



RIO GRANDE®

Since 1944

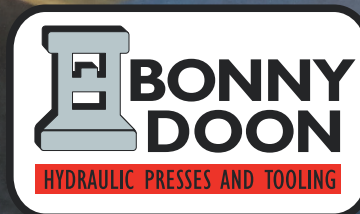
For your bench. At your side.

BONNY DOON
HYDRAULIC PRESSES
2016



**BONNY
DOON**

HYDRAULIC PRESSES AND TOOLING



BONNY DOON Hydraulic Presses and Tooling

Bonny Doon Engineering is the world's premier manufacturer of hydraulic presses for jewelry makers, metalsmiths and artists. Founded in Bonny Doon, California, the company engineered the first commercially available hydraulic press system for jewelers in 1990. In 2006, Bonny Doon moved its facility to Taos, New Mexico, where it continues to develop new tooling and the finest hydraulic presses for the metalsmithing community.

By consistently focusing on hydraulic forming, Bonny Doon delivers the absolute highest quality in the industry. Bonny Doon Engineering's wealth of experience has led to the most comprehensive line of presses, tooling and accessories available. This commitment to innovation and improvement is evident in everything Bonny Doon puts its name on.

Safety—Bonny Doon offers the safest hydraulic presses on the market. Safety features include:

- Ram orientation that keeps the operator safely behind one of the columns at all times.
- An innovative flange system that ensures the ram is always perfectly centered on the frame.
- Return springs contained entirely within the upright columns.
- Several styles of containment tooling that enclose all the volatile pieces of your die and work during pressing.

Engineering & Workmanship—The design and craftsmanship of Bonny Doon presses create the most rigid frames available:

All the force generated by the ram goes directly the workpiece without losing any of it to frame flexure. Bonny Doon hydraulic presses are made from the finest quality American steel and are welded in the USA by a certified master welder. The entire line of tooling and machinery is designed for ease-of-use and built to last a lifetime.

Support—You get more than just a piece of machinery when you purchase a Bonny Doon hydraulic press; you also get access to the very best in technical support from Rio Grande. These experts have decades of combined experience as silversmiths, goldsmiths and hydraulic formers. They are available via phone, email or at riogrande.com live chat to help you choose the right equipment for your specific needs and also to help you get the very most out of using it.



G. PHIL POIRIER Owner, Bonny Doon Engineering

G. Phil Poirier's first press consisted of a homemade frame and a 5-ton ram. The master gem-cutter simply "needed a bigger hammer." In 1990, Phil bought his first Bonny Doon press. Since then he's been creating phenomenal vessels and jewelry—small, intricate, seamless works of art, created with inventiveness, energy and the strong arm of machinery.

Today, Phil is the owner/operator of Bonny Doon Engineering in Taos, New Mexico, where he oversees the development of the finest hydraulic presses and tooling systems for the jewelry industry. His tenure at Bonny Doon is informed by 40 years of working as a designer, craftsman and engineer.

As for teaching, Phil feeds on the enthusiasm of his students as he watches all those lights go on with new ideas and possibilities. His most memorable teaching moment to date? In front of 650 SNAG members, deep-drawing a 6" disc of sterling into a vessel the size of a tuna can ... and then, to the disbelief of the crowd, turning it inside-out.

BONNY DOON HYDRAULIC PRESSES

Bonny Doon offers a variety of presses to fit your needs along with a comprehensive line of specialized tooling, accessories and consumables. As the world’s premier manufacturer of hydraulic presses for jewelry makers, metalsmiths and artists, Bonny Doon constantly pushes the boundaries of the imagination and provides the tooling and equipment that support the innovation and creativity of metalsmiths.



Bonny Doon Comparison Chart

Task → Machine ↓	Embossing	Silhouette Die Forming	Blanking Dies	Bracelet Forming	Non-Conforming Dies/ Conforming Dies	Deep Drawing	Coining
Classic	20 tons, good for heavier/deeper embossing or larger areas.	Up to 6" x 6" silhouette dies; can use the 3" and 6" form box.	Excellent	Excellent	Good to 20 tons.	Capable of using 3" deep-draw kit; good for small quantities of deep-drawn items.	Up to 5/8" diameter.
Mark III	20 tons, good for heavier/deeper embossing or larger areas.	Up to 6" x 12" silhouette dies; can use the 3", 6" and 6" x 12" form box.	Excellent	Excellent	Good to 20 tons.	Use 3" and 6" deep-draw kits; electric version good for large quantities of deep-drawn items, ring-sized tubing to cup-sized vessels.	Up to 5/8" diameter.
Pro	25 tons, excellent for heavier/deeper embossing or larger areas.	Up to 6" x 12" silhouette dies; can use the 3", 6" and 6" x 12" form box.	Excellent	Excellent	Good to 25 tons; achieve 125% more detail over the same surface area or 125% greater area with the same detail compared to a 20-ton press.	Use 3" and 6" deep-draw kits; electric version good for large quantities of deep-drawn items, ring-sized tubing to cup-sized vessels.	Up to 3/4" diameter.
Pro 55-Ton	55 tons, excellent for heavier/deeper embossing or larger areas.	Up to 6" x 12" silhouette dies; can use the 3", 6" and 6" x 12" form box.	Excellent	Excellent	Good to 55 tons; achieve 275% more detail over the same surface area or 275% greater area with the same detail compared to a 20-ton press.	Use 3" and 6" deep-draw kits; electric version good for large quantities of deep-drawn items, ring-sized tubing to cup-sized vessels.	Up to 1" diameter.

glossary of terms

Anticlastic—features opposing curvatures of the same surface (picture a saddle: the ends curve upward while the sides curve downward).

Synclastic—features a matching curvature of a surface in all directions (picture a bowl: all sides curve upward and inward in the same manner).

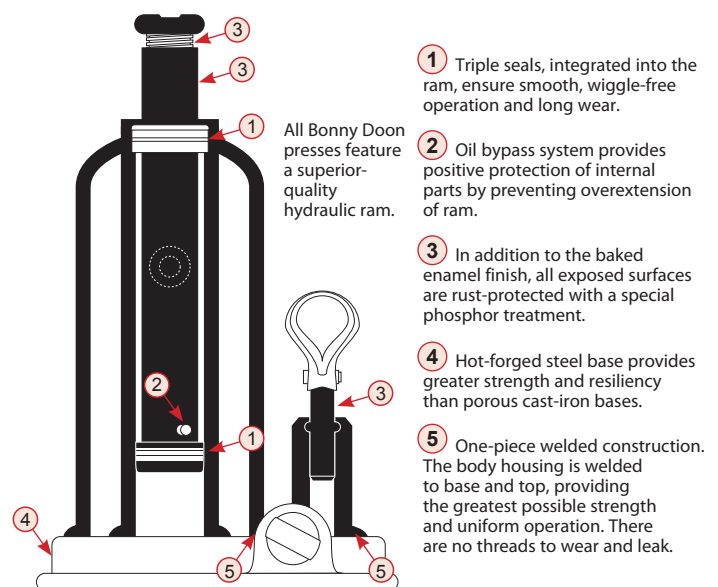
Urethane—the most useful item used in the press. This incompressible material pushes metal into every detail of your die. Bonny Doon’s urethane is specially formulated for forming applications with increased cut resistance and memory retention. Properly used, a urethane can last 10 years or more.

Durometer—measures the hardness of the urethane. 95d is hardest, 80d is softer.

Intensifiers—small pieces of 80d urethane placed over areas of the die to build up the form. These are typically sandwiched between a urethane and the metal.

Pusher—solid steel cylinder that forces a punch or other tool into a contained urethane to achieve a desired form.

Spacer—takes up excess space in the work area to reduce the travel distance required for the platens to begin applying pressure to the workpiece.





BONNY DOON CLASSIC KITS EXCLUSIVE

Emboss, texture, bend, form, shape and cut metal using hydraulics instead of muscle power with the classic Bonny Doon 20-ton manual or electric hydraulic presses. These presses perform all the tasks of a stamping press, punch & die sets, forming hammers, anvils and stakes—and complete each task faster and more evenly with less finishing required.



A

Bonny Doon 20-Ton Classic Manual Press Starter Kit

With manually powered hydraulics, the Bonny Doon Classic delivers 20 tons of force, conforming metal to the shape of the die placed in the platens of the press. Find out more about this press on page 176.

In addition to the press, the kit includes:

- Master tool holder (110-271).
- Contained urethane kit, 2" (110-471).
- Round urethane container, 4" (110-541).
- Round urethane insert, 4" (110-542).
- Square form box kit, 3" (110-471/1).
- Mushroom formers, 3" (110-278) and 4" (110-589).
- Ring-forming blade (110-608).
- Studio bracelet-forming set (110-920).
- Silhouette die kit (110-486).
- Brake back bar (110-567).
- Bonny Doon consumable kit (110-469).

Made in the USA.

Description	Item #	kit
A. 20-ton manual press starter kit	110-509	\$3,785.00



EDUCATION

Online or in-person, Rio's instructors are the best in the business! Search **classes** on riogrande.com and start growing your skills today.



B

Bonny Doon 20-Ton Classic Electric Press Starter Kit

With electric hydraulics, the Bonny Doon Classic delivers 20 tons of force, conforming metal to the shape of the die placed in the platens of the press. Find out more about this press on page 176.

In addition to the press, this kit includes:

- Master tool holder (110-271).
- Contained urethane kit, 2" (110-471).
- Round urethane container, 4" (110-541).
- Round urethane insert, 4" (110-542).
- Square form box kit, 3" (110-471/1).
- Mushroom formers, 3" (110-278) and 4" (110-589).
- Ring-forming blade (110-608).
- Studio bracelet-forming set (110-920).
- Silhouette die kit (110-486).
- Brake back bar (110-567).
- Bonny Doon consumable kit (110-469).

Made in the USA.

Description	Item #	kit
B. 20-ton electric press starter kit	110-519	\$5,679.00



BONNY DOON MARK III KITS EXCLUSIVE

These starter kits include not only the Bonny Doon 20-ton Mark III manual or electric hydraulic press but an exciting selection of tooling that will give your metal forming capabilities incredible range—right from the start.

Bonny Doon 20-Ton Deep-Draw Mark III Manual Hydraulic Press Starter Kit

Perform deep-draw techniques quickly and easily with this press starter kit! Simply lift off the riser block for an additional 4" of vertical clearance and a total of 10" of working space. Accommodates both the 3" and 6" deep-draw kits (available separately). Find out more about this press on page 177.

In addition to the press, this kit includes:

- Master tool holder (110-271).
- Contained urethane kit, 2" (110-471).
- Round urethane container, 4" (110-541).
- Round urethane insert, 4" (110-542).
- Square form box kit, 3" (110-471/1).
- Mushroom formers, 3" (110-278) and 4" (110-589).
- Ring-forming blade (110-608).
- Studio bracelet-forming set (110-920).
- Silhouette die kit (110-486).
- Brake back bar (110-567).
- Bonny Doon consumable kit (110-469).

Made in the USA.

Description	Item #	kit
A. 20-ton Mark III manual press kit	110-451	\$4,130.00



©Maria Samora



Search **Bonny Doon Video** at riogrande.com for more information.

Bonny Doon 20-Ton Deep-Draw Mark III Electric Hydraulic Press Starter Kit

Perform deep-draw techniques quickly and easily with this press! Simply lift off the riser block for an additional 4" of vertical clearance and a total of 10" of working space. Accommodates both the 3" and 6" deep-draw kits (available separately). Find out more about this press on page 177.

In addition to the press, this kit includes:

- Master tool holder (110-271).
- Contained urethane kit, 2" (110-471).
- Round urethane container, 4" (110-541).
- Round urethane insert, 4" (110-542).
- Square form box kit, 3" (110-471/1).
- Mushroom formers, 3" (110-278) and 4" (110-589).
- Ring-forming blade (110-608).
- Studio bracelet-forming set (110-920).
- Silhouette die kit (110-486).
- Brake back bar (110-567).
- Bonny Doon consumable kit (110-469).

Made in the USA.

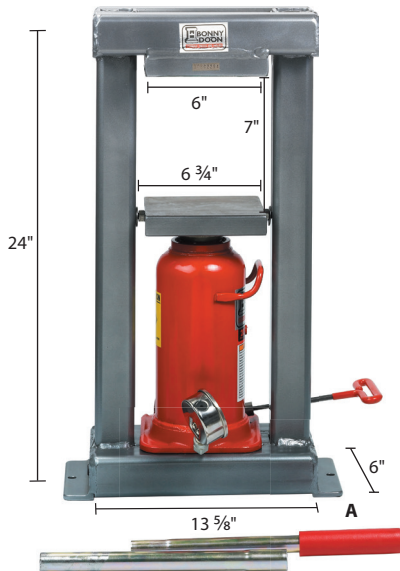
Description	Item #	kit
B. 20-ton deep-draw Mark III electric press kit	110-461	\$6,125.00



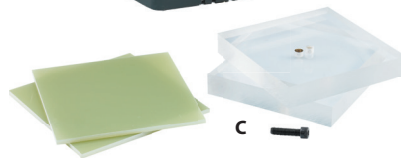
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EXCLUSIVE
A-D



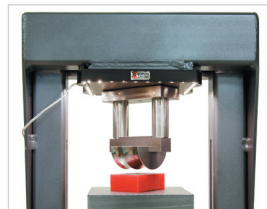
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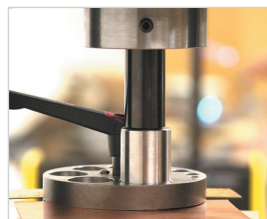
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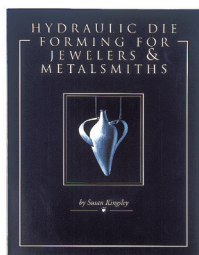
Strong magnets hold this LED lamp frame securely around the upper platen.



E



Use the adapter punch (item E) and the master tool holder (page 186) to punch out discs with your Bonny Doon press and Swanstrom disc cutter.



F

BONNY DOON CLASSIC

Bonny Doon 20-Ton Classic Hydraulic Presses

Emboss, texture, bend, form, shape and cut metal using hydraulics instead of muscle power with the Bonny Doon Classic press. This press performs all the tasks of stamping presses, punch and die sets, forming hammers, anvils and stakes. Available with manually or electrically powered hydraulics, the Bonny Doon Classic delivers 20 tons of force, conforming metal to the shape of the die placed in the platens of the press. See consumables on page 187. Each Bonny Doon Classic press includes:

- One 20-ton Bonny Doon Classic hydraulic press featuring a superior-quality hydraulic ram.
- 11"-wide press frame welded from heavy-gauge 2"-square steel tubing.
- Platens of 1"-thick steel; the upper platen is welded to the frame; the lower platen is self-leveling for consistently even impressions.
- Pre-drilled, integrated mounting feet that allow you to bolt the press directly to a workstation if desired.
- Return springs that are hidden inside the frame to protect the operator, as well as to protect the springs.
- 10,000psi pressure gauge, allowing for accurate repeat cycles.
- T-handle and jack handle to open and close the release valve.

