

FREEMAN MANUFACTURING & SUPPLY COMPANY



DIE SUPPLY PRODUCT CATALOG

VOL. 1



WWW.DIEBOARD.COM

FREEMAN MANUFACTURING & SUPPLY COMPANY



Our History

115 YEARS OF EXCELLENCE

Freeman's humble beginnings started in 1902, when Bill Freeman resold excess shop materials to other foundry pattern shops in the area, becoming a regional supplier in Toledo, OH.

In the 1960s, Freeman acquired similar companies, becoming the nation's largest tooling material supplier to pattern shops. Over the next few decades, Freeman restructured and expanded before a final move to its 150,000 sq. ft headquarters in Avon, OH.

Freeman then added several warehouses, sales territories, and more companies. After expanding into the Steel Rule Die industry with the acquisition of PSC Global in 2015 and Marco Die Supplies in 2018, Freeman is now poised to offer the industry superior product, technical expertise, and unparalleled service.

Expanding our Footprint

TO BETTER SERVE YOU

Geographic Coverage

Freeman has more than a dozen warehouse locations and technical representatives across North America at your disposal. In addition to our in-house customer service department, our team is ready to help you get what you need fast.

Strategic & Effective Stocking

Freeman's inventory staff constantly monitors data to provide the right amount of products at each of our strategically placed locations across North America. This helps reduce your shipping lead times and costs.



See contact information for all of our locations on page 43 or at www.DieBoard.com/AboutUs

Industry Expertise

200+ YEARS OF EXPERIENCE

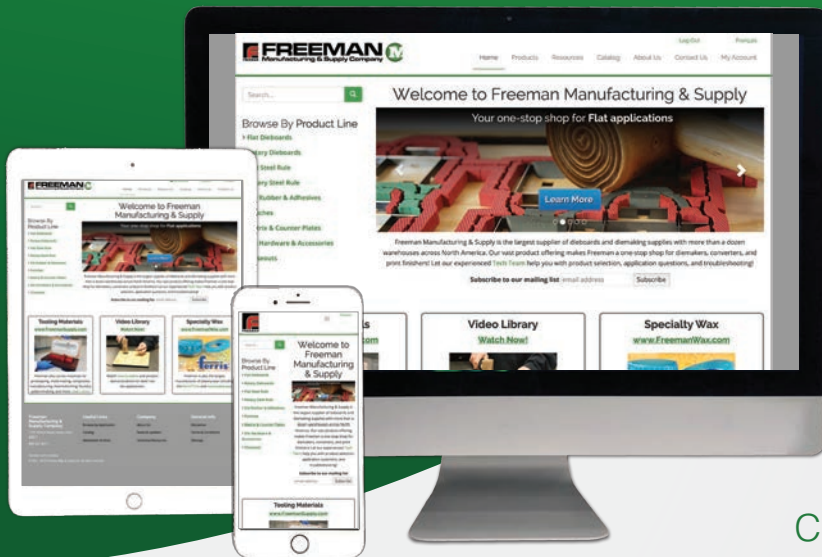
Marco's legendary customer service, multiple decades of diemaking knowledge, and history of innovative solutions has allowed Freeman to help diemakers and converters more than ever.

Key leaders from PSC Global and Marco Die Supplies support our technical team across North America on a daily basis. They manage our product offering, coordinate crucial vendors and shipping partners, and ensure our customers are satisfied with our products and service.

Freeman is dedicated to being your One-Stop Die Supply Shop, and that includes our team of industry experts! Our Tech Team is available to assist with any product inquiry, application question, and more.



OUR DIE SUPPLIES PRODUCT MANAGER & BUSINESS DEVELOPMENT MANAGERS HELP US SERVE YOU!



Digital Innovations

CONTINUOUS IMPROVEMENT

The NEW www.DieBoard.com

Our new website, specifically for Steel Rule Die customers, was unveiled in 2019. We're always adding new functionalities to better serve our customers – from our online ordering system to our technical library, you won't find a more comprehensive website in the industry. These features are available to you NOW:

- ✓ Access 9,000+ products for die makers, converters, and print finishers
- ✓ Build & View Quotes
- ✓ Receive Web Discounts
- ✓ Save Favorite Items

Freeman 360° Membership

Make ordering a breeze by joining Freeman 360° – our FREE upgraded online account for customers. After simply placing one order with us by any method, you'll immediately receive access to the following additional features. See more about Freeman 360° on page 42!

- ✓ View List & Contract Pricing
- ✓ Access Industry Data
- ✓ Build & Place Orders
- ✓ Manage Consignment
- ✓ Track Shipping



Industry Innovations

PROBLEM-SOLVING PRODUCTS

Freeman is proud to have continued PSC Global's and Marco Die Supplies' long history of innovative solutions for the die supply industry.

TruForm™ Composite DieBase

Wiedmann Perma-Plex type diebase with a new dull gray coating for better rubber adhesion



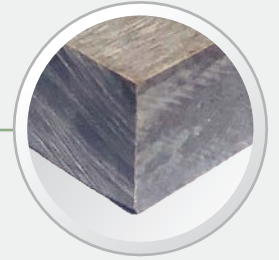
G10™ Lightweight Die Components

Laser-compatible G10 & 31 lb. RenShape Foamcore die components ideal for lightweight dies



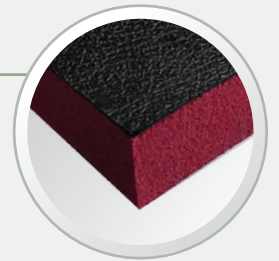
ProForm™ Composite DieBase

An Epoxy Composite Diebase with consistent density for improved laser cutting



ReBounce™ Die Ejection Rubber

The most resilient die ejection on the market for both flat and rotary diecutting with 50% more resilience than competitive microcell ejection materials and 23.1% less compression fatigue after 100,000 impressions.



ReBounce ArmorCoat offers an elastomer top coat that enhances stripping and extends rubber life.



Big Orange Mallets

A durable elastomer head and lightweight fiberglass handle make this mallet a favorite for serrated-rotary diemaking!



Garland Rawhide Safety Mallets

The industry's first Long Head #4 Rawhide – over 2,000 sold and countless fingers saved!



