

# presses and machinery



## Product Listing 2010

*As a qualified engineer, I have been designing and making presses for almost thirty years, and all presses are overseen and checked by me personally.*

*Extra options to the press prices are press stands, drive wheels, castors and upgrades on press beds. Additionally, charges are added for wooden crates made by a local Melbourne crate maker.*

*Freight must always be quoted as it will vary with the size of the press. Each press comes standard with a tester blanket and a free tin of etching ink.*

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### presses - relief

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#### M102 Abig Relief Press - Small

German. This small portable press will print all block techniques, including fabric, with its unique ability to open out to receive artwork not possible with a screw-type press. This press can be used for all lino and wood cut printing techniques. The specially designed handle acts as a lever, applying pressure on the plate. Different thicknesses of block can be accommodated via packing. This is done by adjusting the upper pressure plate to one of two positions and by using packing plates or card. This press is a very cost effective alternative to a conventional etching press and may be screwed to a benchtop for permanent school or studio use or taken out for art-class field printing trips. This allows for rolling up and printing found objects like leaves and paper; also plastic and glass textures.

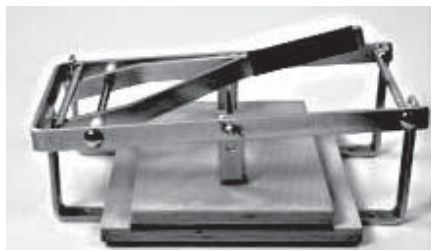
#### PRESS SPECIFICATIONS

**Weight:** 6.7kg

**Printing Block Thickness:** 3-30mm

**Overall Size:** 42cm x 30cm x 20cm

**Printing Area:** 21cm x 30cm (A4)



M102

#### M102B Abig Relief Press - Large

#### PRESS SPECIFICATIONS

**Weight:** 8kg

**Printing Block Thickness:** 3-30mm

**Overall Size:** 46cm x 31cm x 20cm

**Printing Area:** 30.5cm x 30.5cm (12" x 12")



M102B

#### M287.11 Mini Relief Printer 150/200

Entry level small swing arm relief hand press offers limited size and portability in printing small relief plates. Comes complete with pressed wool blanket padding print wadding. Suitable for small plates in maximum size of 6 x 8" (150 x 200mm). This press is 100% made from steel and powder coated for easy cleanup and prevention of rust. The main advantage is lightweight affordability and portability, but the main limitations are the inability to evenly print larger plates due to pressure applied to the swing arm.



M287.11

### M287.12 Relief plate holder/inker

Printmakers' aid for both safety cutting and the secure holding of relief plates in wood or lino. It also may be used as a fast clean up 'roll-up' ink slab. Made from heavy gauge steel with a serviceable powder coated finish, this tool can be screwed to a bench top as a permanent cutting safety area.



M287.12

## presses - etching

### M287.10 Mini Etching Press 255

Entry level small press which allows printing etchings of a limited size. Its main features are two small solid steel top and bottom rollers and solid bearings in cast bronze. The housings bolt to the press sides. Suitable for plates in etching, maximum size 150mm wide, or relief printing at the full width of 240mm. The main advantage is its light weight, affordability and portability for field trips and workshops. However, the main limitations are its thin rollers, which may deflect towards the centre and limit the size of the etching plate necessitating to be printed evenly. Best used for line etching and solar plates, and not for aquatint.