Shipping: Presses are shipped in multiple boxes weighing a total of 120 lbs. for the electric press and 100 lbs. for the manual press. Made in the USA.



©G. Phil Poirier

Description	Item #	each
A. Bonny Doon Classic manual press	110-501	\$995.00
B. Bonny Doon Classic electric press	110-505	\$3,125.00

Bonny Doon Kevlar® and Acrylic Consumables Kit

The ideal consumables kit to begin work with the Bonny Doon Classic press. Save 10% over the cost of individual components. Includes two 6" x 6" acrylic top spacers and two 6" Kevlar® face plates. Made in the USA.

Description	Item #	kit
C. Bonny Doon Kevlar® and acrylic consumables kit	110-612	\$86.04

Bonny Doon Hydraulic Press LED Light Accessory

Install this low-profile light in seconds on your Mark III or Classic Bonny Doon hydraulic press. Strong magnets hold this frame securely around the upper platen, and LED lights provide warm, white color directly to your working area. 100-240 volts; 50/60Hz. Made in the USA.

Description	Item #	each
D. LED light accessory	114-042	\$135.00

Adapter Punch for Swanstrom Disc Cutter

Use this adapter punch in your Bonny Doon press. Align it with any of your Swanstrom disc cutters (pages 130-133) to let the press do the punching. Made in the USA.

Dimensions	Item #	each
E. 3"L x 1" dia.	112-556	\$24.00

Hydraulic Die Forming for Jewelers & Metalsmiths Book by Susan Kingsley

With more than 12 years of experience, Susan Kingsley clearly explains hydraulic systems for metal-forming. See riogrande.com for more information. Made in the USA.

Description	Item #	each
F. Hydraulic Die Forming for Jewelers & Metalsmiths book	550-661	\$24.95

BONNY DOON MARK III EXCLUSIVE

Bonny Doon 20-Ton Deep-Draw Mark III Manual Hydraulic Presses

The Bonny Doon deep-draw hydraulic press features heavy-gauge steel crossbeams and corner reinforcing to help you produce more consistent metal forms. Steel platens are hard and smooth, and the frame is powder-coated for a long-lasting finish. Perform deep-draw techniques quickly and easily with this press! Simply lift off the riser block for an additional 4" of vertical clearance and a total of 10" of working space. Accommodates both the 3" and 6" deep-draw kits (page 178). The press packages include:

- Press frame (17"W x 8"D x 27"H)—welded from heavy-gauge 2"-square steel tubing.
- Steel platens (1" thick)—the 6" upper platen is welded to the frame, the 8" lower platen is self-leveling for consistently even pressure.
- Pre-drilled feet that allow you to bolt the press directly to a workstation.
- 10,000psi pressure gauge, allowing for accurate repeat cycles.
- One 6" x 6" x 4" riser block.
- Two 6" x 6" x 1" acrylic top spacers for the top platen.
- Two 6" x 6" x 3/16" Kevlar® faceplates.
- Eight urethanes in two hardnesses, ranging from 1/16" to 1" thick.

Shipping: Manual press package is shipped in multiple boxes weighing a total of 153 lbs.; electric press package is shipped in multiple boxes weighing 178 lbs. total. Made in the USA.

Description	Item #	kit
A. 20-ton Mark III manual press package	110-454	\$1,835.00
20-ton Mark III manual press only	110-455	\$1,534.00
B. 20-ton Mark III electric press package	110-456	\$3,747.00
20-ton Mark III electric press only	110-457	\$3,435.00

Platen Extender for Bonny Doon Mark III Press

Minimize the working height from 6" to 3" and reduce strokes per cycle on your Mark III press whenever you need to create blanking dies or do any other repetitive work. Overall dimensions are 6" x 3" x 1"; post size is 1" dia. x 3"H. Made in the USA.

Description	Item #	each
C. Platen extender	110-296	\$151.95

Bonny Doon Universal Tool Holder

Attach this holder to your Bonny Doon Pro; its 1 1/4" center hole accepts a variety of tooling with 1" shanks. Orient the holder in any of eight ways around the center point of the press. Change tooling to blank out a bracelet, then pop in the forming kit to form the bracelet—all in a matter of seconds. Overall dimensions are 6" x 3" x 1"; center hole is 1" in diameter. Made in the USA.

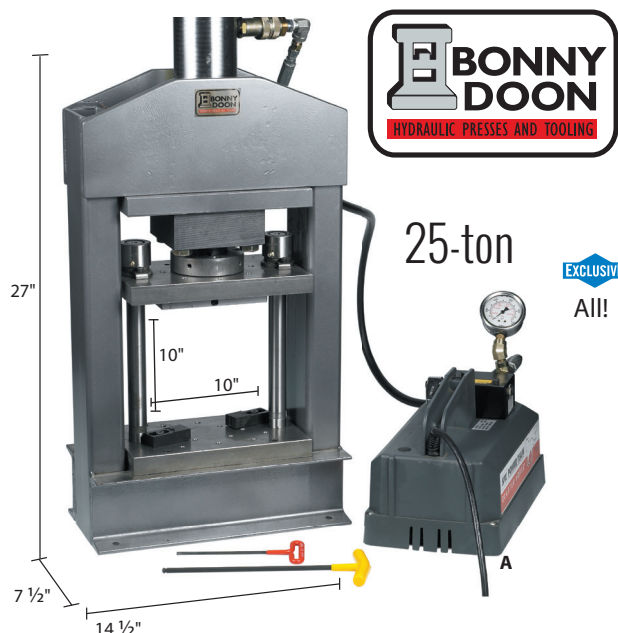
Description	Item #	each
D. Universal tool holder	110-498	\$121.50

Bonny Doon Mark III Die Shoe

Ideal for the Mark III press, this die shoe has 40 mounting holes (5/16"), allowing you to attach tooling in just about any configuration. Precision steel posts guide the platens with extraordinary accuracy (down to 1/1000") to ensure excellent repeatability—ideal for coining and conforming dies. Threaded holes allow you to attach fixture jigs and clamp tools in place. Shoe plates measure 8 1/2" x 6" x 1". Made in the USA.

Description	Item #	each
E. Die shoe	110-610	\$765.00





BONNY DOON PRO

Bonny Doon Pro 25-Ton Hydraulic Press

Engineered to better meet the accuracy needs of production and one-of-a-kind designers and metalsmiths, the 25-ton "Pro" model places the hydraulic ram on top of the frame, allowing more room between the platens for deeper draws and greater versatility; its stroke is a full $8\frac{1}{2}$ "–3" longer than other models. A precision steel post and bushing system guide the platens up and down with extraordinary accuracy (down to 50 millionths of an inch) for precise repeatability of die patterns. The platens offer an array of threaded holes, allowing you to easily attach fixturing jigs and clamping tools.

The Bonny Doon Pro delivers more power, greater control and guaranteed repeatability to production-run metalsmiths as well as providing a versatile, user-friendly forming press for the one-of-a-kind artisan.

When necessary, the platens and guide post assembly can be removed, leaving the entire press area open for deep-drawing applications.

Please Note: This press weighs 250 lbs. and must be shipped truck freight. Made in the USA.

Description	Item #	each
A. Bonny Doon Pro 25-ton electric press	110-463	\$7,640.00

Bonny Doon 3" Deep-Draw Kits

Make ring stock and seamless tubing—even small vessels—with these 3" deep-draw kits! Use the heat-treated tool steel deep-draw dies with 18- or 12-gauge metal in the 20- or 25-ton press. Made in the USA.

Description	Item #	kit
B. For 18-ga. metal	115-359	\$2,090.00
For 12-ga. metal	115-360	\$2,090.00
For 3mm metal	115-362	\$2,090.00

Bonny Doon 6" Master Deep-Draw and Re-Draw Kits

Create hollow forms and small vessels starting with a 6" disc using the master deep-draw and re-draw kits! Heat-treated tool steel deep-draw dies accommodate 18-gauge metal in the 20-, 25- or 50-ton press. The master deep-draw kit (item C) gives you a jump start on almost any hollowware or vessel design because the initial shaping work is done by your press. Use the re-draw kit (item D) to continue narrowing your vessel to the desired interior diameter—even into tubing. Made in the USA.

Description	Item #	kit
C. Master deep-draw kit	115-357	\$3,450.00
D. Re-draw kit	115-358	\$1,875.00

Bonny Doon Deep-Draw Punches with Guide

Use these punches with your 3" deep-draw forming kit to create hollow forms. The hemisphere punch and guide create bowl shapes. The bullet punch and guide create a slightly pointed oval form. The hemisphere and bullet punches can also create egg-shaped forms. The low dome is ideal for making domed boxes. All are $1\frac{3}{4}$ " in diameter x $3\frac{1}{2}$ "H. Made in the USA.

Description	Item #	each
E. Bullet punch	115-367	\$374.00
F. Hemisphere punch	115-368	\$358.00
G. Low-dome punch	115-369	\$265.00

deep-draw punches



BONNY DOON PRO EXCLUSIVE

Bonny Doon Pro 55-Ton Electric Press

With 55 tons of force, Bonny Doon Pro is capable of producing nearly three times the detail of the Bonny Doon 20-ton models. It conforms metal to the shape of the die placed in the platens of the press and allows the press to form thicker metal with finer details in a single cycle—eliminating the need for multiple annealing steps. This press is ideal for hot-forging mokume gane billets and can coin pieces up to 1" in diameter. The press offers a 9"W x 10"H working area that easily accommodates workpieces.

The overhead orientation of its hydraulic ram, driven by an electric pump, allows more room between the platens for deeper draws and greater versatility. The universal ram head accepts a wide variety of tooling. The stroke, a full 10", is nearly twice that of the Classic and the Mark III.

- Press frame is welded from heavy-gauge steel; the cylinder is attached to the frame via the upper crossbeam, and the frame is powder-coated for a long-lasting finish.
- Heavy-duty, two-speed, 1/2hp electric hydraulic pump delivers high-performance needed for the additional pressure generated by this press.
- It is very quiet (at just 67–81 dBA), produces 10,000psi and features a 10-ft. remote control that gives you essential freedom of movement as you work.
- Oil reservoir holds 1 gallon.
- Steel platens are hard and smooth.
- Press includes two Lexan™ safety windows with magnetic attachment.
- Pre-drilled feet allow you to bolt the press directly to a workstation.

Please Note: This press weighs 300 lbs. and must be shipped truck freight. Made in the USA.

Description	Item #	each
A. Bonny Doon Pro 55-ton electric press	110-437	\$9,700.00

Bonny Doon Press Stand

This heavy-duty steel stand is robustly made specifically to support your Bonny Doon hydraulic press or other heavy-duty equipment, such as a rolling mill. The legs and struts are made from 1 1/2" heavy square steel tubing; shelves are 1/8"-thick heavy plate steel. Solid, welded construction, powder-coated for durability and long service life; no assembly is required.

- Top surface is pre-drilled for fast, easy installation of the 55-ton Pro, the Mill or the Class Bonny Doon Pro press; can be drilled to accept other equipment as needed (hardware suitable for a press is included).
- Feet are drilled to allow securing the stand to the floor for stability (hardware for this purpose is not included).
- Sturdy frame features two storage shelves ideal for holding tooling, dies, workpieces and more.

Please Note: This press weighs 300 lbs. and must be shipped truck freight. Made in the USA.

Description	Item #	each
B. Bonny Doon press stand	110-436	\$675.00

C. Sterling Discs *Dead Soft*

Made in the USA.

Diameter	Gauge	Thickness	Ozt./ Piece	Item #	each
3" (76.2mm)	18 ga.	.040" (1.02mm)	1.54	104-733	\$40.39
6" (152.4mm)	18 ga.	.040" (1.02mm)	6.25	104-727	\$151.44

Prices based on a \$18 silver market. Please call for current pricing.

D. Copper Discs *Dead Soft*

Made in the USA.

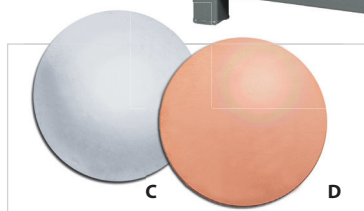
Diameter	Gauge	Thickness	Item #	each
3" (76.2mm)	18 ga.	.040" (1.02mm)	132-257	\$6.62
6" (152.4mm)	18 ga.	.040" (1.02mm)	132-251	\$15.11

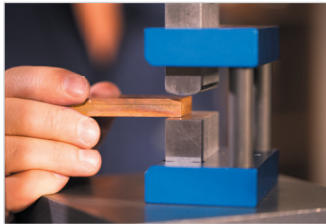


by G. Phil Poirier.



Top surface is pre-drilled for easy installation of presses.





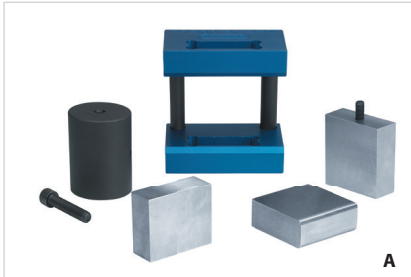
EXCLUSIVE

All!

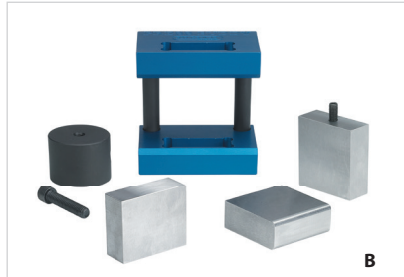


Search **Press Buddy Video**
at riogrande.com for more information.

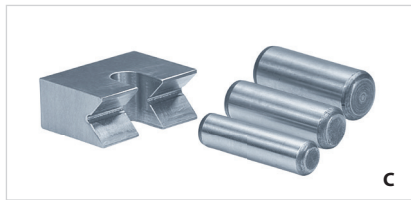
The Press Buddy™ allows you to have a high degree of control over your metal.



