

PRESS & SHEAR



**ONE
TEAM**

PRODUCT RANGE

www.pressandshear.com

PRESS & SHEAR



Press and Shear has been involved in the supply of machines to the sheet metal and fabrication industry for over 50 years, and are proud to be associated with some of the worlds biggest and most respected manufacturers, each with specific areas of expertise.

We are in the unique position of being able to offer machines from a range of manufacturers who are experts in their field, bending, cutting, punching, profiling and forming.

We are proud to be partners with an established, and renowned, group of manufacturers, who offer environmentally friendly machines with the technical innovation to meet the most demanding of production requirements.

The sale of a machine is just the start, our P&S Spares and Service division has a team of service engineers who support, not only the latest equipment installed by Press & Shear, but also all of our long established installations, some of which date back more than 50 years. Our engineers undergo extensive product training, supported by our manufacturing partners.

The aim of all P&S service personnel is to provide a high quality service with the minimum of disruption to our customer's production. Service contracts are available and are tailored to meet the customer's production requirements.

The service team is supported by our spares and tooling department, we carry a large stock of spare parts for machines, both old and new, together with a large stock of press brake tooling.

“We are in the unique position of being able to offer machines from a range of manufacturers.”

Mark Britton
Managing Director

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SERVICE, SPARES AND TOOLING

TOOLING

Press and Shear offers a range of high quality press brake tooling, compatible with most of the press brake manufacturers.

Most tools are available on short delivery times, special tools are available on request.

Press brake tooling can be viewed and ordered via our web site.

www.pressbraketooling.com

Please contact us for a quotation for any of your tooling requirements.

Email: daveb@pressandshear.com



SPARES

Service, Spare parts and Technical support are co-ordinated from our head office and showroom, based in Tamworth, Staffordshire.

P&S carries a large variety of spare parts, for a wide range of sheet metal machinery, and are still supplying parts for machines that are some 40 years old, machines such as Promecam, Elga, Stippit and Peddinghaus, all names with a long history. We still stock parts for these machines, and also stock a wide range of parts for Finn Power, Adira, Guifil, Baykal, Boschert and Steirli - electrical, electronic and mechanical.

We carry a large inventory of spare parts for both current and older product lines that were all originally supplied by Press & Shear and as such we still have many original part lists and drawings.

Email: daveb@pressandshear.com



SERVICE

Unfortunately machines break down, normally at the most inopportune moment.

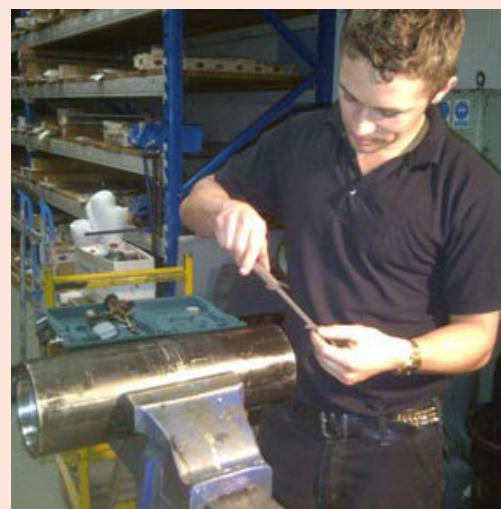
It's impossible to stop machines breaking down, what's important is how quick they are back up, working and producing parts.

P&S has a team of highly skilled service engineers, capable of working on a wide range of sheet metal and fabrication machinery, please contact our Service Manager who can discuss your maintenance requirements in detail and suggest the best way to get you up and running, as quickly as possible.

When a machine is running, maintenance comes quite a way down the list of priorities, it's only when your production stops, due to breakdown, that it moves to the top of the list. Regular service and preventive maintenance is vital in ensuring minimal break down time, a service contract goes some way to help minimise breakdown, and the cost of a contract is minimal in comparison to the cost incurred due to loss of production, please speak to our service manager, who can give you details and costs of our range of contracts.

Your machine only makes you money when it is working efficiently, we can help to ensure that continues to be the case.

Email - johnw@pressandshear.com



Adira is a long established and respected European producer of sheet metal working machinery, manufacturing a range of Press Brakes, Shears and Laser Machines.



PA RANGE

The PA range of multi axis high speed, press brakes incorporates the patented Hexa-C frame design.

- Large range of models
- Choice of bending lengths
- Choice of backgauge configurations
- Choice of controls
- Ease of operation.

Options.