Your One-Stop Die Supply Shop

EVERYTHING YOU NEED FROM START TO FINISH

Dieboards

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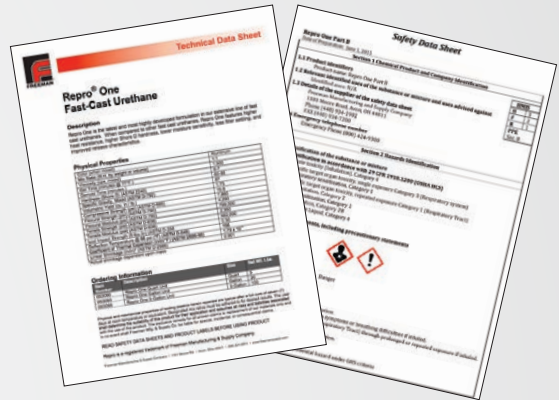
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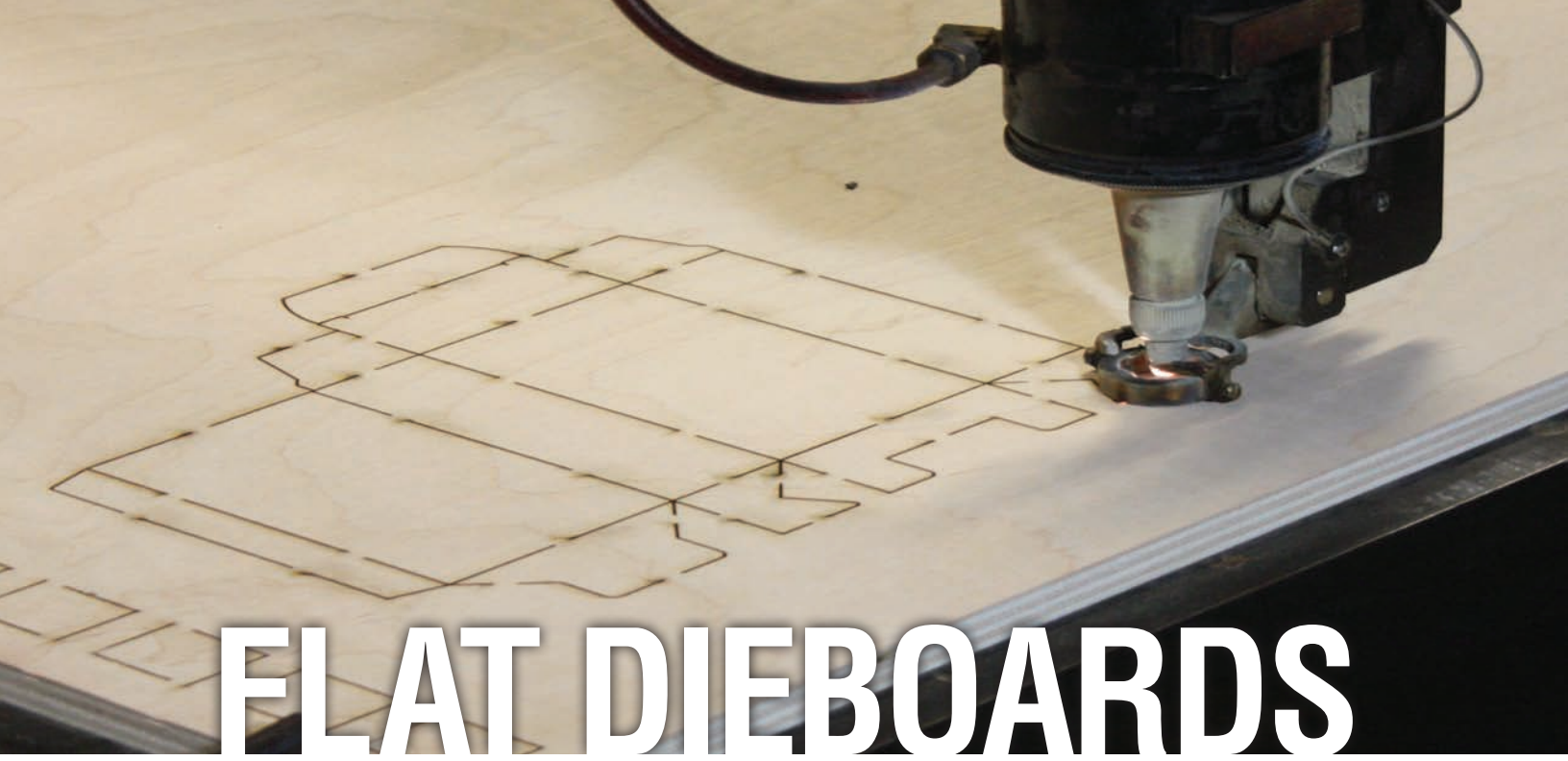
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Find technical documents such as TDS, SDS, charts, diagrams, and more on www.DieBoard.com!



Be the first to hear about new products, exciting innovations, and industry news by signing up for our newsletter at www.DieBoard.com/Newsletter



FLAT DIEBOARDS

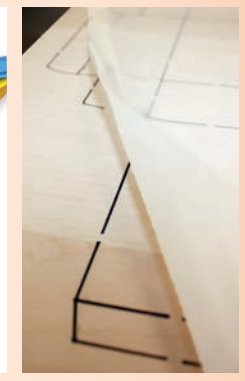
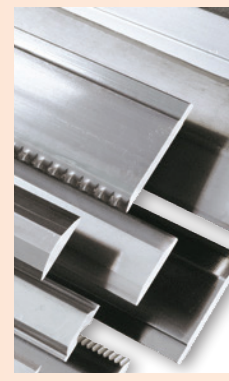
➔ *Freeman Manufacturing & Supply Company has the most comprehensive selection of flat dieboards in the industry.*

Choose from Birch, UV Coated Birch, 7-ply Maple, or High-Strength Composites to suit any diecutting application.

Freeman offers the largest stocked inventory of any supplier, ready for same-day shipping.



Did you know Freeman is your “One-Stop Shop” for rule, die supplies, and hardware?
Check out the other sections to see all of our complementary products.



