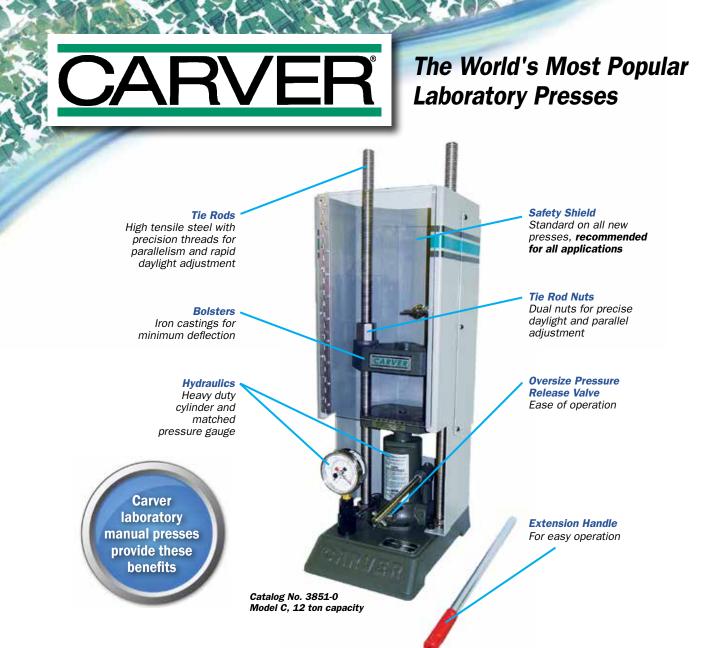


Laboratory **Accessories**





The international standard For more than 100 years Carver hydraulic presses have been the standard for laboratories around the world. Carver Model C presses alone are in use in more laboratories than any other press. The current Carver line has been expanded and improved with more sizes, options, features, and quality performance than any other line of presses.

The widest choices Standard choices now include two-column and four-column, benchtop and floor standing, and manual and automatic presses with clamping capacities from 12 to 100 tons. Automatic "Auto Series" presses include user-friendly control system and integral safety enclosures. Accessories include new self-contained, electrically operated AutoPak hydraulic power unit for retrofit to existing manual Carver presses.

Applications

• Materials research: ceramics, composites, construction materials, cosmetics, drugs, pharmaceuticals, powder metals, printed circuit boards, rubber, silicone and other elastomers, soil, thermoplastic resins and thermosets.

• Quality and performance testing of physical properties: compression strength, flexural strength, shear strength, flow and color dispersion.

 Laboratory testing: ASTM test plaque or bar molds for polyethylene & polypropylene.
Laminating: credit cards, ID cards, plaques and printed circuit boards.

• Other applications: composite molding, compression molding, crushing, encapsulation, extrusion, forming, insert pressing, producing KBr pellets for infrared spectroscopy, metal forming (dimpling), insert molding, oil extraction, pelletizing, specimen preparation, splice molding, splitting chilled oils, transfer molding, and vulcanizing rubber stamps.

Specialized applications Special presses dedicated to specific applications include ASTM test plaque or bar molding, pellet making (KBr specimens for infrared and x-ray spectroscopy), laminating and rubber stamp molding.

Custom presses, too In addition to the models shown in this catalog, Carver designs and manufactures a wide variety of custom made presses and accessories to suit your specific application. Please consult the factory for any equipment not specifically listed in this catalog.

Contact us: Carver, Inc. 1569 Morris St., P.O. Box 544 Wabash, IN 46992-0544 Phone: 260-563-7577, Fax: 260-563-7625 E-mail: carverpress@acscorporate.com www.carverpress.com ISO 9001:2008 Certified

More Choices, More Features, More Performance

Integral Safety Shield Contemporary styling and safe operation

Access Door Clear shatter resistant polycarbonate door permits observation while protecting the operator

Heated Platens Optional digitally controlled, cartridge heated platens **Door Interlock Switch** Prevents operation when safety shield is open

Full Touch Screen Interface For precise, programmed process control

Enclosed Hydraulic Power Unit Self-contained hydraulic system

Catalog No. 3891 NE Auto M-NE,H 25 ton capacity

CARVER

How to select the right Carver press for your application:

- Determine if you want a general laboratory press or one dedicated to a special application.
 General pages 4, 5, 6, 8, 9
 Special pages 7, 10, 11
- Determine clamp force and choose benchtop or floor standing model.
 Benchtop 7.5 to 30 tonspages 4, 5, 7,

8, 9, 10, 11

Floor Standing

30 to 100 tonspages 6, 11

3.	Decide if heated platens will be needed.								
	Heated Floor Modelspages 6, 11								
	Benchtoppages 5, 8								
	Unheated Floor Models page 6 Benchtop pages 5, 9								

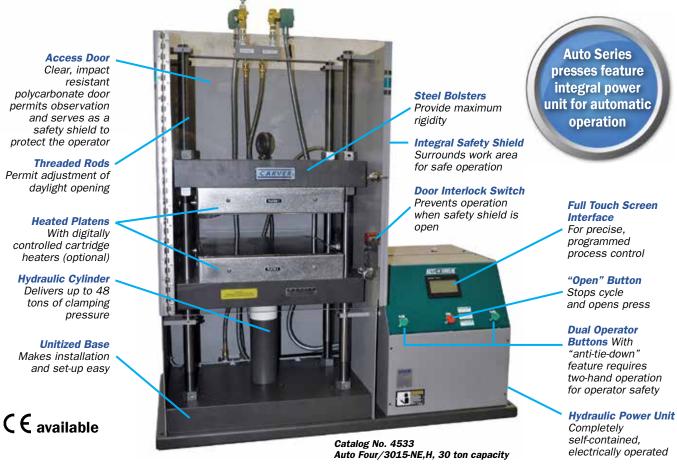
- Refer to specification tables for appropriate work area (platen size) and daylight opening (working height between platens).
- 5. Refer to photos and descriptions to select two- or four-column configuration.
- 6. Select heat control level desired and platen options on page 12.
- 7. Refer to pages 12 thru 15 to select appropriate accessories for your application.
- Note the catalog numbers of your selections on your letterhead and fax to 260-563-7625.
 Or, contact us for prompt assistance: phone: 260-563-7577 email: carverpress@acscorporate.com

Inside Carver presses/ Applications overview2
Press selection3
Table of contents3
Auto Series benchtop presses, 15 to 48 tons4,5
Monarch floor standing presses, 30 to 100 tons6
Presses for plastic ASTM testing7
Portable chillers7
Heated platen benchtop presses and rubber stamp presses 7.5 to 30 tons8
Standard benchtop presses, 12 to 30 tons9
Pellet presses and accessories10
E-Series Electric and laminating presses11
Heating and cooling platens12
Molds, dies and accessories13
Accessories catalog listings14
AutoPak™ power unit for existing manual presses16
Custom presses16
WABASH hydraulic presses and molding machines16

Cover photo: Carver presses molding medical components.

