



The manufacture of the vast range of wood working presses with the name KOLMAG, was started in 1960. These presses were sold both in Italy and throughout the world. Always at the forefront when it comes to the production and design of new work processes, Kolmag was one of the first companies to produce woodworking presses and continuous cycle machines.

Over the last thirty years, in order to satisfy the changing requirements of the clientele, the company concentrated its efforts on the production of membrane presses and it was the first in the world to have devised and placed on the market a specific type of membrane press used mainly for covering shaped panels. As well as producing machines it also carried out an in-depth examination of all the technology of the materials used and the gluing processes which are of paramount importance for the quality of the product so that it can offer the client advice not only with regards to the specific machine but also the entire production process.

In the 1970's in addition to the production of presses, the company began to design, produce and sell vacuum dryers for wood which it exports all over the world under the "Cigomak" name.

The marks Kolmag and Cigomak are now been absorbed by group SAOM, company that produces work centers numerically controlled for working with wood for over 30 years.

The production of the mark Kolmag and Cigomak was transferred SAOM in factories located in Legnaro (Padova) and Costa di Rovigo (RO).

Products - Woodworking presses

liquid:

~COMPAT
SL

~KOMBINAT
ML
EL

~SINTEX
PMV

~CICLO FLEX
PSAM

~COMPLEX
SPMV
PSMV

~ TMSE

air-vacuum:

VACUUM

BPMA

AIR-VACUUM

~DUPLEX
SP2M
M2A

~THERMO
THERMO
MAK

~CURVAT
SPMA



Our current range of membrane presses includes models with either liquid or air pressing cushions or work surfaces. In addition we can also design "vacuum" presses for the same type of work.

"Membrane presses (we remind you that the name "membrane" press was coined by our marketing division) are mainly used for hot gluing synthetic, thermoformed sheets, papers, or wood veneers to panels or various types of backing materials – mainly MDF, chipboard, wood – with shaped or curved surfaces. Regardless of the type of press used the work cycle is the same. However pressing times can vary greatly according to the type of press used. The shortest pressing times are usually achieved using liquid cushion presses.

Work cycle

- 1) Preparation of the panels: sectioning, pantographing
- 2) Spraying a layer of glue onto the surface
- 3) Preparation of synthetic, thermoformable material, veneer or other material
- 4) Pressing cycle: loading, pressing, unloading
- 5) Panel trimming and finishing.

Our current range of membrane presses also includes very powerful membrane presses for the automotive industry or a variety of applications where specific high pressures are required.



SL

The COMPAT SL press has a LIQUID pressing cushion for loading/unloading the panels directly into the press compartment. The machine is mostly used for gluing thermoformable materials on MDF panels; it can also glue veneered panels to MDF panels (raised) or chipboard.

The COMPAT SL model is available in the following versions:

- (V) with depressor – for thermoformed materials
- (R) with heated upper work surface – for wood veneer
- (VR) complete with depressor and upper heated work surface – for all types of wood working.

COMPAT SLV 230x100	
Specific pressure	Kg/Cm2 6+1
Working size	mm 2300x1000
Useful opening between plates	mm 350
Main pistons	Nº6
Diameter of main pistons	mm 100



ML

The Kombinat ML press has a LIQUID pressing cushion for loading/ejecting panels on the manually transversally extractable pressing surface.

It is dedicated to the small and medium sized company where the importance of having an extremely versatile, flexible press is indispensable to satisfy the company's production requirements. The machine is mainly used for gluing thermoformable materials on MDF panels, it can also glue wood veneer to raised MDF or chipboard panels.

The Kombinat ML model is available in the following versions:

- (V) with depressor – for thermoformed materials
- (R) with heated upper work surface – for wood veneer
- (VR) complete with depressor and upper heated work surface– for all types of wood working.

KOMBINAT MLV 230x100

Specific pressure	Kg/Cm ² 6+1
Working size	mm 2300x1000
Useful opening between plates	mm 350
Main pistons	N°6
Diameter of main pistons	mm 100



KOMBINAT EL

The Kombinat EL (1 work surface) EL2 (2 work surfaces) press has an automatically, longitudinally extractable LIQUID pressing cushion to facilitate loading/unloading panels (large sized panels can be loaded/unloaded which would otherwise be difficult).

