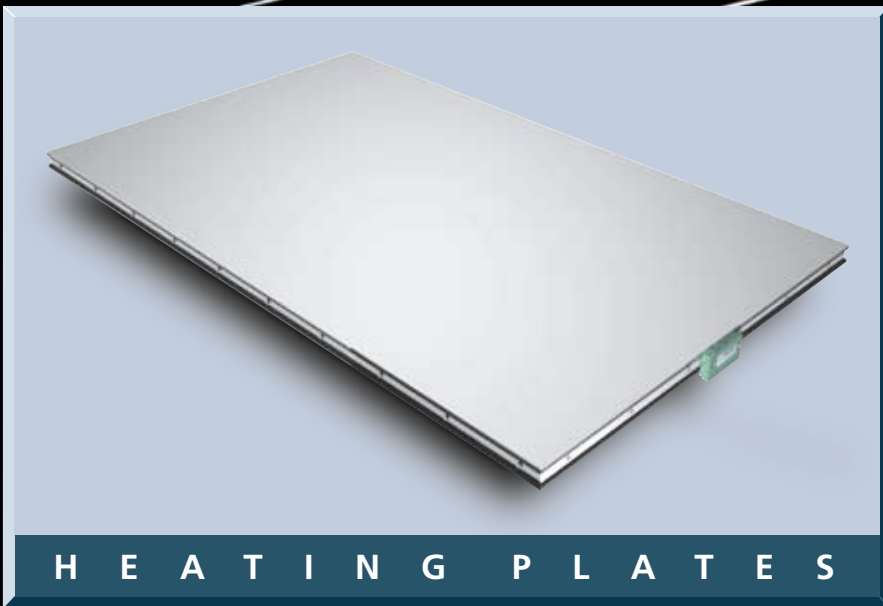
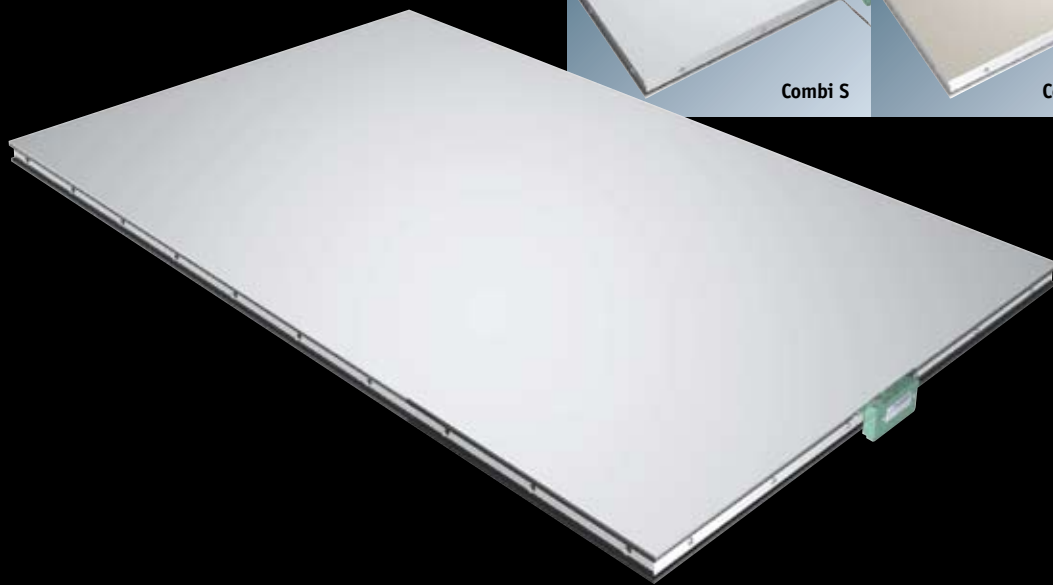


BUSSE

Heating Plate Systems and Press tools



H E A T I N G P L A T E S



Electric-Heating Plates

Busse electric-heating plates are custom-made products produced especially for you, and because the heating plates are customised specially for your veneering press they match your requirements exactly.

They are suitable for all forms of pressing in workshops, in furniture factories and in series production lines as well as for manufacturing furnishings and fittings in large companies providing interior engineering services and technical equipment.

In these heating plates you are getting a product that just about every press manufacturer trusts. For Busse is one of the largest manufacturers of this type of heating plate in Europe.