Auto Series Compact Automatic Benchtop Presses 15 to 48 ton capacity

Automatic hydraulic laboratory presses in two- and four-post models up to 48 ton clamp capacity



Carver's Auto Series presses bring a world of power and control options to your lab



Carver Auto "C" presses molding medical components.*

Carver has incorporated more than 100 years of experience in laboratory presses into this line of automatic electrically powered benchtop presses for today's labs. Each has a built-in hydraulic system with a control system for accurate programmable operation. Five models are available ranging in clamp force capacity from 15 to 48 tons, including a pelletizing press and two- or four-column models. All have integral safety enclosures with a clear front door for operator safety and observation.



Many Carver Auto Series (and Manual presses) are available in CE configurations. Please contact Carver for pricing and availability.

*AutoPak power unit available for existing manual presses. (See page 16)

A Complete Line of Automatic Electrically Powered Benchtop Presses for the Laboratory or Manufacturing Facility



"NE" Control Description:

Carver Auto Series automatic hydraulic laboratory presses feature an enhanced "NE" digital control system. Offering 15 to 48 tons of clamping force (minimum 1,000 lbs). The Auto Series presses also offer a work area (platen size) range of 6" x 6" to 18" x 18". These benchtop presses are typically used in quality control, research and development for test sample preparations, destructive testing, molding, laminating and fluid extraction.

The new "NE" controls feature full touch screen interface with a proximity switch for adjustable slowdown position. Platen heat is controlled through the PLC on heated models and selection for auto reheat at end of cycle is provided. Platen temperature values may be entered in degrees Fahrenheit or Celsius and the display can easily be switched between the two units. Either force

or temperature mode may be chosen per segment. Clamp force values may be entered in pounds, kilograms. US tons or metric tons and the display can easily be switched between the units.

Carver Auto Series Presses also have two hand "anti-tie-down" close buttons and an interlocked safety enclosure with hinged door are provided for operator safety. This programmable control system has storage capacity of 10 recipes, each segmented recipe is capable of 20 programmable setpoints of: clamp force, cure time, platen temperature and bump (automatic bump sequence may be programmed in any or all segments). Hydraulic power unit is completely self-contained (1/4 HP) and electrically operated. See below table for press specifications.

Specifications

Model	Catalog	Max. Clamp	Heated	Platen	Ram	Daylight	Dimensions	Height	Weight
	Number	Force, Tons (lb)	Platens	Size (in)	Stroke (in)	Opening (in)	W x D (in)	(in)	(lb)
Auto C-NE	3888	15 (30,000)	No	6 x 6	6	.75 to 17	37 x 22	42.50	350
Auto C-NE,H	3889	15 (30,000)	Yes	6 x 6	6	0 to 14	37 x 22	42.50	400
Auto M-NE	3890	25 (50,000)	No	9 x 9	6	.75 to 16	37 x 22	45	570
Auto M-NE,H	3891	25 (50,000)	Yes	9 x 9	6	0 to 12	37 x 22	45	630
AutoFour/1512-NE	3892	15 (30,000)	No	12 x 12	6	1 to 17	44.50 x 27.75	46	850
AutoFour/1512-NE,H	3893	15 (30,000)	Yes	12 x 12	6	0 to 12	44.50 x 27.75	46	1,050
AutoFour/1515-NE	4530	15 (30,000)	No	15 x 15	6	8 to 17	44.50 x 27.75	46	1,200
AutoFour/1515-NE,H	4531	15 (30,000)	Yes	15 x 15	6	2 to 12	44.50 x 27.75	46	1,500
AutoFour/3012-NE	3894	30 (60,000)	No	12 x 12	6	1 to 17	44.50 x 27.75	46	850
AutoFour/3012-NE,H	3895	30 (60,000)	Yes	12 x 12	6	0 to 12	44.50 x 27.75	46	1,050
AutoFour/3015-NE	4532	30 (60,000)	No	15 x 15	6	8 to 17	44.50 x 27.75	46	1,200
AutoFour/3015-NE,H	4533	30 (60,000)	Yes	15 x 15	6	2 to 12	44.50 x 27.75	46	1,500
AutoFour/4815-NE AutoFour/4815-NE,H AutoFour/4818-NE AutoFour/4818-NE,H	5400 5401 5402 5403	48 (96,000) 48 (96,000) 48 (96,000) 48 (96,000)	No Yes No Yes	15 x 15 15 x 15 18 x 18 18 x 18	4 4 4 4	6 to 19 0 to 15 6 to 19 0 to 15	55 x 36 55 x 36 55 x 36 55 x 36 55 x 36	72 72 72 72 72	3,074 3,384 3,074 3,444

CARVER

Monarch Hydraulic Lab Presses 30, 50, 75, 100 ton capacity

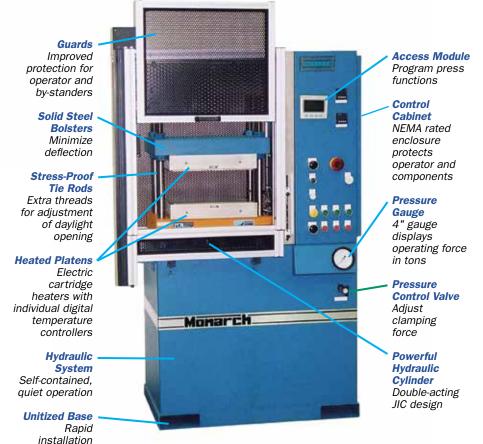
Carver's Monarch laboratory presses with integral hydraulic system and high technology options are based on standard production press models adapted to precision laboratory requirements.

Recommended for testing or research, compacting, molding rubber or plastic, laminating and assembly where stripping force is required.

Standard features include doubleacting J.I.C. style cylinder for power open and power close. An integral hydraulic reservoir is easily accessible for cleaning and includes a strainer or cartridge filter, air filter/breather, oil level indicator and oil cooler. A programmable controller with access module is standard.

Optional equipment includes electrically heated platens to 500°, 800° or 1200°F, with digital temperature controllers, low pressure system, pressing speed control and automatic platen cooling.

