

SpectroPress® Manual 12 Ton Pellet Press

XRF Powdered Sample and IR Briquetting

Compact contemporary two post designed manual SpectroPress® model delivers 12 tons of force. Large accessible area facilitates fast and easy die removal and reinsertion

Accepts Chemplex® annealed stainless steel die sets optionally available for producing 32, 35, 40 and 45 mm diameter XRF sample briquettes and 13 mm diameter sample for IR applications.

With the exception of the 13 mm die size, the stainless steel dies are designed to accept Chemplex® compressible tapered aluminum PelletCup® powdered sample briquetting cups.

Long 20" (51 cm) pumping handle with rubber grip facilitates pumping. Pressure release control rapidly retracts ram. Analog gauge indicates 0 to 12 tons in 0.4 ton increments. Four 17/32" (0.531") diameters through holes with 7/8" diameter x 1/2" deep counterbores in each corner are provided to safely secure the press in position.

The platen, or die platform, is uniquely designed to accept Chemplex® 13, 32, 35, 40 and 45 mm evacuable stainless steel die sets. The platen incorporates a series of stepped counter bores that serve to accommodate, self-align, self-center and secure the respective die sizes in position. It is important that the die is placed completely within the confines of a counterbore. The use and applications of another die brand presents the potential possibility of misfit, endangerment and damage to the machine.



Basic Manual 12 Ton SpectroPress® is Cost Effective for XRF and IR Briquetting and General Laboratory Applications



Unique platen accepts, self-aligns and self-centers all Chemplex® optionally available die size sets

Specifications

Dimensions: 14" long x 12" deep x 20 high (35.5 cm x 30.5 cm x 50.9 cm)

Weight: 102 lbs (46.3 kg)

Ordering Information

Cat. No.	Description	Optionally Available Die Sets
4312	Manual 12 Ton Force SpectroPress® Model	4013 (13 mm), 4030 (32mm), 4038 (35mm), 4040 (40mm), and 4047 (45mm)

Chemplex Industries, Inc.
 2820 SW 42nd Avenue Palm City, FL 34990-5573 USA
 Phone: 1-800-4-CHEMPLEX or 800-424-3675
sales@chemplex.com
www.chemplex.com

SpectroPress® Semi-Automatic 30 Ton Pellet Press

This model is easily adaptable to accept different size dies for laboratories requiring different sample briquette diameters.

Simple two button operation for briquetting, decompression and sample pellet ejection. Depress “Up” button for briquetting until desired force in tons is attained as indicated on the analog gauge. Analog gauge indicates force in one ton increments up to 30 tons.

For applying dwell time, discontinue depressing the “Up” button at the desired force for a timed interval before depressing the “Down” button for initiate the decompression process and briquetted sample removal. Amazing fast ram travel speed expedites briquetting samples for XRF analysis.

Threaded arbor with knurled knob adapts to any conventional die height. This feature enables controlling the volumetric sample capacity of the die for standardizing sample briquette thickness.

Self-centering and self-aligning die feature integrated in the ram platform accepts optionally available 32, 35, 40 and 45 mm evacuable stainless steel dies. Small compact design allows counter-top installations. Illuminated working chamber (on some models) improves visibility.



Knurled knob adjusts die plunger height to control volumetric capacity for accommodating different sample volumes to produce uniformly thick sample briquettes



Unique platen accepts, self-aligns and self-centers all Chemplex® optionally available die sizes

Features

- Exceptionally fast ram response time
- Self-centers Chemplex 32, 35, 40 and 45 mm dies on innovative designed platen
- Simple two button operation; ram up and ram down
- High visibility analog gauge indicates tons in one ton increments up to 30 tons
- Adjustable knurled-knob arbor enables uniformly thick sample briquettes by compensating for variable density differences
- Quiet counter top operation
- Functions best with recommended use of PelletCups® tapered briquetting cups
- Illuminated working chamber on some models

Specifications

Dimensions: 14.5” deep x 17.5” wide x 17” high (37 cm x 45 cm x 43 cm)

Weight: 210 lbs (94.5 kg)

Chemplex Industries, Inc.
2820 SW 42nd Avenue Palm City, FL 34990-5573 USA
Phone: 1-800-4-CHEMPLEX or 800-424-3675
sales@chemplex.com
www.chemplex.com

Ordering Information

Cat. No.	Description	Optionally Available Die Sets
4300-115	Automatic Standard 30 Ton Force SpectroPress® Model; 115VAC/60HZ	4013 (13mm), 4030 (32mm), 4038 (35mm), 4040 (40mm), 4047 (45mm)
4300-230	Automatic Standard 30 Ton Force SpectroPress® Model; 230VAC/50HZ	

SpectroPress® Semi-Automatic Integrated Die Assembly 30 Ton Pellet Press

A user selected die size is included with this Semi-Automatic 30 Ton SpectroPress® “Integrated Die Assembly (IDA)” model. Ideally suitable for laboratories requiring a standardized 32, 35 or 40 mm diameter size sample briquette. The manually operated integrated die assembly greatly facilitates the briquetting and ejection procedure; die removal is completely eliminated.