M287.10

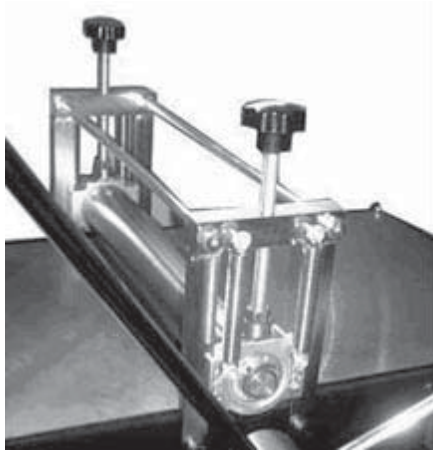
### M287.05 Junior Etching Press 400 HD

For printmakers starting out, the Junior press offers excellent value for a number of reasons. Its main features are a ground solid steel bed, and top and bottom self-aligning precision Japanese roller bearings in cast housings which bolt to wide, extra long 600mm press side frames for maximum stability and overall bed support. It is finely engineered, with solid steel top and bottom rollers on heavy duty 25mm axle diameters which will last a lifetime without bending. For its size, it is still sufficiently portable to be used for field trips and workshops. The view below shows the side 12mm solid steel brace holding the upper bearing and top roller, with the adjustable roller bearing bed support.



M287.05 (detail)

The bed is made of composite materials, fitted at the ends with brass safety stops to prevent the bed from moving out of the press through the roller gap when printing. Additionally, the brass stops will not mark the upper steel rollers, since brass is much softer than steel. The press has four tension springs between the upper frame and the top bearing housing to allow an upper sprung roller which assists with processes requiring very low pressure such as lino cuts, monoprints and plate litho printing. The Junior press is made as a bench press, but a stand is available if required at an extra charge, either with or without lockable wheel castors. The pressure is easily adjusted with the non-rusting black plastic knobs which minimise stickout into the print space and do not catch the blankets when flipped over after each print. Press movement is via a large diameter spoked drive which attaches to the bottom roller. Arms are plated for easy maintenance.



M287.05

**PRESS SPECIFICATIONS**

- Overall weight** - 45kg
- Side width** - 600mm
- Height overall** - 400mm
- Roller diameter** - 65mm top & 55mm bottom
- Bed length** - 800mm; **Width** - 400mm
- Bed thickness** - 20mm (nominal)
- Finish** - Satin black and galvanised steel
- EXTRAS AVAILABLE** (at additional charge)
  - Round 760 mm handwheel
  - Welded steel press stand
  - Lockable castors fitted to stand legs

**M288.12 Etching Press 510 HD**

For printmakers looking for the best value for money, relative to top roller size and weight of press, the 510 HD is excellent Australian value. It offers a larger format press at an affordable price, having a large press footprint with its long bed support wings, and solid laser cut sides which form the heavy duty 12mm thick bearing support braces. Much thought has been given to making this press without using welding, since intense welding heat tends to distort the frame and pull the press out of fine balance. It also features top and bottom self-aligning precision Japanese roller bearings in cast housings which bolt to the wide press side frames for maximum stability and overall bed support. This press is of fine engineering, with a large diameter professional sized top roller on 25mm diameter axles and a much smaller solid steel bottom roller, which gives the press a geared effect without the cost of an added gearbox.

This is a press which ideally should be permanently set up in a school or studio, and although made as a bench press, offers a matching all steel base stand, exactly fitting the press dimensions. The view below shows the plated top brace crossover which bolts into the side plates and is tapped for the pressure adjustment screw. The side plates are fitted with adjustable sealed for life roller bearings for perfect bed support.



M288.12 (detail)

The standard version bed is a composite, made of galvanised steel and dense fibreboards composite. It is fitted at the ends with brass safety stops to prevent the bed from moving out of the press through the roller gap when printing. Additionally, the brass stops will not mark the upper steel rollers, since brass is much softer than steel. A solid ground steel bed is also available at an extra price. Press movement is via a large diameter spoked windlass which fits onto the bottom roller. The arms are plated for easy maintenance; however, a 760 mm, fully rimmed hand wheel is available as an extra. The press has four tension springs between the upper frame and the top bearing housing to allow an upper sprung roller to assist with processes which require very low pressure, such as lino cuts, monoprints and plate litho printing. This press is made as a bench press, but a stand is available if required at an extra charge, either with or without lockable wheel castors. The pressure is easily adjusted with the non-rusting, large black plastic knobs which minimise stickout into the print space and do not catch the blankets when flipped over after each print. This press, even though direct drive, has a 'geared effect' since the lower roller is of smaller diameter than the top roller where the work is actually being done during printing.