C E available



Specifications

Model	Maximum Capacity (tons)	Nominal Work Area (in)	Adjustable Daylight Opening*	Cylinder Stroke (in)	Tie Rod Dia. (in)	Floor Space W x D (in)	Height (in)	Approx. Weight (lb)
CMG 30H-15	30	15 x 15	6 to 12	6	1.25	42 x 40	72	1,850
CMG 30H-12 ASTM	30	12 x 12	6 to 12	6	1.25	43 x 40	72	1,850
CMG 50H-12	50	12 x 12	8 to 16	8	1.75	60 x 38	78	4,800
CMG 50H-15	50	15 x 15	8 to 16	8	1.75	60 x 38	78	4,800
CMG 50H-18	50	18 x 18	8 to 16	8	1.75	60 x 38	78	5,000
CMG 50H-24	50	24 x 24	8 to 16	8	1.75	66 x 38	78	5,600
CMG 75H-15	75	15 x 15	8 to 16	8	2	63 x 38	78	5,300
CMG 75H-18	75	18 x 18	8 to 16	8	2	69 x 38	78	5,500
CMG 75H-24	75	24 x 24	8 to 16	8	2	69 x 38	78	6,100
CMG 100H-15	100	15 x 15	12 to 22	12	3	66 x 38	78	7,000
CMG 100H-18	100	18 x 18	12 to 22	12	3	66 x 38	78	7,000
CMG 100H-24	100	24 x 24	12 to 22	12	3	72 x 38	78	7,500

Presses for Special Applications







No. 4391-ASTM with Safety Shield

No. 4393-ASTM & No. 4394-ASTM with Safety Shield

No. 4393-ASTM Model AutoFour/15P-ASTM, 15 tons & No. 4394-ASTM Model AutoFour/30P-ASTM, 30 tons Carver Auto Series self-contained press with heating/cooling platens and programmable controller. See pages 4 & 5 for press description.

ASTM Chase Frame Assemblies

	Ca	100		
Descrip- tion	Teflon Coated Steel	Stainless Steel	Brass	100 Mylar Sheets
4"x 4"	4079	4080	4081	4161
6"x 6"	4082	4083	4084	4162
8"x 8"	4085	4086	4087	4163

Molding ASTM Test Specimens Plastics, elastomers and other materials

Carver has developed the following three presses which are specially configured to perform the compression molding of test plaque or bar specimens of Type I, II, III or IV polyethylene and other thermoplastic resins. The procedure is in conformance with ASTM Method D 4703, Procedure C. The presses are equipped with heating/cooling platens and a programmable digital controller which has a heating/cooling loop for each platen and built-in program for the required 15°/minute

CMG 30H-12 ASTM Model B, 30 tons

±2°C cooling rate.

Floor standing, four-column, automatic press with heating/cooling platens and programmable controller.

No. 4391-ASTM Model 12-12H-ASTM, 12 tons

Benchtop, four-column manual press with heating/cooling platens and programmable controller.

Optional Portable Chillers available upon request



Proppant Crush Test Press Models CMG28-12-PCR & CMG40-12-PCR Compatible with ISO 13503-2:2006

For use with (frac) sand, resin coated sand and ceramic proppant

Carver Inc. is proud to introduce Models CMG28-12-PCR & CMG40-12-PCR Proppant Crush Test Presses. These Monarch Series presses meet the critical demands of ISO 13503-2:2006 with unsurpassed cycle repeatability. The proportional hydraulic system is capable of applying a constant rate of 3.8 MPa/min. (2000 PSI min.) from 2 ton to 28 ton clamp force within a $\pm 2.5\%$ deviation. The operator interface allows easy setup of press control parameters and includes ample recipe storage.

No. 5456

2" ID Proppant Crush Test Cylinder based on ISO 13503-2:2006(E) Cell: 2" ID x 3" tall, Wall thickness > 0.5", Constructed of 4340 alloy Steel with Rockwell-C Hardness of > 43 Piston: 2" diameter x 3" length, Constructed of 4340 alloy Steel with a Rockwell-C hardness of > 43

- 28 and 40 ton models
- Hardened plates: 12" L-R x 12" F-B fully guided platens to ensure parallalism
- Positive stop on plates for centering the crush die
- Open daylight: 6"-12"
- Cylinder stroke: 6"
- Self-contained hydraulic system
- Available with and without 2" ID crush die (compatible with ISO 13503-2)
- "Mini" Viewpoint control system including:
 - Allen Bradley programmable controller
 - PanelView Touch screen interface
 - Closed-loop control of clamp pressure
 - Recipe storage (up to 30 recipes of 24 segments)
 - Two hand close buttons
- Polycarbonate safety guards around molding area with manual sliding interlocked operator gate
- Dimensions: 40" W x 35" D x 74" H
- Weight: 1,900 lbs.

Heated Presses with Digital Temperature Controls & Safety Shields

Used for molding, laminating, embossing, and bonding of various materials

7.5, 12, 25 and 30 ton capacity



7.5 TON PRESSES

No. 3690

(Model 7.5-15H) Seven and a half ton, fourcolumn press with 15" x 15" electrically heated platens. Designed for applications needing lower force over a larger area. Shown with optional digital gauge.

12 TON PRESSES

No. 4386

(Model CH) Twelve ton, manual, two-column hydraulic lab press with digital heated platens. Daylight to 15". Easy-to-read dual scale gauge, reading in pounds force and metric tons.

No. 4120

(Model 12-10H) Twelve ton, manual, twocolumn hydraulic press. Similar to No. 4386 press, but heavier construction and guided moving platen. Has electrically heated 10" x 7" platens for temperatures to 650°F with digital controller for each platen. Easy-to-read dual scale gauge, reading in pounds force and metric tons.

No. 4122

(Model 12-12H) Twelve ton, manual, fourcolumn hydraulic press. Four-post construction assures parallelism over 12" x 12" surface. Easy-to-read dual scale gauge, reading in pounds force and metric tons. Has electrically

heated platens for temperatures to 650°F with digital controller for each platen.

No. 4123

(Model 12-12-2H) Same press as No. 4122 except has four electrically heated platens with two 3" daylights. Optional water cooled platens are also available.

25 TON PRESSES

No. 4389

(Model MH) Twenty-five ton, manual, two-column hydraulic press with digital heated 9" x 9" platens. Daylight opening is adjustable. Rigid cast iron and steel construction for precision and durability. Easy-to-read dual scale gauge, reading in pounds force and metric tons. Optional water cooled platens are also available.