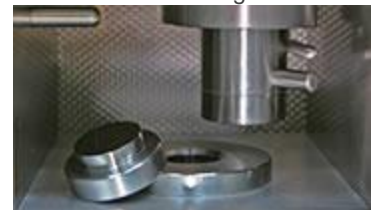
Two momentary buttons control the operation for briquetting, decompression and sample pellet ejection. Depressing the “Up” button raises the ram and the “Down” button retracts the ram. Analog gauge indicates force in one ton increments up to 30 tons.

For optionally applying dwell time, discontinue depressing the “Up” button at the desired force for a timed interval before depressing the “Down” button to implement decompression and pellet removal.

The use of optional compressible tapered aluminum Chemplex® PelletCups® briquetting cups is mandatory attributed to the precision and close manufacturing tolerances involved to avoid unnecessary spillage and damage during the briquetting process. Small compact design is ideal for counter top operation. Illuminated working chamber (on some models) improves visibility.



Includes integrated die size of choice: 32, 35 or 40 mm. Two momentary switch buttons control operation: “Up” for compression and “Down” for decompression. It’s that simple and requires no die handling.



Fast, Easy and Convenient to Use

1. Place powdered sample in Chemplex® compressible tapered aluminum PelletCups® briquetting cups on ram.
2. Depress “Down” button until PelletCups® briquetting cup is retracted for Briquetting Cap insertion.
3. Insert stainless steel Briquetting Cap over the PelletCups® briquetting cup within the die body.
4. Rotate Anvil completely forward over the Briquetting Cap.
5. Depress “Up” button until desired force indicated in tons is attained.
6. If dwell is required remove pressure applied to “Up” button for a timed interval.
7. Depress “Down” button to retract the ram.
8. Rotate Anvil completely to its backward position.
9. Depress “Up” button to extract Briquetting Cap and briquetted pellet in preparation for introducing another sample.

Integrated Die Assembly (IDA) simplifies briquetting: place powdered sample on ram platform, depress “Down” button to lower sample into die chamber, insert die cap and swing anvil into position. Depress “Up” button to desired force.

Specifications

Dimensions: 14.5" deep x 27.5" wide x 17" high (37 cm x 45 cm x 43 cm)

Weight: 210 lbs (94.5 kg)

Chemplex Industries, Inc.
2820 SW 42nd Avenue Palm City, FL 34990-5573 USA
Phone: 1-800-4-CHEMPLEX or 800-424-3675
sales@chemplex.com
www.chemplex.com

Ordering Information

Cat. No.	Description
4332-115	Automated 30 Ton SpectroPress® with Manual Integrated Die Assembly; 32 mm Die; 115VAC/60 HZ
4332-230	Automatic 30 Ton SpectroPress® with Manual Integrated Die Assembly; 32 mm Die; 230VAC/50 HZ
4335-115	Automatic 30 Ton SpectroPress® with Manual Integrated Die Assembly; 35 mm Die; 115VAC/60 HZ
4335-230	Automatic 30 Ton SpectroPress® with Manual Integrated Die Assembly; 35 mm Die; 230VAC/50 HZ
4340-115	Automatic 30 Ton SpectroPress® with Manual Integrated Die Assembly; 40 mm Die; 115VAC/60 HZ
4340-230	Automatic 30 Ton SpectroPress® with Manual Integrated Die Assembly; 40 mm Die; 230VAC/50 HZ

SpectroPress® Semi-Automatic 40 Ton Pellet Press

**Touch-Screen Control, Programmable Force & Dwell Time,
Flexibility of Different Die Set Size Use**

The Standard 40 Ton Force SpectroPress® Model allows the flexibility of briquetting powdered samples to different diameters by accommodating a variety of standard die set sizes. All operating parameters are easily performed and programmable through touch-screen key functions and digital readouts.

**Semi-Automatic
SpectroPress®
Model Extends Powdered Sample
Briquetting Capabilities**

**Accepts Different Die
Size Sets
Adjustable Die Height
Arbor
Single “Start” Key
Function
Programmable Force
Programmable Dwell
Time
Touch-Screen Entry
Functions
Illuminated Sample
Chamber**



Optionally available 13, 32, 35, 40 and 45 mm Chemplex® evacuable annealed stainless steel die sets



Unique platen self-centers and secures die sets in position

The Semi-Automatic SpectroPress® Model incorporates features that provide the analyst with control of the operating parameters through touch-screen key entries. Up to 40 tons of force in 0.1 ton increments and dwell time up to ten minutes in 0.1 minute increments are programmable. The option of engaging dwell allows briquetting samples with tendencies to develop fissures time to adjust to their newly compressed state.

Different standard Chemplex® 13, 32, 35, 40 and 45 mm stainless steel die sets are easily interchanged and self-aligned in a platen with counter-bores corresponding to the die set size. A threaded arbor with a large knurled knob enables the adjustability of the volumetric capacity of the die chamber. This feature accounts for variations in sample density to enable uniformity of sample pellet thickness.