The second work surface (model EL2) can be added later to the single work surface EL model.

The machine is mainly used for gluing thermoformable materials to MDF panels, it can also glue wood veneer to raised MDF or chipboard panels.

The Kombinat EL model is available in the following versions:

- (V) with depressor – for thermoformed materials
- (R) with heated upper work surface – for wood veneer
- (VR) complete with depressor and upper heated work surface– for all types of wood working.

KOMBINAT ELV 250x120

Specific pressure	Kg/Cm2 6+1
Working size	mm 2500x1200
Useful opening between plates	mm 150
Main pistons	Nº6
Diameter of main pistons	mm 120

KOMBINAT EL2V 250x120

Specific pressure	Kg/Cm2 6+1
Working size	mm 2500x1200
Useful opening between plates	mm 150
Main pistons	Nº6
Diameter of main pistons	mm 120



PMV

The SINTEX PMV (1 work surface) and PM2V (2 work surfaces) presses have an automatically, longitudinally extractable liquid pressing cushion to facilitate loading/unloading the panels. This also allows large panels to be loaded/unloaded which would otherwise be difficult. SINTEX PMV and PM2V presses are supplied with a depressor (for PV - PET - ABS - Transfer foil thermoformable materials) and can be fitted with an upper heated surface - model PMVR and PMV2R - for wood veneer.

SINTEX PMV 250x120	
Specific pressure	Kg/Cm2 10
Working size	mm 2500x1200
Useful opening between plates	mm 250
Main pistons	Nº3
Diameter of main pistons	mm 265

SINTEX PMV 320x130	
Specific pressure	Kg/Cm2 11
Working size	mm 3200x1300
Useful opening between plates	mm 250
Main pistons	Nº3
Diameter of main pistons	mm 265

SINTEX PM2V 250x120	
Specific pressure	Kg/Cm2 10
Working size	mm 2500x1200
Useful opening between plates	mm 250
Main pistons	Nº2
Diameter of main pistons	mm 265

SINTEX PM2V 320x130	
Specific pressure	Kg/Cm2 11
Working size	mm 3200x1300
Useful opening between plates	mm 250
Main pistons	Nº3
Diameter of main pistons	mm 265

PSAM**PSAM**

The CICLOFLEX PSAM presses have a lower LIQUID pressing cushion and an upper heated work surface.

The presses are equipped with an external conveyor belt for composing and loading panels as well as a rotary belt within the machine body. These presses have been specifically devised for coating both sides (flat and raised) of the panels with various types of wood veneer. The machines are usually fitted with a row of idler rollers for ejecting the panels.

A conveyor belt can be fitted for ejecting the panels on request.

CICLOFLEX PSAM 14x28

Specific pressure	Kg/Cm ² 12
Working size	mm 2700x1350
Useful opening between plates	mm 250
Main pistons	N°3
Diameter of main pistons	mm 265

CICLOFLEX PSAM 14x31

Specific pressure	Kg/Cm ² 15
Working size	mm 3000x1350
Useful opening between plates	mm 250
Main pistons	N°4
Diameter of main pistons	mm 265

SPMV**SPMV**

The COMPLEX SPMV presses have a LIQUID cushion press for loading/unloading the panels directly into the press compartment. The machines achieve a specific high pressure and can be used for any type of gluing, including extremely difficult materials. The SPMV models come complete with depressor (for thermoformed materials) and can be fitted with a heated upper work surface - model SPMV-R (for wood veneer).

COMPLEX SPMV 170x75

Specific pressure	Kg/Cm2 18
Working size	mm 1750x770
Useful opening between plates	mm 350
Main pistons	Nº2
Diameter of main pistons	mm 265

COMPLEX SPMV 230x100

Specific pressure	Kg/Cm2 18
Working size	mm 2350x1020
Useful opening between plates	mm 350
Main pistons	Nº3
Diameter of main pistons	mm 265

PSMV



Complex PSMV

The COMPLEX PSMV EL (1 work surface) and PSMV 2L (2 work surfaces) presses have an automatically, longitudinally extractable LIQUID pressing cushion to facilitate panel loading/unloading. This also allows large panels to be loaded/unloaded which would otherwise be difficult.