No. 3856

(Model 25-12H) Twenty-five ton, manual, four-column hydraulic press. Easy-to-read dual scale gauge, reading in pounds force and metric tons. Electrically heated 12" x 12" platens for temperatures to 650°F with digital controller for each platen. Optional water cooled platens are also available.

No. 3693

(Model 25-15H) Twenty-five ton, four-column hydraulic press. The 15" x 15" heated platen area allows for larger work area. Standard

with dual scale analog gauge. Easy-to-read dual scale gauge, reading in pounds force and metric tons.

No. 4126

(Model 25-12-2H) Same press as No. 3856 except has four electrically heated platens with two 3" daylights. Optional water cooled platens are available.

30 TON PRESSES

No. 4128

(Model 30-12H) Thirty ton, manual, fourcolumn, hydraulic press. Has two-speed pump, first stage for rapid closing and second for pressing mode. Easy-to-read dual scale gauge, reading in pounds force and metric tons. 12" x 12" electrically heated platens for temperatures to 650°F with digital controller for each platen.

No. 4129

(Model 30-12-2H) Same press as No. 4128 except has four electrically heated platens with two 3" daylights. Optional water cooled platens are available.

SPECIAL 30 TON HIGH TEMPERATURE (1.100°F) **PRESSES AVAILABLE.** Consult factory for details.

C E available

NOTE: Pictures shown with both analog gauge and digital gauge. Standard manual presses come with analog gauge. Digital gauges available upon request. Consult factory for details. Information on digital gauges may also be found on page 13.

Specifications

•									_		
Catalog Number	3690	4386	4120	4122	4123	4389	3856	3693	4126	4128	4129
Model	7.5-15H	Model CH	12-10H	12-12H	12-12-2H	Model MH	25-12H	25-15H	25-12-2H	30-12H	30-12-2H
Clamping Force			10	10	10	05	0.5	0.5	05		
U.S. Tons Lbs	7.5 15,000	12 24,000	12 24,000	12 24,000	12 24,000	25 50,000	25 50,000	25 50,000	25 50,000	30 60,000	30 60,000
Max. Temp. (°F)	650°	650°	650°	650°	650°	650°	650°	650°	650°	650°	650°
Platens (in)	15 x 15	6 x 6	10 x 7	12 x 12	12 x 12	9 x 9	12 x 12	15 x 15	12 x 12	12 x 12	12 x 12
Ram Stroke (in)	5	5.1	5.1	5.1	5.1	6.5	6.5	5	6.5	6	6
Daylight Opening (in)	5	0 to 15	0 to 11	0 to 10	2@3	0 to 12	0 to 9.5	5	2@3	0 to 12	2@3
Footprint w x d (in)	28 x 19	15 x 16	26 x 18	29 x 27	29 x 27	19 x 24	29 x 27	28 x 19	29 x 27	32 x 27	32 x 27
Height (in)	27	39	39	39	39	42	39	30	43	43	43
Weight (Ib)	810	300	420	770	1,035	425	805	1,100	1,070	835	1,100

Standard Presses

12, 25 and 30 ton capacity

For pelletizing, destructive testing, fluid extraction, pressure forming, etc.



12 TON PRESSES

No. 3850

(Model Mini C) Twelve ton manual, two-column hydraulic press with 6" x 6" square work area. Compact and portable, requiring less bench space than our Model C. This press is ideal for constricted bench space or glove box applications, as well as field work. It features adjustable daylight, steel construction for rigid precision and includes safety shield for operator protection. Easy-to-read dual scale gauge, reading in pounds force and metric tons.

No. 4350

Pellet press with 4" round platen. Available with and without pellet die (see page 10).

No. 3851

(Model C) Twelve ton, manual, two-column hydraulic lab press. Similar to Mini C above, but larger, heavier construction with daylight to 18". Easy-to-read dual scale gauge, reading in pounds force and metric tons.

No. 3968

(Model 12-10) Twelve ton, manual, twocolumn hydraulic press, with 10" x 7" work area. Similar to No. 3851 press described above, but heavier construction with fully guided moving platen and daylight to 16". Easy-to-read dual scale gauge, reading in pounds force and metric tons.

No. 3969

(Model 12-12) Twelve ton, manual, fourcolumn hydraulic press. Fully guided moving platen assures parallelism over 12" x 12" surface. Easy-to-read dual scale gauge, reading in pounds force and metric tons.

25 TON PRESSES

No. 3853

(Model M) Twenty-five ton, manual, twocolumn hydraulic press, with a 9" x 9" work area. Daylight opening is adjustable. Rigid cast iron and steel construction for precision and durability. Easy-to-read dual scale gauge, reading in pounds force and metric tons.

No. 3855

(Model 25-12) Twenty-five ton, manual, fourcolumn hydraulic press with a 12" x 12" work area. Easy-to-read dual scale gauge, reading in pounds force and metric tons.

30 TON PRESSES

No. 3970

(Model 30-12) Thirty ton, manual, fourcolumn, hydraulic press with a 12" x 12" work area. Has two-speed pump, first stage for rapid closing and second for pressing mode. Easy-to-read dual scale gauge, reading in pounds force and metric tons.

Note: Existing Carver presses can be automated with an optional AutoPak power package (see back cover).

C E available

NOTE: Standard manual presses come with analog gauge (as shown in pictures). Digital gauges available upon request. Consult factory for details. Information on digital gauges may also be found on page 13.

Specifications

Catalog Number with shield	3850	4350	3851	3968	3969	3853	3855	3970
Model	Mini C	Pellet	Model C	12-10	12-12	Model M	25-12	30-12
Old Press*	3393	3620	2086	3724	2696	2089	2702	2698
Clamping Force Tons (Ib)	12 (24,000)	12 (24,000)	12 (24,000)	12 (24,000)	12 (24,000)	25 (50,000)	25 (50,000)	30 (60,000)
Platens (in)	6 x 6	4 round	6 x 6	10 x 7	12 x 12	9 x 9	12 x 12	12 x 12
Ram Stroke (in)	5.1	5.1	5.1	5.1	5.1	6.5	6.5	6
Daylight Opening (in)	.75 to 7	0 to 5.50	.75 to 18	1 to 16	1 to 15	.75 to 16	1 to 14	1 to 17
Footprint w x d (in)	12 x 16	10.25 x 14	15 x 16	17 x 18	21 x 28	19 x 24	21x 28	24 x 27
Height (in)	22	24.4	39	37	37	42	37	43
Weight (lb)	125	115	200	345	560	350	600	625

*Use to refer to old models which are no longer available.