The electric-combi heating plate consists of 2 components: the aluminium electric-heating plate and the iso-pressing plate

Both components are simply screwed together and can be replaced independently. The heating plates are secured to the back of the press bedplate with spring mounted hook bolts. This makes it possible to extend the aluminium heating plate easily and means that the press surface is free of rivets and bolts.

The iso-pressing plate serves two purposes. It offers insulation between the heating plate and press bedplate. This ensures that the energy taken up is used efficiently. Furthermore it evens out the distances between the individual press bedplate supports. Thanks to the iso-pressing plate the press surface is completely flat.

The aluminium heating plate is made of exceptionally flat rolled aluminium. Using aluminium means that the weight of the heating plates is kept to a minimum, thus reducing the operating costs for the veneering press, and the aluminium delivers heat immediately to the item being veneered.

A heat conducting system is present across the entire surface of the aluminium plates, enabling a completely even distribution of heat across the whole press surface. An operating temperature of 90°C is reached within approx. 12 to 15 minutes. The result is a veneering press that is ready for use in the shortest possible time. The maximum operating temperature for electric-combi heating plates is 120°C.

Combi S

Electric-combi heating plate with untreated surface. Standard design for every veneering press. The upper surface consists of a hard aluminium alloy that satisfies all veneering requirements.

Combi S plus

The Combi S plus is also covered with a replaceable, tear resistant plastic foil which rejects adhesives. The surface of the heating plates is constantly protected by the Mylar® foil. Older heating plates can also be re-fitted with Mylar® foil.

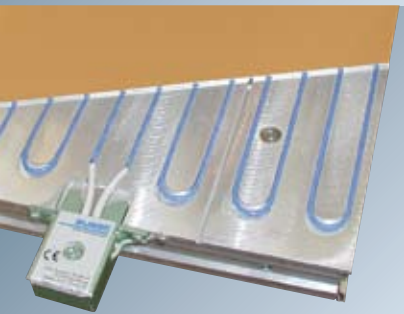
Combi E

An anodised aluminium plate is used as the pressing plate for the Combi E. The anodised layer, available in silver or gold, gives the heating plate

excellent protection against corrosion and provides an extremely hard surface. The heating plates are easier to clean and the use of stripping agents is minimised.

Do you wish to know if our products can cater for your special requirements? Contact us. All our electric-heating plates can be adjusted to suit your particular needs in terms of temperature, pressing and performance.

Moreover, we can supply electric and liquid-heating plates in whatever size you require.





Liquid-Heating Plates

Busse liquid-heating plates are designed for the use of liquid-heating media in veneering presses. By connecting to existing heating boiler installations the operating costs of a veneering press can be reduced to a minimum.

Liquid-heating plates consist of precision tubes welded to a continuous register. Because the tubes conducting the heating media are close together they produce an even surface temperature. The spaces are filled with reactance tubes. Depending on the design, aluminium plates are either screwed onto or adhered to the press surface and the back.

Three versions of Busse liquid-heating plates are available:

VAR St

The continuous register and reactance tubes consist of precision steel tubes. An aluminium press plate is mounted on the press surface. Because it is screwed down it is easy to replace. Moreover, because the individual components are simply screwed together it is a simple matter to replace each component on site. The St liquid-heating plates are ideally suited for use at high pressure and for temperatures higher than 120°C.

VAR Al

The Al liquid-heating plates are made completely of aluminium. The entire surface of the aluminium plates is adhered to the aluminium continuous register. Because the press surface is free of rivets and screws it is ideally suited to slide-through and series operation.

Al liquid-heating plates can be used up to 120°C and - like all liquid-heating plates can also be used as recooling plates.

