels and guiding rolls are mounted. The applied bearings don't need maintenance and guarantee a precise guiding of the portal over the track both with low and high speeds.

### The Control
By using three Servo drives you obtain a perfect control in along-direction and cross-direction. In this way the movements of the machine can be adjusted in all directions without collisions, vibrations and deviations.

The applied servo drive systems are suitable for higher temperatures and an continuous pressure. The motors are provided with a delay, that guarantee through the gear drive the right speed with a high couple moment. The control in cross-direction takes place through a servo motor that grasps directly in the pinion rack, so that a precise movement in along-direction is guaranteed. An automatic cleaning system is mounted on the machine, as an option.

### The control/operation
The control and the operation panel are mounted on the wheel houses. With these two units the machine, its processes and its functions are operated. For the control Stako BV uses the reliable Burny control.

| 1 | Cutting capacity: 3100x12300 |

| 1 | **Laserpointer** |

By mounting of a laser pointer unit at any time the position of the machine in reference to the plate can be observed. This is very convenient when dealing with thick materials, if the right edge on which the plate is situated on the machine has to be read. Also at all times a reference with regard to the cutting head or other tool can be switched on. The distance to the other tools is programmed by means of an off-set software switch.

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1 | **CNC Burny 10 LCD Plus for XP**
**Hardware**

**2 GHz Intel processor**
The Burny10 LCD PLUS makes use of the strength and possibilities of the latest processors.

**Touch screen for industrial applications (HMI)**
Operation of the Burny10 is easy and simple to learn thanks to huge buttons and simplified prompt schedule.

**15-inch (380mm) LCD**
Huge, clear colour LCD screen with good reproduction simplifies the usage in factory environments.

**Hard disk 20 GB**
This is enough storage on the hard disk for part programs and other important files.

**1,44 Mb disk station**
There is an easy to reach disk station on the front panel for loading and saving files.

**USB connection on front panel**
On the front panel there is a connection for USB, which can be used for mouse, keyboard and/or USB memory stick.

**Cutting machine in 8 directions movable**
This is a superior way to move the machine within the cutting part in circles.

**Switch for industrial applications: Start, Stop, Go To, Reverse Emergency Stop**
The important movement control switch of the machine for easy access placed together on a slanting panel.

**Switch for industrial applications: Start, Stop, Go To, Reverse Emergency Stop**
The important movement control switch of the machine for easy access placed together on a slanting panel.

**Industrial closet with hinging valve for easy access**
The design experience that Burny10 has for many years has been built in this robust closet protected by EMI/RFI and easy to access, which is durable even in the worst circumstances.

**Extensive built-in EMI/RFI suppression**
Keeps outside noise emissions out of the control system insuring years of reliable operation and service.

**Dimensions**
Width : 465 mm
Height : 365 mm
Depth : 305 mm
Weight: App. 14.0 kg

**Software**

Windows XP Embedded version 2002

The Burny10 LCD PLUS is equipped with the following operating system: Windows XP Embedded Version 2002.

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## Installation, Installation and Diagnostics

Remote diagnostics via internet

The Burny10 can be interrogated and diagnosed (your shop floor to our factory) via phone modem and internet providing extremely rapid, powerful and low-cost maintenance and diagnostic services.

### Real-Time Diagnostics

Extensive built-in diagnostic routines monitor I/O status in real time, minimizing set-up time and increasing service functionality.

Manuals are loaded into Burny10
Entire machine and cutting systems manuals can be loaded into Burny10 creating a centralized and easily accessible complete machine database and technical reference library.

BURNY10 LCD PLUS Standard I/O

Communication ports for external keyboard; pointing device and fully isolated RS 232/422 serial communications (Upload/download). The multiple communication ports make it possible to easy communicate in different configurations with the Burny10 LCD PLUS, which are customizable.
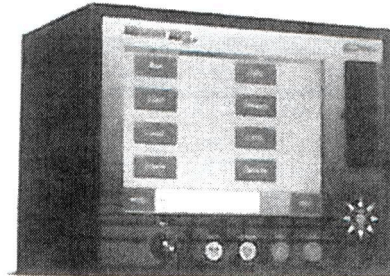
Optical Isolation of I/O
This provides system noise immunity from surrounding RFI noise for trouble free operation.

4 encoder inputs for X, Y, X" and C-axis feedback.
Closed loop encoder feed back is used on each axis to insure precise position feedback and accurate cut parts.

Further Specifications



- 4 D/A analogue outputs for X, Y, X' and C-axis
- 4 24-230 V AC/DC inputs for oxy fuel and plasma cutting processes
- 8 24 VDC/230 VAC 5-amp. VDE approved relay outputs for oxy fuel, plasma and marking units
- External contact (OK to run) output
- Emergency Stop input 24-230V AC/DC

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## PLASMA

| 1 | **Roto tangential cutting head** |
|---|---|

Running in combination with software with torch.
Stako implemented a patented a special rotary tangential head with its own height control, fully programmable from offsets to bevel angels and automatic X ,Y and Z compensation.

In relation to other machine builders this is unique and we like to invite you to our company.

The fully programmable head is equiped with one continous variable bevel head.

Technical details:
- Rotary axis: AC servo controlled
- Very stable construction
- Free Programmable Axis ( cutting angle)
- AC servo controlled
- Integrated Anti collision system with Quick Machine stop optional
- Automatic homing
- Positioning -55 till +55 Degrees

Torch lifter for Bevel head.
The lifter is constructed extra rigid to be able to carry the bevel torch.

| 1 | **Hypertherm Plasma HPR 260** |
|---|---|

The HyPerformance Plasma realises an unequalled HyDefinition® cutting quality, which is consistent within a large range of plate thickness, however at half of the operational costs.