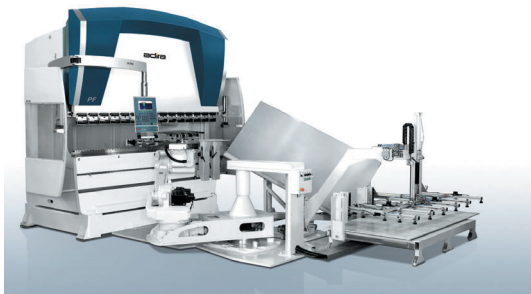
- Thickness and angle measuring system
- Upper and lower automatic tool clamping
- Robotic integration



HEXA C

Adira has developed a brand new frame design to complement the range of PM press brakes, Hexa-C offers the following advantages:

- Improved bending accuracy
- Perfect alignment between upper and lower beam
- Ability to accurately bend anywhere on the beam



Machine with Robotic automation.



BLUEBENDER

Electrical press brake

- Energy saving servo electric press brake
- Low power costs
- Low maintenance costs
- Fast and accurate
- Choice of models
- Choice of control and backgauge configurations



GREENBENDER

Hybrid bending technology

- Extraordinary precision
- Hybrid Green Dynamics technology
- Reduced maintenance



SM Shear

- 2 models: for 6 mm or 13 mm thickness
- Swing beam operation.
- Optional sheet support system.
- Ease of use.
- Proven solutions.
- Designed, engineered and produced in Europe.
- High quality standards.



GH Shear

- Choice of models and cutting capacity
- Swing beam
- Fixed angle to suit all thicknesses
- Sturdiness and reliability
- Patented "SCSC" - Combined Sheet Support System
- Proven technology
- Versatile range

GV Shear

- Cutting thickness up to 25 mm, more options on request
- Sizes up to 6 meters, more options on request
- Variable rake
- Optional: anti-twisting system
- Sturdiness, reliability, safety
- The ideal choice for heavy duty applications



Press and Shear offers a range of shears with either fixed or variable rake and with a cutting capacity of up to 30mm material thickness. There are a number of controls available, plus options such as sheet supports, extended squaring and support arms, loading and unloading equipment is also available.

In addition to the standard range of press brakes and shears Press and Shear can offer special machines to meet most customer's requirements.

RAS is a German company founded in 1939. RAS offers a range of bending, cutting, forming and ducting machines, from manually operated machines, to fully automated flexible manufacturing systems.



MULTIBEND CENTRES

- High speed and high accuracy using 'folding' technology
- Minimum hydraulics, giving lower energy & maintenance requirements
- Reduced marking of material during bending
- Ultra fast, twin tool changer
- Multiple load & unload options, eg. robots
- 3 models of 2160mm, 2560 and 3060mm working length respectively and 2mm capacity
- One click part programming



MULTIBEND ECO

- Manual loading and unloading
- Automatic blank squaring
- Automatic folding sequences, highest level of productivity
- Automatic tool setup
- Highest level of precision and repeatability
- Scratch free bending, no wear of tools
- One-click part programming
- Small floor space required



MINIBEND CENTRE

- World's first fully automatic 'folding' centre for small components
- Multiple folding stations allows complex part forming in single set-up
- Intelligent loading robot, and options for offload strategy
- Capacity from 40 x 50mm to 600 x 600mm in up to 3mm material



XXL CENTRE

- Machine for roof & wall profiles
- Automatic inserting and positioning of blanks
- Bending up and down
- Scratch-free bending of sensitive materials
- Large free spaces for maximum part design flexibility
- Automatic bending sequences
- Automatic 1-click part programming
- High productivity



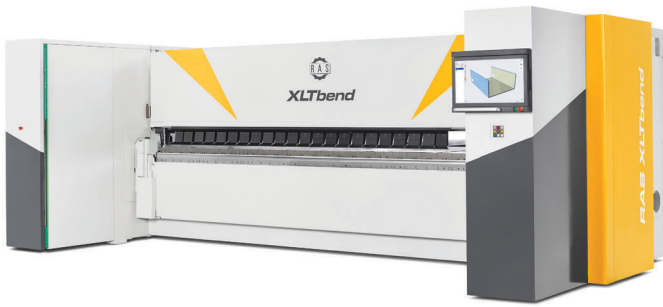
PROFILE CENTRE

- Fully automated squaring, handling, bending and unloading of profiles
- Ideal for profiles such as door frames, lift components and cable ducts
- Flexible bending - up and down
- Highest levels of precision and repeatability
- Scratch-free bending: no tool wear
- Machine automatically adjusts to thicknesses and material type
- Automatic one-click part programming