**PRESS SPECIFICATIONS**

- Overall weight** - 55kg
- Side width** - 800mm
- Height overall** - 500mm
- Roller diameter** - 120mm top & 70mm bottom
- Bed length** - 1000mm; **Width** - 510mm
- Bed thickness** - 20mm (nominal)
- Finish** - Chrome plate and galvanised steel
- Gear ratio** - Geared effect with smaller lower roller
- EXTRAS AVAILABLE** (at additional charge)
  - Round 760 mm hand wheel
  - Solid ground steel press bed (510x1000mm)
  - Welded steel press stand
  - Lockable castors fitted to stand legs



M288.12

**M288.13 Etching Press 580 HD**

For printmakers who want to print a full 56 x 76mm sheet of paper without having to tear it down. It offers a large format studio press at an affordable price, with its long bed support wings, and solid 12 mm laser cut sides. Basically, this is a copy of the above press stretched wider in dimension.

**PRESS SPECIFICATIONS**

- Overall weight** - 65kg
- Side width** - 800mm
- Height overall** - 500mm
- Roller diameter** - 120mm top & 70mm bottom
- Bed length** - 1100mm; **Width** - 580mm
- Bed thickness** - 20mm (nominal)
- Finish** - Chrome plate and galvanised steel
- Gear ratio** - Geared effect with smaller lower roller
- EXTRAS AVAILABLE** (at additional charge)
- Round 760mm hand wheel
- Solid ground steel press bed
- Welded steel press stand
- Lockable castors fitted to stand legs



M288.13

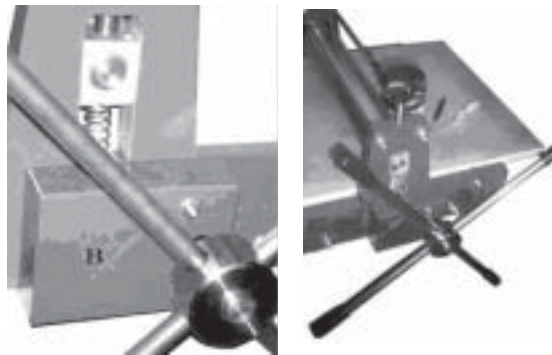
**M103 Abig 500 Geared Etching Press**

Made in Germany. For printmakers, the Abig geared press has become one of Europe's best sellers for a number of reasons. It has a winning combination of excellent value for money, as well as fine engineering with an overall ease of use, due to its lightweight cast aluminium side frame construction. For its size, it is quite portable and excellent for field trips and workshops, etc. (36kg).



M103

Perhaps of equal importance for multi-purpose use is the fact that it is precision geared and sells for the same price as most direct drive presses. The gearing enables larger plates to print without effort and minimises a 'stop and go' print passage through the press that often results in uneven blacks in aquatints and lino cuts. The gearbox is fully enclosed for safety and is situated behind the metal box marked 'B' below.



M103 (detail)

Additionally, with gearing, the drive wheel can be made a much smaller diameter, so the press has a smaller footprint in the studio or classroom. The bed is a laminated sandwich of 2.5mm zinc plated steel and thick, stable hardwood ply. If the bed is moved too far out, four special safety pins on the side frames of the press allow the bed to gently tip off the drive roller and the press bed will then stay in this position until the bed is reversed in direction manually by the printmaker. Also observable in the above photo is the upper sprung roller that assists with processes which require very low pressure such as lino cuts, monoprints and plate litho printing.

Each press comes fully crated from Germany, so there are not the extra charges for crating which have to be added to the cost of most Australian presses. The press is made as a bench press, but a stand is available if required at an extra charge, either with or without lockable wheel castors. The pressure is easily adjusted with the non-rusting ergonomic large black plastic knobs which minimise the stick-out into the print space and do not catch the blankets when flipped over after each print.