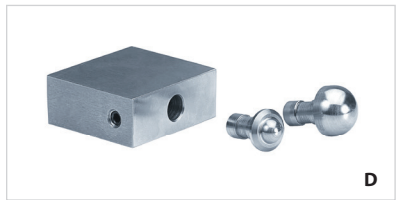
A



B

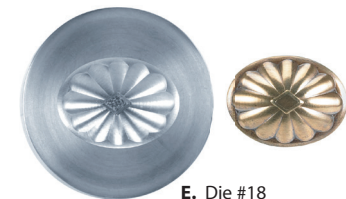


C

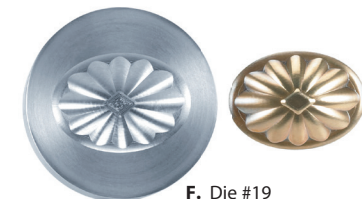


D

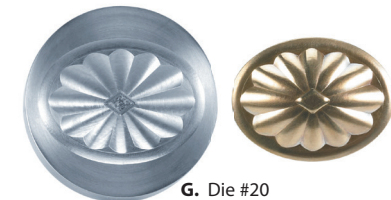
Use these dies with the precision containment system on the facing page.



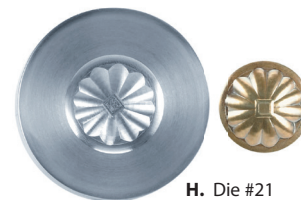
E. Die #18



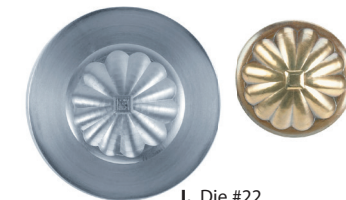
F. Die #19



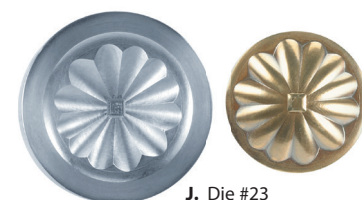
G. Die #20



H. Die #21



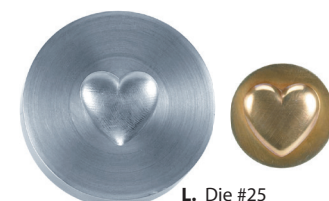
I. Die #22



J. Die #23



K. Die #24



L. Die #25



M. Die #26

Press Buddy™ Forging Kits for Bonny Doon Classic and Mark III Deep-Draw Hydraulic Electric Presses

The Press Buddy™, designed and created by industry innovators Jim Binnion and Chris Ploof, is unique tooling that allows you to perform controlled forging and forming of metal—especially mokume gane billets—in a hydraulic press. These kits are made specifically to fit the working area of the Bonny Doon Classic or the Mark III press. Each kit includes:

- One precision-machined frame consisting of anodized aluminum top and bottom guide plates separated by two steel support pins.
- One hardened tool steel flat lower die.
- Two hardened tool steel upper dies—one flat and one radiused; the radiused die for drawing; the flat die for flattening out the material and reducing its thickness.
- One steel press extension (pusher) with $\frac{5}{16}$ " bolt.

Made in the USA.

Description	Item #	kit
A. Press Buddy™ kit for Classic press	115-908	\$154.00
B. Press Buddy™ kit for Mark III press	115-907	\$159.00

Kits for Press Buddy™ Forging Tool

These kits, designed by Jim Binnion and Chris Ploof, work with the Press Buddy™ to enhance your creative options. The mandrel kit is ideal for supporting and shaping rings and other curved workpieces during stamping, forming and forging operations. It includes three 2"-long hardened steel mandrels ($\frac{1}{2}$ ", $\frac{5}{8}$ " and $\frac{3}{4}$ " dia.) and a hardened steel V-block die that supports the mandrels. The dapping kit allows you to perform dapping, punching, peening and other decorative surface forging on your metal. It includes a punch set ($\frac{3}{8}$ " and $\frac{3}{4}$ " dia.) and an upper die drilled to hold the punches secured with a $\frac{3}{8}$ " set-screw. Made in the USA.

Description	Item #	kit
C. Mandrel kit	115-906	\$42.00
D. Dapping kit	115-905	\$42.00

BONNY DOON non-conforming dies

Bonny Doon Precision Non-Conforming Dies

Precision machined at the Bonny Doon facility in Taos, New Mexico, these steel dies present a symmetrical design that makes a beautiful volume form in your metal. For use in the Bonny Doon precision containment system, these dies are ideal for making earrings, pendants and bracelet components. Made in the USA.

Description	Item #	each
E. Die #18	110-617/18	\$65.00
F. Die #19	110-617/19	\$65.00
G. Die #20	110-617/20	\$65.00
H. Die #21	110-617/21	\$65.00
I. Die #22	110-617/22	\$65.00
J. Die #23	110-617/23	\$65.00
K. Die #24	110-617/24	\$65.00
L. Die #25	110-617/25	\$65.00
M. Die #26	110-617/26	\$65.00

non-conforming dies, continued

Bonny Doon Precision Containment System and Non-Conforming Dies

Use the containment system (item A) and your Bonny Doon hydraulic press with any of the 18 dies sold below and on the facing page to create high-relief forms with incredible detail. The matching steel cylinder and pusher are machined to extremely close tolerances (within microns), maximizing the power of the contained urethane. The result is a high-relief form with amazingly defined details.

First set the brass precision non-conforming die into the container, then your metal, then a 95 durometer urethane, then the steel pusher. For high-volume shapes, use the 60-durometer urethane as a primary step to pre-form the metal (both urethanes are included). Use your Bonny Doon press to force the pusher into the container; with such close tolerances, the urethane cannot spread laterally, and the force of the press is focused almost exclusively into the die form. The result is a high-relief form with amazingly defined details. This system includes:

- One steel container (2" dia.) with matching pusher.
- Two 95d urethane pads (one flat, one domed).
- One 60d (black) urethane.

The 1/2"H x 2" dia. brass dies are individually hand-machined on a 19th-century rose engine at the Bonny Doon facility in Taos, New Mexico; designs may vary slightly. Made in the USA.

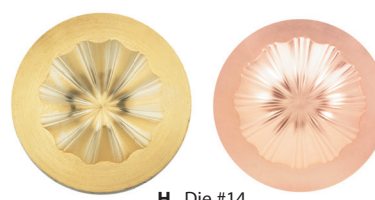
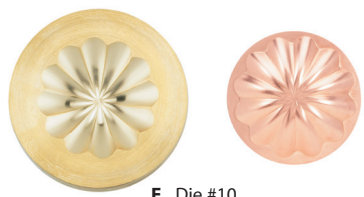
Description	Item #	kit
A. Bonny Doon precision containment system	110-616	\$225.00
B. Die #2	110-617/2	\$65.00
C. Die #7	110-617/7	\$65.00
D. Die #8	110-617/8	\$65.00
E. Die #10	110-617/10	\$65.00
F. Die #11	110-617/11	\$65.00
G. Die #13	110-617/13	\$65.00
H. Die #14	110-617/14	\$65.00
I. Die #16	110-617/16	\$65.00
J. Die #17	110-617/17	\$65.00



Swanstrom 2" Disc Cutter for Bonny Doon Press

This 2"-diameter disc cutter punch is the ideal partner for Bonny Doon conforming dies (above and facing page). A center-positioning die is included to allow you to make perfectly centered concentric ring (washer) components. Made of hardened and tempered, shock-resistant tool steel with precision-ground surfaces. Designed for soft materials up to 16 gauge (1.29mm). **Please Note:** Always position a shim of the same thickness of the material being cut directly across from that material to keep the plates balanced and ensure a perfectly perpendicular cut. Made in the USA.

Description	Item #	1 set	2+ set
K. 2" disc cutter	112-541	\$230.00	\$225.00



Use the dies on this and the facing page with the Bonny Doon precision containment system (item A).

BONNY DOON SILHOUETTE DIES

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& David Reynolds



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The pieces above were made using the silhouette die plate kit (item A).



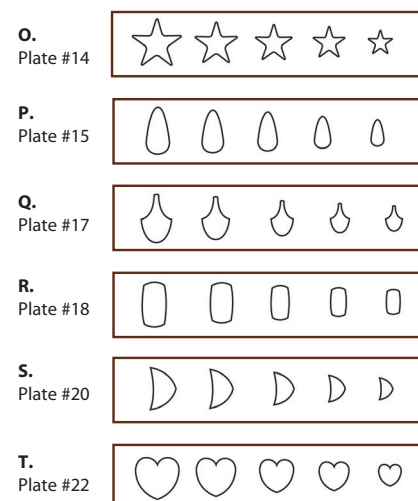
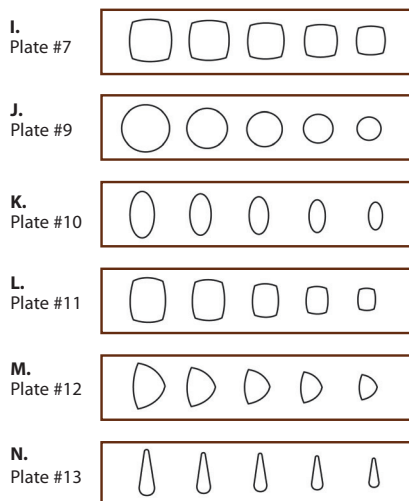
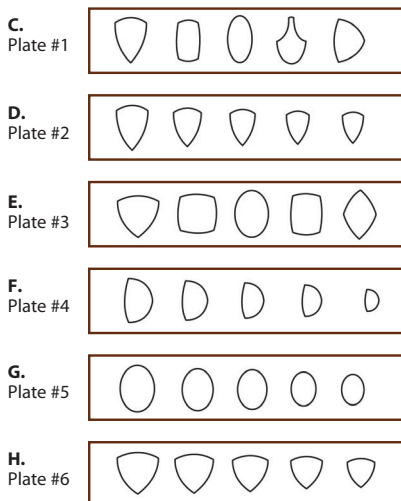
A Silhouette die plate kit; includes items B, C (plate #1) and E (plate #3)



B Silhouette die container and urethane kit (does not include plates)



Use silhouette die plates with your Bonny Doon press to create one-of-a-kind pieces or for high-volume production.



Search **Silhouette Die Forming Demo Video** at rogrande.com for more information.

Silhouette Kits and Die Plates

Form a variety of component shapes for your designs—consistently and accurately—with steel silhouette die plates. Items D and F-T have graduated shapes—great for creating graduated beads or components. The urethane container focuses all the force into the die plate for accurate volume shapes. Use the 60d urethane for more volume form and less detail; use the 95d urethane for more detail and less volume form.

Item A includes a 3" urethane container with a stainless steel thumbscrew, an aluminum pusher, three 1 7/8"-dia. urethanes (60d, 80d and 95d) and combination pattern die plates #1 and #3. The container kit (item B) includes the container, three urethanes (60d, 80d and 95d) and an aluminum pusher but comes without plates, allowing you to choose the plates you want. Made in the USA.

Need a special shape? Custom-shaped silhouette die plates are available by special order; call for more information and pricing.

Description	Item #	each
A. Silhouette die plate kit	110-486	\$337.65
B. Silhouette container kit	110-479	\$215.00
C. Combination die plate #1	110-487/1	\$70.00
D. Graduated die plate #2	110-487/2	\$70.00
E. Combination die plate #3	110-487/3	\$70.00
F. Graduated die plate #4	110-487/4	\$70.00
G. Graduated die plate #5	110-487/5	\$70.00
H. Graduated die plate #6	110-487/6	\$70.00

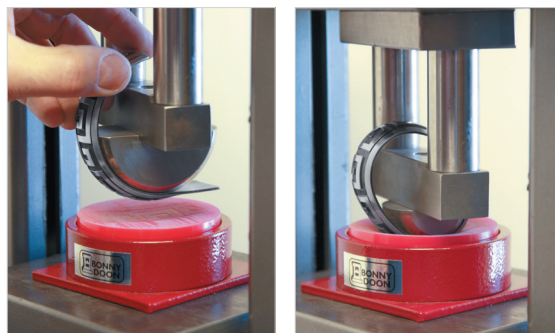
Description	Item #	each
I. Graduated die plate #7	110-487/7	\$70.00
J. Graduated die plate #9	110-487/9	\$70.00
K. Graduated die plate #10	110-487/10	\$70.00
L. Graduated die plate #11	110-487/11	\$70.00
M. Graduated die plate #12	110-487/12	\$70.00
N. Graduated die plate #13	110-487/13	\$70.00
O. Graduated die plate #14	110-487/14	\$70.00
P. Graduated die plate #15	110-487/15	\$70.00

Description	Item #	each
Q. Graduated die plate #17	110-487/17	\$70.00
R. Graduated die plate #18	110-487/18	\$70.00
S. Graduated die plate #20	110-487/20	\$70.00
T. Graduated die plate #22	110-487/22	\$70.00

BONNY DOON BRACELET-FORMING KITS

Bracelet forming with Bonny Doon goes far beyond bending a perfect curve. With your press and any of the kits below, not only can you form a bracelet, but you can also design and finish your bracelet first, then form it without distorting the design. Items A and B include a low-profile urethane contained in a heavy-walled steel cylinder that has welded steel bottom plates and a powder-coated finish. Magnetic die fixtures attach to the upper platen of the hydraulic press using a $\frac{5}{16}$ " hole and set-screw (included) and allow you to exchange dies in seconds. Die pairs are also available separately; use them to enhance any of these or other kits. Made in the USA.

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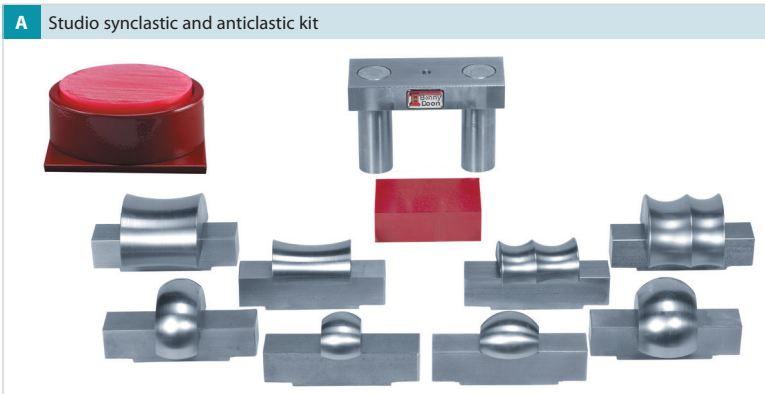


The larger die creates the initial oval. The smaller die completes the oval. All metal-to-metal contact is made inside the oval; the outside touches only the urethane.

