

# ZINSER software

## MCC 8

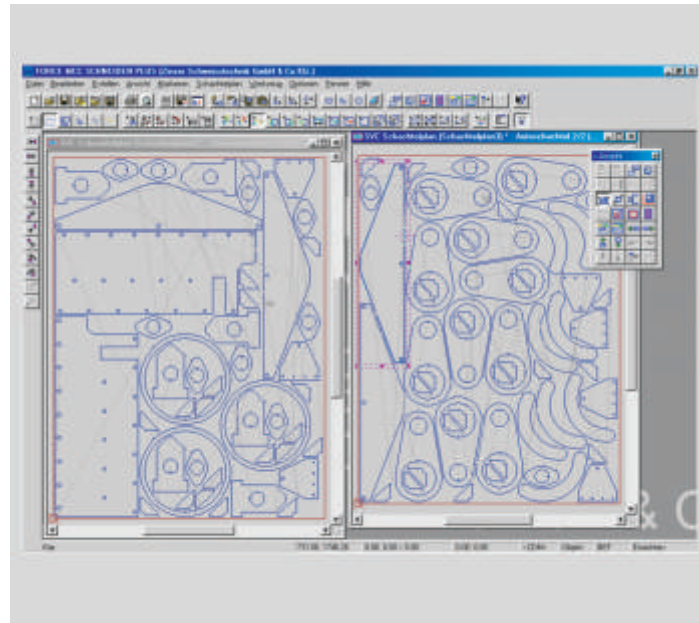
Programming system for flame cutting machines

- object-oriented creation of nesting plans from CAD data manually and/or automatically
- tool-oriented setting of technical parameters
- simulation of the program on the screen
- creation of the NC program for your flame cutting machine

The most important features:

- 32Bit Windows program
- MDI (multiple document interface)
- DXF-Import / DWG-Import
- standard figures (developments and pipe cuts too)
- automatic nesting
- data base
- reports
- self defined cutting processes
- postprocessor for ZINSER CNC-controls
- ...

Editions: Light / Pipe / Standard / Plus



## ZINSER CUT<sub>32</sub>

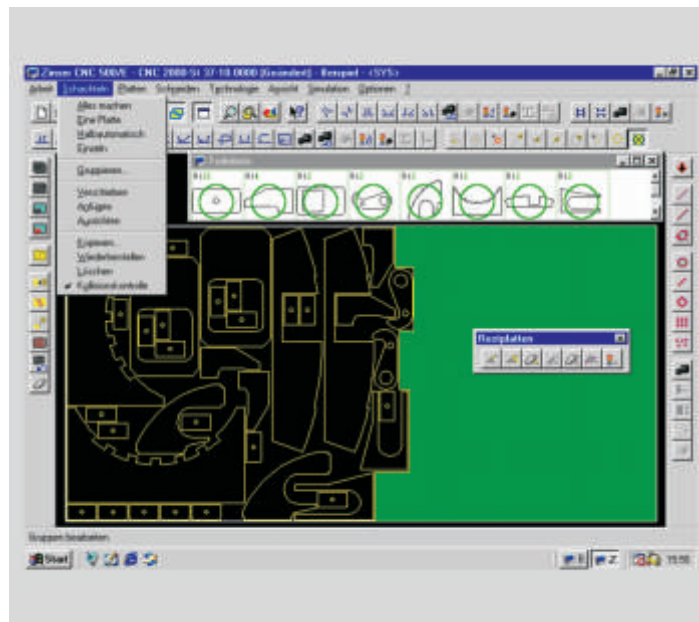
Software to generate and manage flame-cut parts and nesting plans

Editions:

- ZINSER-CUT<sub>32</sub> / Lite focus on 2D-CAD / DXF import/export
- ZINSER-CUT<sub>32</sub> focus on 2D-CAD / manual nesting
- ZINSER-CUT<sub>32</sub> / Plus focus on 2D-CAD / automatic nesting
- ZINSER-CUT<sub>32</sub> / DUCT-Plus focus on HCV-duct figures / automatic nesting

The most important features:

- 2D-CAD module
- DXF import/export
- macros
- manual or automatic nesting
- manual or automatic CNC-technology
- standard lists
- SQL-database
- administration of parts and databases
- calculation of cutting times and cost
- postprocessor for ZINSER CNC-controls



## Data transmission system

Transmission distances up to 1.000 m are possible.