Accessories may be added to facilitate loading/unloading heavy panels on request.

The PSMV EL and PSMV 2L models come complete with depressor (for thermoformed materials) and can be fitted with an upper heated work surface - model PSMVR-EL and PSMVR-2L for wood veneer.

The machines achieve a specific high pressure and can be used for any type of gluing, including extremely difficult materials. Moreover the array of sophisticated technical features make these models the most competitive in the industry in terms of productivity and product quality.

The second work surface (PSMV 2L model) can also be added to the PSMV EL model which has only one work surface.

COMPLEX PSMV EL 230x110	
Specific pressure	Kg/Cm2 18
Working size	mm 2350x1120
Useful opening between plates	mm 250
Main pistons	Nº3
Diameter of main pistons	mm 265

COMPLEX PSMV EL 265x130	
Specific pressure	Kg/Cm2 18
Working size	mm 2700x1320
Useful opening between plates	mm 250
Main pistons	Nº4
Diameter of main pistons	mm 265

COMPLEX PSMV EL 320x130	
Specific pressure	Kg/Cm2 18
Working size	mm 3250x1320
Useful opening between plates	mm 250
Main pistons	Nº5
Diameter of main pistons	mm 265

COMPLEX PSMV EL 320x160	
Specific pressure	Kg/Cm2 15
Working size	mm 3250x1620
Useful opening between plates	mm 250
Main pistons	Nº5
Diameter of main pistons	mm 265



TMSE

The TMSE series of Kolmag presses represents a significant technological step forward for forming and pressing a wide range of plastics and metals.

The versatility of the forming/pressing system together with the high quality adequate for the high power developed make this a distinguished press on the international market on account of the quality of the products.

The use of a hydraulic forming surface provides high precision, decorative forming and pressings at a very competitive price compared to the traditional system of press and counterpress.

The TMSE model has a liquid pressing cushion with one or two automatically extractable trays to facilitate loading/unloading. Pressures can reach 300 Kg/cm².

Maximum aperture of the surfaces is approximately 70 mm.



BPMA 25 e 30

The Kolmag BPMA vacuum thermoforming press has been studied and designed to PVC-coat shaped MDF panels.

This type of machine uses the whole sheet pressing system and is especially recommended for companies requiring a simple-to-use vacuum press without sacrificing up-to-date technological features.

BPMA 25	
Working size	mm 2320x1180

BPMA 30	
Working size	mm 2820x1180

SP2M



SP2M

The DUPLEX SP2M presses have a twin AIR pressing cushion (above and below) for loading/ejecting the panels directly into the press compartment.

These presses are capable of simultaneously gluing wood veneer to both sides of the raised panels (for example door panels)

DUPLEX SP2M 180x75

Specific pressure	Kg/Cm2 7
Working size	mm 1800x750
Useful opening between plates	mm 350
Main pistons	Nº3
Diameter of main pistons	mm 120

DUPLEX SP2M 180x130

Specific pressure	Kg/Cm2 8
Working size	mm 1800x750
Useful opening between plates	mm 350
Main pistons	Nº6
Diameter of main pistons	mm 120

DUPLEX SP2M 265x130

Specific pressure	Kg/Cm2 8
Working size	mm 2650x1300
Useful opening between plates	mm 350
Main pistons	Nº2
Diameter of main pistons	mm 265

M2A**M2A**

The DUPLEX M2A presses have a twin AIR pressing cushion (above and below) and are equipped with an external conveyor belt for composing and loading the panels as well as a rotary belt inside the body of the machine. The machines are usually fitted with a row of idler rollers for unloading the panels.

These machines have been studied and designed to simultaneously glue wood veneer to both sides of the raised panels (for example doors).