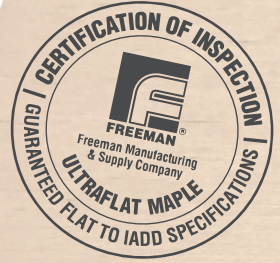
MAPLE DIEBOARDS

Freeman UltraFlat Maple

The industry's flattest Maple Dieboard is guaranteed flat to IADD specifications and certified stamped flat. This board was developed in response to diemakers' and converters' requests for a flatter maple dieboard.

UV Coated Maple offers all the strength and reknifing capabilities of UltraFlat Maple with the added benefit of stability. The moisture-inhibiting UV Coating helps the cutting dies remain matched to their steel counterplates.

- ▶ Thicknesses from 1/4" to 1"
- ▶ 7-ply construction
- ▶ Available with No Coating or UV Coating
- ▶ Guaranteed flat to IADD specs
- ▶ Stands up to long run and heavy duty applications

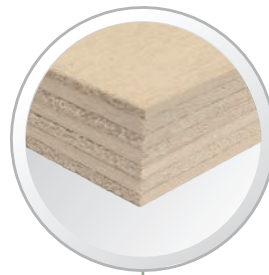


Marco Pure Maple

Marco Pure Maple is the only flat dieboard in the industry using 100% maple. This 7-ply board is extremely flat and is manufactured with a low moisture content for optimum stability and reknifability.

UV Coated Maple offers all the strength and reknifing capabilities of Marco Pure Maple with the added benefit of stability. The moisture-inhibiting UV Coating helps the cutting dies remain matched to their steel counterplates.

- ▶ Thicknesses from 1/2" to 3/4"
- ▶ 100% maple
- ▶ Available with No Coating or UV Coating



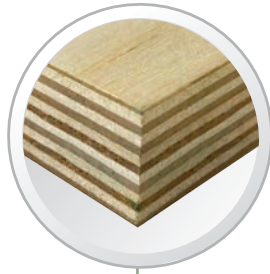
Marco MV Maple

The proven 7-ply construction of Marco MV Maple Dieboard results in a very flat and easily reknifable board. The low moisture content provides optimum stability and its appealing price point makes this board an ideal choice for any application.

- ▶ Thicknesses from 1/4" to 1"
- ▶ Appealing price point
- ▶ No Coating



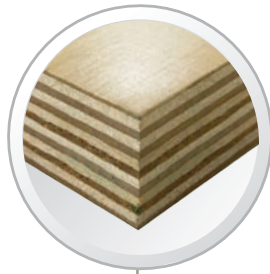
PREMIUM BIRCH DIEBOARDS



LaserPLY™ Advantage Premium Birch

LaserPLY Advantage is a very flat dieboard constructed of a superior grade of birch veneer. It features the industry's tightest thickness tolerance of +/-0.2mm.

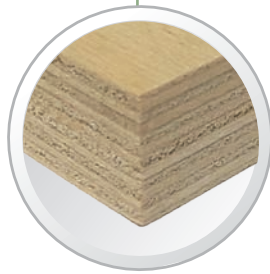
- ▶ Thicknesses from 1/4" to 3/4"
- ▶ Tightest thickness tolerances at +/- 0.2mm
- ▶ Virtually void-free cores for laser consistency
- ▶ Superior packaging: Integral runners prevent fork damage to bottom sheets



UV Coated LaserPLY™ Advantage Premium Birch

UV Coated LaserPLY Advantage is ideal for tooling matched with steel counterplates. The clear UV Coating seals dieboard surfaces to mitigate moisture migration out of the panel. This board offers the ultimate in flatness and stability.

- ▶ Tightest thickness tolerances at +/-0.2mm
- ▶ Virtually void-free cores for laser consistency
- ▶ UV Coating stabilizes cutting dies matched with steel counterplates
- ▶ Excellent for lower stripping boards



Freeman Premium Birch

Freeman's Birch is imported from the finest mills to offer a true dieboard grade of laser-quality birch. From cutting dies to stripping and blanking tools, this board is ready for a variety of applications at a great value.

- ▶ Thicknesses from 3mm to 1"
- ▶ Widest variety of sheet lengths up to 60" x 96"
- ▶ Best value in Birch Dieboard
- ▶ Uniform veneer construction for laser consistency



UV Coated Freeman Premium Birch

Freeman's UV Coated Premium Birch is ideal for tooling matched with steel counterplates. Two coats of UV polymer seal out moisture and stabilize the panel. It provides a completely sealed, smooth hard surface.

- ▶ Ideal for tooling matched with steel counterplates
- ▶ Two coats of UV polymer stabilize the cutting die
- ▶ Widest variety of sheet lengths up to 60" x 96"
- ▶ Smooth finish great for lower stripping boards

COMPOSITE DIEBOARDS

ProForm™ Composite Diebase

ProForm is an epoxy/paper composite diebase developed to offer diemakers superior stability, strength, flatness, and thickness tolerance. It is stronger, flatter and more stable than plywood.

It is highly moisture resistant, as well as heat resistant for thermal die applications. ProForm is CNC machinable and is easily processed on a laser. It offers very consistent kerf across the entire sheet when compared to other epoxy composites on the market.

- ▶ Thicknesses from 1/16" to 1"
- ▶ Special thicknesses available upon request
- ▶ Consistent laser cutting across the sheet
- ▶ Temperature tested to 400°F – great for thermal dies diecutting plastics
- ▶ Ideal for multiple reknifing and extremely long run tooling
- ▶ Suitable for wet environments

TruForm™ Composite Diebase

Freeman's new TruForm is constructed of polyester resin and cellulose fibre. It was developed to offer diemakers and converters a more laser-friendly alternative to the commonly used gray composite board.

TruForm laser cuts with great consistency, has excellent bridge strength, and a much better grab on the steel rule. Ideal for multiple re-knives, thermal dies, steel counter dies, and all your toughest diecutting applications.

- ▶ Superior rule holding ability
- ▶ Economical alternative to Epoxy Composites
- ▶ Laser cuts extremely well
- ▶ Temperature tested to 400°F – great for thermal dies diecutting plastics
- ▶ Sealed surface with matte gray finish easily accepts die ejection adhesives
- ▶ Not suitable for wet environments

Freeman Lightweight Composite Diebase

Freeman's laser-compatible components are used to create a 3-ply lightweight completely stable steel rule die. Sold separately, the sheets of Freeman Laser-G10 and RenShape 31 lb. foam are laser compatible for fast easy assembly.