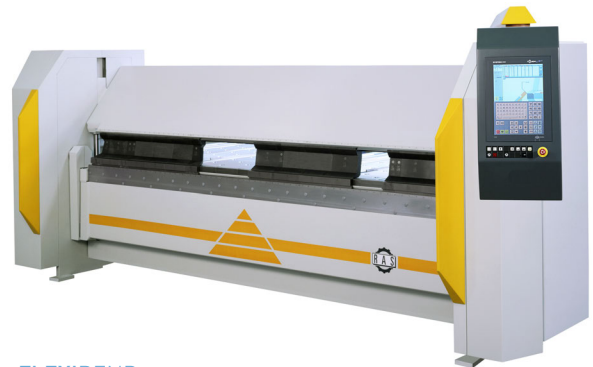
UP/DOWN CENTRE

- Semi-automatic Bending Centre with increased capacity
- Fast automatic tool changer
- Adjustable sheet support to allow for large or small parts
- Poslift gauging system reduces operator handling requirement
- 3200 x 3mm capacity, with box height of up to 250mm



XLTBEND

- Bends both positive and negative bends automatically
- Semi automatic part handling. Safe and ergonomic operation
- Energy-sapping lifting and holding of parts is eliminated
- A single person can even bend large and heavy components
- Operation from folding beam side (smaller parts and profiles)
- Operation from gauging side (large panels)
- Automatic part programming
- Ideal solution for users with high demands on flexibility



FLEXIBEND

- Alternative to Press Brake for larger parts and small batch operations
- Automatic tool clamping
- Automatic crowning adjustment
- Multiple backstop/sheet support options
- Single set of tooling for all materials & angles
- Reduced marking of material during bending
- Capacities of 3200 x 3mm and 4050 x 2.5mm



TURBO 2 PLUS

- CNC folder for industrial, roofing, cladding and HVAC applications
- Bending length up to 3200mm
- Segmented tooling
- 127 mm tool height
- Automatic part programming
- Automatic recognition of tool height and change



XL CENTRE

- New up & down Folder for roofing profiles, flashings etc.
- 300° free space in front of beams for maximum part design flexibility
- Offset facility within CNC for tapered part bending
- Reduced operator handling, reduces fatigue and increases accuracy
- Capacity 3200 x 1.5mm



GIGABEND

- Ideal bending solution from 0.5 to 6 mm mild steel
- Large free space for maximum parts design flexibility
- Easy to handle
- Bending of panels and profiles
- Bending any angles, radii, open/closed hems



TURBOBEND

- Entry level CNC Folder for Roofing or HVAC applications
- Automatic material thickness adjustment
- Touch screen graphic display for easy programming
- 3200 x 1.5mm capacity



Fast blade clearance adjustment for burr-free cuts



Cut part delivered onto the moveable stacking carriage



Foot lever for adjusting the parts chute: Sorting to the front and the rear

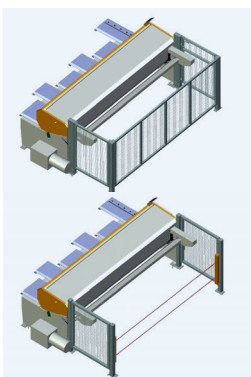


SMARTCUT

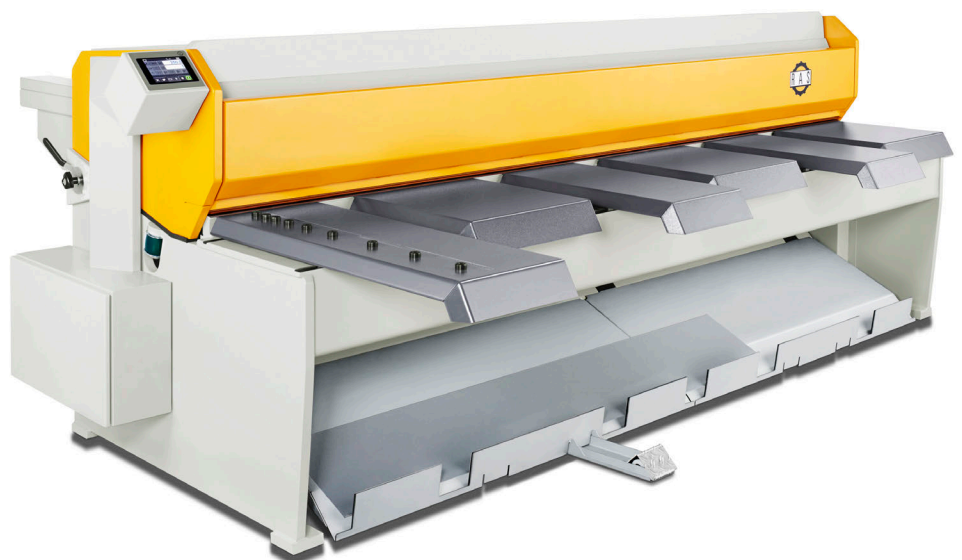
- Swing beam cutting for accurate dimensions and straight cuts
- Low rake angle for twist-free cuts
- Long cutting blade lifetime
- Sorting cut pieces during cutting (to the front or the rear)
- Sheet support and sorting system
- Up to 2mm capacity



Optional 1500 mm table extension supports large workpieces



Protective fences and safety light beams available for both machines.