Bonny Doon Studio Synclastic and Anticlastic Bracelet-Forming Kit for Classic, Mark III or Pro Press

Everything you need to get started with your Bonny Doon press! This kit includes four sets of matched dies—one single and one double for both synclastic and anticlastic forming. The magnetic fixture allows you to exchange dies in seconds; a $\frac{5}{16}$ " hole and set-screw (included) allow you to attach the die fixture to the upper platen of the press. This fixture allows you to change the dies instantly and accommodates a variety of Bonny Doon die styles.

Description	Item #	kit
A. Studio synclastic and anticlastic kit	110-920	\$1,225.00



Synclastic Kit for Classic, Mark III or Pro Press

Create smooth and even curves with ease. This kit includes a low profile, heavy-walled steel container that is a perfect fit for the synclastic dies. With a contained urethane, less pressure is needed because the urethane can only go into the metal, rather than sideways, making it easy to perfectly form bracelets without distorting the texture or design. These dies are great for creating cuff, bangle and overlay bracelets. Kit includes:

- One matched set of 1" and one matched set of 1 1/2" forming dies.
- One contained urethane (95d).
- One long-post magnetic die fixture.

Description	Item #	kit
B. Synclastic kit	110-485	\$704.85



Complete Anticlastic Kit for Classic, Mark III or Pro Press

The complete kit includes two double anticlastic dies and two single anticlastic dies, as well as one urethane and one long-post magnetic die fixture.

Description	Item #	kit
C. Complete anticlastic kit	110-909	\$762.00



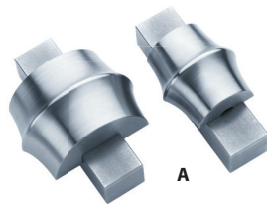
Anticlastic Kit for Classic, Mark III or Pro Press

Create spectacular cuffs with smooth, graceful opposing curvatures without kinks or creases. Experiment with embossing, engraving, rivets and fold-forming for endless design options. These dies will maintain the texture on your metal strip while cleanly forming the metal. The non-contained urethane allows for more free-forming and die options. Kit includes:

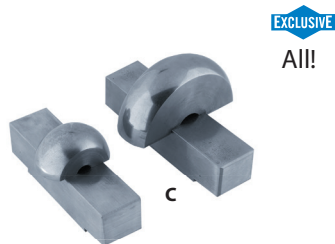
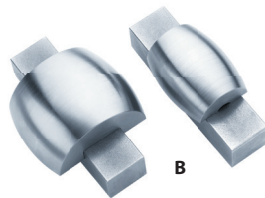
- One matched 2" die set.
- One 3" x 2" x 1" urethane (95d).
- One long-post magnetic die fixture.

Description	Item #	kit
D. Anticlastic kit	110-598	\$495.00

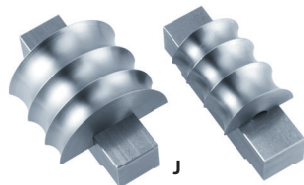
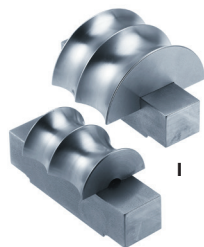
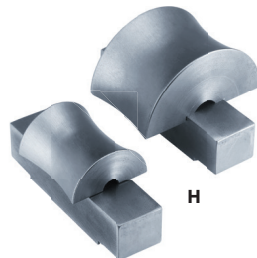
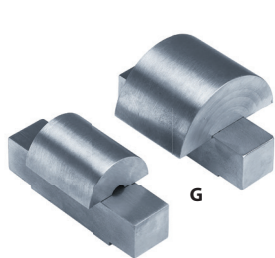
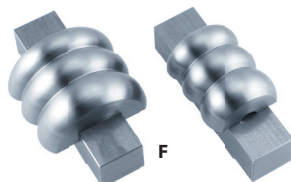
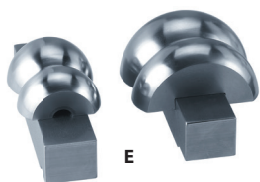
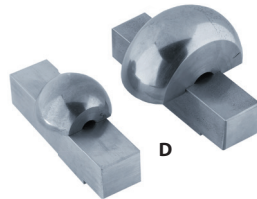




NEW
A, B



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BONNY DOON BRACELET FORMING

Forming flat sheet into synclastic or anticlastic ovals for bracelets normally takes a great deal of time and patience. Bonny Doon has a better way, using two matching half-oval dies (one large, one small). Magnetic fixtures attach to the upper platen of the hydraulic press and allow you to exchange dies in seconds. Made in the USA.

Bonny Doon 2" Synclastic Bangle Former Die Sets

Use these matched dies in your Bonny Doon press to create 2" synclastic bracelets free of kinks or creases. The forms of item A are peaked at the center, ideal for making a wide bangle or cuff from 2"-wide sheet. Item B features smooth, barrel-shaped domes. Each die surface offers eye-catching contours. Die sets work with the Bonny Doon bracelet-forming kit or die adapter.

Description	Item #	set
A. Peaked synclastic bangle former die set; 2"	110-674	\$345.00
B. Wide synclastic bangle former die set; 2"	110-675	\$320.00

Bonny Doon Synclastic Bracelet-Forming Components

Use Bonny Doon matched die pairs to easily and beautifully form synclastic curves—ideal for cuff and bangle bracelets.

Description	Item #	set
C. Synclastic set, 1"W; set/2	110-483	\$199.25
D. Synclastic set, 1 1/2"W; set/2	110-484	\$248.80
E. Double synclastic die set, 2"W; set/2	110-908	\$394.40
F. Triple synclastic die set, 1/2", 3/4" and 5/8"; set/2	110-625	\$394.40

Bonny Doon Flat Bracelet-Forming Components

Bracelet forming with Bonny Doon goes far beyond bending a perfect curve. With your press and this kit, not only can you form a bracelet, you can design and finish your bracelet first, then form it without distorting the design, using two matching half-oval dies (one large, one small). Use this flat, 2"-wide die pair with any Bonny Doon press to create smooth, even curves—ideal for cuff bracelets.

Description	Item #	set
G. Flat set, 2"W; set/2	110-600	\$240.15

Bonny Doon Anticlastic Bracelet-Forming Components

Anticlastic die pairs are ideal for creating bracelets with smooth, graceful opposing curvatures without kinks or creases.

Description	Item #	set
H. Anticlastic set, 2"W; set/2	110-601	\$344.60
I. Double anticlastic die set, 2"W; set/2	110-902	\$394.40
J. Triple anticlastic die set, 1/2", 3/4" and 5/8"; set/2	110-626	\$394.40

Magnetic Fixtures for Bracelet Forming

Choose the 3" long fixture for use with the Bonny Doon Classic, Mark III or Pro press. Choose the 2 1/4" short fixture for use with the Bonny Doon Lite or the Original Gold Bonny Doon press. Both fixtures require forming dies and urethanes; each has a 5/16" mounting hole. Magnetic fixtures are also available in the bracelet forming kits on the previous page.

Description	Item #	each
K. Long fixture; 4 1/2"W x 2"D x 3"H	110-615	\$151.00
L. Short fixture; 4 1/2"W x 2"D x 2 1/4"H	110-614	\$151.00

Urethanes for Bracelet Forming, 95d

M. Contained urethane; 3" x 1 1/4" (for synclastic dies)	110-611	\$110.11
N. Urethane; 3" x 2" x 1" (for anticlastic dies)	110-599	\$20.50

BONNY DOON BRACELET FORMING

Bonny Doon Freeform Synclastic Bracelet Former Kit

Use this kit with your Bonny Doon press to create convoluting synclastic forms. Kit includes:

- 2 1/2" dia., 80d urethane insert (replacement insert available on page 187).
- Two restraining rings.

Description	Item #	kit
A. Freeform synclastic bracelet former kit	110-286	\$101.85

Bonny Doon Freeform Anticlastic Bracelet Former Kit

Use these formers in your press to shape anticlastic forms. Kit includes:

- Four pairs of split contoured Delrin® rings: 1/2", 3/4", 1" and 1 1/4" heights.
- Steel holder.
- 2 1/2" dia., 80d urethane insert (replacement insert available on page 187).
- Aluminum pusher.

Description	Item #	kit
B. Freeform anticlastic bracelet former kit	110-476	\$374.65



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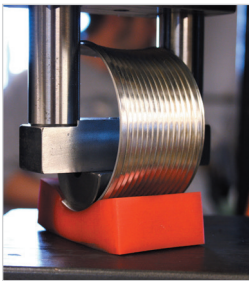
A



©Cynthia Eid



B



The specially formulated 95d urethane forces metal into every detail of your die or every part of your form.



Search **How to Form Synclastic Bracelets Video** at riogrande.com for more information.



JEWELRY TECH TEAM

With two centuries of combined know-how, Rio's team of experts has the jewelry-making answers you need.

Ring and Bracelet Blanking Dies

These tool steel blanking dies produce ring and bracelet blanks from sheet metal up to 12 ga. thick. To use a blanking die, slide your metal under the cutout shape until the shape is positioned completely over the metal. Then set the die and metal sheet in a vise (or on the center of the platen on your hydraulic press). Close the jaws of your vise (or the platens of your press) to cut the metal sheet. Trim off any portion of the flap that was cut, and your blank is ready to be formed into your jewelry design. Made in the USA.

Description	Blank Dimensions	Item #	each
C. R1; small ring	2 1/16"L x 3/16"W	110-672	\$75.00
D. R2; large ring	2 3/16"L x 3/8"W	110-673	\$85.00
E. B1; small bracelet	5 7/8"L x 1 1/16"W	110-670	\$210.00
F. B2; large bracelet	5 7/8"L x 1 3/4"W	110-671	\$230.00



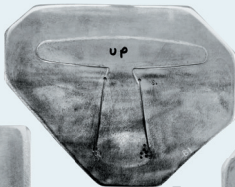
Blanking dies allow you to quickly and repeatably cut multiple metal blanks of the exact same shape and size.



C



D



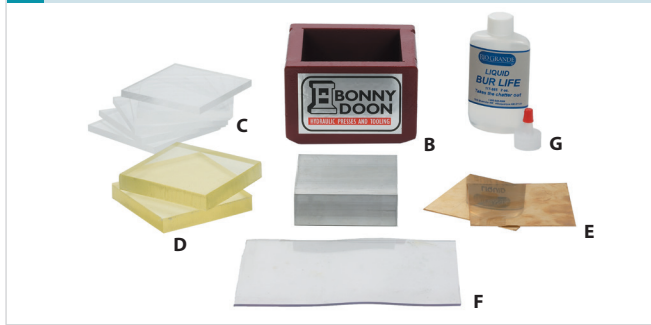
E



F

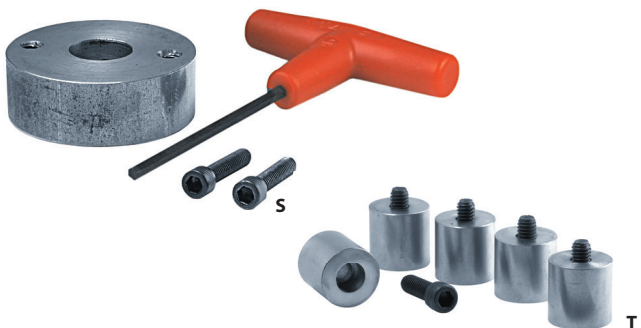
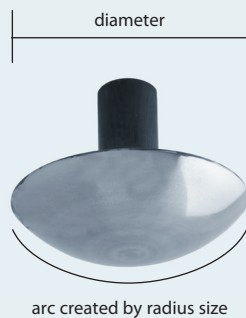
NEW
C-F

A 3" form box kit



Choosing the Correct Mushroom Former

To help you order a mushroom former with the correct dome radius, you can use a ruler to set your compass to the radius size. Then draw an arc on a piece of paper. The arc will allow you to see the curvature created by the dome of the mushroom former with that radius.



Bonny Doon 3" Form Box Kit

Create larger, deeper-volume forms by concentrating the urethane forces inside the containers, using your hydraulic press. Intensifiers (included) are used to build up the form in desired areas. The form box features 33% thicker gauge construction than the original box design. Kit includes two urethanes (60d), one form box and pusher, two brass plates, an intensifier sheet, four silhouette die blanks, liquid BurLife® lubricant and instructions. Made in the USA.

Description	Item #	kit
A. 3" form box kit	110-470	\$264.00
B. 3" form box and pusher	110-291	\$215.00
C. 3" x 3" x 1/4" silhouette die blanks; pkg/4	110-293/2	\$9.95
D. 3" x 3" x 1/2" urethane (60 durometer)	110-292	\$13.65
E. 3" brass die-forming plate (18 ga.); pkg/2	110-295/2	\$9.15
F. Intensifier sheet, 6" x 4"	110-473	\$17.35
G. Liquid BurLife®; 2-oz. bottle	117-985	\$8.25

Bonny Doon 6" Form Box and Urethane

Create deep-volume forms by concentrating the urethane forces inside the container. Use the 6" form box for larger forms. The form box features 33% thicker gauge construction than the original box design. Use the 6" x 6" acrylic top spacer (item G, page 188) as a pusher for the form box and urethane. Made in the USA.

Description	Item #	each
H. 6" form box	110-569	\$158.40
I. 6" x 6" x 1/2" urethane (60 durometer)	110-344	\$39.55

Bonny Doon Dapping Set for Hydraulic Presses

Created by Bonny Doon Engineering for use in its hydraulic presses, this set includes 12 precision-machined, highly polished, hardened-steel dapping punches. Each punch has a 1" shank and fits into the Bonny Doon master tool holder (item S, below) for quick tool changes as you work.

This set includes:

- 12 punches (5/16", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1 1/8", 1 1/4", 1 1/2", 1 3/4" and 2").
- Beveled wood organizer stand.

Made in the USA.

Description	Item #	set
J. 12-piece dapping set for hydraulic presses	110-579	\$245.00

Bonny Doon Mushroom Formers

Use mushroom formers with contained urethane boxes to enhance their efficiency and repeatability with less force. Use case-hardened steel mushroom formers in any Bonny Doon press with the master holder (item S, below). Use a urethane matching the diameter of the former. All have a 1" shank. Made in the USA.