Standard Features

Flexibility to interchange die set size
 Adjustable volumetric die capacity with arbor control
 Self-centering and aligning die platen
 Simple touch-screen key operating and programming functions
 Programmable force selection and digital display in 0.1 ton increments up to 40 tons
 Programmable dwell time selection option and digital display in 0.1 minute increments up to 10 minutes

Animated touch-screen symbols simulate status of hydraulics and ram position
 Operating functions and diagnostics alerts
 Small footprint for countertop installations
 Sturdy solid steel slab construction
 Side-hinged interlocked safety door
 Audible cycle completion alert sound
 Illuminated working chamber
 SpectroCertified® force accuracy

Specifications

Dimensions: 10.7" wide x 14.6" deep x 16.9 " high (27.1 cm x 37.1 cm x 42.9 cm)

Weight: 220 lbs (100 kg)

Force: 40 tons maximum; 0.1 ton increments

Dwell Time: 10 minutes maximum; 0.1 minute increments

Electrical: 115 VAC/60 HZ or 230 VAC/50 Hz (specify)

Electronics: Solid state; touch-screen display and function keys; microprocessor

Ordering Information

Cat. No.	Description
4400-115	Standard Automatic 40 Ton Touch-Screen SpectroPress® Model; 115 VAC/60 HZ
4400-230	Standard Automatic 40 Ton Touch-Screen SpectroPress® Model; 230 VAC/50 HZ

SpectroPress® Automatic “AIDA” 40 Ton Briquetting Press

Automated Integrated Die Assembly (AIDA), Touch-Screen Key Functions, Programmable Force and Dwell Time

This SpectroPress® AIDA Model is the most technologically advanced powdered sample briquetting press. It is fully automatic from powdered sample introduction to removal of a sample briquette just moments later without intervention. It is designed for busy laboratories requiring repetitive briquetting to a standardized 32, 35 or 40 mm diameter.



Automatic SpectroPress® Utilizes “Automated Integrated Die Assembly” (AIDA) Technology

**Completely Automatic
Single “Start” Key
Function
Eliminates Die
Handling
Includes Die Size of
Choice
Programmable Force
Programmable Dwell
Time
Digital Display**

Engineered for unattended high-performance for briquetting repetitive powdered samples to a standardized 32, 35 or 40 mm diameter automatically

The amazing performance of the AIDA model is attributed to the Chemplex® development of “Automated Integrated Die Assembly” (AIDA) technology. This critical aspect together with state-of-the-art electronics is responsible for the complete automation of the powdered sample briquetting process, high sample through-put and simplicity of operation. The use of optional compressible tapered aluminum [PelletCups®](#) is mandatory for effective automation.

Standard Features

Automated Integrated Die Assembly (AIDA)
Includes integrated die of choice: 32, 35 or 40 mm
Single “Start” touch-screen function key initiates the automatic briquetting process
Touch-screen programmable force selection and digital display in 0.1 ton increments up to 40 tons
Touch-screen programmable dwell time option selection and digital display in 0.1 minute increments up to 10 minutes

Operating function and diagnostic alerts
Animated touch-screen symbols simulate status of hydraulics and ram position
Small footprint for countertop installations
Sturdy solid steel side construction
Side-hinged interlocked safety door
Audible cycle completion alert
Illuminated working chamber
SpectroCertified® force accuracy

Chemplex Industries, Inc.
2820 SW 42nd Avenue Palm City, FL 34990-5573 USA
Phone: 1-800-4-CHEMPLEX or 800-424-3675
sales@chemplex.com
www.chemplex.com

Specifications

Dimensions:	10.7" wide x 14.6" deep x 16.9" high (27.1 cm x 37.1 cm x 42.9 cm)
Weight:	220 lbs (100 kg)
Force:	40.0 tons; 0.1 ton increments
Dwell Time:	10 minutes maximum; 0.1 minute increments
Electrical:	115 VAC/60 HZ or 230 VAC/50 Hz (specify)
Electronics:	Solid state; touch-screen function keys; microprocessor

Ordering Information

Cat. No.	Description
4432-115	Automatic 40 Ton SpectroPress® with Automated Integrated Die Assembly (AIDA); 32 mm Die; 115VAC/60 HZ
4432-230	Automatic 40 Ton SpectroPress® with Automated Integrated Die Assembly (AIDA); 32 mm Die; 230VAC/50 HZ
4435-115	Automatic 40 Ton SpectroPress® with Automated Integrated Die Assembly (AIDA); 35 mm Die; 115VAC/60 HZ
4435-230	Automatic 40 Ton SpectroPress® with Automated Integrated Die Assembly (AIDA); 35 mm Die; 230VAC/50 HZ
4440-115	Automatic 40 Ton SpectroPress® with Automated Integrated Die Assembly (AIDA); 40 mm Die; 115VAC/60 HZ
4440-230	Automatic 40 Ton SpectroPress® with Automated Integrated Die Assembly (AIDA); 40 mm Die; 230VAC/50 HZ