The system consists of:

- software Windows-DNC V4.45
- USB/V24 converter
- twisted pair cable
- current loop system
  - 1 external modem for the PC / 1 plug-in power supply
  - 1 internal modem for the CNC control

Further information can be obtained from your ZINSER dealer.

## Appointed dealer:

ZINSER SCHWEISSTECHNIK GmbH  
Daimlerstr. 4  
D-73095 Albershausen  
Phone +49 (0)7161/505-0  
Fax +49 (0)7161/5050-100  
E-mail info@zins.de  
Internet www.zins.de



Subject to modifications 11.001-101a / 504.1001-00101 3.07

Since 1898 performance and progress

Flame cutting systems

Oxy-acetylene equipment

Hot air welding devices



One company  
3 production lines

# ZINSER

## flame cutting machines

# ZINSER flame cutting machines

**ZINSER Schweisstechnik** is one of the leading manufacturers worldwide for flame cutting machines. The well proven manually driven flame cutting and pipe cutting devices as well as guiding machines for every use belong to the wide product range.

The variety of machines does include simple and robust flame cutting machines with optical tracers as well as modern CNC-controlled machines for oxy-fuel, plasma or waterjet cutting. For the ideal adaptation of the ZINSER flame cutting machine to your cutting tasks a huge variety of accessories is available.

Plasma units with the newest technologies complete the product range.

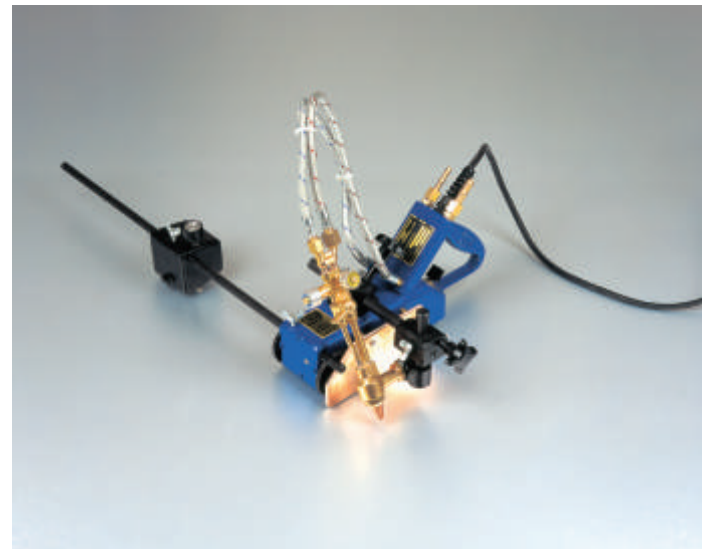
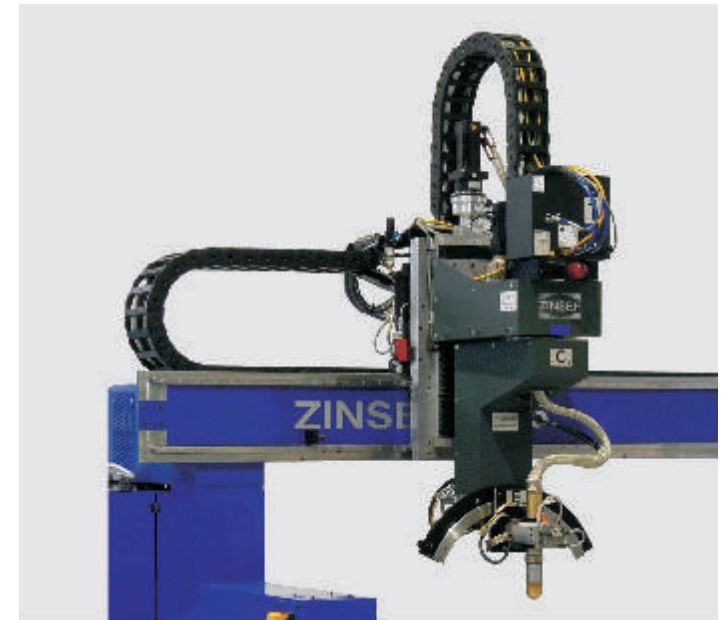
Programming systems for the creation of NC-programs are the interface between CAD and production.