PRIMECUT

- Swing beam cutting for accurate dimensions and straight cuts
- Low rake angle for twist-free cuts
- Long cutting blade lifetime
- Sorting cut pieces during cutting (to the front or the rear)
- Sheet support and sorting system
- Up to 3mm cutting capacity

DUCTING AND FORMING



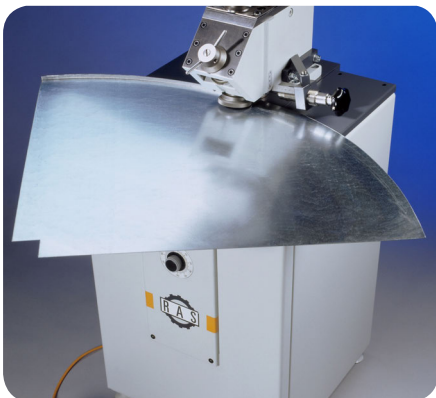
SWAGING MACHINE 11.15 and 11.35

- 9 pairs of wheels for all common swaging applications included
- Divided stop plate and stops for special applications available
- RAS 11.15 with manual drive
- RAS 11.35 with motor drive and variable speed
- 2 speed ranges for high productivity and sensitive forming
- Power supply via a normal 220V household socket



EASYFORM 12.35

- Automatic teaching of movement sequences
- Large range of forming wheels for different applications
- Large range of stop plates for different applications
- Two speed ranges for sensitive and less critical jobs
- Speed adjustable via the foot pedal



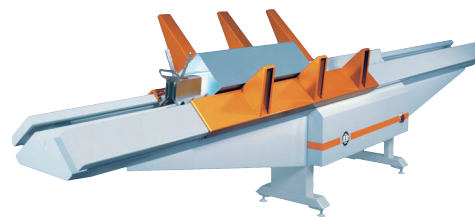
FLANGER

- Quick turn-up of flanges on straight, round and curved duct segments
- Standing seam for joints with Pittsburgh seam
- Cam standing seam for joints with snap-lock seam
- Attachment for cam standing seam cuts and pierces the cams
- Automatic sheet guiding system for flange heights (8 or 10 mm)



SPEEDY SEAMER

- Rollforming of all common seams on air ducts and pipes
- Two sets of roll can be set up at a time
- Combinations: Pittsburgh/Standing seam and Snap-lock/Cam-standing seam
- Durable rolls made of case hardened special steel
- Hardened run-in guides (reduced wear)
- Adjustable roll for straightening or pre-rounding of seamed sheets
- Rolls for stainless steel ducts available



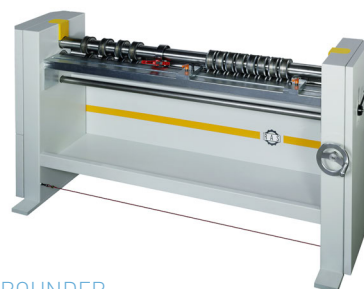
DUCT ZIPPER V

- Easy handling of large air ducts
- Consistent long-term quality due to low machine wear
- 40-50% less space required (possible installation next to a wall)
- Improved seam accuracy due to longer guide rail
- Increased safety: Even large ducts keep their shape
- Easy maintenance and cleaning due to good accessibility



DUCT ZIPPER L

- Quick and easy forming, and closing, of large air ducts
- Very tight seam joint for demanding applications
- Optional SealJet seals the joint for extreme energy efficiency requirements
- AutoPilot ensures a simultaneous start of the seam on both ends
- Improved seam quality due to extended guiding rail



VENTIROUNDER

- Rounding of air duct elbow cheeks with pre-formed seams
- Rounding of sheet metal with Pittsburgh, Snap-Lock or Standing Seam
- No damage to the pre-formed seams due to the moveable rolls
- Quickly adjust to different inside and outside widths elbow cheeks
- Mark-free rounding of the visible outside elbow cheeks
- Selecting of forward and reverse movement (hands remain on part)
- Variable speed for high productivity and sensitive work
- Optional configuration for stainless steel air ducts

Nisshinbo is one of the most widely recognised names associated with the manufacture of turret punch presses, Nisshinbo has an enviable reputation for build quality, reliability, ease of operation and value for money, and has a large existing user base in the UK.

In 2007, the Japanese firm Nisshinbo entered into a joint venture with one of China's largest manufacturers of sheet metal machinery, Yawei, producing in excess of 3,000 machines per year at its 260,000 square metre facility.