CARVER Pres

Presses for preparing pellets, bricks, briquettes and cakes



No. 4350, 12 ton Manual Pellet Press

No. 4350 Manual Pellet Press

The compact 12 ton Pellet Press with 4" diameter platen is perfectly suited for KBr pellet pressing. It can also be used for Glove Box applications, compound and formula testing, compression strength tests, fluid extractions and on-site field testing. Includes integral Safety Shield, buffer plate and 13mm evacuable die. (not shown in picture)



No. 3887 25 ton AutoPellet Press

C E available

No. 3887 AutoPellet Press

The self-contained 25 ton AutoPellet press has 5" diameter platen and integral safety shield cabinet enclosing electrically powered hydraulic system. Rigid slab side construction maintains precise alignment and includes provision for a vacuum line connection to the pellet die. The control system with digital force display allows programmable/ selectable bleed-off rates.

Specifications

Catalog Number	Max. Clamp Force, U.S. Tons (lb)	Platen Dia. (in)	Die (mm)	Ram Stroke Stroke (in)	Daylight Opening (in)	Footprint W x D (in)	Height (in)	Weight (lb)
4350	12 (24,000)	4	13	5.1	0.0 to 5.5	10.5 x 14.0	24.4	115
4350L	12 (24,000)	4	N/A	5.1	0.0 to 5.5	10.5 x 14.0	24.4	115
4555	40 (80,000)	4	31	6.0	0.0 to 6.0	32.5 x 15.0	31.2	400
4555L	40 (80,000)	4	N/A	6.0	0.0 to 6.0	32.5 x 15.0	31.2	400
4565	50 (100,000)	4	31	6.0	0.0 to 6.0	32.5 x 15.0	31.2	420
4565L	50 (100,000)	4	N/A	6.0	0.0 to 6.0	32.5 x 15.0	31.2	420
AutoPellet 3887	25 (50,000)	5	N/A	1	1.5 to 7.25	31.5 x 22.75	22 (+ handle)	400
AutoPellet 4387	40 (80,000)	5	N/A	1	1.5 to 7.25	34 x 22.75	26 (+ handle)	500

Note: Pellet Models with an "L" means less die. Additional Pellet Die sizes available below and on page 13 and 15 (sold separately).



Evacuable Pellet Dies Used with Pellet Presses to form the pellets for use in IR and x-ray spectrosel die includes a fitting

copy. The stainless steel die includes a fitting for vacuum source connection when applicable. (6, 12, 13, 25, 31 & 40mm dies available. See pages 13 & 15 for more details)



No. 237005 Stainless Steel Pan Fluid pan for use with all Test Cylinder Outfits. When presses are

used for fluid extraction, filter pads sandwich the sample. The stainless steel pan captures the released fluid.

No. 2095 90mm dia. KBr Buffer Plate Recommended for use with pellet dies. The plate has centering grooves for proper alignment and mounts to the top bolsters to prevent damage by the die plunger during pressing.



Buffer Plate and One (1) 6" x 6" Steel Plate (for new styles presses only). Recommended for use when pressing pellet dies and/or test cylinder outfits. Picture shows 5021 plate kit installed in press.

No. 5021 KBr

No. 5022 KBr Buffer Plate and One (1) 9" x 9" Steel Plate (for new styles presses only). Recommended for use when pressing pellet dies and/or test cylinder outfits.

No. 5023 Set of (2) Two 6" x 6" Steel Plates (for new styles presses only). Recommended if solid smooth surface is required.

No. 5024 Set of (2) Two 9" x 9" Steel Plates (for new styles presses only). Recommended if solid smooth surface is required.



No. 2090-0 1.125" I.D. 440 Stainless Steel Test Cylinder and Pellet Mold

■ No. 2091-5 2.25" I.D. 440 Stainless Steel Test Cylinder and Pellet Mold For use with standard unheated manual presses for molding, forming bricks, briquettes, pressure forming, crushing, pressing plant and animal tissues, fluid extraction, extrusion and flow tests.



No. 3874 Vacuum Pump Kit Used with pellet press to evacuate molds or dies. (available 115 or 230V)

E-Series Electric & Laminating Presses

All Electric E-Series Compression Press For Compression Molding of Rubber/Elastomers, Gum Silicones, Various TPR's, Thermosets and Thermoplastics

Carver, Inc. first all electric compression press designed for around-the-clock performance in a lab, clean room or on the production floor. The E-Series is clean, quiet to operate and offers greater precision and reliability over hydraulically driven presses. Energy savings is another key benefit, especially when considering longer dwell time applications.

The E-Series is ideal for compression molding of rubber/elastomers, gum silicones, various TPR's, thermosets and thermoplastics, as well as various bonding and laminating applications. The unique all electric power-drive system provides accurate control of clamp force from 1,000 lbs. to 60,000 lbs.

Specifications – Electric E-Series Press

Model Number	CGE30H-15
Operating Speed (IPM)	70
Max. Clamp Force (tons)	30
Electrically Heated Platen (in)	15 x 15
Max. Operating Temperature	500°F
Clamp Stroke (in)	12
Daylight Opening (in)	12
Dimensions w x d (in)	48 x 40
Height (in)	84



Features: Load cell for force feedback; PLC controls press functions; Segmented program with recipe storage; Touch-screen operator interface; Platens available up to 18"x 18"; Clamp area guards; Patented (US 6990896B2).



Laminating Presses

Manually operated hydraulic presses with stacked heating and cooling platens. Heating one opening while simultaneously cooling the other results in faster production of laminated ID cards, licenses, photos and other important documents. Temperature control to 500 °F.

No. 4130 (formerly 2112) Laminating Press, 12 ton capacity

with Safety Shield Four 6"x 6" platens for one hot and one cold daylight opening. Thermostat control of heated platens in top opening as shown in picture to the left.

No. 4132 (formerly 2630) Laminating Press, 30 ton capacity

with Safety Shield Four 12"x12" platens for one hot and one cold daylight opening. Digital control of heated platens in top opening.

Specifications – Laminating Presses

Catalog Number	4130	4132
Model Number	150-C	30-12-L
Clamping Force, U.S. tons (lb)	12 (24,000)	30 (60,000)
Platens (in)	6 x 6	12 x 12
Footprint w x d (in)	16 x 18	19 x 19
Height (in)	39	42
Weight (lb)	190	1,000
Electrical	115 or 2	30/1/60

CARVER®

Heating and Cooling Platen Options

Carver Heat Control Options

There are several levels of control for heating and cooling to give you a choice to meet the specific demands of your application.

Manual thermostat control Basic heated platens are controlled by an integral sensor and individual manual thermostats.

