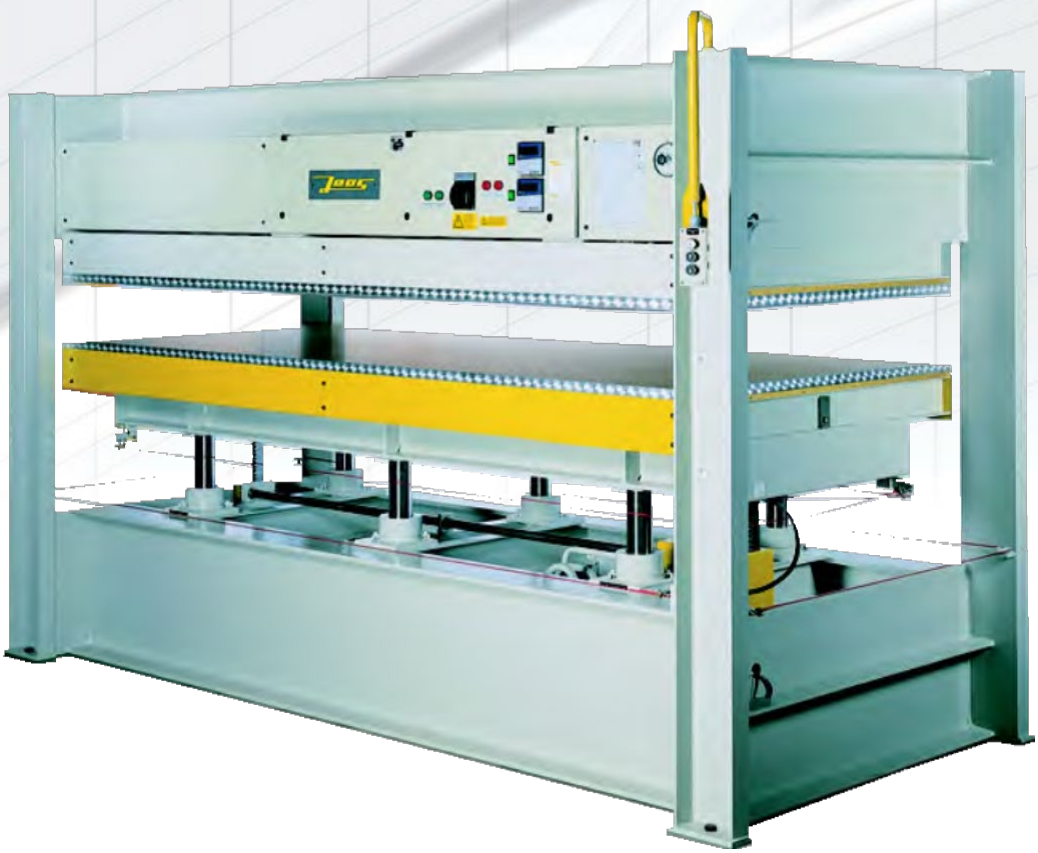
Product Range:
Wood

Joos Quality Press



Joos quality
is the difference
Details that matter.

PRESSEN + TECHNOLOGIE
GOTTFRIED JOOS MASCHINENFABRIK

Projection through innovations

At first glance, the presses may look similar. But you know from your own experience that different manufacturers build different machines.

The specialist can see very quickly whether a press is

- the quality of the workmanship
- the high reliability
- the long service life
- the high level of ease of use
- a mature technology
- economic work is

guaranteed.

Joos quality has been considered the benchmark for the production of presses for some time.

Check 12 important quality differences yourself and demand solutions from Joos.

Type HP 115 with optional

... made in Germany ...

1. The hydraulic power unit

As the core of the hydraulic quality press from Joos, the hydraulic power unit is securely installed in the middle of the lower part of the press.
This design excludes damage to the motor, pump and other units. Technical improvements prevent air from entering hydraulic lines and cylinders. This significantly increases the operational reliability of the press. The engine, valves and two-stage high-pressure pump are maintenance-free at Joos. The large hydraulic oil reservoir prevents excessive heating and aging of the oil.