All of the main components, such as the turret, auto index, gearbox and other key mechanical components are produced by Nisshinbo in Japan and assembled by Yawei, the control system is from Siemens.



HPE SERIES, SERVO ELECTRIC

- SIEMENS CNC controller
- Choice of turret configurations
- Automatic side-positioning device when locating the sheet
- Three moveable pneumatic clamping
- Equipped with brush table
- Automatic lubrication
- Automatic strip detector, clamp-sensor
- Functions include: punching, forming, rib wheel, rolling cutting, rolling pincher and marking etc.



PUNCH/SHEAR COMBINATION

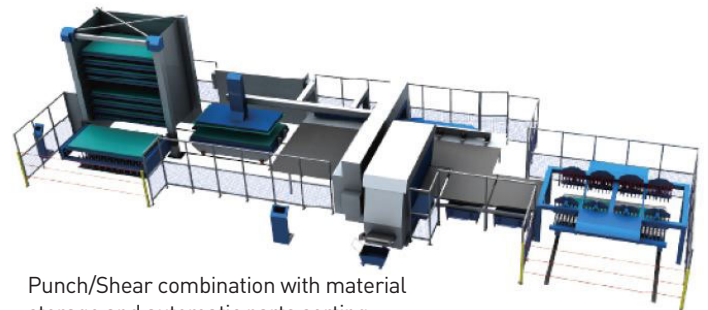
In addition to their standard turret punch presses, Yawei offers a range of flexible manufacturing systems, including the punch/shear combination.

The punch shear combination offers the benefits of a standard punching machine, but with the addition of an integrated right angle shear. Once the parts nest is programmed, the sheet can be automatically loaded into the punching machine, once punched the integrated shear cuts out each individual part and takes the part individually away from the machine, via a conveyor, at which point they can be automatically stacked in pre-programmed locations.

One of the main benefits of the integrated right angle shear is that it eliminates the need to slit around, and tag, each punched part, giving better edge finish and higher sheet utilisation.



HPE with compact load/unload.



Punch/Shear combination with material storage and automatic parts sorting.

Key Features

1. SERVO ELECTRIC OR HYDRAULIC PUNCHING HEAD

The stroke can be adjusted by the CNC control system, and the pressure is constant throughout the full stroke, whilst noise levels are greatly reduced.

2. SHEET DISTORTION SENSORS

The sheet distortion sensors protect both the sheet and turret in the event of collision.

3. TURRET & INDEX TOOLS

All models incorporate a thick style turret, with a choice of configurations. The turret includes a high precision auto index system allowing accurate rotation of selected tools. optional multi tools give added flexibility.

4. QUICK TOOL CHANGE

The design of the lower turret enables rapid tool change and fast setup times.

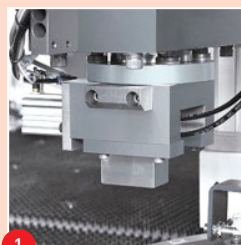
5. X AXIS

The X Axis is precise and robust due to the high precision ball screw and linear guides. The sheet clamps are pneumatically operated and adjustable.

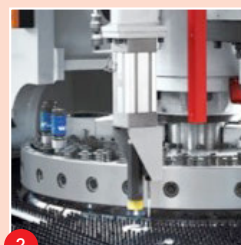
6. HARDENED DIE BUSH

The turret is fully bushed to allow easy replacement in the event of wear or damage.

7. SIEMENS CNC CONTROL



1



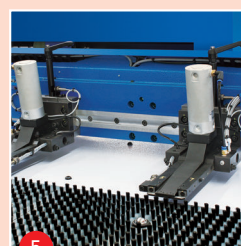
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3



4



5

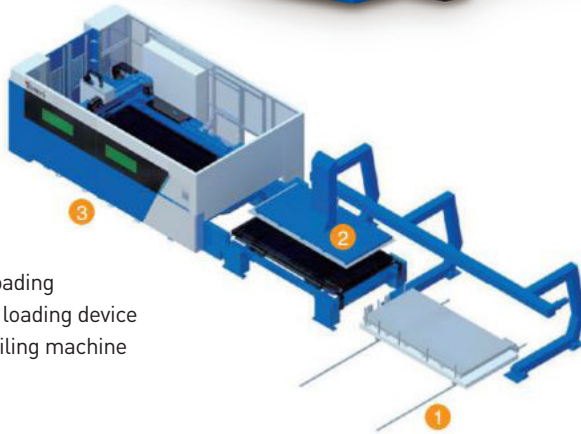


6

A combination of high cutting edge laser technology and advanced numerical controls combined with a user friendly interface, make the Yawei Laser a leader in technical innovation.

Featuring a duel drive machine base, reinforced aluminium gantry beam, automatic shuttle tables, to allow fast loading and unloading, and IPG Laser generator.