Digital control For more precise control, individual digital temperature controllers automatically control platen temperature from a separate control panel.

No. 3984

Digital control assembly for existing hotplates.

Manual cooling Manual water cooling permits hand operated cooling of platens with monitoring by analog thermometers for thermostatically controlled platens and digitally on the digital platen packages. Also available as an option are manifold kits (consult factory for details)

Note: All heaters are single phase unless otherwise noted.



Heated Platens Thermostat Control



Heating/Cooling Platens Thermostat Control



Heated Platens w/Digital Control and Disconnect (available with cooling channels)



Cooling Platens

Specifications

For Presses Catalog Number/Model	Platen Size (in)	Heated Platens Thermostat Control (230V available upon request)	Heated Platens Digital Control	Heating/Cooling Platens Thermostat Control	Heating/Cooling Platens Digital Control
3850 /Mini C	6 × 6	2101 - aluminum 150 to 500° F, 115V	3796 - steel to 650°F (115V)	2103.1 - steel	3772 - steel, with hoses to 650°F (115V)
3851-0/Model C 4130/150-C	6 x 6	2102.1 - steel 150 to 500° F, 115V	4286 - steel, to 650°F (230V)	150 to 500°F	3988 - steel to 650 ° F with hoses (230V)
3853-0 /Model M	9 x 9	2107.1 - steel 150 to 500°F, 115V	3973 - steel to 650°F (230V)	2108.1 - steel 150 to 500°F	3972 - steel, with hoses to 650 °F (230V)
<u>F</u> our-column	12 x 12		3906 - steel to 650°F (230V)		3749 - steel with hose assemblies to 650 °F (230V)
Presses	15 x 15		6316 - steel to 650°F (230V)		



Accu-Heat[™] Heat Tube Platens

- Accurate and uniform up to ±1 F° in many applications
- Standard sizes include; 6" x 6", 9" x 9", 12" x 12", 15" x 15", 18" x 18" and 24" x 24"
- · Custom engineered sizes quoted upon request
- 500 F maximum temperature
- Heated/cooled configuration also available
- Can be designed to fit existing Carver or other brand presses
- · Contact Carver for pricing and lead times

Laboratory Accessories for Carver Presses

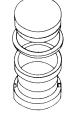
Carver Molds and Dies

See pages 10-11 for information on pellet molds and dies and ASTM specimen molds.



Tile Mold

Plated steel or stainless steel frame with polished steel top and bottom covers. Can be used up to 400°F to form plastic or rubber sheets. Use with Carver heated, or heated and cooled platens.



Color Dispersion Disc Mold

For making plastic film to check color dispersion or clarity. Provides precise film thickness and parallelism. Made of stainless steel or hardened tool steel. Includes die, upper punch, lower punch and 3 spacers for optional film thicknesses.

Molds, Dies and Test Cylinder Specifications

Catalog Number	Description	Sample Dimensions	Sample Thicknesses	Maximum Applied Load					
818701D	Tile Mold, 440 Stainless Steel	50mm x 50mm	1mm, 2mm & 5mm	N/A					
818702D	Tile Mold, 440 Stainless Steel	100mm x 100mm	1mm, 2mm & 5mm	N/A					
818703D	Tile Mold, 440 Stainless Steel	150mm x 150mm	1mm, 2mm & 5mm	N/A					
818704C	Color Dispersion, 440 Stainless Steel	50mm diameter	0.1mm, 0.2mm & 0.5mm	N/A					
818705C	Color Dispersion, 440 Stainless Steel	100mm diameter	0.1mm, 0.2mm & 0.5mm	N/A					
4417	Pellet Die, 440 Stainless Steel	6mm	N/A	3,500 Lbs Max					
4946	Pellet Die, 440 Stainless Steel	12mm	N/A	13,000 Lbs Max					
3619	Pellet Die, 440 Stainless Steel	13mm	N/A	18,000 Lbs Max					
4369	Pellet Die, 440 Stainless Steel	25mm	N/A	47,000 Lbs Max					
3902	Pellet Die, 440 Stainless Steel	31mm	N/A	60,000 Lbs Max					
3876	Pellet Die, 440 Stainless Steel	40mm	N/A	70,000 Lbs Max					
2090-0	Test Cylinder, 440 Stainless Steel	1.125"	N/A	19 US Tons Max					
2091-5	Test Cylinder, 440 Stainless Steel	2.25"	N/A	51 US Tons Max					
818698D	Tile Mold, 440 Stainless Steel	4" x 4"	1mm, 2mm & 5mm	N/A					
818699D	Tile Mold, 440 Stainless Steel	6" x 6"	1mm, 2mm & 5mm	N/A					
818700D	Tile Mold, 440 Stainless Steel	10" x 10"	1mm, 2mm & 5mm	N/A					
Special Appli	Special Application Test Cylinder (See page 7)								

Special Application Test Cylinder (See page 7)

Catalog Number 5456

Description

Proppant Crush Test Cylinder based on ISO 13503-2:2006(E) Including: Cell: 2" ID x 3" tall, Wall thickness > 0.5", Constructed of 4340 alloy Steel with Rockwell-C Hardness of > 43 Piston: 2" diameter x 3" length, Constructed of 4340 alloy Steel with a Rockwell-C hardness of > 43





No. 2092 Swivel Bearing Plates

Carver presses are frequently used for crushing and breaking tests of standard 2" x 2" cubes and 2" x 4" cylinders of concrete samples or similar crushing tests. Swivel Bearing Plates adjust slightly to the sample to assure proper application of pressure. Requires safety shield.

No. 818744C **Punch and Die Holder**

This punch and die holder permits off-line testing of pellet and tablet samples. It works with standard BB2 production tooling in most Carver presses, including Auto Series presses. The set includes an anodized aluminum holding fixture, steel shims to adjust for various size samples, and an anodized aluminum ejector. (does not includes dies)



No. 2096CE & 2096-1CE **Two Gauge Manifolds**

The 2096CE is for most standard manual presses, except the Mini C. The 2096-1CE is specifically designed for the Mini C Model Press only. These manifolds permit mounting of both high (right) and low (left) range gauges for more precise application of pressure. Hand operated shut-off

valve protects low pressure gauge when using high pressure. Analog Gauges sold separately. (see page 15)



No. 6306 Digital Gauge

Optional digital force gauges for manual presses. Available in 10 or 100 pound increments. They are scaled per press model. Approximate accuracy: \pm 1% of reading between 1,000 lbs up to tonnage maximum of press (12, 25 or 30 tons). Consult factory for press details.