## EBA-P - Plasma Bevel Cutting System

The automatically rotating plasma bevel system for one torch is used for precise bevel cuts even at complicated contours. It is fully programmable and disposes of an integrated three-dimensional collision protection. The plasma torch is moved in three axes (tilt, rotation and height) via high-quality AC servo motors. The height is adjusted via laser distance control and by analysis of the electric arc tension of the plasma unit.

### Technical data

Rotation:	± 540°
Swivelling area:	0°- +45° or ± 45°
Vertical stroke:	450 mm
Height control:	via laser distance control and voltage control
Weight:	approx. 85 kg

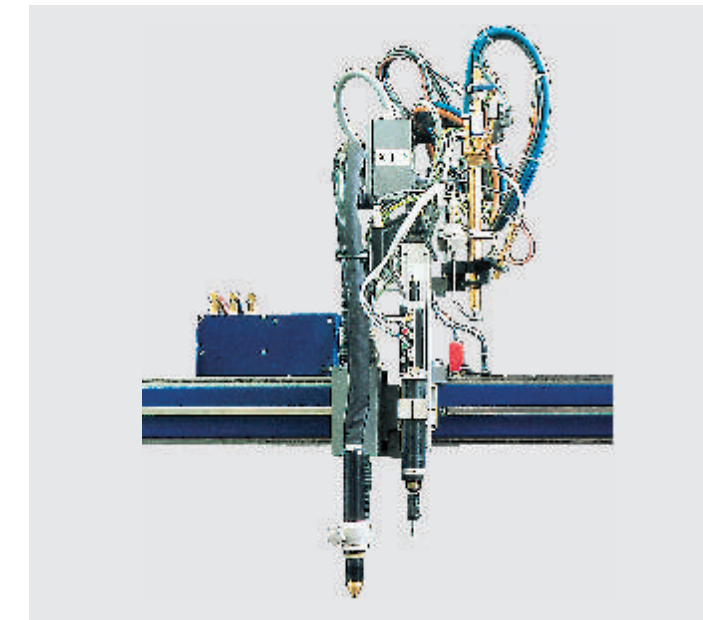


## Favorit I - Portable flame cutting machine

with stepless drive system. Shape cutting by means of hand guiding, straight and bevel cutting by means of L-bar or guide rail, circle cutting attachment for circles up to 1.600 mm Ø.

### Technical data

Material thickness:	3-60 mm / 100 mm
Fuel-gas:	acetylene or propane
Torch support:	lateral and height adjustment beveling via angle scale
Speed:	50-900 mm/min, steplessly controlled with forward and backward drive
Weight:	approx. 9.5 kg
Input voltage:	230 VAC / 120 VAC / 42 VAC optional



## Marking units

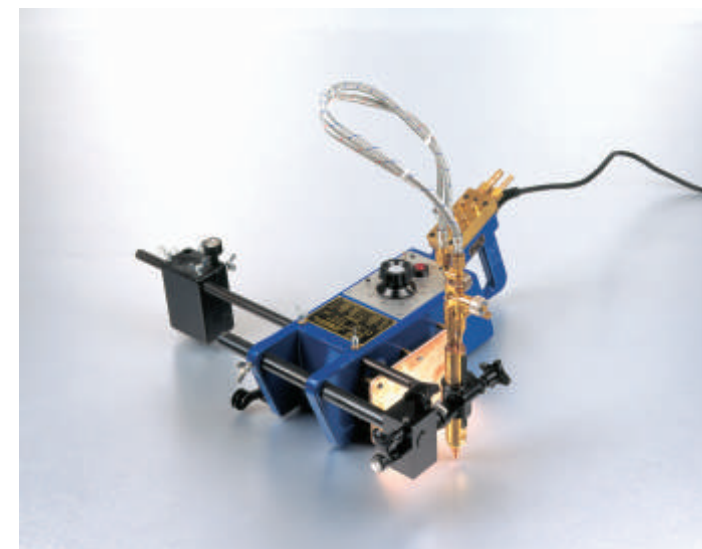
- pneumatic drilling unit for spot-drilling and marking
  - the unit runs with compressed air
  - the CNC control switches the spot-drilling unit on and off
  - drill feed and bit gauge are adjusted by means of an adjustable hydraulic shock absorber
- pneumatic drawing unit for marking of points and lines
- pneumatic punch marker for marking of points and lines
  - punch mark can be used as centre point for drilling
  - clear physical mark also at rusty and scale surface
- needle marker for engraving of numbers and characters
  - fast and permanent marking
  - electromagnetically operated
- plasma marker for engraving of lines, contours and characters
  - high marking speed
  - variable marking depth
  - clear physical and permanent mark