The machine offers fast and stabilised cutting speeds, across a wide range of material thicknesses and types.



- 1 - Material loading
- 2 - Automatic loading device
- 3 - Laser profiling machine

HLF

- SIEMENS CNC controller
- IPG Fibre laser generator
- Reduced electric consumption (when compared with CO2 Laser)
- Reduced maintenance (maintenance-free laser source)
- Low gas consumption (laser source requires no gas)
- Optimal technology for cutting reflective materials
- Ideal choice for a range of material thicknesses and types
- No external mirrors
- High cutting speed, with reduced overall running costs
- Load/unload options

Key Features

1. MACHINE BASED CONSTRUCTION

Duel drive machine base construction which gives a strong and stable platform, it includes the duel channel dust extraction system.

2. BEAM CONSTRUCTION

- High rigidity and lightweight design
- High precision and stability
- High speeds and acceleration

3. PRECITEC CUTTING HEAD

- Market leader in cutting head design
- High cutting quality across a range of materials
- Lasermatic distance sensor

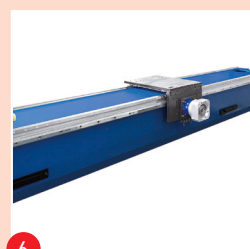
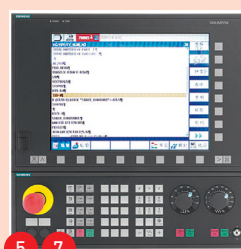
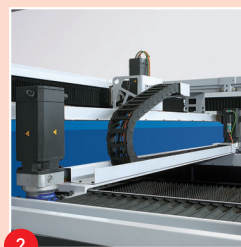
4. IPG GENERATOR

- Market leader in fiber laser generator design
- Choice of power output
- Stable and reliable
- Compact design.

5. SIEMENS CNC CONTROL

- Market leader in CNC controls
- Ethernet, USB, RS232 communication interface.

6. HIGH PRECISION RACK AND PINION DRIVE



YAWEI PRESS BRAKES AND SHEARS.

Yawei manufactures a large range of Press Brakes and Shears. Utilising the latest generation of controls and laser safety systems, the machines offer high productivity and reliability and a competitive price.



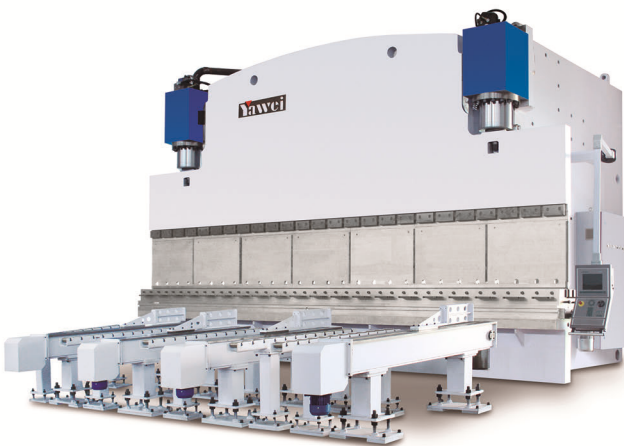
YAWEI PBH PRESS BRAKE.

- Advanced design with high speed and high accuracy
- Choice of models
- Choice of control
- Choice of back gauge configurations
- Hydraulic automatic crowning
- Choice of tooling configuration



YAWEI PBE ALL ELECTRIC PRESS BRAKE.

- Low power consumption
- Low maintenance costs
- Choice of models, from 800mm bending length
- Choice of control and backgauge configuration
- Laser guarding



HEAVY DUTY PRESS BRAKES.

- Bending lengths of up to 18m
- Up to 5000 ton capacity
- Machines in single, or tandem, configuration
- Bespoke design for special applications
- Material handling systems



YAWEI HGSK SHEAR.

- Variable rake angle adjustment
- CNC control
- Sheet support
- Squaring and support arms
- Fully guarded

BEADING, FLANGING & ROLLING

Peter Prinzing GmbH is a medium-sized, family owned engineering company with a long tradition that has its roots in the heart of Germany.



SME 200



SME 100

FLANGING AND BEADING

SME 50p – 125p

The beading and flanging machines SME 50/P-125/P are used for a variety of applications. The motor driven drive is single step, two step or infinitely variable by a foot switch with a safety control. The infeed of the upper roll happens manually or motor driven by a SPS control, during the manual infeed by the foot switch. For material thickness for 1.25mm to 3.5mm.

SM160/200

The SM 160-200 are a heavy duty range of beading and flanging machines with a capacity of up to 7mm.



RME 85



RM 20

ROLLING MACHINES

RM/RME

The RM range of rolling machines are either manual or motor driven.