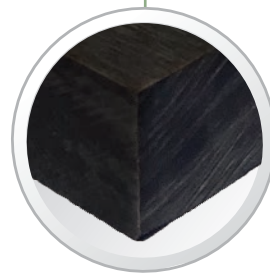
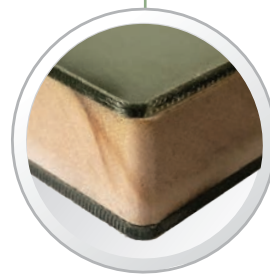
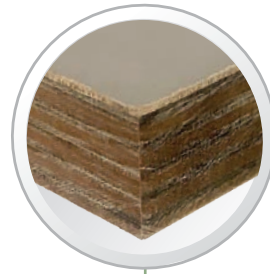
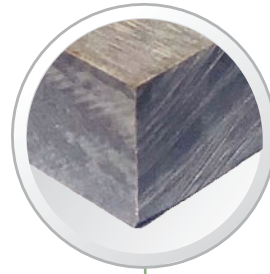
The finished die is completely stable and very lightweight – a highly desirable trait among Bobst press operators and safety-minded managers. Pair it with our stainless steel thin plates for an unbeatable combination.

- ▶ **SKU #085872:** 1/4" thick x 48" x 96" HD Urethane Foam
- ▶ **SKU #075864S:** 1/2" thick x 48" x 96" HD Urethane Foam
- ▶ **SKU #081984:** 0.062" thick x 48" x 72" Laser G10 Laminate

Marco Black Board

Marco Black Board is a phenolic/paper solid composite and is machinable and stable. It is not laser-friendly, but it is an excellent material for use as mounting blocks underneath embossing and debossing.

- ▶ **Thickness:** 5/8"
- ▶ **Width:** 48"
- ▶ **Length:** 72"
- ▶ **Other Thicknesses Available**





ROTARY DIEBOARDS

➔ *Freeman Manufacturing & Supply Co. stocks over 100 sizes of rotary dieboard in a multitude of diameters. Choose from three different high-quality mills, all with the tightest ID tolerances.*

Freeman also offers the largest selection of veneer species for your most demanding applications – Hard Maple, 100% Beech, Red Maple, and XP HDO. Most boards are in stock and ready for same-day shipping.



Did you know Freeman is your “One-Stop Shop” for rule, die supplies, and hardware?

Check out the other sections to see all of our complementary products.



Marco Premium Rotary

Marco Premium Rotary is the only rotary in North America constructed of 100% Maple veneers throughout! This proven construction provides you with a smooth Hard Maple face, increased bridge strength, and the toughest dieboard for your most demanding diecutting applications. Each board is hand-inspected for ID tolerance and guaranteed to IADD specifications.

- ▶ Diameters from 6½" to 38"
- ▶ Lengths from 40" to 120"
- ▶ Thicknesses of ½" or ⅝"
- ▶ Available in C-Max Long Wrap

Freeman Maple Rotary 2.0

Freeman Maple Rotary Dieboard 2.0 is a strong and stable rotary dieboard. It is constructed of Maple faces, with maple or other hardwood inner plies. It offers reliable IDs and consistent laser cutting. Recent improvements at the mill have further stabilized the IDs of this proven dieboard.

- ▶ Diameters from 6⅞" to 26"
- ▶ Lengths from 41" to 120"
- ▶ Thicknesses of ½" or ⅝"
- ▶ Available in Long Wrap

Penta Box Prime™ Beech Rotary

Imported Penta Box Prime features a unique 11-Ply 100% European Beech construction. This superior dieboard is designed for long-run and heavy-test board applications. It is also renowned for stability and ID tolerance. Freeman is the exclusive distributor for the USA.

- ▶ Diameters from 10⅛" to 29¾"
- ▶ Lengths from 51" to 120"
- ▶ Designed for long-run tooling
- ▶ 11-Ply 100% Beech Construction
- ▶ Freeman exclusive

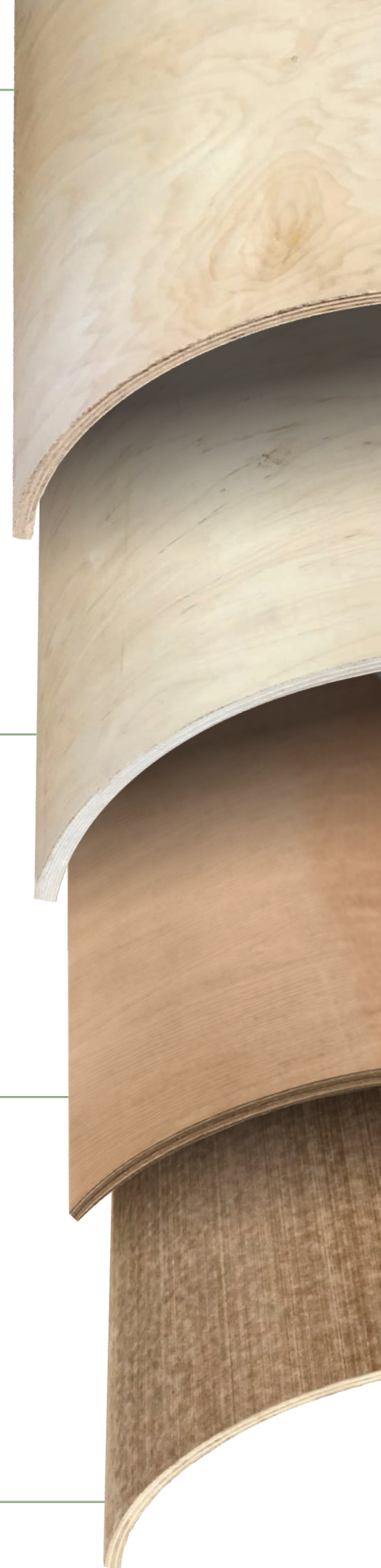
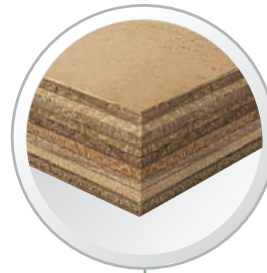
Freeman XP Rotary



THE HDO OVERLAY CONTAINS
27% RECYCLED MATERIAL!