## Favorit II - Portable flame cutting machine

with stepless drive system and free-wheel clutch. Shape cutting by means of hand guiding, straight and bevel cutting by means of L-bar or guide rail, circle cutting attachment for circles up to 1600mm Ø.

### Technical data

Material thickness:	3-100 mm / 250 mm
Fuel-gas:	acetylene or propane
Torch support:	lateral and height adjustment beveling via angle scale
Speed:	50-900 mm/min, steplessly controlled with forward and backward drive
Weight:	approx. 19.5 kg
Input voltage:	230 VAC / 120 VAC / 42 VAC optional
Number of torches:	up to 3 pcs.- 1 piece included in the scope of delivery



## Environmental technology

systematic air purification in the working environmental

- Cutting tables
  - in different designs
  - modular construction
  - high surface load
  - mechanically or electronically controlled sectionalised extraction
  - can be fitted perfectly to the size and equipment of your machine
- Extraction systems and filter units
  - "Plug and Go" unit
  - easy installation
  - low maintenance time
  - corner installation possible
  - available also for outside installation





# ZINSER flame cutting machines

## CNC 300

2/3-axes CNC-control with drive amplifier

The most important characteristics

- 2/3-axes CNC-control with drive amplifier suitable for oxy-fuel and plasma cutting machines with up to 6 torches
- RTOS-UH real-time and multitasking operating system
- 2 M-Byte RAM for operating system and user programs (battery back up)
- LCD graphic display - 240x64 pixels
- 65 Standard shapes with lead-in/lead-out
- Creating of own standard shapes / free programmable contours
- Processing of externally created NC-programmes (DNC-port via RS422)
- Graphical display of the NC-program (with current torch position) / Zoom function
- Diagnostic system
- Repositioning to the last program point
- Reversing within the contour
- Angle-dependent corner slow down (Look-ahead-function)
- Program rotation
- Logging
- Marking function



## CNC 2030 / CNC 2050

Modern control for guiding machines for oxy-fuel, plasma and water jet cutting. The intuitive user interface, based on a real time operating system and a powerful industrial PC assure high efficiency. The CNC 2030 and CNC 2050 is available in attached form or as a stand alone version.

The most important characteristics

- 4-axes CNC control for
  - cutting machines for oxy-fuel (max. 8 torches) and/or plasma cutting
  - pipe cutting machines for oxy-fuel and/or plasma cutting
  - combined cutting machines for even cuts (X/Y-axis) and pipe cuts (X/A-axis)
- Gantry axis for precise guidance of the portal
- Extra axis for rotating units or other special accessories
- Ergonomically designed front with
  - 12.1" TFT colour display - VGA (800x600 pixel)
  - intuitive user interface
- Short training time and high operating convenience
- Easy integration into existing network
- High cutting speed due to fast processing times and look-ahead function
- Unlimited program size via dynamic reload into NC memory



## ZAC 2100 Twin (ZINSER Arc Voltage Control)

Combined distance control for the alternative use of a plasma torch or an oxy-fuel torch.

The ZAC 2100 Twin consists of:

- motorized height adjustment (Z-axis) with 4 quadrant-control
- universal arc distance control ZAC-2100 for the plasma torch
- capacitive distance control for the oxy-fuel torch
- electronic interface for the alternative use of the arc distance control and the capacitive distance control.