VAR Al plus

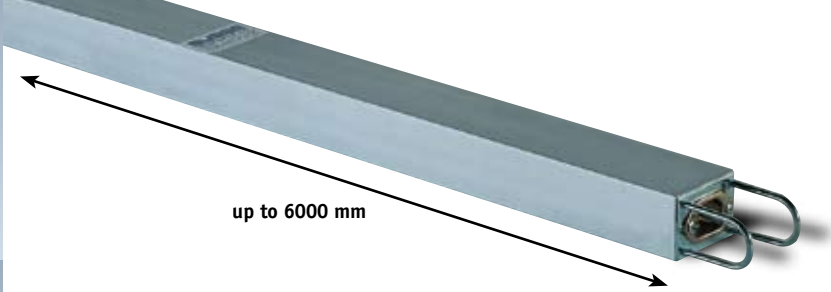
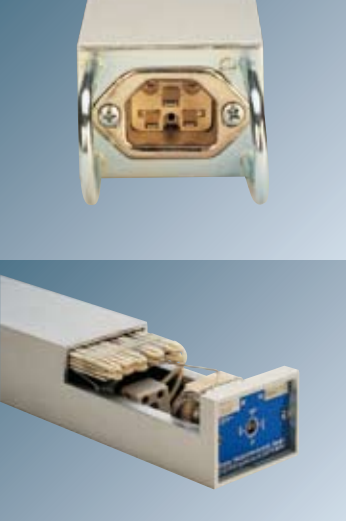
The Al plus heating plate combines the liquid and electric-heating plate. An aluminium electric-heating plate is attached to the continuous register made of aluminium tubes for the press surface. Hot water from the existing heating boiler installation is fed to the heating plates, creating background heat in the plates. The electric-heating plate is then switched on in order to reach the necessary operating temperature.

As with electric-heating plates you can opt for an aluminium surface or an anodised press surface. And of course a Mylar® foil can also be attached.

Busse heating plates are available with the following standard dimensions:

2200 x 1100 mm	2550 x 1300 mm
2200 x 1250 mm	2550 x 1350 mm
2200 x 1300 mm	3000 x 1250 mm
2250 x 1200 mm	3000 x 1300 mm
2250 x 1350 mm	3000 x 1350 mm
2500 x 1100 mm	3300 x 1300 mm
2500 x 1250 mm	3300 x 1350 mm
2500 x 1300 mm	3500 x 1300 mm
2550 x 1100 mm	3500 x 1350 mm
2550 x 1200 mm	





Electric-Heating Bars

Busse electric-heating bars are recommended for bonding veneer and plastic edges. Curing times are lowered to a minimum both for frame and edge presses and in workshops.

All Busse electric-heating bars are made of thermomechanical resistant aluminium profiles and are anodised in a standard silver colour.

The low maintenance heat conducting system produces a constant, thermostatically controlled surface temperature and is easy to replace.

The recessed controller for the temperature prevents unintentional temperature adjustments. Busse electric-heating bars are equipped with a CEE standard European connector, making it easy to detach the 3 m long electric lead.

All electric-heating bars have a cross section of 64 x 46 mm.

The following standard lengths are available:

600 x 64 x 46 mm	230 volt	500 watt
1100 x 64 x 46 mm	230 volt	700 watt
1600 x 64 x 46 mm	230 volt	800 watt

2100 x 64 x 46 mm	230 volt	1100 watt
2600 x 64 x 46 mm	230 volt	1200 watt
3100 x 64 x 46 mm	230 volt	1450 watt
3600 x 64 x 46 mm	230 volt	1550 watt
4100 x 64 x 46 mm	230 volt	1700 watt

We can also supply intermediate lengths and special orders up to 6000 mm.



Temperature Control

Temperature controllers are essential for controlling Busse electric-heating plates and press tools. If they are not already present on the veneering presses or moulding presses then they must be re-fitted.

For this we offer a temperature controller with direct reading remote thermometer. The microstats have a set value setting and an actual value display in accordance with DIN 3340 and are VDE tested [Association of German Electric technical Engineers]. All remote thermometers are fitted with a 3m capillary wire with capillary shearing pin. The shearing pin increases the operational reliability of the controller and heating plates. Temperature controllers can be supplied to cover the ranges 0-160°C, 0-200°C and 0-250°C. The number of remote thermometers depends on the number of heating plates that are to be controlled.

