

Presses

Manual and Automatic Hydraulic Presses

CARVER

Versatile 2 and 4-column presses suitable for a wide range of applications including:-

- oil extraction from mineral and vegetable products
- briquetting and pelleting
- laminating
- moulding of rubber and plastic composites
- compression and flow testing within the laboratory, small scale production plant and quality control departments

◆ All models supplied with safety shield

Safety Shields

The shields fitted to Carver presses have heavy gauge, sheet steel sides and rear with a hinged, transparent, tough plastic front to allow access to the press area.

Hotplates/Cooling Plates

These are used for laminating, moulding and other applications requiring heat and pressure applied simultaneously.

Unheated and Heated Test Cylinders

These are used for a variety of applications including:

- moulding test specimens or production items
- pressing out extracts, fats or fluids
- tableting and pelleting
- compression strength test for ceramics, plastics, etc.
- powder metallurgy
- flow tests
- extrusion tests

Plate/Cloth and Cage Equipment

Used for the pressing of oils and liquids from fibrous and other materials and separating crystals from liquors.

Filter Pads and Stainless Steel Pan

Used with the unheated test cylinder outfits for oil extraction applications. The filter pads keep the material being compressed from escaping during compression and the pan captures the extracted oil or fluid.

Swivel Bearing Plate

The major use for this accessory is in crushing and breaking tests particularly with 50 x 50mm cement/concrete cubes and 50 x 100mm test cylinders.

Pellet Die and Buffer Plate

The 13mm evacuable die is used primarily in the preparation of KBr discs for IR spectrography. The die assembly is hardened stainless steel and the construction ensures high performance, economy and ease of maintenance.

The buffer plate is used with the 13mm die. It is 88mm diameter and mounts to the top head of the press where it prevents the plunger of the KBr die from damaging the press head.

AutoPak™ Power Units

Self-contained, electrically operated automatic power units are available for retrofit to existing manual presses.

Pellet Presses

Purpose built manual and automatic models for producing KBr pellets – see page 446 for details.



PW100-30



PW110-12

Presses

Manual Hydraulic Presses

Catalogue No.		PW100-10 basic	PW100-30 basic PW100-37 heated	PW100-60 basic PW100-67 heated	PW110-12 basic	PW110-32 heated
Model		Mini C	Model C	Model M	Model 25-12	Model 25-12H
Clamping force (max. applied load)	tons* lbs	12 24000	12 24000	25 50000	25 50000	25 50000
Columns		2	2	2	4	4
Plates	mm	150 x 150	150 x 150	228 x 228	300 x 300	300 x 300
Ram stroke	mm	130	130	165	165	165
Daylight opening	mm	0 to 177	19 to 457	19 to 406	25 to 355	0 to 240
Hydraulic fluid capacity	ml	560	560	1120	1120	1120
Dimensions, W x D x H	mm†	260 x 205 x 560	410 x 380 x 915	485 x 485 x 1070	460 x 460 x 940	460 x 635 x 940
Weight, net	kg†	45	64	121	223	291

*US ton equivalent to 0.893 Imperial ton. † For the basic machines only – see Accessories entries also.

Two-Column, Manually Operated

All models supplied with pressure gauge, hydraulic fluid, instruction manual and safety shield.

Manual Hydraulic Press, Mini C basic

Maximum applied load 12 ton. Square unheated plates, 150 x 150mm.

PW100-10 Mini C basic, ref. 3850

Manual Hydraulic Press, Model C basic

Maximum applied load 12 ton. Square unheated plates, 150 x 150mm.

PW100-30 Model C basic, ref. 3851

Manual Hydraulic Press, Model CH heated

Maximum applied load 12 ton. Square heated plates, 150 x 150mm. With digital temperature indicating controls, range ambient to 340°C. For 220V 50/60Hz single phase supplies.

PW100-37 Model CH heated, ref. 4386CE

Safety Eyeshields – see SA930-10.

Manual Hydraulic Press, Model M basic

Maximum applied load 25 ton. Square unheated plates, 228 x 228mm.

PW100-60 Model M basic, ref. 3853

Manual Hydraulic Press, Model MH heated

Maximum applied load 25 ton. Square heated plates, 228 x 228mm. With digital temperature indicating controls, range ambient to 340°C. For 220V 50/60Hz single phase supplies.

PW100-67 Model MH heated, ref. 4389CE

Spares

PW125-05 Hydraulic fluid for all presses, 560ml

PW125-10 Repair Kit for Mini C and Models C hydraulic units

PW125-13 Repair Kit for Models M, Model 25-12 and Model 25-12H hydraulic units

PW125-35 Hydraulic unit for Mini C and Model C presses, weight 12.5kg

PW125-40 Hydraulic unit for Models M, Model 25-12 and Model 25-12H presses, weight 23kg

Four-Column, Manually Operated

All models supplied with pressure gauge, hydraulic fluid, instruction manual and safety shield.