Capacitive distance control

- sensor electronic for the height adjustment between torch and plate
- sensor with detector ring

Universal arc distance control

- Evaluation of the electric arc voltage for the height control
- First height adjustment via nozzle contact on the sheet
- Two operation modes:
  - ARC-voltage (cutting voltage)
  - Cutting height (cutting distance and ignition height / monitored in mm)

Linear drive

- high precision (resolution 0.1mm) and high control speed (up to 6.600 mm/min)
- max. load: 12 kg
- electro-mechanical 3D collision protection with automatic <torch-up> function

## Pipe Cutting Devices - RSV

Portable pipe cutting devices with manual or motorized drive system for separating and chamfering of pipes.

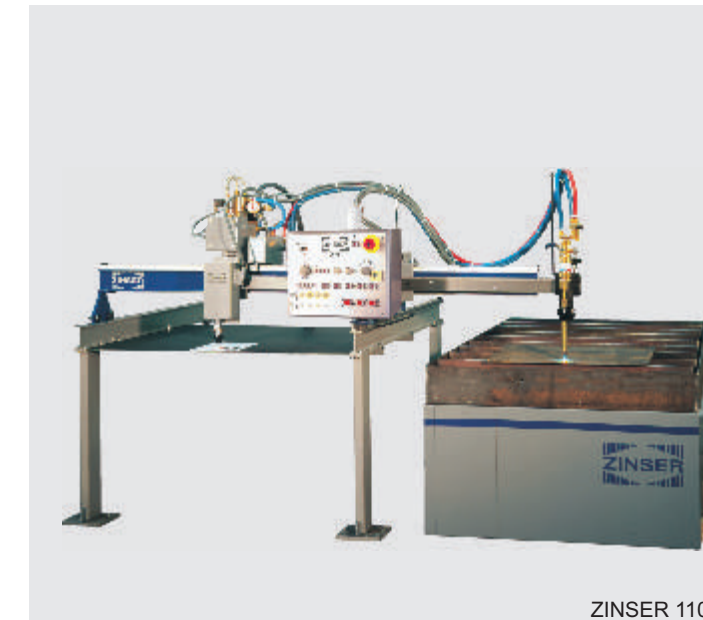
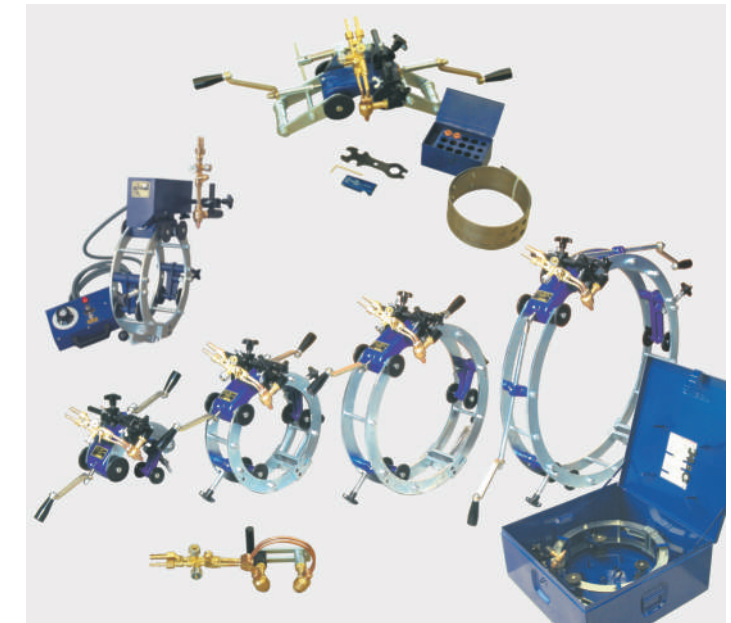
### Technical data

RSV-0	for pipes with outer Ø 70 - 120 mm ( 2.75"- 4.72")
RSV-1	for pipes with outer Ø 120 - 270 mm ( 4.72"- 10.63")
RSV-2	for pipes with outer Ø 270 - 420 mm (10.63"- 16.53")
RSV-3	for pipes with outer Ø 420 - 620 mm (16.53"- 24.40")
RSV-4	for pipes with outer Ø 400 - 1.600 mm (15.74"- 62.99")
RSV-4/14	for pipes with outer Ø > 1.400 mm ( >55.10")

RSV-1, RSV-2, RSV-3, RSV-4 and RSV-4/14 also available with stepless drive system.