DUPLEX M2A 180x130

Specific pressure	Kg/Cm ² 8
Working size	mm 1800x1300
Useful opening between plates	mm 250
Main pistons	N°6
Diameter of main pistons	mm 120

DUPLEX M2A 265x130

Specific pressure	Kg/Cm ² 8
Working size	mm 2650x1300
Useful opening between plates	mm 250
Main pistons	N°2
Diameter of main pistons	mm 265

THERMO**Thermo MSA**

The THERMO MSA presses have an upper AIR pressing cushion and 2 automatically transversally extractable panel holders below.

These machines, designed and manufactured for coating all types of moulded plastic panels (PVC-PET-ABS-TRANSFER FOIL) combine the most advanced heating systems with the most innovative methods for creating and controlling vacuum.

These and other techniques devised in cooperation with various panel producers have led to the production of machines incorporating a special press cycle which has made great headway into improving the quality of the gluing.

The machines use the whole sheet pressing system.

THERMO MSA 26x13

Specific pressure	Kg/Cm ² 7+1
Working size	mm 2550x1320
Useful opening between plates	mm 90
Main pistons	N°2
Diameter of main pistons	mm 265

THERMO MSA 32x13

Specific pressure	Kg/Cm ² 7+1
Working size	mm 3200x1320
Useful opening between plates	mm 90
Main pistons	N°2
Diameter of main pistons	mm 265



MAK

The Kolmag press model MAK is the result of a continuous research for an easy-to-use and conveniently priced vacuum thermoforming press. Vacuum is provided by a high capacity adjustable pump (100 m³/h) connected to a 300 lt capacity tank. After a preheating time to warm-up the material, the pump creates the vacuum in the working shuttle. Two timers in the electric cabinet allow setting the preheating time, and the vacuum pump operation time.

Technical characteristics:

- movement of the mobile plate to climb from the lower part
- automatic movement of the tray in longitudinal sense
- electric plates (superior for membrane heating, inferior for tray heating)

MAK 24 x 12	
Working Dimension	mm 2400 x 1200
Useful opening between plates	mm 350
Installed Power	Kw 22
Main Cylinder	Nº 6
Cylinder Diameter	mm 85

SPMA



SPMA

The CURVAT SPMA presses have an upper, automatically, transversally extractable AIR pressing cushion to facilitate panel loading/unloading.

The particular characteristic of this machine is that it can coat curved panels using a cushion or work chamber with a height of approximately 250 mm.

CURVAT SPMA 220x100

Specific pressure	Kg/Cm ² 8
Working size	mm 2200x1000
Useful opening between plates	mm 260
Main pistons	Nº2
Diameter of main pistons	mm 265

CURVAT SPMA 250x120

Specific pressure	Kg/Cm ² 8
Working size	mm 2500x1200
Useful opening between plates	mm 260
Main pistons	Nº3
Diameter of main pistons	mm 265



Vacuum dryers for wood

The drying process is made in two phases: wood heating and depression phase that, acting in synergy take the water contained in the wood to the temperature of evaporation and allows the elimination through the steam condense without causing excessive tensions to the wood.

All of this is controlled from a electrical digital unit for the heating temperatures and wood compensation with five different sensors probes in addition to a constant control of the humidity level through a specifically detector (moisture tester).

Essicatoio MINI 20	
Maximum capacity	m cubi 2
Number of heating plates	8
Dimensions of plates	mm 4000x700
Diameter container	mm 1000
Lenght container	mm 4600
Maximum height	mm 1670

Essicatoio 5 MA	
Maximum capacity	m cubi 5
Number of heating plates	16
Dimensions of plates	mm 5000x1120
Diameter container	mm 1600
Lenght container	mm 5850
Maximum height	mm 2400

Essicatoio 10 MA	
Maximum capacity	m cubi 5+5
Number of heating plates	16+16
Dimensions of plates	mm 5000x1120
Diameter container	mm 1600x2
Lenght container	mm 5850
Maximum height	mm 2400

Essicatoio 12 MA	
Maximum capacity	m cubi 12
Number of heating plates	22
Dimensions of plates	mm 6300x1420
Diameter container	mm 2100
Lenght container	mm 7350
Maximum height	mm 2900