Freeman XP Rotary Dieboard is constructed utilizing a high density overlay face and back. The HDO faces provide a surface layer that improves dimensional stability and is 35-50% more dense than hardwood veneer. The Maple and other hardwood inner plies add strength while the smooth surface is helpful on Serrapid dies. It is priced similar to wood veneer rotary dieboards for better performance at a great value.

- ▶ Diameters of 7", 10⅛", 14⅜", 19⅜"
- ▶ Lengths from 41" to 120"
- ▶ Available in Long Wrap
- ▶ Excellent for Serrapid Rapid Mount Systems
- ▶ HDO provides additional stability and uniform appearance

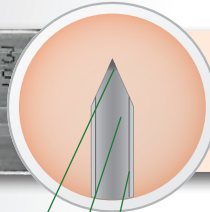


Freeman offers a comprehensive line of flat cutting and creasing rule for a multitude of diecutting applications. These are our most popular and highest quality flat rules offered by Bohler™, Martin Miller/Viking™, and Helmold™.

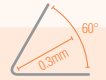


Bohler Universal

bohlerstrip 23.80/.937/23.80/.937/23 UNIVERSAL-CF 23.80X0.71-.9



Thickness 1.5pt, 2pt, 3pt, 4pt
Heights 0.918" – 2.00"
Bendability 2pt bends 60° max w/Radius of 0.3mm



58 HRC cutting edge

35 HRC body

Soft & ductile skin

Bohler Universal cutting rule is Voestalpine's #1 selling rule, featuring a soft bendable body with a hardened knife edge. The excellent bending properties and years of proven long runs on press make this rule your ideal choice for most applications. Available in shaved, ground, and polished.

✓ Paperboard

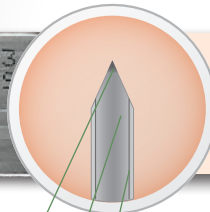
✓ Corrugated board

✓ Labels

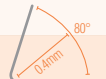
✓ Postcards

Bohler Universal 60

bohlerstrip 23.80/.937/23.80/.937/23 UNIVERSAL-60 23.80X0.71-.9



Thickness 1.5pt, 2pt, 3pt, 4pt
Heights 0.918" – 3.00"
Bendability 2pt bends 80° max w/Radius of 0.4mm



58 HRC cutting edge

45 HRC body

Soft & ductile skin

Bohler Universal 60 incorporates the harder body of Bohler Top with the proven edge hardness of Bohler Universal. The result is higher rule stability and extended service life. Available in shaved, ground, and polished.

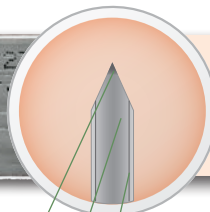
✓ Thicker materials

✓ Puzzles

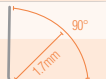
✓ Hard & durable body for tough applications

Bohler Universal 75

bohlerstrip 23.80/.937/23.80/.937/23 UNIVERSAL-75 23.80X0.71-.9



Thickness 2pt, 3pt
Heights 0.918" – 2.00"
Bendability 2pt bends 90° max w/Radius of 1.7mm



60 HRC cutting edge

51 HRC body

Soft & ductile skin

Bohler Universal 75 has a harder body than Universal 60 with the same proven edge hardness of all Universal rules. The 51 HRC body offers even more stability for cutting heavy materials. Available in shaved, ground, and polished.

✓ Sandpaper

✓ Gaskets

✓ Plastics


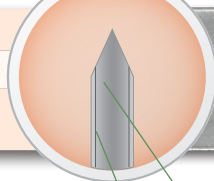
✓ Laminates

✓ Felt

STEEL RULE

Bohler Top

Thickness	1.5pt, 2pt, 3pt, 4pt
Heights	0.937" – 2.00"
Bendability	2pt bends 80° max w/Radius of 0.3mm

45 HRC edge & body


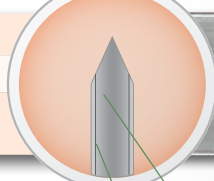
Soft & ductile skin

Bohler Top is an economical through-hardened cutting rule that is best suited for shorter runs and clicker die applications. Top offers good bendability and stability of a harder body. Available in shaved bevel finish.

- ✓ Clicker dies
- ✓ Paperboard
- ✓ Corrugated board
- ✓ Shorter runs

Bohler H-75

Thickness	2pt, 3pt
Heights	0.918" – 1.50"
Bendability	2pt bends 85° max w/Radius of 1.7mm

51 HRC edge & body


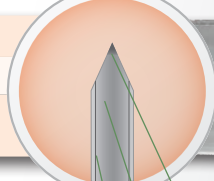
Soft & ductile skin

Bohler H-75 is through-hardened similar to Top, but even harder at 51HRC throughout. The stiffer body reduces flex and is ideal for use on thicker materials like cork, rubber and felt. Available in shaved bevel finish.

- ✓ Rubber
- ✓ Gaskets
- ✓ Felts
- ✓ Reduced flex & increased stability

Bohler Extra

Thickness	2pt, 3pt
Heights	0.937"
Bendability	2pt bends 90° max w/Radius of 1.7mm

61 HRC cutting edge

40 HRC body

Soft & ductile skin

The secret of this problem-solving rule is an extra-deep hardening just beyond the tip that supports the knife edge, resulting in extremely long runs. The 42° bevel penetrates plastics with ease, yet lasts because of the extra-deep hardening. Available in shaved, GX ground, and polished.

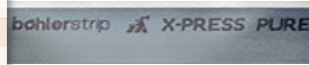
- ✓ Composites
- ✓ Plastics
- ✓ Economical alternative to Plast-X

BOHLER PROBLEM-SOLVING RULE

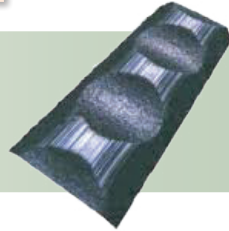
Bohler X-Press Pure

Bohler X-Press Pure is a patented self-leveling rule, designed for quick make-ready, and extremely long runs. The micro-serrated rule back deforms under pressure and self-levels. This reduces wear on the knife edge and improves knife service life.