Accessories:

- Steel box for stowing and transport
- Double cutting torch for V-welding seam preparation



## ZINSER 1101

Small cantilever machine with rack and pinion drive system for oxy-fuel cutting. Prepared for max. 2 torch carriers with manual height adjustment. Optical tracer system LK110 for line and edge tracing.

### Options:

- CNC-controller CNC 300 with 65 standard shapes and graphic display for combined operation mode tracing/CNC/teach-in
- Plasma power source

### Technical data

- Tracing width: 1.000 mm
- Working width: 1.000 mm
- Working length: 1.000 / 2.000 mm
- Cutting thickness: max. 100 mm
- Speed: 10 - 4.000 mm/min

## ZINSER 1211

Medium sized cantilever cutting machine with rack and pinion drive system for oxy-fuel and plasma cutting. Prepared for max. 4 torch carriers. Optical tracer system LK110 for line and edge tracing.

### Options:

- CNC-controller CNC 300 with 65 standard shapes and graphic display for combined operation mode tracing/CNC/teach-in
- Plasma power source

### Technical data

- Tracing width: 1.000 mm to 1.500 mm
- Working width: 1.000 / 1.250 / 1.500 mm
- Working length: 2.000 / 2.500 / 3.000 / >3.000 mm
- Cutting thickness: max. 100 mm
- Speed: 10 - 4.000 mm/min





# ZINSER flame cutting machines

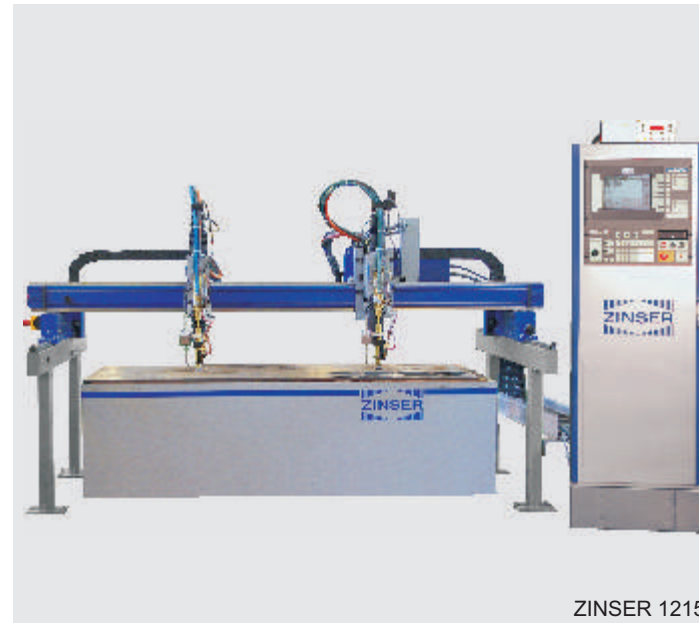
## ZINSER 1215 / 1215-DS

Low cost CNC-controlled gantry cutting machine for oxy-fuel and plasma cutting. Ideal for the combination of oxy-fuel and plasma. Basic machine with single side longitudinal drive system for oxy-fuel and dual side longitudinal drive system (DS) for plasma cutting via rack and pinion in both axes.