Having 3 rolls, the roll diameter ranges from 20 mm to 120 mm and the length of just over 200 mm to 2.5 m.

Standard Features include:

- Upper roll swinging to the front by quick release
- Quick adjustment of the bottom roll
- Screw adjustment of the back roll with mech. digital display
- Drive by gear brake motor

RBA four roll automatic.

The RBA is in a four-roll design. The rolls are positioned by a infinitely variable motor. The motors are doing the feeding, bending angle and angular deflection plate. Bearing cap and lateral stop for the pre-bending are Pneumatically actuated. Control panel with SPS-control and touch screen for setup- and automatic sequence. Program memory for 200 programs with up to 30 bending steps.

Features in the summary:

- Four roll design with high-strength rolls
- Roll positioning motor driven, infinitely variable
- Motor driven adjustment of sheet thickness
- Sheet metal stop and bearing cap pneumatically controlled
- SPS-control of the machine with touch-screen control



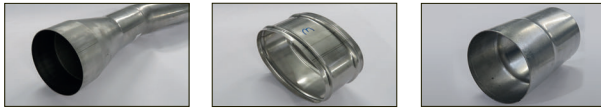
RBA

Founded in 1985, Wecotech AG is a swiss company which, together with its employees and equipment, embraces the highest of technical challenges. Using high-quality materials, combined with suitable hardening processes and modern coating methods, the in-house toolmaking department produces the most modern tube end forming equipment.



TUBEX-U

Tube end punching: single or multiple slots on circumference, straight, Torca, parallel or perpendicular to the axis. Single or multiple round holes on circumference. Ideal as auxiliary machine due to compact design.



TUBIMATIC-C DUE

Compatible with commercially available C-tools. Tube end expansion, impanding (reduction). Tube end calibration after bending or welding operations. Ideal as auxiliary machine due to compact design.



Forstner has been developing and manufacturing machines for professional processing of coils since 1960.

Forstner machines are not available "off the peg". On the basis of fundamental modular components for decoiling, straightening, slitting and cut to length, an optimised system is provided for each and every customer. The results are perfected, field-proven products in reliable designs ensuring an extended operating life.

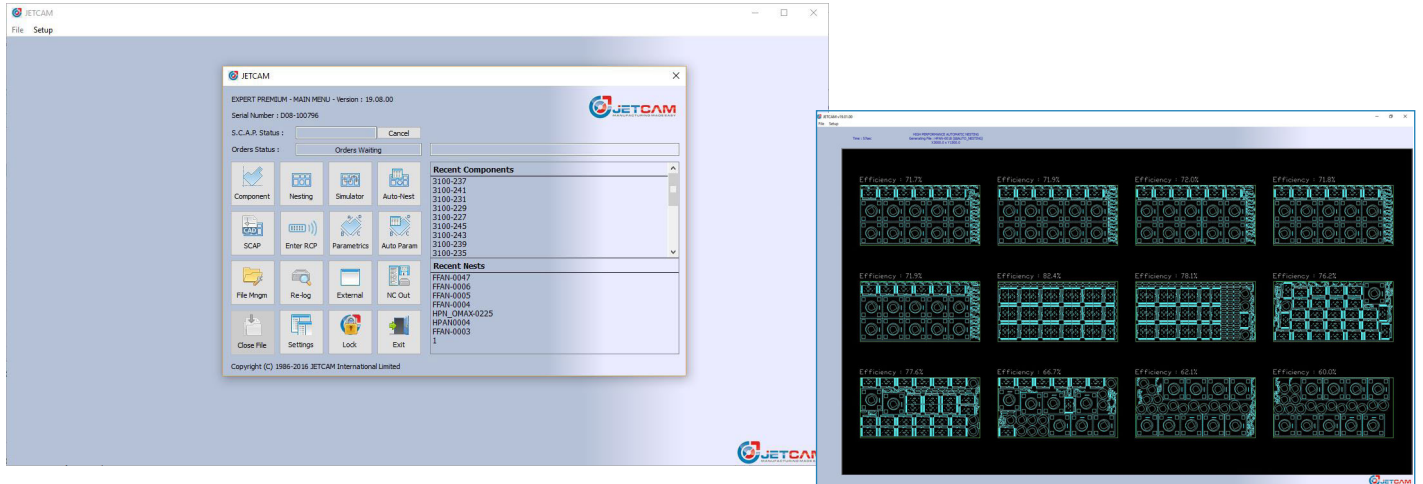


SLITTING AND RECOILING LINE UA

- Simple clamping of stripes and coils
- Gentle processing of sensitive material
- Perfect recoiling quality
- Easy unloading and tipping of light coils
- One-man operation
- Space savings because no loop is necessary
- Low cost

NESTING & AUTOMATION SOFTWARE

Jetcam has the technical know-how to drive virtually every punching, laser, waterjet, routing and plasma machine on the market today – from a basic laser machine through to state of the art combination machines fitted with extras such as load/unload or right angle shear.