Hardness	Body 35 HRC, Edge 58 HRC
Thickness	2pt, 3pt
Height	23.8mm
Bevel Angle	53°, 42°
Bevel Finish	Shaved, Polished, Supreme



- ✓ Patented self-leveling design
- ✓ Quicker make ready
- ✓ Extremely long runs



Plast-X

Bohler Plast-X was developed for diecutting PET, PE, PVC, PP, Blister Packs and Thermoplastics. Utilizing razorblade technology, the knife edge undergoes a slow-feed wet grind. This results in a razor-sharp rule for plastics that reduces friction and cutting force. The harder



Hardness	Body 40 HRC, Edge 60 HRC
Thickness	2pt, 3pt
Height	23.8mm
Bevel Angle	42°, 53°

body and extra deep hardening underneath the extremely sharp knife edge is why this rule drastically improves diecutting performance on plastics.

- ✓ Ultimate rule for plastics
- ✓ Extra-deep edge hardening
- ✓ Razorblade technology - slow-feed wet grind
- ✓ Extremely sharp cutting edge

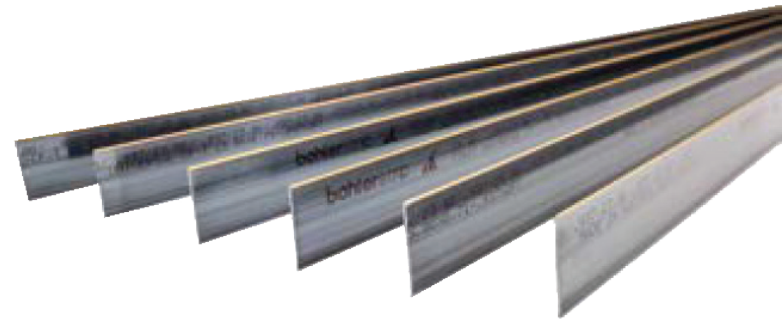
BOHLER COATINGS



Bohler Universal Supreme Dust Killer Coating

Bohler Universal Supreme features a molybdenum anti-friction coating on the knife edge. This coating fills microscopically small pores which reduces friction and ultimately reduces dusting. Additional benefits include prevention of glue adhering to rule when diecutting labels and extended knife life.

- ✓ Reduced dusting
- ✓ Label diecutting
- ✓ Reduced friction on diecut material
- ✓ Extended rule life



Bohler Titanium Nitride (TiN) Coating

Bohler TiNiT rule is coated with a thin layer of Titanium Nitride. Titanium Nitride is a gold colored ceramic material that is 4 times harder than the original steel knife edge. The TiN coating dramatically extends knife life without affecting bendability or cutting profile.

- ✓ Same bendability
- ✓ Extends knife life
- ✓ Increased wear against diecutting abrasives
- ✓ Offers tremendous productivity gains

BOHLER CREASING RULE



Folding box design and the precision of final products are becoming more demanding, which requires the application of high quality creasing rules with tight tolerances.

Bohler Single Round Creasing Rule

Bohler Single Round Creasing Profiles have a perfectly radiused profile and very tight tolerances with a flat back.

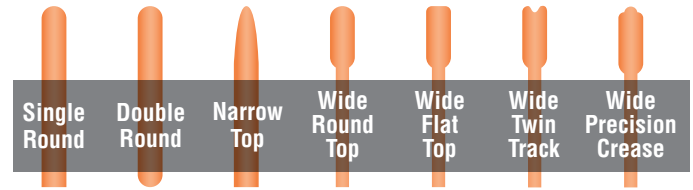
Bohler Double Round Creasing Rule

Bohler Double Round Creasing Profile have a perfectly radiused profile and very tight tolerances.

Bohler Specialty Profile Crease

Wide variety of crease profiles to solve difficult diecutting applications.

Creasing Rule Profiles



To see all creasing rule heights and types, visit our website at www.DieBoard.com.

BOHLER SPECIALTY RULE

Bohler Perforating Rule (Cut-Skip)

Bohler Perforating Rule offer a wide range of thicknesses and tooth-gap combinations.



Bohler Stripping Rule

Bohler Stripping Rule are the optimum solution for ejecting the waste material after the die-cutting process.



Bohler Combination Rule (Cut-Crease)

With cut-crease rule, there is no need to insert individual parts of cutting and creasing rule. Bohler Cut-Crease rule are produced in standard punched (CF), or in round machined executions for high-quality jobs (CF / FT and CF / SR).



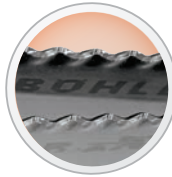
Bohler Spacer Rule

Spacer Rule fill gaps between steel rule and wider laser cuts within the die board or backfill unwanted laser cuts within an existing die. The rule show a square cross sectional profile. Bohler Spacer Rule are available in all common wood sizes used in the die making industry.



Bohler Wave Edge Rules

The main application for wave edge rule is in the production of safety cutting edges on solid and corrugated board boxes, to avoid injuries during box handling.



SPEEDI-TEAR™ RULE*

Speedi-Tear™ is the absolute best perf rule for knock-out panels on Shelf-Ready Packaging. Scientific principles applied to tooth and gap design results in an easy rip-out panel for shelf displays, yet maintains critical carton strength for shipping pallets of stacked boxes.

- ✓ #1 Requested Tear-Out rule!
- ✓ Scientific tooth/gap design
- ✓ Panels rip-out easily and cleanly
- ✓ Unopened cartons maintain box strength for stacking



A FREEMAN EXCLUSIVE!

Speedi-Fold™ solves the problem of difficult to fold box flaps without compromising box strength integrity.

Speedi-Flare™ solves the problems associated with standard 1/8" x 1/8" and 1/4" x 1/4" perf. It provides a more refined fold and tear.

Speedi-Micro Nick™ is a 2pt rule with .007" nicks. Available in 4, 8, or 16 nicks per inch.

Speedi-Micro Perf™ is the best on the market. Extra deep .030" spaces allow for perforating thicker stocks. Bohler base steel is of highest quality. Available in 15, 25, 30, 36, 50, 60, and 70 teeth per inch.