Z-1215 single side drive system CNC-controller attached or stand alone version  
 Z-1215 DS dual side drive system CNC-controller stand alone version  
 CNC-controller: CNC 300 or CNC 2030 / CNC 2050

### Technical data

- Track width: 1.500 / 1.750 / 2.000 / 2.250 / 2.500 mm
- Working length: up from 2.000 mm in 1.000 mm steps
- Cutting thickness: max. 100 mm for oxy-fuel  
max. 100 mm for plasma (depends on the power source)
- Torch carriers: max. 3



ZINSER 1215

## ZINSER 2315/2325

Robust gantry cutting machine for oxy-fuel and plasma cutting. The high stiffness, precise linear guides in the transverse axis and heavy duty runways, based on milled railway profiles S49, guarantee the very best quality and a long duration of life. A digitally controlled AC-drive system (single or double sided) with high precision planetary gears as well as selected racks ensure excellent motion characteristics, even at higher speeds.

Z-2315 single-sided drive / Z-2325 double-sided drive  
 Z-2315-N, Z-2325-N with double linear guidance within the gantry

### Technical data

- Track width: 2.100 / 2.600 / 3.100 / 3.600 mm
- Working length: up from 2.000 mm in 1.000 mm steps
- Cutting thickness: max. 300 mm for oxy-fuel  
max. 100 mm for plasma (depends on the power source)
- Torch carriers: max. 4



ZINSER 2315 / 2325



ZINSER 1225

## ZINSER 1225

High value gantry cutting machine for plasma and oxy-fuel cutting, ideal for combined cutting tasks. Dual side rack and pinion drive system (helical) via AC-servo motors and linear guides for the X- and Y- axes. CNC controller CNC 300 or CNC 2030 / CNC 2050 with standard shapes and graphic display - stand alone cabinet.

### Technical data

- Track width: 1.000 / 1.500 / 2.000 / 2.500 / 3.000 mm
- Working length: up from 2.000 mm in 1.000 m steps
- Cutting thickness: max. 100 mm for oxy-fuel  
max. 100 mm for plasma (depends on the power source)
- Torch carriers: max. 2



ZINSER 4025 / 4125

## ZINSER 4025B / 4125B

Gantry cutting machine for oxy-fuel and plasma cutting. Extraordinary robust design and high stiffness. Precise double linear guides in the transverse axis, runways based on milled railway profiles S 49. Digitally controlled AC-drive system (double sided) with high precision planetary gears and selected racks. Z-4125B with reinforced gantry and extended wheel housing.

### Technical data

- |                      | Z-4025B                                     | Z-4125B                                     |
|----------------------|---|---|
| - Track width:       | 3.100 - 5.600 mm                            | 6.100 - 10.100 mm                           |
| - Total length:      | Work. length+2.000 mm                       | Work. length+3.000 mm                       |
| - Cutting thickness: | max. 300 mm oxy-fuel<br>max. 100 mm plasma* | max. 300 mm oxy-fuel<br>max. 100 mm plasma* |
| - Torch carriers:    | max. 8                                      | max. 8                                      |
| - Working length:    | up from 2.000 mm in 1.000 mm steps          |   |

\* depends on the power source

## ZINSER 1825 S

Gantry machine for precision plasma cutting (HyDefinition or HiFocus) of thin steel plates at high speed. Floating support and automatic alignment of the gantry. Powerful dual side AC-servo drive system via linear guides and helical rack/pinion. CNC controller as stand-alone cabinet.

### Technical data

- Track width: 1.680 mm up to 4.680 mm (step: 500 mm)
- Working length: up from 3.000 mm in 1.000 mm steps
- Cutting thickness: max. 60 mm for plasma (depends on the power source)  
max. 60 mm for oxy-fuel
- Speed: 10 - 15.000 mm/min (35.000 mm/min)



ZINSER 1825-S

## ZINSER 1303/1304

For oxy-fuel and/or plasma cutting. The machines have been particularly developed for efficient machining of pipes. Openings, recesses and the entire end preparation can be realized quickly and economically.

### Z-1303

- For oxy-fuel and/or plasma cutting of pipes
- 32Bit CNC-control
- Programming via standard shapes or external programming system
- Graphic display during programming and program flow
- Driven by means of AC servos

### Z-1304

as Z-1303, but also hollow shaft through the chuck for the use of a suction through the pipe

### Z-1306

with additional Y-axis for machining of square pipes

### Accessories:

- Pipe supporting system consisting of a runway and adjustable dollies
- Pneumatic drilling unit for small holes



ZINSER 1303 / 1304