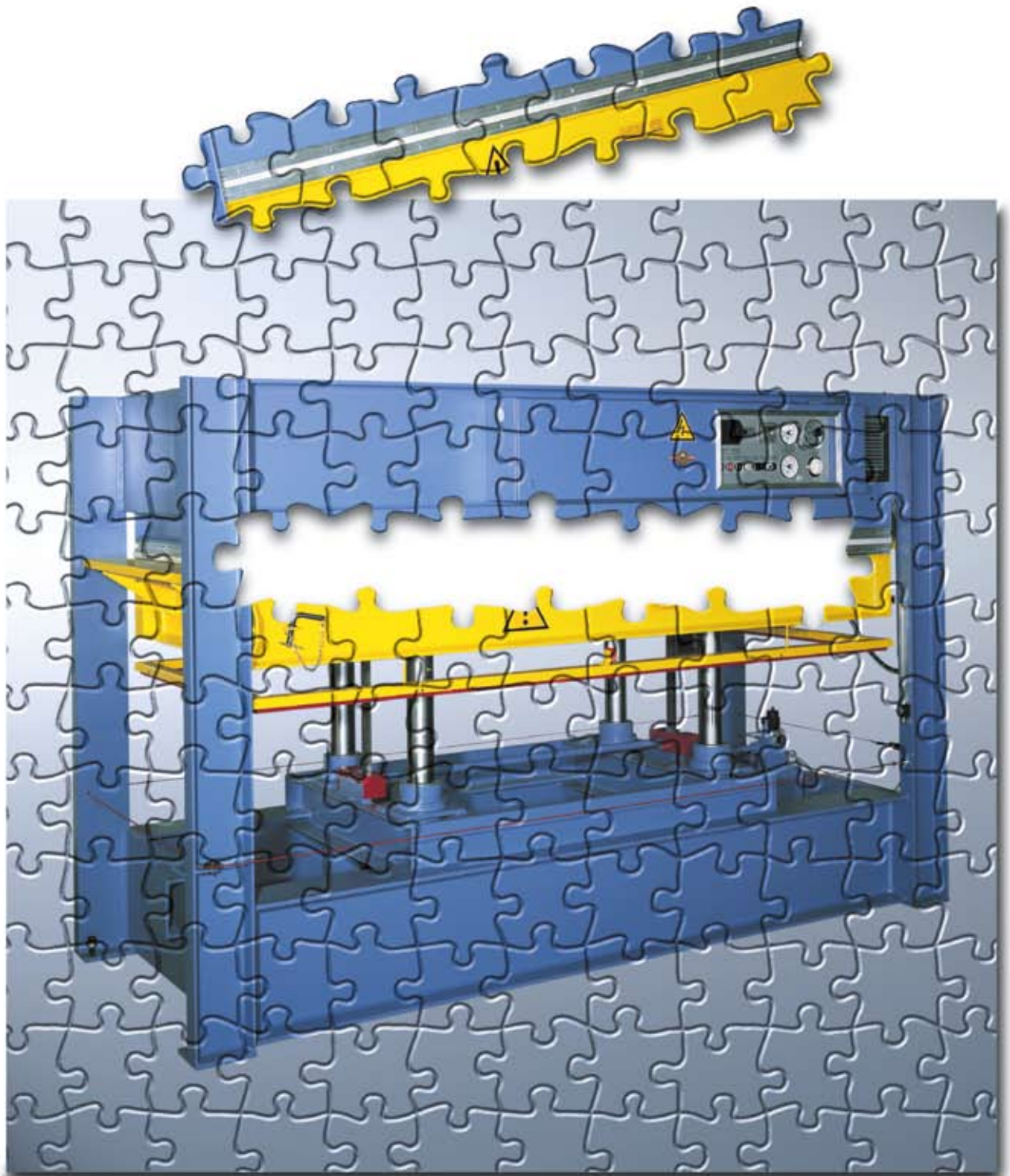
If particularly accurate measuring results are necessary or if the temperature is to be established at several points on a heating plate, then the use of microprocessor controllers is recommended. The extremely compact controllers are equipped with a digital and analogue actual display. The values are measured by means of a PT 100 resistance thermometer. Measuring ranges are freely programmable.

Hotplates or small electric-heating plates can be controlled by means of a permanently mounted contact controller. Measuring ranges: 0-85°C, 50-150°C or 50-240°C. The controller is equipped with a connecting lead and shock-proof plug for mains connection.

Alternatively the temperature may be controlled using an output regulator with plug. Maximum power

consumption 3000 watt at 220 volt. The output regulator enables continuously variable temperature control in heating plates. The consumer's plug is simply inserted into the socket provided and can then be adjusted between power levels of 10 and 100% by means of a toggle.

Fits all



Press tools



Electric-heating bars



Temperature control



Liquid-heating plates



Electric-heating plates



Flexible electric-heating plates