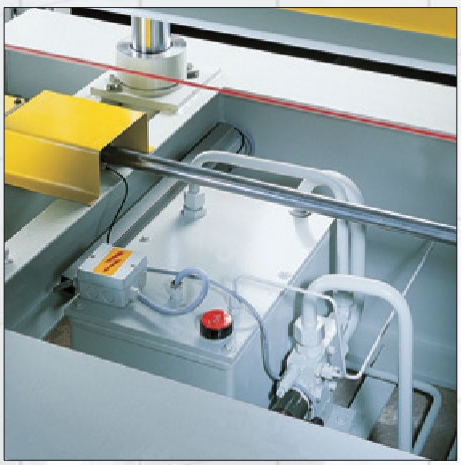
2. The dynamic piston bearing

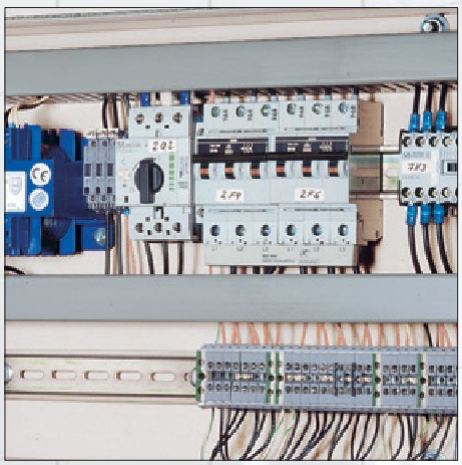
Even in the event of improper loading, the Joos press offers the highest level of operational reliability. With the unique Joos concept, the pistons are not screwed to the printing table, but dynamically meet under the printing table on a planed contact surface. The table is prevented from tilting and emigrating by a column guide. The synchronization of the printing table is ensured by a precision rack and pinion parallel guide. This technology gives the press table full expansion possibilities in all directions.

3. The electrical control system

The prerequisite for perfect veneer work is the exact control of the commands.
Joos quality products are therefore exclusively equipped with tested components such as:

- Contactors with cyclic contact monitoring in the safety path.
- Double motor gates with mutual locking.
- Automatic machines with phase monitoring instead of screw locks.





4. The table construction

In the case of veneer presses, the table construction must meet two important conditions:

The high pressures must be distributed absolutely evenly over the entire table. At Joos, the T-beams, which have been machined several times, are therefore welded together at a small bridge distance. This results in Joos stability.

The steam produced during veneering must be able to escape from the press body. Joos has developed an open table construction for this

5. Optimal heating

Perfect veneer work requires an absolutely reliable heating system that is adapted to the requirements . In close cooperation with the leading heating plate manufacturer, Elkom, Joos offers the following options:

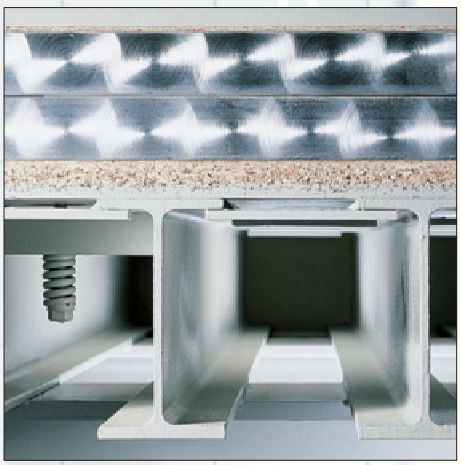
- **Electric heating plates (110°C / 130°C)** impress with their very short heating and regeneration phase, thus ensuring the greatest possible flexibility in production. There are two variants to choose from:
  a) up to max. 110°C or
  b) up to max. 130°C operating temperature.
- **Ökotherm heating plates (90°C / 110°C / 130°C)** are heated with liquid media such as water, steam or thermal oil. The patented design results in an extremely light heating plate and thus opens up enormous energy-saving potential.
  In addition, it ensures optimal and fast temperature distribution and high temperature consistency on the heating plate surface.

  Ökotherm heating plates can be connected to the operating heating circuit and heated externally or combined. This makes it possible

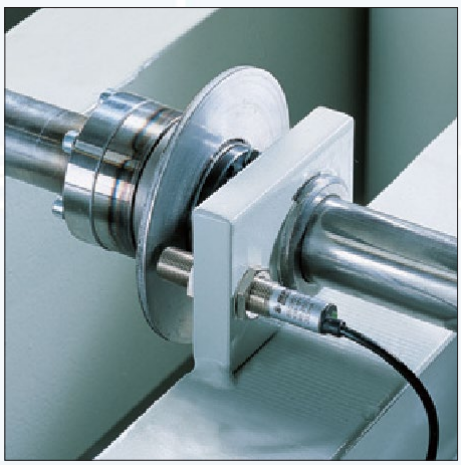
Find out more about the different systems. We would be happy to work with you to find the best solution for you.

6. The Joos-A.B.S. safety system

The A.B.S. safety system is installed exclusively in Joos quality presses. (D.B.G.M.8714804.8) The idea: incorrect assignments or parts that have been left behind are immediately registered by microsensors. A control command causes the Joos quality press to open again automatically. The expensive consequences of damage to the press table, the valuable hydraulics and/or the expensive heating plates are avoided by this Joos invention. The service life and operational reliability of your veneer press are significantly increased by the Joos A.B.S. safety system.



details on which it arrives.