## PRESS SPECIFICATIONS

**Overall weight** - 36kg

**Roller diameter** - 80mm top & bottom

**Approximate force generated** - 1000kg

**Bed width** - 500mm; **Length** - 700mm

**Bed thickness** - 22mm

**Finish** - Tough furnace-baked enamel.

**Gear ratio** - 2.4 : 1

**EXTRAS AVAILABLE** (at additional charge)

Ground solid steel bed 12mm thick x 900mm long

Welded steel press bench

Lockable castors fitted to stand legs

Round hand wheel drive

### M104 Abig Rack Drive Press

This press is at the top of the Abig range with the same lightweight die cast aluminium side frames for precision portability, and the same 500mm bed width roller combination. Because of this, it looks almost identical to the Abig press above, but has the major difference of a system of bed movement known as 'rack drive'.

Two identically-machined steel racks are fitted underneath the bed on either side. The bottom roller, at each end, has twin bevel gears which engage with the rack on the bed to provide perfect smooth drive, even at the very low top roll pressure used in wood block relief printing. This assists in perfect colour registration.

Geared by a 3 : 1 ratio, it is equally good for both etching a lino printing without the press sticking at the start of the lino plate printing.

The geared rack drive is the ultimate press drive option and is the system used in the highly expensive printing machines used by professional printers.

### M289.3 HFAW 800 Etching Press

This large format press is made for printing large sheets of paper, including Hahnemuhle and the large Rives and Arches 80x120 papers. Equally, it will print plate lithographs, lino plates and wood blocks. It has been fitted with specially adjustable flat springs in the top roller bearing assembly to assist in printing lino and litho plates where a low sensitive 'kiss' pressure is desired during printing for best results.



M289.3

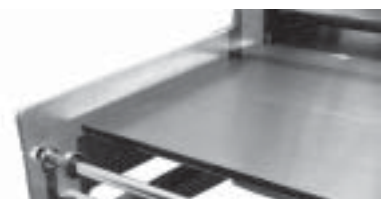
Every effort has been made in this press design to keep the price to a reasonable level, and make the press affordable to both university as well as individual artists who wish to print large format.

The press construction is based on 12 mm solid steel side plates laser cut for precision and to minimize plate heat distortion. The 160mm diameter top roller is made of heavy walled seamless pipe of a large diameter, whilst the lower roller is smaller in solid steel, both running on 30 mm shafts and self aligning bearings in cast iron housings. The 12mm sides and wheel have been finished with a durable black powder coat furniture type baked enamel for easy maintenance and durability. Other parts of the press have been electroplated to prevent rusting.

For ease of pressure adjustment the pressure is adjusted via two short Tommy bars with black bakelite knobs to move the adjuster out of the way of the blanket during printing. Printing is made easy by a good gear reduction gearbox attached to the side of the press and hidden behind a welded steel cover. Note that this press has superior hand cut bevel gears via an idler to maintain correct direction as the wheel is turned. (ie the bed moves in the same direction as the wheel) The gear ratio of the press is a generous 5 : 1 without being over-g geared and losing the 'feel' during the printing process. Bevel gears are direct and do not slacken off like a chain drive tends to do over time, so there is never any messy chain adjustment required. The large bevel gear is joined to the bottom roller by a steel keyway, secured by a double locked Allen key to prevent movement over time.

In addition to the generous gearing, the press is fitted with a large diameter 1220 mm diameter hand-wheel. The press is fixed in width with machined-faced thick plated crossbars to ensure the press sits squarely and is totally rigid.

The bed is made from heavy weight black Bakelite to keep the overall weight of the press down in shipping and handling. Also the Bakelite does not tend to buckling or rusting as steel beds often do over time. Bed support is via fully sealed roller bearings which never need lubrication and are also virtually frictionless.



M289.3 (detail)

View showing Bakelite bed tracking on roller bearings

The lower part of the press is made from square steel tube (RHS) and is fully braced at the corners to maximize stability. It is recommended that these large format presses be bolted to the floor after correctly levelling.

## PRESS SPECIFICATIONS

**Overall weight** - 300kg

**Roller diameter** - 160mm top & 100mm bottom

**Approximate force generated** - 3000kg

**Bed width** - 830mm; **Length** - 1450mm

**Bed thickness** - 16mm

**Finish** - Tough furnace-baked enamel.

**Gear ratio** - 5 : 1