*Not a voestalpine product.



MARTIN MILLER RULE

▶ *Plasma technology: Martin Miller's secret. A few seconds at a temperature of approximately 10,000°C ensures a precise hardening process, without affecting the body hardness like other methods do. The result: extreme edge hardness for extreme rule lifetime.*

Martin Miller Cutting Rules

Martin Miller cutting rules are renowned for bendability and sharpness.



MM Style

- ✓ Similar to Bohler Top for shorter runs where a stiffer body rule is needed
- ✓ Through hardened rule with either 40 or 44 HRC throughout
- ✓ Clicker dies



HF Style

- ✓ High Frequency edge hardening process mimics Bohler Universal
- ✓ 34 or 40 HRC body, 57 HRC tip
- ✓ Edge hard rule with great bendability



HP Style

- ✓ Plasma edge hardening for longer life and great bendability
- ✓ 34 or 40 HRC body, 60 HRC tip
- ✓ Long run diecutting



HP+ Style

- ✓ Extra Deep Plasma edge hardening fully supports the rule tip for extreme life
- ✓ 40 HRC body, 67 HRC tip
- ✓ Extremely long runs

Martin Miller Glue Flap Rule

This unique perf profile roughens the glue flap to achieve better adhesion.



Martin Miller Stripping Rules

Stripping rule is used in place of stripping pins. The high rule has tiny teeth that grab the scrap for dynamic stripping.



Did You Know?



Voestalpine (Bohler/Martin Miller) manufactures their own steel and controls the process from iron ore to steel rule. This ensures the absolute highest quality and consistency, and why Voestalpine rule is the market leader worldwide.

The in-house R&D center includes state-of-the-art production technology and expert staff. This ensures you receive the best problem-solving steel rule solutions for your applications.

HELMOLD RULE

Helmold Flat 65 Hard, Ultraflex, and Helmex Rule

These through-hardened cutting rule have the same body and edge hardness. They are all made with a specially formulated steel to produce an extremely durable cutting edge and enough ductility to create sharp bends. They offer good life and are an excellent all-purpose utility rule. Available with bevels of 42, 53, or 60 and shaved edge, ground edge, or buffed edge.



Helmold Flat 70 Hard Rule

This rule is made with a specially formulated steel to produce an extremely durable cutting edge and enough ductility to create sharp bends. Available with bevels of 42, 53, or 60 and shaved edge, ground edge, or buffed edge.



Helmold Flat 80 Hard & 85 Hard Rule

These products are used in applications where no bending is needed. These though-hard cutting rule have excellent wearability and are mostly used as slitter blades and where other straight cuts are needed. Available with bevels of 42, 53 and 60 and shaved edge, ground edge, or buffed edge.



Helmold Flat Lazer Blade Rule

This premium rule offers a softer body with a hardened edge, a great combination for many Kiss Kut applications for cutting paper or other substrates. They all offer good bendability as well as long wearing edge sharpness, which allows for less down time on the press. Available with bevels of 42, 53, or 60 and shaved edge, ground edge, or buffed edge.

Lazer Blade *Good for long runs*



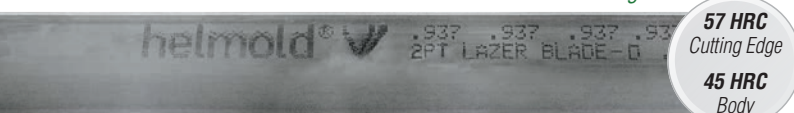
Lazer Blade H *Good for harder materials*



Lazer Blade D *Deeper edge hardening, good for long runs*

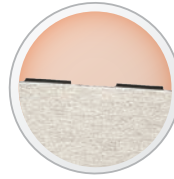


Lazer Blade HD *Good for harder materials and long runs*



Helmold Creasing Rule

Helmold Creasing Rule is available in both double round or single round. The smooth radiused top produces well defined scores and inhibits board cracking. High-quality height tolerances also mate perfectly with matrix and counterplates to ensure perfect folds in paperboard and corrugated packaging. Helmold Illinois is able to manufacture custom heights of crease that may not be stocked in our Bohler line.



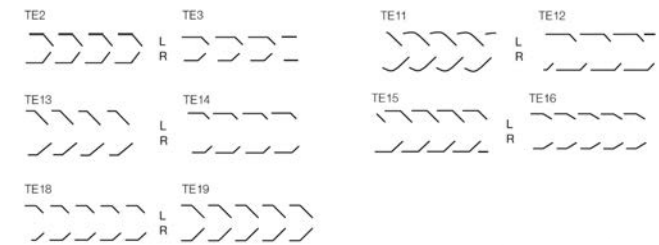
Helmold Perf Rule

Freeman stocks over 100,000 ft. of Helmold perf rule in a wide variety of tooth configurations. This high-quality rule is used in folding carton, corrugated, business forms, and label industries. The superior high-carbon steel results in longer press life, and an advanced manufacturing process produces a clean precise space or crease. Helmold can manufacture almost any configuration of perf. *To see our vast inventory of in-stock perf, visit our website, www.DieBoard.com.*

For the business form and carton industries		For the corrugated industry (Fractional tooth width and spacing)	

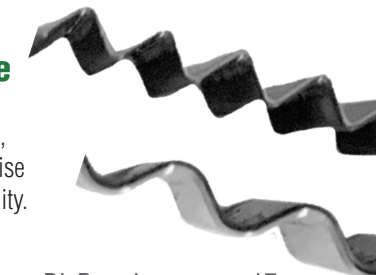
Helmold Tear-Edge Zipper Rule

Tear-edge, also known as Zipper rule, is used to produce the "zipper opening" in packaging like facial tissue, aluminum foil, and plastic garbage bags. Helmold Zipper rule is bent from the bevel to the base, making it extremely strong. *For full dimensions and a printable actual size PDF, visit our website, www.DieBoard.com.*



Specialty Helmold Wave Rule

Helmold's Wave Rules feature a wave shape over the complete height of the rule, giving it a very exact form and a very precise line in the center and a much higher stability.



Converters love the cut quality and long life of Bohler rotary rule. The thermal and mechanical stress relief process during manufacturing prevent fatigue cracks. The Bohler-produced steel, special edge hardening options, and fine tooth grinding make these problem-solving rotary rule the best in the industry. Freeman's deep inventories mean you can get what you need when you need it.