7. The gold heating plate

The "Gold Anodized Decor D.B.G.M." system makes the surface of the valuable heating plates extremely hard.

The main advantages:
No scoring, reduced consumption of release agents, shorter working time, no foil wear and higher quality of veneer work. All press models are also available with heating plates for low or high-pressure steam, for hot and hot water or thermal

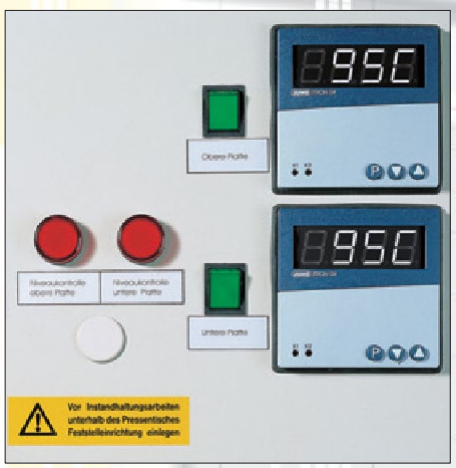
9. Capacity expansion

The veneer capacity of Joos quality presses can be economically expanded by installing additional deck heating plates.
This means that all standard models with two free-standing heating plates can be easily expanded to a total of 3 levels. Of course, deviating requirements can also be implemented here.

On request, the Joos quality press can be prepared in such a way that the later expansion is possible without major additional costs.

11. The temperature control systems

The conventional temperature control is carried out via the liquid thermostat in the edge area of the heating plate.
The better solution is the R 3.1 electronic temperature control system from Joos. Here, an electronic controller in the middle of the heating plate measures and regulates the current temperature requirement. An additional safety thermostat in the edge area protects against overheating of the heating plates.



... Consistently economical, consistently reliable

8. The pull-out pad

Free access to the pressing surface from all sides requires an appropriate press construction .
The open design of the Joos quality press also makes it possible to veneer extra-long parts by pushing them several times. Protruding workpieces must be supported during the pressing process. For this reason, Joos has designed a pull-out support that keeps the pressed material in a horizontal position at all times during processing.

10. The variable stroke limitation

Opening and closing the press takes time. This depends on the opening width of the press tables. In the case of thin workpieces, this time expenditure must be reduced if the machine stroke is limited.
With the adjustable limit switch from Joos, you can determine the stroke width and thus reduce the time required.
This saves you time and reduces your production costs.

12. The Controls

The Joos idea is that the operator always has the pressed material in view when opening and closing the press.

With us, you are not limited to forehead or longitudinal control. The Joos swivel button ensures the best control over the entire pressing process.

Perfection in press construction ...

... has been realising Joos for over 80 years. With great success. A number of decisive technical innovations and impulses came and come from Joos. Then as now, the overriding principle is to bring only high-quality products to the market that meet the highest practical requirements in terms of cost-effectiveness , ease of use, safety and reliability.

This claim is underlined by the broad programme. The variety of types and model variants of Joos quality products enable every customer to choose the right machine.

The range of services

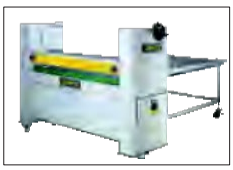
The **Joos Junior Press** (European Patent 0634253) is the entry-level model in the Joos quality range. It is designed for young entrepreneurs, educational institutions and companies with different amounts of veneer. Two model sizes, on a pneumatic basis, allow veneering or coating in your own company. The electrically heated Joos Junior press can be used variably as a mobile version.

The **Joos Quality Press HP** is the most well-known product. Joos has created many innovations that have shaped veneer press construction. To name just a few examples: the Joos A.B.S. safety system, the dynamic piston bearing or the gold-anodized heating plates. Worldwide utility models and patents testify to the permanent spirit of innovation. In 1976 and 1990, Joos was the only press manufacturer in the world to be awarded the Bavarian State Prize for its clear conception of the technology and its high willingness to innovate.

The series of **the Joos continuous press DLP Economic System 2000** (European patent 0512300) was developed from the experience of industrial production. The machines are manufactured as both front and longitudinally loaded machines. The design as sub-piston presses enables an optimal price-performance ratio and makes these models particularly interesting for the trade. From just two veneer days a week, rapid amortization and consequently economic success are achieved.

Especially in industrial veneering, the long running times and short pressing cycles place very high demands on the press. Downtime causes exceptionally high costs. Absolute reliability and great ease of use therefore have the highest priority. Of course, this standard also applies to the **Joos DLP/OK Industrial Line continuous presses,** which are implemented as complete systems from automatic insertion to stacking of the finished parts by Joos.