By integrating the HyDefinition®, HySpeed® and LongLife® technologies of Hypertherm, the HyPerformance improves the performance, and the productivity. The system offers the almost dross less cutting quality of HyDefinition®, but faster and with twice as long life length of the cutting parts.

Features
- Mild Steel : 30, 80, 130, 200 and 260 Amps
- Stainless Steel : 40, 80, 130, 200 and 260 Amps
- Aluminium : 45, 130, 200 and 260 Amps
- HyPerformance dry plasma
- LongLife oxygen plasma
- Carbon, stainless plasma
- 100% duty cycle throughout entire cutting range
- Black box approach with no operator controls and only a single status light
- 3 divided compartments for noise immunity

Cutting capacity
- Mild Steel : 0.5 tot 64 mm (piercing 40mm)
- Stainless Steel : 1.0 tot 50 mm
- Aluminium : 1.5 tot 50 mm

Applied gasses
- Plasma gas : 02, N2, F5, H35, Air
- Shield gas : N2, O2, Air
- Gas pressure : 8.3 bar (120 psi) Manual gas console
- Gas pressure : 8.0 bar (115 psi) Automatic gas console

*More information about the HPR260 Plasma you can find in the leaflet.*

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| 1 | **Stako Auto. Gas console for plasma** |
|---|---|
| | The controller just chooses material and thickness in the CNC drive system or software. Then the CNC control will control the right amount of gas and pressure automatically from databank and proportion valve and the CNC file. This is a simplification of the plasma cutting process. Also with changing between the cutting and the marking, this appliance makes it automatically possible. The marker depth can also be automatically established. |

## OXYFUEL

| 2 | **Oxyfuel Torch lifter** |
|---|---|
| | This Oxyfuel torch uses either propane or acetylene in combination with oxygen. The Oxyfuel cutting torch comes with one basic set Oxyfuel cutting torch tip 50-75mm, backlash arrestors, hoses and base valves. |

| 1 | **Oxy fuel standard** |
|---|---|
| | consisting of: Oxy fuels preparation with in lines, hoses for cutting oxygen, preheating oxygen and gas, hose reducing valves and connection parts. The gas type can be chosen: either acetylene or propane or a mixture. |

| 1 | **Stako Auto. Gas console for oxyfuel** |
|---|---|
| | The controller chooses only material and thickness from the Data Base drive system or software. Then the CNC control will, from databank and proportional valve, control the right amount of gas and pressure. This is a simplification of the oxyfuel cutting process. Also it can be whole automatically from the CNC file headed. |

| 1 | **Oxy fuel automatic positioning** |
|---|---|
| | With this machine it is possible to program the torches on the right distance +.0 from each other through the software. This prevents failures, gives a much better cutting economics and saves material and time. Stako has developed an intelligent solution for this in order to do this completely automatic. |

## Additional feature

| 1 | **Pipe cutting module** |
|---|---|
| | On the right side of the cutting machine is a pipe cutting module mounted. |
| | The chuck and pipe support makes it possible to rotate the movement combined with the movement in length direction of the portal. This makes it easily possible combined with our nesting software to cut pipes on the machine. |
| | Max. cutting thickness pipe with oxyfuel 100mm and plasma 40 mm. |

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| 1 | **Software StakoNest** |
|---|---|

Version for Windows, built modular, possibilities for extensions

**Minimum requirements for the PC:**
- Intel Pentium IV, 1.8 GHz or equal
- 1024 MB SDRAM with 133 MHz BUS
- 20 GB Hard disk with min. 200MB free storage
- Microsoft Windows XP Professional or higher
- 19" Monitor with min. 16bit colour, keyboard and mouse

**Characteristics of the software:**
- User friendly Graphical User Interface with icons
- Import facilities for DXF files
- Standard Word Address
- Automatic part NC code programming in Word Address
- Printing reports
- Standard Shapes library with 50 parametric shapes. These shapes are user definable

Cutting part creation by only giving the desired dimensions (quick calc)

| 1 | **Used water table 2500x10000mm** |
|---|---|

Used water table with level control(by compressed air)

Suitable:
- Dry cutting
- against water cutting
- Under/in water cutting

This water table will be maid bigger by Stako suitable for 3100x12300 mm plates.

| 1 | **Side exhaustion system** |
|---|---|

For the water tables we developed a drive along metal side exhaustion mouth, which can exhaust the space between water and the plate. The exhaustion mouth is provided with two hose connections and is mounted on the bridge support.

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**Price complete machine with water table, side exhaustion system, transport, training and mounting the machine in Kolding:** € 181.500,--

## Summary of the order:

- Magnum 3100 x 12300
- Rails min.. 15000mm
- Laserpointer
- Burny10
- Roto tangential cutting head
- Hypertherm Plasma HPR 260
- Stako Auto. Gas console for plasma
- 2 x Oxyfuel Torch lifter
- Oxy fuel standard
- Stako Auto. Gas console for oxyfuel
- Oxy fuel automatic positioning
- Pipe cutting module
- Nesting Software
- Used water table cleaned and lengthened 3100x12300
- Side exhaustion system – motor for the exhaustion system is included in the price
- Used suction filter system for side exhaustion system

## Agreement:

Company name: Rool Denmark
Name: Mr. J. Roth
Date: 8/3·2012

Signature:

Stako B.V.
Name: Markus Peters
Date:

Signature:

8

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