Diameter	Radius	Item #	each
K. 3"	1 1/2"	110-278	\$133.20
L. 2"	2"	110-551	\$125.35
M. 2 1/2"	2 1/2"	110-553	\$125.35
N. 3"	3"	110-555	\$125.35
O. 4"	4"	110-586	\$125.35
P. 4"	2 1/2"	110-587	\$141.00
Q. 3"	3"	110-588	\$141.00
R. 4"	4"	110-589	\$141.00

Master Tool Holder

Bolted to the upper platen of your Bonny Doon press, this holder accepts all 1" tools and keeps them centered and straight. It features a set-screw to hold tools securely and includes two bolts and a T-handle key. Made in the USA.

Description	Item #	each
S. Master tool holder	110-271	\$59.20

Bonny Doon Quick-Change Adapter Set

These adapters convert your standard threaded Bonny Doon tools to fit into your 1" master holder so that you can quickly change tools without having to reconfigure the tooling in the upper platen itself. Made in the USA.

Description	Item #	set
T. Quick-change adapter set	110-499	\$87.50

Bonny Doon 2" Container Urethane Kit

The round steel container and urethane insert allow you to create domed forms with your hydraulic press. Item A includes four Delrin® punch blanks (two 2" flat and two 2 1/2" domed), one 2"-diameter urethane insert (95d), one 2" pusher with bolt and one 2" container. Made in the USA.

Description	Item #	kit
A. Complete 2" forming kit	110-471	\$136.25
B. 2" round container only	110-274	\$40.00
C. 2" 95d urethane insert	110-275	\$34.05
2" 80d urethane insert (not shown)	110-539	\$34.05
D. 2" flat Delrin® punch; pkg/2	110-474/2	\$12.00
E. 2 1/2" domed Delrin® punch; pkg/2	110-475/2	\$18.00
F. 2" pusher with bolt	110-272	\$23.40



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Bonny Doon Round Containers and Urethanes

Constrain urethanes inside the containers to concentrate hydraulic force. Made in the USA.

3" Diameter

Description	Item #	each
G. Round container	110-491	\$46.85
H. 95d urethane	110-277	\$47.70
I. 80d urethane	110-540	\$47.70
J. Pusher with bolt	110-273	\$29.80

4" Diameter

Description	Item #	each
K. Round container	110-541	\$59.00
L. 95d urethane	110-542	\$61.30
M. 80d urethane	110-543	\$61.30
N. Pusher with bolt	110-544	\$38.25

O. Bracelet Urethane Inserts

Use these 80-durometer urethanes with the bracelet-forming kits on page 183. Use the smaller diameter urethanes (110-339 and 110-340) when forming corrugated or heavily textured bracelets. Made in the USA.

Size	Item #	each
2 1/2" dia. x 1 1/2"H	110-341	\$27.50
2 1/2" dia. x 3/4"H	110-342	\$26.10
2 1/4" dia. x 1 1/2"H	110-339	\$22.40
2 1/4" dia. x 3/4"H	110-340	\$18.30

Bonny Doon Urethanes

Urethanes help concentrate the hydraulic force of your Bonny Doon press around your workpiece. Use items P–R with the non-conforming dies and Bonny Doon precision containment system (110-616) on page 181. Items R–T are replacement urethanes for the Bonny Doon silhouette container kit (110-479) on page 182. Item U is a replacement urethane for the Bonny Doon freeform anticlastic bracelet former kit (110-476) on page 185. Made in the USA.

Round

Durometer	Dimensions	Item #	each
P. 95d	3/4"H x 1 7/8" dia.	115-455	\$21.25
Q.	1/4"H x 1 7/8" dia.	115-456	\$27.15
R. 60d	3/4"H x 1 7/8" dia.	110-621	\$15.25

Silhouette

Item #	Dimensions	each
S. 80d	3/4"H x 1 7/8" dia.	110-622 \$13.25
T. 95d	1/4"H x 1 7/8" dia.	110-623 \$5.95

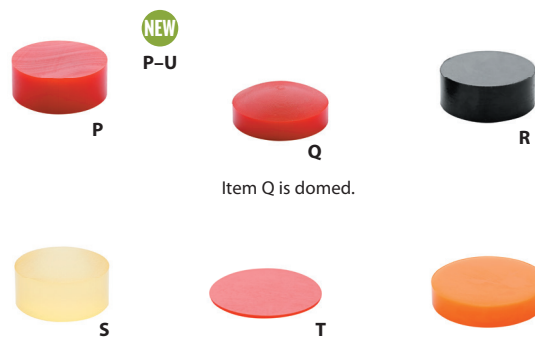
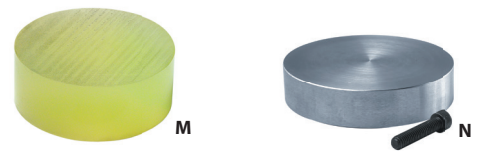
Bracelet

Item #	Dimensions	each
U. 80d	1/2"H x 2 1/2" dia.	110-372 \$19.75

A Complete 2" kit (includes items B–F)



EXCLUSIVE
All!



Item Q is domed.

BONNY DOON URETHANES

Each Bonny Doon urethane is specifically formulated for increased cut-resistance and memory retention. Its purpose is to provide the matching half of the form that you create in your press; it forces the metal into every crevice of the die, precisely conforming to the design. To ensure good results and to prevent damage to the urethane, choose pieces thicker than the design (designs should no more than 2/3 of the thickness of the urethane). Used properly, a urethane can easily last ten years or longer. Made in the USA.

Bonny Doon 3" x 3" x 1/2" Urethanes

Use these urethanes to concentrate the hydraulic force of your Bonny Doon press around your workpiece. Use 3" square urethane pads in your 3" form box (page 186) to form synclastic, anticlastic and flat pieces.

Durometer	Item #	each
A. 60d	110-292	\$13.65
B. 80d	110-293	\$13.65
C. 95d	110-294	\$13.65

Replacement Bonny Doon Urethane for Bracelet Forming

Use this 95-durometer urethane with the bracelet-forming dies and fixtures on page 185 to form synclastic, anticlastic and flat bracelets in your Bonny Doon press.

Durometer	Dimensions	Item #	each
D. 95d	3" x 2" x 1"	110-599	\$20.50

Bonny Doon 6" x 6" Urethanes

All fit the 6" square form box (110-569) on page 186 to create deep-volume forms. Just choose the durometer and thickness you need.

Durometer	Thickness	Item #	each
E. 95d	1/16"	110-331	\$25.25
80d	1/16"	110-332	\$25.25
95d	1/8"	110-333	\$28.50
80d	1/8"	110-334	\$28.50
95d	1/4"	110-335	\$34.35
95d	1/2"	110-337	\$37.50
80d	1/2"	110-336	\$37.50
95d	1"	110-338	\$55.10
Set of all 8 urethanes, above		110-268	\$244.50
F. 60d	1/2"	110-344	\$39.55



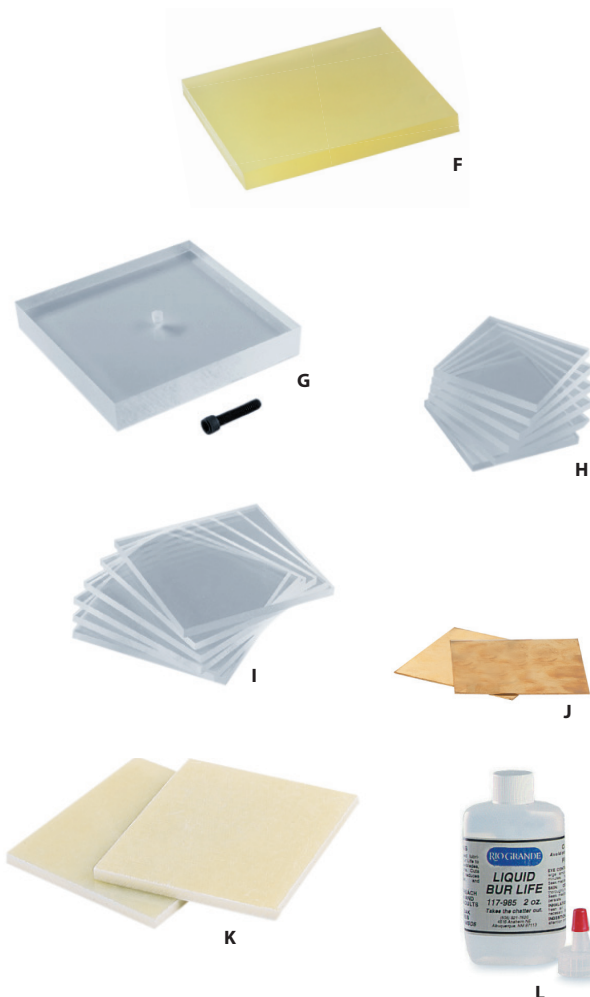
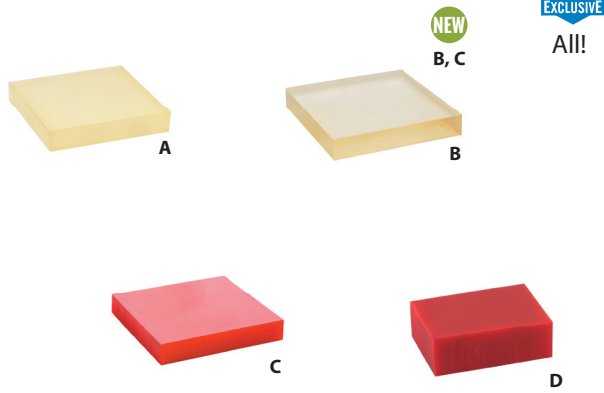
Search **Bonny Doon Video** at riogrande.com for more information.

Bonny Doon Consumables

These consumables add versatility to your press.

Packaging varies; see below

Description	Pkg Qty	Item #	pkg
G. 6" x 6" acrylic top spacer	2	110-269/2	\$55.45
H. 3" x 3" x 1/4" silhouette die blanks	4	110-293/2	\$9.95
I. 4" x 4" x 1/4" silhouette die blanks	4	110-472/2	\$12.70
J. 3" brass face plate	2	110-295/2	\$9.15
K. 6" Kevlar® face plate	2	110-270/2	\$40.15
L. Liquid BurLife®; 2-oz. bottle	1	117-985	\$8.25
Bonny Doon consumables kit; items G, K and E (set of 8 urethanes, above)		110-469	\$322.50



Bonny Doon Split-Die Ring-Forming Master Kit

This ingenious ring-forming master kit allows you to form rings using split dies. Simply separate the die halves to release your ring—created in one seamless piece, with no soldering needed. Four 1"H x 5/8" dia. split-die pairs offer various working widths (included; also available separately below), providing a range of options for your ring design. To use with your hydraulic press, the split-die holder (included) is magnetically centered in the blade accessory of the press. To use in a vise, the split dies slide onto the vise adapter (included) for shaping with your forming hammer. Made in the USA.

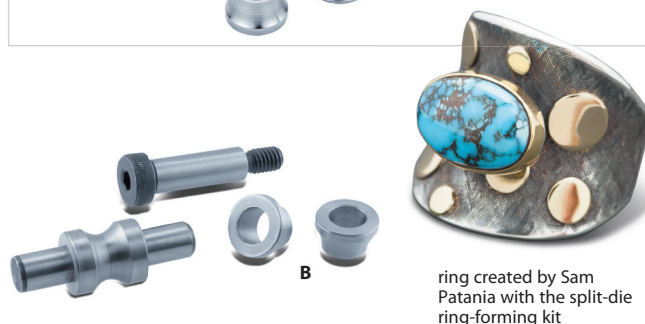
Description	Item #	kit
A. Ring-forming master kit	110-643	\$165.25



Bonny Doon Ring-Forming Kit and Split-Die Pairs

This kit includes a press pin for use with the Bonny Doon ring-forming blade in your Bonny Doon hydraulic press and a tool holder for use in your Bonny Doon vise adapter (110-639, page 191) and vertical vise (115-400, page 191). The kit comes with two pairs of 1"H x 5/8" dia. split dies—one with a 10mm working area (also available separately, item C), one with a 7mm working area (also available separately, item D). Additional extra-wide (item E) and extra-narrow (item F) split-die pairs are available below. Made in the USA.

Description	Item #	kit
B. Ring-forming kit	110-642	\$76.50
		pair
C. Original wide split-die pair; 10mm	110-644	\$26.95
D. Original narrow split-die pair; 7mm	110-645	\$26.95
E. Extra-wide split-die pair; 12mm	110-646	\$26.95
F. Extra-narrow split-die pair; 4mm	110-647	\$26.95

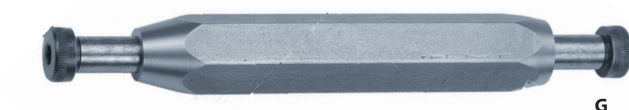
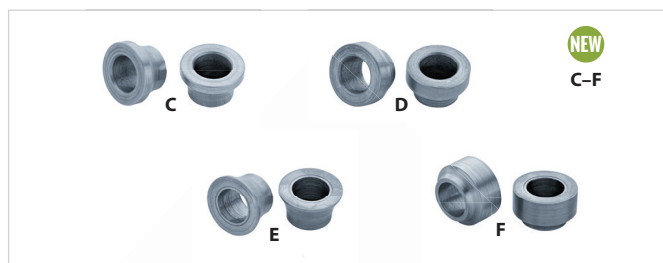


ring created by Sam Patania with the split-die ring-forming kit

Vise Adapter for Bonny Doon Small Forming Tools

Crafted from 1" hexagonal stock, this 6" adapter accepts the Bonny Doon split dies (item B–E, above) and convertible small forming tools (item I, below). Use with the Bonny Doon vertical vise on page 191. Two tool holders are threaded to fit each end of the adapter and are tapped to hold a forming tool, allowing you to have two forming tools set up and ready to use at any given time. Made in the USA.

Description	Item #	each
G. Bonny Doon vise adapter	110-639	\$53.25



Press Pin for Bonny Doon Convertible Small Forming Tools

This 2.5"-long steel pin accommodates the Bonny Doon convertible small forming tools (item I, below) and is used to center and position the tool in the brake back bar and ring-forming blade for use in a Bonny Doon hydraulic press. Made in the USA.

Description	Item #	each
H. Bonny Doon press pin	110-640	\$15.00



Search **Bonny Doon Convertible Forming Tools Video** at riogrande.com for more information.



H

Convertible Small Forming Tool Pairs Master Kit

This complete Bonny Doon master kit includes one of each style of tool pairs (nine pairs in all), two press pins (for use with a Bonny Doon hydraulic press), a Bonny Doon vise adapter (for use with the Bonny Doon vertical vise) and two tool holders (to use with the vise adapter). All kit components come in a fitted wood organizer tray. When using the tool pairs with the vertical vise, we recommend the Bonny Doon urethane hammers on page 191 for the best results. Made in the USA.

