

Self-assembly bench press

Marc Fish weighs up the Self-assembly bench press from AirPress

Loading the bench press is a lot easier than using an equivalent size bag



AirPress has been going since 1993 and the business has grown into the UK's largest vacuum pressing equipment supplier. Their range of products cater for all budgets and applications, from a simple standard pump running one bag to multi-bag pumps and large membrane bench presses. The self-assembly bench press was developed about five years ago in an attempt to bring bench presses to smaller businesses. The sheer size of this piece of kit means that it will not be for everyone but for a medium-sized business, it offers substantial savings on a pre-assembled version, and increased productivity over that of a vacuum bag.

First impressions

Upon receiving the very large package we were keen to get started and as soon as the box was opened, it was clear that this was a very professional piece of equipment.

Custom packaging holds all the components secure for transit and the contents are bagged up into the separate assembly stages and are colour coded, which avoids bits being lost. It comes with two sets of instructions: one for making the platen or press base and another set for the assembly of the membrane frame. Both sets are concise, well written and contain plenty of diagrams. The plans are easy to read. Most people making one of these will probably be familiar with technical drawings, but if not, a little time spent working out where and why to drill holes in certain places will help. Do not be tempted to jump stages or open bags prior to the appropriate stages. The sequence has been well planned and considered.

Product assembly

We made a sturdy base from 75 x 75mm pine (*Pinus spp.*), and joined it together using a combination of dominoes and bolts. The top is

made from 25mm melamine faced chipboard. The base cost around £300 in materials and has gained us an immense amount of storage space underneath. After it was made we levelled the plate using shims and packers, which is absolutely necessary. All the components for the frame are

The self-assembly components are all excellent quality and therefore easy to put together



PHOTOGRAPHS BY GUY CANTON BAILEY

F&C verdict

The positives of this system include the fact that there is no set up time when using it; this system will allow you to make massive savings compared to that of a pre-assembled press; easier loading and unloading compared to a bag system, and no bag being sucked into or underneath laminates. It also allows much quicker evacuation of air than a bag setup. It was very easy to assemble and the instructions are concise, clear and very well thought out. The downsides, which are limited, come down to space required, not being able to see your work through the membrane and the cost is still considerably more than a vacuum bag system. But would I have one? Yes, I already do!

Pros

*Quick and convenient to load/unload
Well made components
Easy to assemble
8 x 4ft capacity*

Cons

*Requires a lot of space
Workpiece not visible in use*

Numbers

Maximum pressing area: 2,850 x 1,300mm

Price: £2,950

Contact: AirPress

Tel: 01725 514 426

Web: www.airpress.co.uk



Metal fittings in the platen require precise fitting to locate with the vacuum cups in the frame

Vacuum cups hold the frame to the platen



bespoke and a lot of development time has gone into bringing this to market. Everything is of a very high standard and all components fit together without any fiddling. The membrane is a little tricky to fit, especially when trimming to size. As they say – measure twice and cut once. The frame and platen will

take a couple of days to assemble. The optional base we made took a further two days to make.

Improvements

If I were to make the product again I would make some changes. Firstly, use MDF for the platen and apply a melamine face, top and bottom. The chipboard which is suggested in the instructions is not that strong. The hinge rail is fixed onto it using spire nuts that do not secure that well in the chipboard; MDF would be much better. The position of the vacuum outlet according to the drawings would hinder the veneering of a full 8 x 4 sheet but moving it over a short distance would sort this out. I have relayed this information to AirPress and I believe the drawings are now being amended.

In use

We have undertaken various tasks with the bench press from simple flat

veneering to curved laminating. It comes as quite a surprise how large a former it can accommodate. The basic rule is to place the former in the middle of the platen and if you can, physically pulling the frame down will stretch the membrane sufficiently to press the item. We have used this on formers measuring 400mm high and experienced no problems. The membrane will stretch 600% and it is quite difficult to pierce the rubber; in fact it is almost impossible to puncture the rubber with a ballpoint pen. That said, it is good practice to round all corners and be careful that no screws or nails protrude on anything going into the press.

The recommended pump for the machine moves 40m³ which is quite some air; five times more than the industrial pump that we have that runs four bags at once. The press area is 2,850mm by 1,300mm but they do supply a bigger press if you want the extra size. *F&C*