Manual Hydraulic Press, Model 25-12 basic

Maximum applied load 25 ton. Square unheated plates, 300 x 300mm.

PW110-12 Model 25-12 basic, ref. 3855

Manual Hydraulic Press, Model 25-12H heated

Maximum applied load 25 ton. Square heated plates, 300 x 300mm. With digital temperature indicating controls, range ambient to 340°C. For 220V 50/60Hz single phase supplies.

PW110-32 Model 25-12H heated, ref. 3856



PW100-10



PW100-37



PW110-32

Presses

Major Accessories for Hydraulic Presses

Digital AutoPaks

Self-contained power units for converting manually operated presses to automatic operation. Comprising d.c. motor, two-stage pump, touchscreen interface for controlling pressure, cycle, time and temperature (where applicable) parameters automatically. Two-hand, anti-tie down controls protect the operator. Overall 590 x 330 x 610mm W x D x H. Weight 50kg. For 220V 50/60Hz single phase supplies.

PW130-13 AutoPak 12. For Mini C, Models C

PW130-15 AutoPak 25. For Models M, Model 25-12

Hot Plates/Cooling Plates

Steel, with digital thermostatic control over the range ambient to 340°C. For 220V 50/60Hz single phase supplies. Supplied per pair.

	Type	For Models	Size, mm	Weight, kg
PW130-28	Heating	Mini C, C	150 x 150	12
PW130-29	Heating/cooling	Mini C, C	150 x 150	15
PW130-34	Heating	M	228 x 228	26
PW130-35	Heating/cooling	M	228 x 228	30

Cage Equipment

For extracting oils and liquids from fibrous materials. Minimum daylight opening of 410mm required. Includes felt discs, steel discs, tray, bulb type syringe and mounting hardware. For use with Model C unheated presses only.

PW130-44 Cage equipment

This accessory cannot be used with the Model C press fitted with heated plates.



Digital AutoPaks



PW190-20

Test Cylinders and Pellet Die

For moulding, briquetting and pressing fluids from plants and animal tissues.

For Mini C, Models C, M and 25-12 only

PW130-50 Test cylinder outfit, stainless steel, 1.125" i.d. (28.6mm). Weight 1.5kg

PW130-52 Set of 12 filter pads for above

PW130-54 Test cylinder outfit, stainless steel, 2.25" i.d. (57.2mm). Weight 4kg

PW130-57 Set of 12 filter pads for above

PW130-60 Stainless steel pan for use with PW130-50 or -54

PW130-68 Heated test cylinder outfit, 1.125" i.d. (28.6mm). Weight 3kg. 220V 50/60Hz

PW130-70 Heated test cylinder outfit, 2.25" i.d. (57.2mm). Weight 6kg. 220V 50/60Hz

For Mini C, Models C & M only

PW130-80 Swivel bearing plate.

PW130-85 13mm pellet die for KBr pellets. Requires PW130-87

PW130-87 KBr buffer plate. Please state for which press when ordered



PW190-60

Pellet Presses

CARVER

Manual Pellet Press, Model 4350CE

Compact, two-column, fully enclosed, manual hydraulic press designed primarily for KBr pellet pressing. Maximum applied load 12 US tons. Circular unheated plates, 100mm diameter. Supplied complete with 13mm evacuable die, safety shield and high-visibility pressure gauge. Ram stroke 130mm; daylight opening 0 to 146mm. Overall 267 x 605 x 572mm W x D x H. Weight net 55kg.

PW190-20 Manual pellet press, ref. 4350CE

Automatic Pellet Press, Model 3887CE-SD

Maximum applied load 25 US tons. Two-column, automatic press primarily for KBr pellet pressing.

- ◆ Touchscreen interface controller with display for pressure, speed, dwell time setting and press status
- ◆ Ten recipe storage of pressure and time settings
- ◆ 0.01sec to 99.9 hours timer
- ◆ Automatic platen opening on cycle completion
- ◆ Adjustable end of cycle alarm
- ◆ Units of measurement setting for kg, lbs or tons
- ◆ Integral safety enclosure with transparent door

With circular unheated plates, 125mm diameter. Supplied complete with 13mm die. Ram stroke 25mm; daylight opening 38 to 184mm. Overall 605 x 250 x 600mm W x D x H. Weight net 120kg. For 220V 50/60Hz single phase supplies.

PW190-60 Pellet press, ref. 3887CE-SD