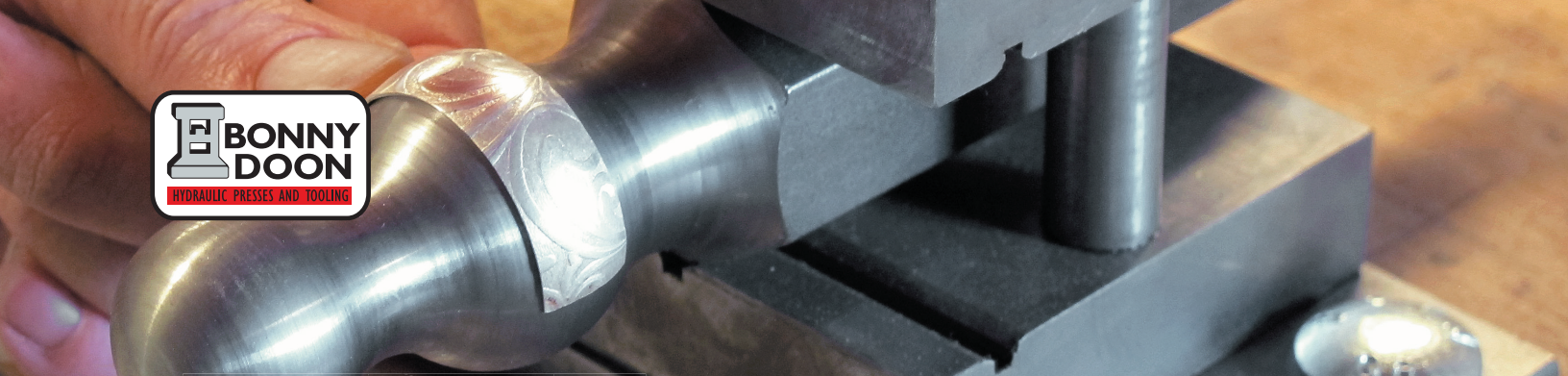
Description	Item #	kit
I. Small forming tool pairs master kit	110-641	\$558.68



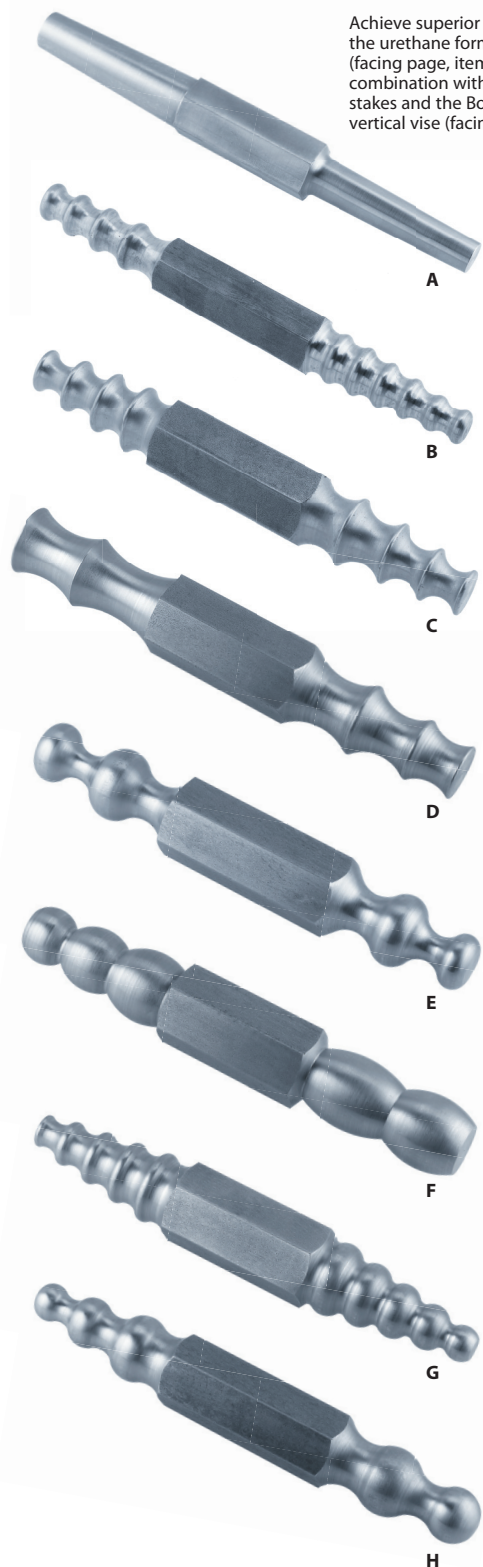
Item I includes nine tool pairs (18 tools in all).



I



Achieve superior results using the urethane forming hammers (facing page, items A, D and G) in combination with these forming stakes and the Bonny Doon vertical vise (facing page).



BONNY DOON FORMING STAKES

Bonny Doon offers a new spin on the classic metal-forming stake. These 9" Bonny Doon stakes are CNC-milled from hexagonal stock, creating precise synclastic and anticlastic shapes with less flex than traditional stakes. The hexagonal center of these stakes clamps securely into a bench vise, such as the Bonny Doon vises on the facing page, providing a more stable work surface compared to traditional forming stakes. When used with the Bonny Doon urethane hammers (facing page), these stakes become a must-have for any metalsmith. Stakes can be secured in most standard bench vises; however, for the most secure hold, use with the Bonny Doon vertical vise—the points of the hexagonal shape index into the grooves of the vise face, providing an uncompromising grip on the stake. Made in the USA.

Bonny Doon Ring-Forming Stake

This ring-forming stake features two tapered ends; the large end diameter tapers from approx. $1\frac{1}{16}$ " to $\frac{3}{4}$ "; the small end diameter tapers from approx. $1\frac{1}{16}$ " to $\frac{9}{16}$ ".

Description	Hexagonal Stock Size	Item #	each
A. Ring-forming stake	1 $\frac{3}{8}$ "	115-420	\$75.00

Bonny Doon Anticlastic/Synclastic Forming Stakes

These forming stakes offer many forming options in small, medium and large sizes with graduated forms and depressions. The curves in between the forms or the depressions can be used for small synclastic/anticlastic forming.

Anticlastic

Description	Hexagonal Stock Size	Item #	each
B. Small; 10 depressions	1"	115-410	\$65.85
C. Medium; eight depressions	1 $\frac{1}{4}$ "	115-411	\$72.00
D. Large; five depressions	1 $\frac{3}{8}$ "	115-417	\$75.00

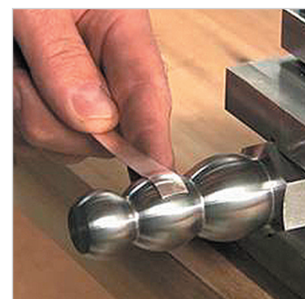
Synclastic

E. Large; four synclastic forms	1 $\frac{3}{8}$ "	115-412	\$75.00
F. Large; five synclastic forms	1 $\frac{3}{8}$ "	115-418	\$75.00

Anticlastic/Synclastic Combination

G. Small; five depressions and five synclastic forms	1 $\frac{3}{8}$ "	115-419	\$75.00
H. Medium; five synclastic forms (form in depressions and over synclastic forms)	1 $\frac{1}{4}$ "	115-416	\$72.00

Insert the forming stake into the vertical vise (item J, facing page) and form small strips of metal with a urethane forming hammer (items A, D and G, facing page).



Bonny Doon Urethane Forming Hammers

These Bonny Doon urethane hammers create shapes with far fewer strikes than traditional hammers and are ideal for use with metalsmith stakes and dapping bowls. The cross-peen face is made of extra-hard 95-durometer urethane and tapers to a 32 x 1 mm tip. The flat face is made of 80-durometer urethane and is 32mm in diameter. The flat face can be unscrewed and replaced with different urethane hardnesses and shapes. Additional inserts are available separately. The handles are made of tough, durable hickory wood. The urethane faces are non-marring and help create shapes with fewer strikes than a traditional hammer requires. Made in the USA.

Heavy Duty

Description	Head Size	Head Weight	Item #	each
A. Heavy-duty hammer	5 1/4" x 1 1/4" dia.	16 oz. (454g)	110-912	\$89.00
B. 95d domed insert, 32mm dia. x 27mmH			110-904	\$19.50
C. 95d flat insert, 32mm dia. x 27mmH			110-905	\$16.50
Set of 2 inserts (items B and C)			110-906	\$33.90

Original

D. Hammer	5 1/4" x 1 1/4" dia.	10 oz. (283g)	110-903	\$87.00
E. 95d domed insert, 32mm dia. x 27mmH			110-904	\$19.50
F. 95d flat insert, 32mm dia. x 27mmH			110-905	\$16.50
Set of 2 inserts (items E and F)			110-906	\$33.90

Small

G. Small hammer	4 1/2" x 1" dia.	7 oz. (198g)	110-910	\$79.00
H. 95d flat insert, 25.4mm dia. x 25.4mmH			110-910/02	\$15.75
I. 95d domed insert, 25.4mm dia. x 25.4mmH			110-910/03	\$18.75
Set of 2 inserts (items H and I)			110-910/01	\$30.00

Bonny Doon Vertical Vises and Adapter

These vises are cleverly designed to securely hold mandrels and forming stakes at ideal angles for bench work. Item J mounts to your benchtop in either a horizontal or vertical orientation. Bolted properly to a heavy table, bench or other work surface, the Bonny Doon vertical vise will hold any mandrel or horizontal stake immovably. Item K mounts in your bench vise. The adapter (item L) allows you to use Bonny Doon bracelet forming dies and other tools in the vise as forming stakes. Made in the USA.

Description	Item #	each
J. Bench-mounted vise	115-400	\$250.00
K. Vise-mounted vise	115-401	\$250.00
L. Vertical vise adapter	110-900	\$28.50

Bonny Doon Brake Back Bar

Use this bar in any Bonny Doon press as a holder for the tubing and ring blade (item N, below) or for any other 0.375"-thick strap tooling. Cavity size: 3/8" x 1/2". Made in the USA.

Description	Item #	each
M. Brake back bar; 6"W x 1 1/4"D x 1 1/4"H	110-567	\$127.75

Bonny Doon Ring-Forming Blade

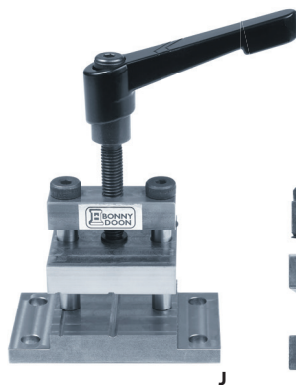
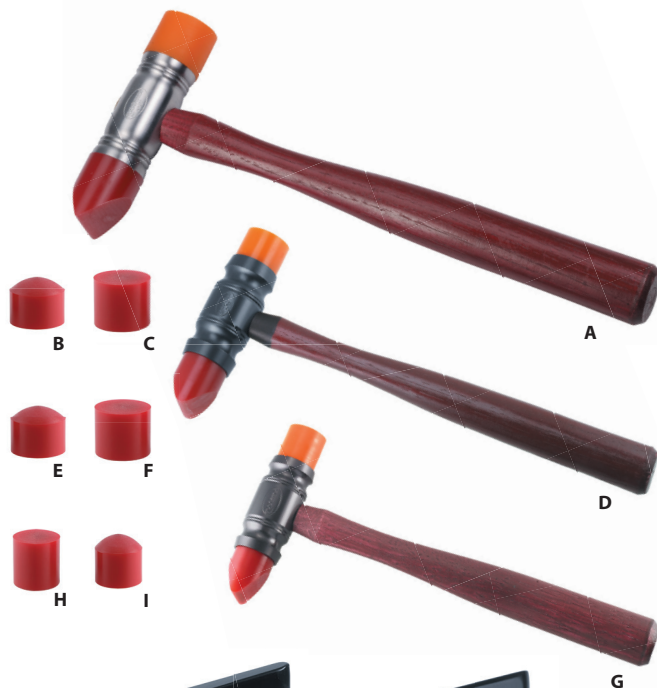
Bonny Doon has upgraded the popular forming blade! Now made of precision-ground hardened tool stock, this blade has two magnets embedded in the blade to secure steel rods for forming tubing. Use this blade to make seamed tubing and form rings with your Bonny Doon press. Made in the USA.

Description	Item #	each
N. Ring-forming blade; 6"W x 2"D x 3/8"H	110-608	\$97.70

Bonny Doon Brake Blade Set

Made of precision-ground tool stock, this set includes five brake blades (1 1/2", 1 1/4", 1", 3/4" and 1/2" widths). Use blades in any combination to create clean, sharply angled edges. All five line up to offer one 5" bar. These blades are ideal for forming small boxes. Use with the brake back bar (item M, above). Made in the USA.

Description	Item #	set
O. Brake blade set; 2 1/2"D x 3/8"H (widths vary)	110-609	\$145.15



Please Note: To ensure a solid hold on the mandrel, make sure the handle of the vise is torqued tightly.

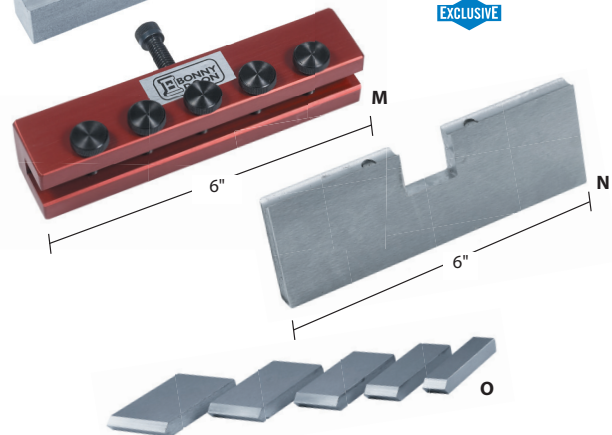


Item K is designed to fit in the jaws of your bench vise.

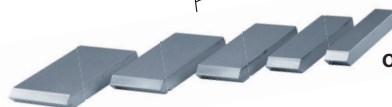


Search **How to Use the Bonny Doon Vertical Vise and Hammers Video** at riogrande.com for more information.

Item J is a bench-mounted vise that is designed to securely hold ring and forming mandrels.