Joos molding presses are manufactured as upper or lower piston presses according to individual requirements. The example shows two mirror-image moulded presses for the production of chair seats and backrests on several floors.



There are a wide variety of aspects in favor of using a **Joos glue applicator:**
Thin and delicate veneers or plastics require an even glue film, which cannot be achieved manually. The mechanical glue application guarantees an even, thin glue film. They reduce glue consumption while increasing veneer quality and capacity.

Peripheral devices from Joos are used to optimize the process and handling before and after the pressing process. Joos glue applicators can be combined with upstream roller and downstream knife disc roller conveyors. Automatic feeding devices such as scissor lift tables, brushing machines and stacking units further streamline the work process.

Joos quality presses as individual solutions are used worldwide in a wide variety of areas of the wood and plastics industry. These range from automotive to aircraft construction, the sporting goods industry and recycling technology. To ensure that the best solution to the problem can be implemented in each case, each individual system is individually planned according to the customer's requirement profile.
Talk to Joos about forming, pressing, punching or tempering plastics.

The service life of a used machine can be significantly increased by professional **Joos customer service**, and the veneer quality and operator safety can be decisively improved. 80 years of experience bring knowledge in the event of problems that arise, even with third-party products. Thanks to the large spare parts and heating plate warehouse, you can rely on quick help from the **Joos customer service** in case of need.

Joos Quality Presses Specifications:

Type	HP 45	HP 65/1	HP 65/2	HP 70	HP 80	HP 90	HP 100	HP 115	HP 140/1	HP 140/2	HP 150
Pressing surface mm	1800 900	2200 1100	2500 1100	2500 1300	2500 1300	2550 1350	2550 1350	3000 1350	2550 1350	3000 1350	3300 1350
Ges. Pressing force kn	430	650	650	700	780	900	980	1150	1400	1400	1500
Height of the pressing room	400	400	400	400	400	400	400	400	400	400	400
m	4x65	4x80	4x80	4x80	4x80	4x90	4x90	6x80	6x90	6x90	8x80
m Number Ø of cylinders	2,8	2,7	2,4	2,15	2,4	2,7	2,9	2,8	4,1	3,7	3,4
spec. Pressure at 100 % design daN/cm2	3,9	3,8	3,4	3,4	3,4	3,8	4,1	4,0	5,8	5,2	4,8
spec. Pressure at 70 % design daN/cm²	325	325	325	350	385	355	385	380	370	370	370
Working pressure											
Power Kw	1,1	1,1	1,1	1,1	1,1	1,1	1,1	2,2	2,2	2,2	2,2
Forward time ca. sec.	16	16	16	16	16	16	16	16	16	16	16
Basic dimensions Total length approx.	2200	2600	2900	2900	2900	2950	3030	3480	3110	3560	4000
mm Total width	1100	1300	1300	1500	1500	1560	1570	1570	1600	1600	1630
approx. mm Total	1950	1970	2080	2080	2080	2200	2250	2240	2350	2420	2450
height approx. mm											
Weight of the press	1980	2500	2800	2950	3100	3600	3800	4700	4900	5800	7150
with 2 electric heating plates											
Technical data for heating:											
Electric heating plates											
Thickness each and/if. Combi heating	51	51	51	51	51	51	51	52	51	52	52
plate approx. mm connected load per	5,3	6,6	7,8	8,9	8,9	10,0	10,0	12,7	10,0	12,7	13,2
combi heating plate approx. kW	2,1	3,0	3,5	4,1	4,1	4,5	4,5	5,7	4,5	5,7	6,0
consumption/hour at 3 min pressing time	16	16	16	16	16	16	16	16	16	16	16
approx.											
kWh Heat-up time to 90°C approx.	-	7,7	9,0	10,2	10,2	13,2	13,2	14,8	13,2	14,8	17,5
min. connected load per											
Floors-Hotplate approx.											
kW											
Max. heating temperature 90°C											

Steam/water heating plates Data on request.

10 kN ^= ca. 1 t; 1 daN/cm2 ^= ca. 1 kg/cm2; 1 bar ^= ca. 1 atü, oder 14,6 psi; 4.186 kJ ^= 1 kcal; 1 cm2 ^= 0,155 in2; F° = C° x 1,8 +

- Pneumatic presses
- Hydraulic Presses
- Running Meals
- Molding Samples
- Special Dishes
- Present food service
- Glue Coating Machines
- Handling equipment

PRESSEN + TECHNOLOGIE

JOOS MASCHINENFABRIK GMBH & CO. KG