Laboratory Accessories for Carver Presses



FLOOR STANDS - Designed for most vintage models

Catalog/Item Number	Description	Dimensions H x W x D	Weight
223160C	Press Stand AccuStamp presses	30" x 23.5" x 23.5"	150#
223171D	Press Stand (2 & 4 column presses)	30"x 19" x 19"	
2232150	Press Stand (2 & 4 column presses with 6" casters)	30" x 36" x 36"	260#
223219D	Press Stand for Standard Auto Series presses (excluding 48 ton models)	30" x 47" x 22.5"	280#
223229C Press Stand for Standard Auto Series presses with 6" casters (excluding 48 ton models)		30" x 47" x 22.5"	280#



SAFETY SHIELDS

Catalog/Item Number	Description (Fits most vintages with or without heat)		
3404	Mini "C" Presses		
3295	Model "C" Presses		
3253	Model "M" Presses		
3322	Presses with 10" x 7" Work Area		
3418	Presses with 12" x 12" Work Area		
4427	Presses with 15" x 15" Work Area		



Repair parts for (gray) Carver hydraulic units. Repair kits contain hydraulic oil, seals, gaskets, pins, fittings, valve parts and jack handle bracket for quick maintenance. (restrictions apply, visit carverpress.com for details)

No. 3729 12 ton hydraulic unit repair kit

No. 3730 25 ton hydraulic unit repair kit

No. 319002 pump assembly for 12 & 25 ton jacks

Catalog r	SSORIES number erence index					2108.1	Set of (2) 9" x 9" heated and coolec steel platens, then statically controlle
	COOLING r Model C Presses ble in deg C upon request)		and the second se				150° to 500°F with hoses (Specify 115 or 230V)
2101	Set of (2) 6"x 6" heated, aluminium platens, thermo- statically controlled, 150° to 500°F			*	_	2109	Set of (2) 9" x 9" steel steam heating plates, with insulation and braided hoses
2102.1	(Specify 115 or 230V) Set of (2) 6" x 6" heated, steel platens, thermo-	R				3972	Set of (2) 9" x 9", heated and cooled steel platens, digitally controlled, 650° F, 230V
	statically controlled, 150° to 500°F, (Specify 115						r four-column presses ble in deg C upon reque
3796	or 230V) Set of (2) 6" x 6", heated, steel platens, digitally controlled,	Í				3906	Set of (2) 12" x 12' heated, steel platens, digitally controlled, 650°F, 230V
4286	650°F, 115V Set of (2) 6" x 6", heated, steel platens, digitally controlled,	3772	Set of (2) 6" x 6" heated & cooled		r Model M Presses ble in deg C upon request)	3749	Set of (2) 12" x 12' heated and cooled steel platens, digi- tally controlled, 650° F, 230V
2103.1	650°F, 230V Set of (2) 6" x 6" heated and cooled, steel platens, thermo- statically controlled, 150° to 500°F	3988	steel platens, digitally controlled, 650°F, 115V Set of (2) 6" x 6" heated & cooled steel platens, digitally	2107.1	Set of (2) 9" x 9" heated, steel platens, thermostatically controlled, 150° to 500° F, (Specify 115 or 230V)	6316	Set of (2) 15" x 15' heated, steel platens, digitally controlled, 650°F, 230V
2104	with hoses (Specify 115 or 230V) Set of (2) 6" x 6" aluminum cooling plates, with valve and hose assemblies	2105	controlled, 650°F, 230V Set of (2) 6" x 6" aluminum steam plates, with insulation and braided hoses	3973	Set of (2) 9" x 9", heated, steel platens, digitally controlled, 650°F, 230V		

Accessories for Many Applications

SAFETY SHIELDS

MOLDS AND DIES

MOLDS AND DIES (See page 10 & 13)			
Test Cylinder and Molds	s, Pellet Dies,		
2090-0	Test cylinder outfit, 1.125" I.D.		
2090-1	Set of 12 filter pads for 1.125" ID TCO's		
2091-5	Test cylinder outfit all stainless steel, 2.25" I.D.		
2091-1	Set of 12 filter pads for 2.25" ID TCO's		
237005	Stainless steel pan for either TCO size		
4417	6mm pellet die 440 stainless steel		
4946	12mm pellet die 440 stainless steel		
3619	13mm pellet die for KBr pellets		
4369	25mm pellet die 440 stainless steel		
3902	31mm pellet die, 440 stainless steel		
3876	40mm pellet die, 440 stainless steel		
5456	2" ID Proppant Crush Test Cylinder based on ISO 13503-2:2006(E) Page 7 & 13		
2092	Swivel bearing plate (Requires safety shield)		
2095	KBr buffer plate		
818744C	Pharmaceutical pellet die holder		
ASTM Molds (See page 7)			
4079	4" x 4" chase assembly, Teflon		
4080	4" x 4" chase assembly,		
4081	Stainless steel 4" x 4" chase		
4082	assembly, Brass 6" x 6" chase assembly, Teflon		
4083	6" x 6" chase assembly,		
4084	Stainless steel 6" x 6" chase		
4085	assembly, Brass 8" x 8" chase		
4086	assembly, Teflon 8" x 8" chase		
	assembly, Stainless steel		
4087	8" x 8" chase assembly, Brass		
4161	(100) 6" x 6" mylar sheets for		
4162	4"x 4" molds (100) 8" x 8" mylar sheets for 6" x 6" molds		

6" x 6" molds

4163	(100) 10" x 10" mylar			
	sheets for			
	8" x 8" molds			
Tile Molds and Color Dispersion Disc Molds (See page 13)				
818698D	4" x 4" tile mold,			
0100300	1mm, 2mm or			
	5mm thick, Stainless steel			
818699D	6" x 6" tile mold,			
0100330	1mm, 2mm or			
	5mm thick, Stainless steel			
818700D	10" x 10" tile			
0101002	mold, 1mm, 2mm			
	or 5mm thick, Stainless steel			
818701D	50mm x 50mm			
	tile mold, 1mm,			
	2mm or 5mm thick, Stainless steel			
818702D	100mm x 100mm			
	tile mold, 1mm,			
	2mm or 5mm thick, Stainless steel			
818703D	150mm x 150mm			
	tile mold, 1mm, 2mm or 5mm thick			
	Stainless steel			
818704C	50mm diameter			
	color dispersion disc, .1mm, .2mm			
	or .5mm thick,			
0407050	Stainless steel			
818705D	100mm diameter color dispersion			
	disc, .1mm, .2mm			
	or .5mm thick, Stainless steel			
TESTING/PR	OCESSING			
Polished Plat				
	ng applications)			
235020	Plate with #8			
	mirror finish, 1 side polished,			
	6" x 6" x .03" thick			
235021	Plate with #8			
	1 side polished,			
	9" x 9" x .03" thick			
235022	Plate with #8			
	mirror finish, 1 side polished,			
	9" x 12" x .03" thick			
235023	Plate with #8 mirror finish,			
	1 side polished,			
	12" x 12" x .03" thick			
Heated Test				
2472	Heating jacket with 1.125" test cylinder			
2417	Heating jacket with			
	2.25" test cylinder			