EXCLUSIVE



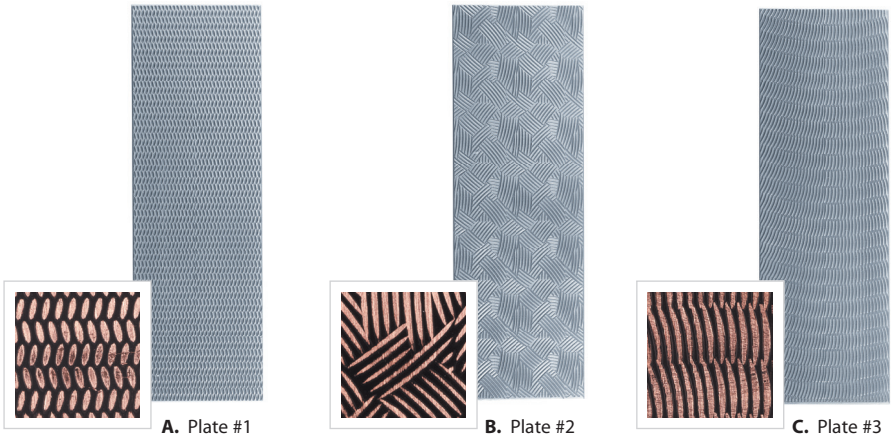
BONNY DOON EXTRA-FINE PATTERN PLATES

Bonny Doon 6" x 2" Extra-Fine Petite-Pattern Plates

Ideal for small designs such as earrings, pendants and rings in addition to larger formed pieces, these precision petite-pattern plates feature smaller-scale patterns with finer, more delicate lines. Use the plate in your Bonny Doon press or your rolling mill to emboss these patterns on thick- or thin-gauge metal. Created from a special scale-free steel that is softer than the rollers on a rolling mill, this plate will produce a highly detailed, low-relief pattern on metal as thick as 16-ga. or as fine as 32-ga.

Please Note: Plates may be used in either your hydraulic press or your rolling mill. Once a plate has been used in your rolling mill, however, it will begin to take on a curvature and should not be used in the hydraulic press. The same plate should never be used interchangeably between the mill and press. If you are using the plate in your rolling mill, we recommend annealing your target metal before sending it through the rolling mill to achieve cleaner, crisper detail. Made in the USA.

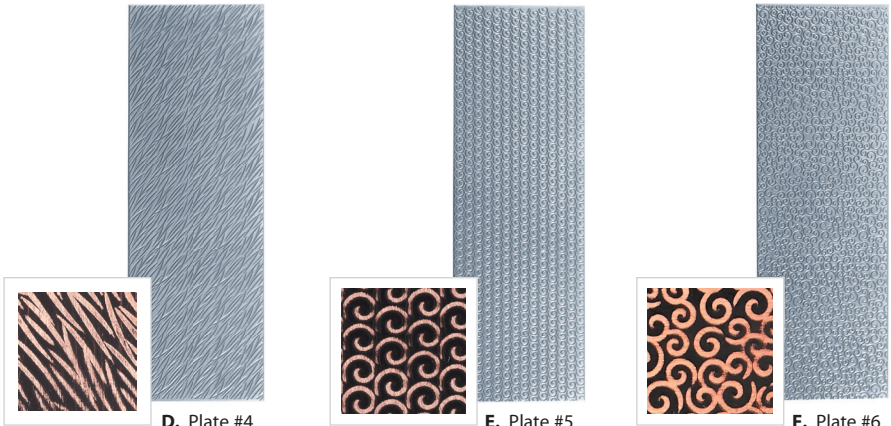
Description	Item #	each
A. Plate #1	110-719/01	\$79.00
B. Plate #2	110-719/02	\$79.00
C. Plate #3	110-719/03	\$79.00
D. Plate #4	110-719/04	\$79.00
E. Plate #5	110-719/05	\$79.00
F. Plate #6	110-719/06	\$79.00
G. Plate #7	110-719/07	\$79.00
H. Plate #8	110-719/08	\$79.00
I. Plate #9	110-719/09	\$79.00
J. Plate #10	110-719/10	\$79.00
K. Plate #11	110-719/11	\$79.00
L. Plate #12	110-719/12	\$79.00



A. Plate #1

B. Plate #2

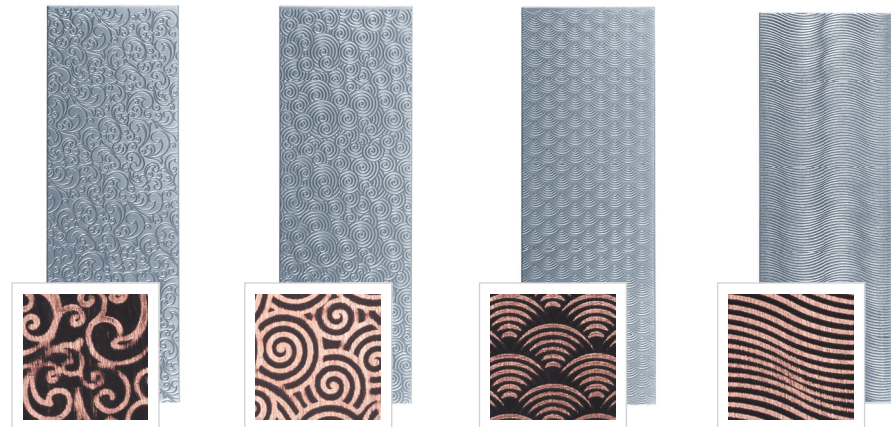
C. Plate #3



D. Plate #4

E. Plate #5

F. Plate #6

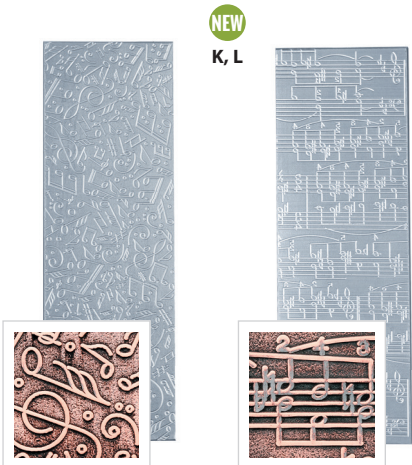


G. Plate #7

H. Plate #8

I. Plate #9

J. Plate #10



K. Plate #11

L. Plate #12

BONNY DOON LONG PATTERN PLATES

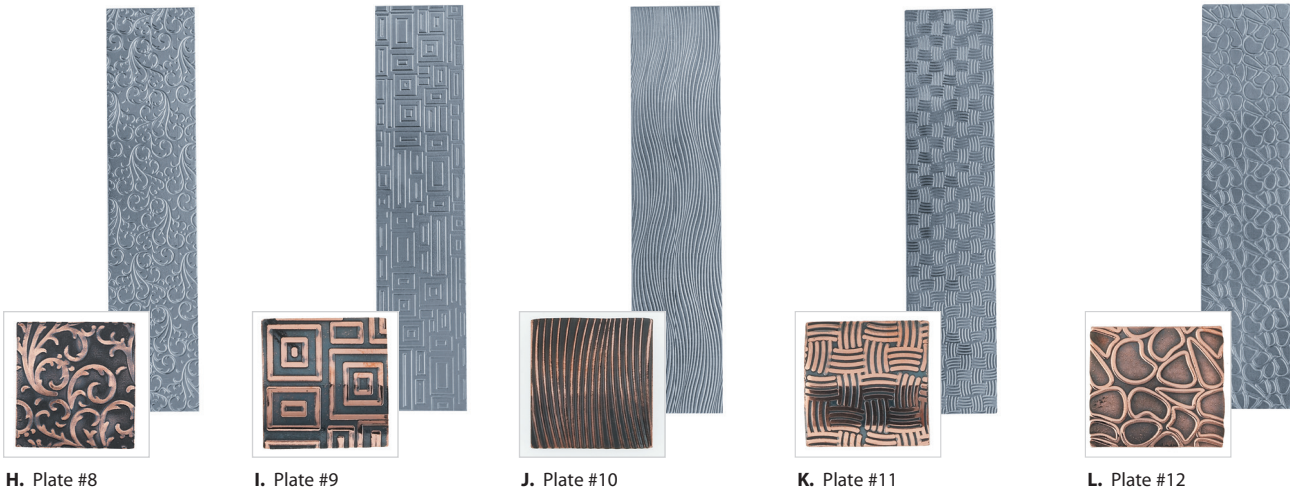
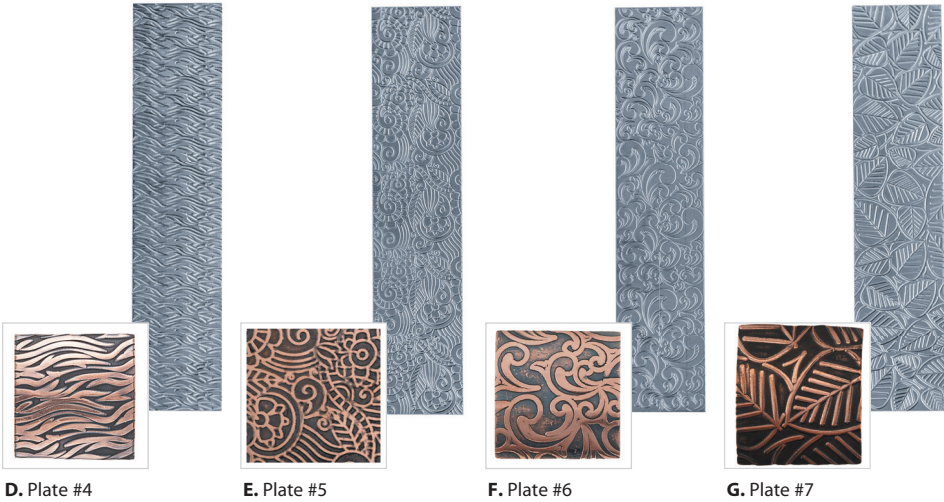
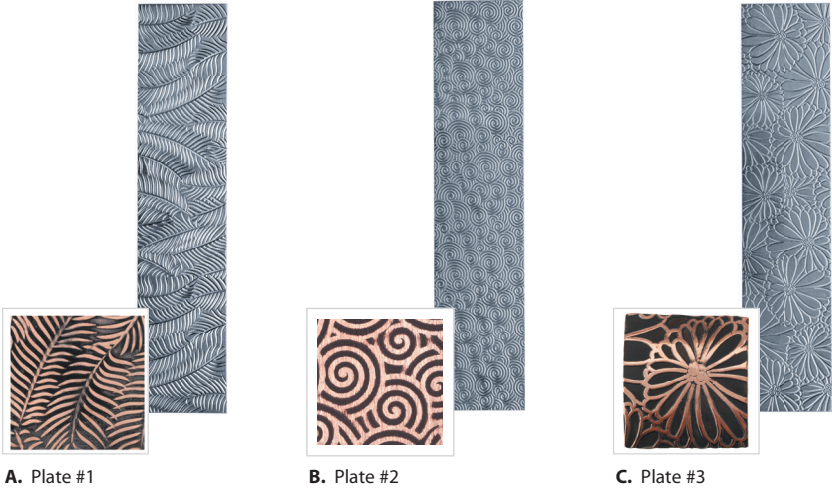
NEW
All!

Bonny Doon 9" x 2" Long Pattern Plates

Bonny Doon long plates help you work more effectively with longer sheets of metal! Use your Bonny Doon press or your rolling mill to emboss finely detailed patterns into your metal using these pattern plates. Created from a special scale-free steel that is softer than the rollers on a rolling mill, these plates will produce a detailed, low-relief pattern on metal up to 16-ga. thick or as fine as 26-ga. (note that these are guidelines for what is possible with these plates; let your experience be your best guide). Instructions are included.

Please Note: Plates may be used in either your hydraulic press or your rolling mill. Once a plate has been used in your rolling mill, however, it will begin to take on a curvature and should not be used in the hydraulic press. The same plate should never be used interchangeably between the mill and press. If you are using the plate in your rolling mill, we recommend annealing your metal before sending it through the rolling mill to achieve cleaner, crisper detail. Made in the USA.

Description	Item #	each
A. Plate #1	110-819/01	\$77.00
B. Plate #2	110-819/02	\$77.00
C. Plate #3	110-819/03	\$77.00
D. Plate #4	110-819/04	\$77.00
E. Plate #5	110-819/05	\$77.00
F. Plate #6	110-819/06	\$77.00
G. Plate #7	110-819/07	\$77.00
H. Plate #8	110-819/08	\$77.00
I. Plate #9	110-819/09	\$77.00
J. Plate #10	110-819/10	\$77.00
K. Plate #11	110-819/11	\$77.00
L. Plate #12	110-819/12	\$77.00



BONNY DOON PATTERN PLATES

Bonny Doon 6" x 2" Pattern Plates

Use your Bonny Doon press (pages 173–178) or your Durston rolling mill (pages 199–205) to emboss finely detailed patterns into your metal with these 6" x 2", 3.5mm-thick pattern plates.

Created from a special scale-free steel that is softer than the rollers on a rolling mill, these plates will produce a detailed, low-relief pattern on metal 26- to 36-gauge thick (using a hydraulic press) or on metal 14- to 24-gauge thick (using a rolling mill). Instructions are included.

Please Note: Plates may be used in either your hydraulic press or your rolling mill. Be sure not to exceed the maximum thickness capacity of your rolling mill or damage may occur. Once a plate has been used in your rolling mill, it will begin to take on a curvature and should not be used in a hydraulic press. The same plate should never be used interchangeably between mill and press. We recommend annealing your metal before rolling to achieve better detail. Made in the USA.