When you are looking at reducing costs or increasing efficiency one of the often overlooked areas is the nesting system driving your machine. Many companies soldier on with outdated software, often using several packages to drive different machines. This can cause many problems – programmers spend much more time generating nests, the efficiency of the nests can be poor and the NC code may not be optimised, taking longer to cut on the machine.

JETCAM has been developed and distributed worldwide since 1986, with users in over 80 countries worldwide. This award-winning software saves money in three key areas – reduction of programmer time through automation, increase in machine efficiency through optimised nesting and sequencing, and material savings with its High Performance Nesting module.

JETCAM was founded in 1986 to develop and market software systems for computer numerical control programming of punching and cutting machines used in sheet metal fabrication and composite cutting.

It was started as a response to the time consuming and error-prone practices then being used for this work and the guiding principles of the company ever since have been to develop systems that:

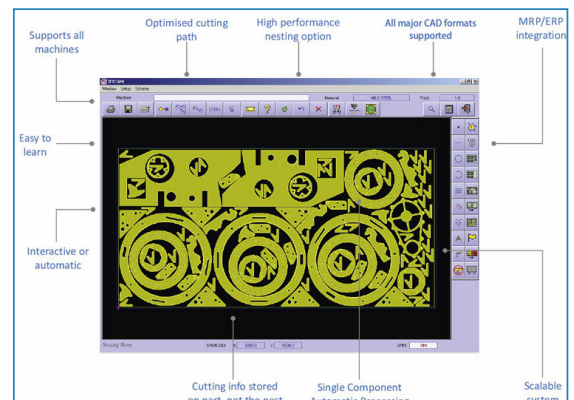
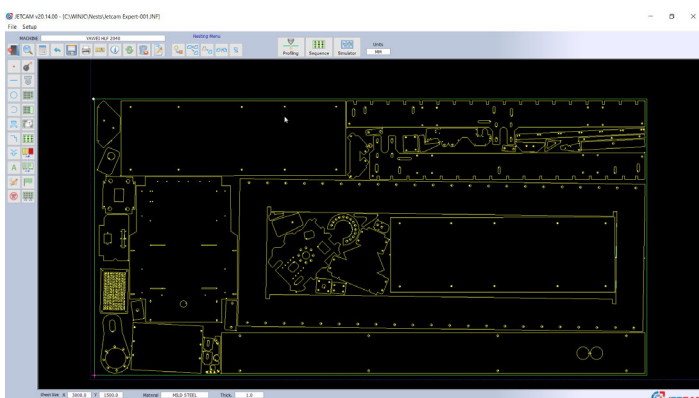
- Are very easy to learn and use without compromising functionality
- Are exceptionally reliable and trouble-free
- Can handle just about any type of job on just about any type of machine (covering punch, laser, plasma, waterjet and routing technologies)
- Allow jobs to be moved from one machine to another without reprogramming
- Incorporate innovative features to get the absolute best performance out of machines of all ages
- Produce results extremely quickly
- Truly automate the process of CNC code generation from CAD drawing files

The company has been able to live up to these ambitions and now has approximately 7000 licensed users across 70 countries around the world. Major machine manufacturers have standardized on JETCAM systems and supply them together with their machines.

Whether you are a sheet metal job shop producing small runs or a multi-national company looking for complete automation, JETCAM Expert delivers a comprehensive programming system for all CNC punching, profiling, routing and composite cutting machine tools.

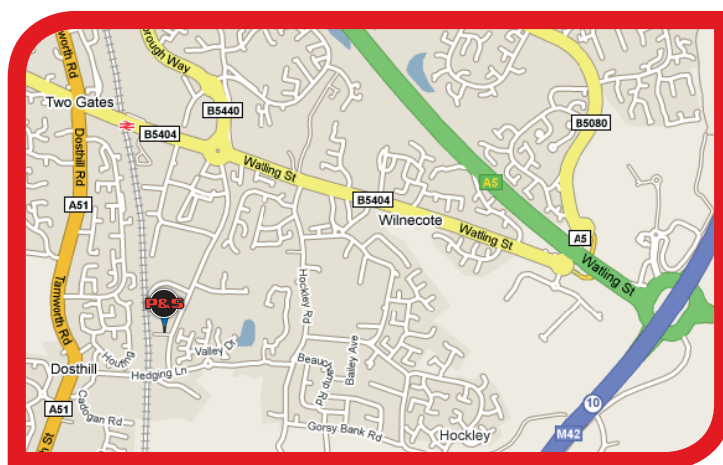
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