(See page 14)		
3404	For most Mini C Presses	20 20
3295	For most Model C Presses	20
3253	For most Model M Presses	
3322	For most presses with 10" x 7" platens	
3418	For most presses with 12" x 12" platens	Dia
4427	For 3690 and 3693 with 15" x 15" platens	38
	ANALOG GAUGES/ THERMOMETERS (See page 13)	38
$\mathbf{\mathbf{v}}$	(HY (Sp
Gauges for I	Model B/C	39
381005	Gauge normally furnished with	39
	Model C press, 0 - 24,000 lbs	32
	applied force, 11 metric tons, 200 lb increments	34
381042	Model B/C gauge, 0 - 500 lbs,	37
	.225 metric tons, 5 lb increments	37
381001	Model B/C gauge, 0 - 1,000 lbs, .45 metric tons,	21
381002	10 lb increments Model B/C gauge,	AU (Se
	0 - 2,000 lbs, .9 metric tons, 20 lb increments	39
381003	Model B/C gauge, 0 - 5,000 lbs,	39
	2.25 metric tons, 50 lb increments	
381004	Model B/C gauge, 0 -10,000 lbs,	39
	4.5 metric tons, 100 lb increments	FL
Gauges for I	•	(Se
381008	Gauge normally furnished with Model M press,	22
	0 - 50,000 lbs applied force,	22
	22.5 metric tons, 500 lb increments	22
381006	Model K/M Gauge, 0 - 5,000 lbs, 2.25 metric tons, 50 lb increments	22
381007	Model K/M Gauge, 0 - 10,000 lbs,	
	4.5 metric tons, 100 lb increments	22
381176A	Model K/M Gauge, 0 - 1,000 lbs, .45 metric tons, 10 lb increments	

10 lb increments

Two Gauge Manifold (See page 13)

Т

096 C € Two gauge manifold **096 C €-1** (mini C only)



Dial Thermon	neters
385001	Dial face thermometer 150°F to 750°F
385019	Dial face thermometer 50°C to 400°C
HYDRAULIC (Specify press	JNITS Serial Number)
3912	12 ton hydraulic unit
3925	25 ton hydraulic unit
321007	Pump and reservoir for 30 ton presses
3467	Hydraulic cylinder for 30 ton presses
3729	12 ton repair kit (gray only)
3730	25 ton repair kit (gray only)
2170	Carver hydraulic fluid (pint size)
AUTOPAK™ P (See page 16	POWER UNITS
3946NE	AutoPak/12, for 12 ton existing manual presses.
3947NE	AutoPak/25, for 25 ton existing
3948NE	manual presses. AutoPak/30, for 30 ton existing manual presses.
FLOOR STAN (See page 14	
223160C	Press stand for AccuStamp presses
223171D	Press stand for 2 column and 4 column presses
223215C	Press stand for 2 column and 4 column presses with casters
223219D	Press stand for standard Auto Series presses (excluding 48 ton models)
223229C	Press stand for

Consult factory for other accessories not listed here

standard Auto Series presses with casters (excluding

48 ton models)

Add Power to Existing Presses

AutoPak[™] Power Units

- Self contained 1/4 HP hydraulic power unit
- Develops maximum clamping force for most of our 12, 25 and 30 ton manual press models (minimum 1.000 lbs)
- Six feet of hose for connecting to existing Carver hand operated press
- Programmable control system (pressure only)
- Full touch screen interface
- 10 recipe storage capability
- 20 programmable segments of clamp force, cure time per recipe
- Programmable in units of Kg, US Tons, Metric Tons & Pounds
- Automatic bump sequence (can be programmed in any or all segments)
- Two "anti-tie-down" close buttons for operator safety
- Interlocked switch for existing safety shield door included (See page 14 for recommended safety shield)
- Electrical disconnect (non-fused)
- Approximate Dimensions & Weight: 24" L x 20" W x 21" H, 130 Lbs

Catalog No.	Model	Capacity (tons)	Supply Voltage (230V available upon request)
3946-NE	AutoPak/12	0.5 - 12	115V 1-Ph
3947-NE	AutoPak/25	0.5 - 25	115V 1-Ph
3948-NE	AutoPak/30	0.5 - 30	115V 1-Ph

Specify press model and serial number when ordering

Carver Warranty

Carver Inc. warrants all equipment we manufacture to be free from defects in workmanship and material when used under recommended conditions. The Company's obligation under this warranty is limited to those parts which within twelve (12) months from delivery of equipment to original purchaser are returned to the factory with transportation prepaid, and upon examination shall disclose them to be defective. Carver neither assumes, nor authorizes any other persons to assume any liability in connection with the sale of its equipment except under the conditions of this warranty.

This warranty does not cover any labor charges for replacement of parts, adjustment, repair or any other work done. This warranty shall not apply to any apparatus which in our opinion has been subjected to misuse, negligence or pressures in excess of limits recommended, or which shall have been repaired or altered outside of the Carver factory.

Replacement of defective material(s) will be FOB the Carver factory. Replacement of component parts not of its manufacture will be limited to the warranty of the manufacturers of such parts.

Rely on Carver and WABASH Presses for Every Need

Carver, Inc. and WABASH MPI are sister companies located in Wabash, Indiana. For over 70 years WABASH MPI has met the challenge of designing and manufacturing standard and special presses for industry worldwide. Parts, service and support information are readily available. Ask to see installations of Carver or WABASH presses performing productively in your area. Consult us to discuss all of your molding requirements.



WABASH manufactures 15 to 1,000 ton molding machines for elastomers and thermoplastics, Compression molding machines, C-Frame presses, Vacuum chamber molding and laminating presses, Die-cut and Trim presses. For more information on any of our presses call, fax or visit our website.





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Custom Presses

Customized presses can be configured from the many options and accessories listed in this catalog. In addition, Carver engineers will work with you to design special presses for your particular application. Consult the factory for more information. Press shown is a custom designed Auto Series four column press with casters and built in floor stand.