A. Plate #1



B. Plate #2



C. Plate #3



D. Plate #4



E. Plate #5



F. Plate #6



G. Plate #7



H. Plate #8



I. Plate #9



J. Plate #10



K. Plate #11



L. Plate #12



M. Plate #13

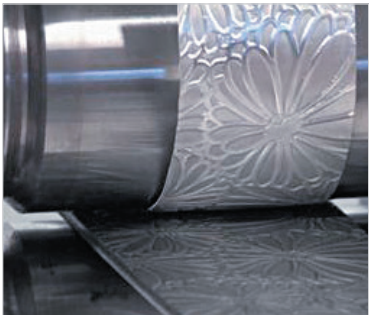
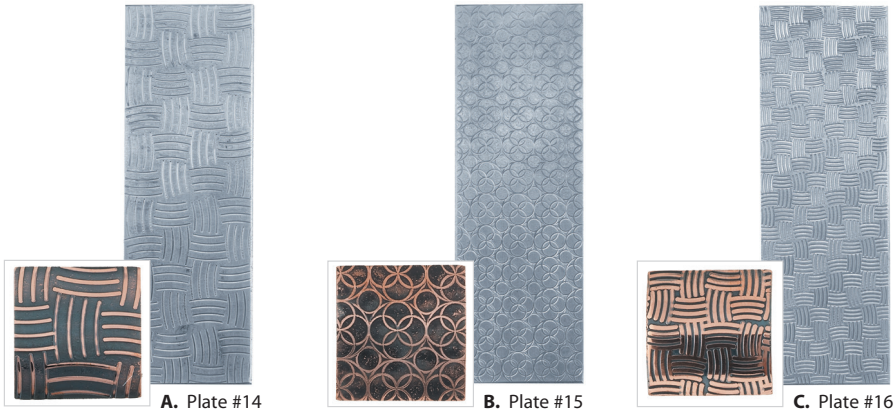
Description	Item #	each
A. Plate #1	110-619/01	\$49.00
B. Plate #2	110-619/02	\$49.00
C. Plate #3	110-619/03	\$49.00
D. Plate #4	110-619/04	\$49.00
E. Plate #5	110-619/05	\$49.00
F. Plate #6	110-619/06	\$49.00
G. Plate #7	110-619/07	\$49.00
H. Plate #8	110-619/08	\$49.00
I. Plate #9	110-619/09	\$49.00
J. Plate #10	110-619/10	\$49.00
K. Plate #11	110-619/11	\$49.00
L. Plate #12	110-619/12	\$49.00
M. Plate #13	110-619/13	\$49.00

BONNY DOON

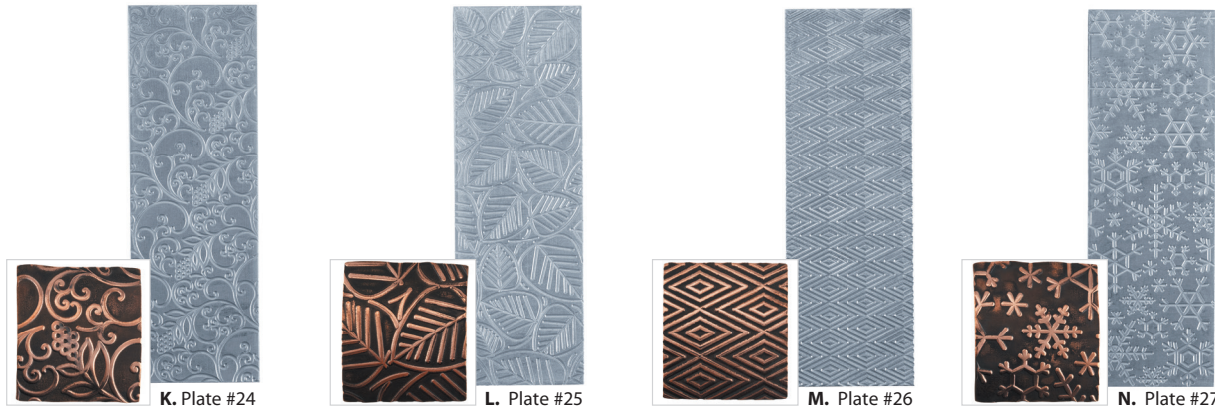
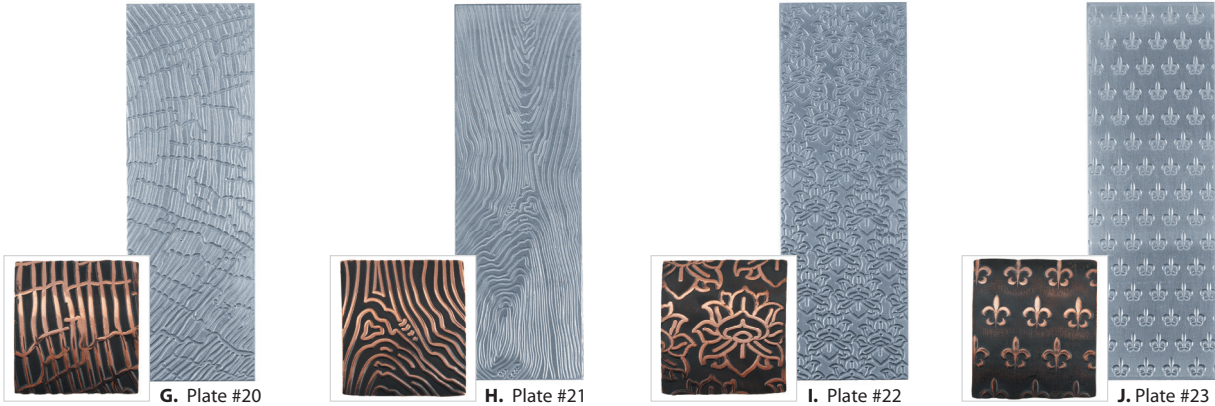
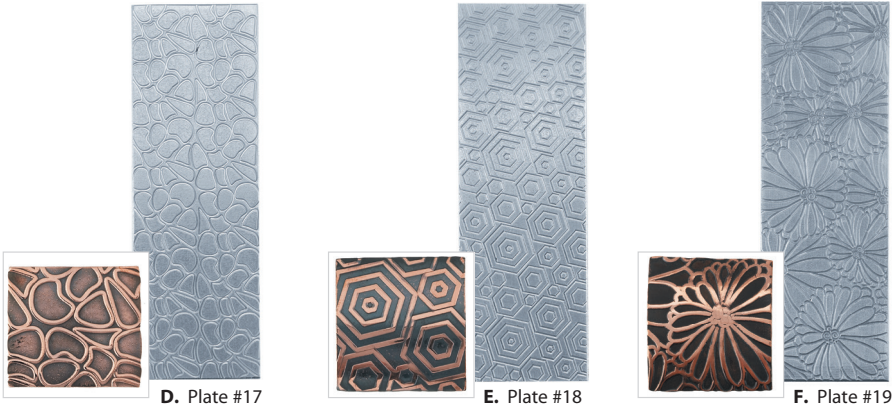
PATTERN PLATES

Bonny Doon 6" x 2" Pattern Plates
Made in the USA.

Description	Item #	each
A. Plate #14	110-619/14	\$49.00
B. Plate #15	110-619/15	\$49.00
C. Plate #16	110-619/16	\$49.00
D. Plate #17	110-619/17	\$49.00
E. Plate #18	110-619/18	\$49.00
F. Plate #19	110-619/19	\$49.00
G. Plate #20	110-619/20	\$49.00
H. Plate #21	110-619/21	\$49.00
I. Plate #22	110-619/22	\$49.00
J. Plate #23	110-619/23	\$49.00
K. Plate #24	110-619/24	\$49.00
L. Plate #25	110-619/25	\$49.00
M. Plate #26	110-619/26	\$49.00
N. Plate #27	110-619/27	\$49.00



Produce a detailed, low-relief pattern using pattern plates and a rolling mill.



BONNY DOON PATTERN PLATES

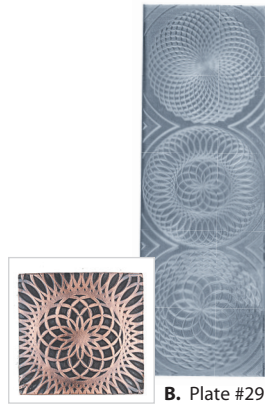
Bonny Doon 6" x 2" Pattern Plates

Created from a special scale-free steel that is softer than the rollers on a rolling mill, these plates will produce a detailed, low-relief pattern on metal 26- to 36-gauge thick (using a hydraulic press) or on metal 14- to 24-gauge thick (using a rolling mill). Instructions are included.

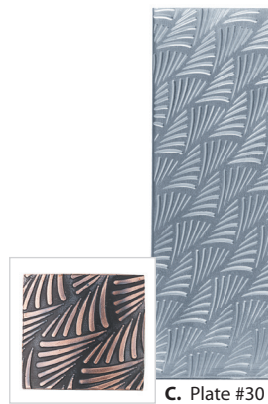
Please Note: Plates may be used in either your hydraulic press or your rolling mill. Be sure not to exceed the maximum thickness capacity of your rolling mill or damage may occur. Once a plate has been used in your rolling mill, it will begin to take on a curvature and should not be used in a hydraulic press. The same plate should never be used interchangeably between mill and press. We recommend annealing your metal before rolling to achieve better detail. Made in the USA.



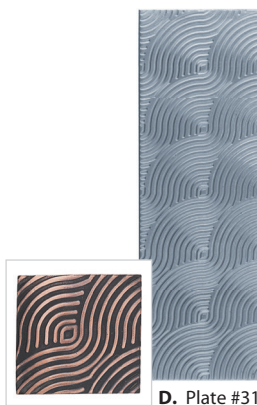
A. Plate #28



B. Plate #29



C. Plate #30



D. Plate #31



E. Plate #32



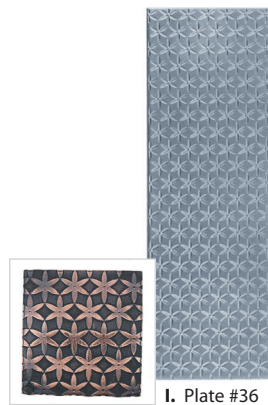
F. Plate #33



G. Plate #34



H. Plate #35



I. Plate #36



J. Plate #37



K. Plate #38

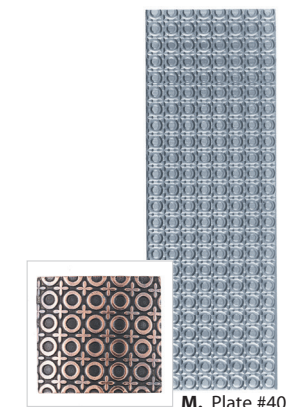


L. Plate #39

Description	Item #	each
A. Plate #28	110-619/28	\$49.00
B. Plate #29	110-619/29	\$49.00
C. Plate #30	110-619/30	\$49.00
D. Plate #31	110-619/31	\$49.00
E. Plate #32	110-619/32	\$49.00
F. Plate #33	110-619/33	\$49.00
G. Plate #34	110-619/34	\$49.00
H. Plate #35	110-619/35	\$49.00
I. Plate #36	110-619/36	\$49.00
J. Plate #37	110-619/37	\$49.00
K. Plate #38	110-619/38	\$49.00
L. Plate #39	110-619/39	\$49.00
M. Plate #40	110-619/40	\$49.00



See our wide selection of rolling mills on pages 199–205, including our most popular rolling mill (113-514).

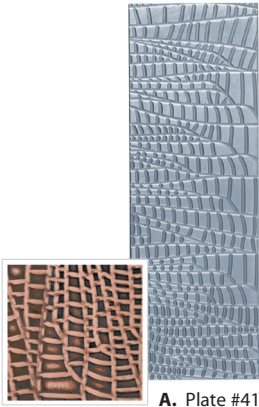


M. Plate #40

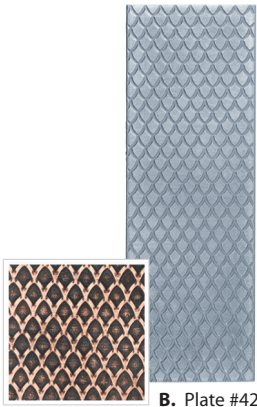
BONNY DOON PATTERN PLATES

Bonny Doon 6" x 2"
Pattern Plates
Made in the USA.

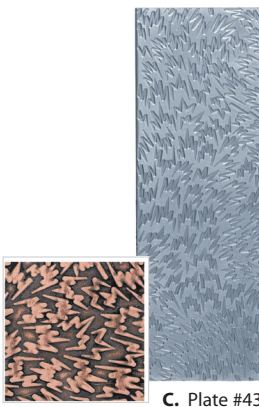
Description	Item #	each
A. Plate #41	110-619/41	\$49.00
B. Plate #42	110-619/42	\$49.00
C. Plate #43	110-619/43	\$49.00
D. Plate #44	110-619/44	\$49.00
E. Plate #45	110-619/45	\$49.00
F. Plate #46	110-619/46	\$49.00
G. Plate #47	110-619/47	\$49.00
H. Plate #48	110-619/48	\$49.00
I. Plate #49	110-619/49	\$49.00
J. Plate #50	110-619/50	\$49.00



A. Plate #41



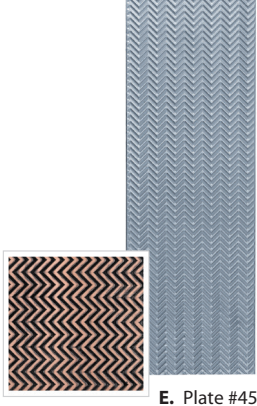
B. Plate #42



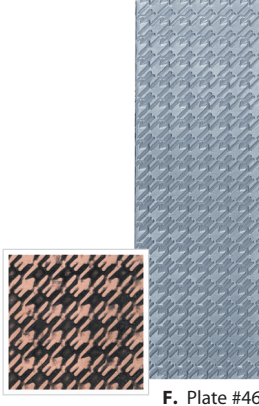
C. Plate #43



D. Plate #44



E. Plate #45



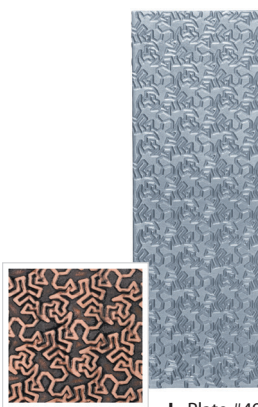
F. Plate #46



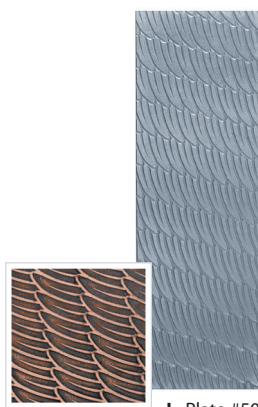
G. Plate #47



H. Plate #48



I. Plate #49



J. Plate #50

Search **How to Transfer Texture with Bonny Doon Plates and a Rolling Mill Video** at [riogrande.com](#) for more information.



Our most-popular 130mm rolling mill!
Find this one and more on pages 199–205.

Durston Rolling Mills

Rolling flawless, detailed patterns onto metal sheet has never been easier. Bonny Doon pattern plates can be used in either a hydraulic press or a rolling mill. Many of Durston's high-quality, hand-powered rolling mills feature a gear reduction box to deliver more rolling power with less physical exertion. Many of their mills also feature wide rollers, allowing ample room for Bonny Doon pattern plates. With so many patterns to choose from, you can crank out professional designs instantly. And if you are in need of a specific pattern, we take custom orders, too.