Bohler USC 8/10

- ✓ USC 10 – most versatile 10 tooth
- ✓ USC 8 – for tough, thick board

USC 10 is our most popular and versatile cutting rule. The 10-tooth geometry cuts extremely well on a variety of corrugated materials.

USC 8 has a slightly more aggressive tooth geometry, that permits minimal cutting pressure on thicker board and doublewall. The barbed tips and sharp gullets ensure easy penetration of the toughest materials.

Bohler US 8/10

- ✓ Leaves clean cut on product edge
- ✓ True center bevel for dimensional accuracy

US 10 is most commonly known as "Clean Cut". US 10 was designed to leave a very clean cut on the product. One side is shaved smooth, and the other side has ground tooth geometry. Bohler's clean cut is still a true center bevel for accurate diecutting and dimensionally accurate boxes on multi-out dies.

US 8 offers the same clean-cut geometry as US 10 but in an 8-tooth for heavy test board. Even though this rule has a different geometry on each side, the tip is still precisely centered, which enables dimensional accuracy when cutting multiple out designs.

Bohler SWC 8/10

- ✓ Euro Cut geometry for minimal pressure
- ✓ Reduced gullet and anvil wear

SWC 10 has a European tooth geometry commonly called Euro Cut. The shallow gullet and radiused tip performs superbly on singlewall corrugated, (especially on long lead and trail edge knives), and reduces anvil wear.

SWC 8 offers the same Euro Cut tooth design for cutting heavyweight double and triplewall corrugated with minimal pressure. The shallow gullet reduces pressure and ultimately anvil wear.

STEEL

RULE

Bohler STC 8/10/12

- ✓ STC 8 – deep V tooth penetrates tough board
- ✓ STC 10 Martin Miller – heavier singlewall board
- ✓ STC 12 – standard 12T for lightweight board & foam



STC 8 has a very sharp V tooth that easily penetrates doublewall and heavy test board.

STC 10 from Martin Miller is for heavier singlewall.

STC 12 is a standard center bevel cutting rule. This rule provides an enhanced finished product edge appearance for both light-weight singlewall and microflute corrugated board. This profile is also recommended for cutting a variety of foam materials.

Bohler ProCut

- ✓ Proven USC tooth geometry – sharp but not too aggressive
- ✓ Harder body to prevent cracking and rollover
- ✓ Designed for produce boxes and heavy test board
- ✓ ProCut 10T – 35 HRC body, 49 HRC edge
- ✓ ProCut 8T – 40 HRC body, 49 HRC edge



ProCut was developed specifically to solve problems associated with diecutting produce boxes. Utilizing the proven USC 10 tooth geometry, with fine ground bevels and radiused gullets, Bohler strengthened the rule with a harder body, to prevent roll-over and cracking. ProCut is the industry's go-to problem-solving rule for heavy test corrugated. Available in 10 tooth and 8 tooth.

Speedi-Tear™ Products*

- ✓ #1 Requested Tear-Out rule!
- ✓ Scientific tooth/gap design
- ✓ Panels rip-out easily and cleanly
- ✓ Unopened cartons maintain box strength for stacking



Speedi-Tear™ is the absolute best perf rule for knock-out panels on Shelf-Ready Packaging. Scientific principles applied to tooth and gap design results in an easy rip-out panel for shelf displays, yet maintains critical carton strength for shipping pallets of stacked boxes.

Speedi-Fold™ solves the problem of difficult to fold box flaps without compromising box strength integrity.

Speedi-Flare™ solves the problems associated with standard $\frac{1}{8}$ " x $\frac{1}{8}$ " and $\frac{1}{4}$ " x $\frac{1}{4}$ " perf. It provides a more refined fold and tear.

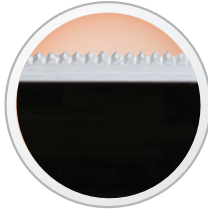
Speedi-Break™ is a Superior Bundle Breaker Rule for high-speed corrugated box makers. Replaces common rule between multi-outs.

**Not a voestalpine product.*

BOHLER ROTARY CUTTING RULE

Bohler SFST 12

SFST 12 is the original 12-tooth side face rule profile for rotary diecutting. It is recommended for cutting lightweight singlewall and microflute. SFST 12 has also improved stripping on high-speed EVOL dies.



- ✓ Side bevel 12-tooth
- ✓ Improves stripping on EVOL dies
- ✓ Lightweight board

Bohler SFST 8/10

SFST 8 cuts heavier corrugated stock and SFST 10 cuts medium corrugated stock. Both rule can be used in slots or tight areas allowing more room for ejection rubber, as well as scrap knives or lead edge as the bevel helps the product release easier for the die. They can also be used with EVOL dies on higher test boards.



- ✓ 8-tooth or 10-tooth
- ✓ Improves stripping on EVOL dies
- ✓ Medium & Heavy Corrugated

BOHLER ROTARY CREASING RULE

Folding box design and the precision of final products are becoming more demanding, which requires the application of high quality creasing rules with tight tolerances. These rule offer very smooth crease head surfaces, perfectly radiused profiles, smooth transitions from radiused profile to side faces, minimum eccentricity, and minimum height and thickness tolerances.

Bohler Single Round Crease

- ▶ Perfectly radiused profile
- ▶ Superior height tolerances

WFT Wide Flat Top

- ▶ Flat Top provides crisp scores and rollovers
- ▶ 3/6, 3/8, 4/6, 4/8

WTT Wide Twin Track

- ▶ Creates a double score on E-Flute
- ▶ Solves problems with Litho Labels
- ▶ 3/8, 4/8

WRT Wide Round Top

- ▶ Round Top less prone to cracking
- ▶ 6/3, 8/3, 6/4, 8/4

WPC Wide Precision Crease

- ▶ Beaded top excellent with corrugation direction
- ▶ 3/8, 4/8

Bohler's unique 14/4 crease has proven excellent on doublewall and triplewall corrugated. It scores deep and wide without cracking, and it greatly helps with folding.

14/4 Wide Round Top & 14/4 Wide Flat Top

- ▶ Developed for double wall and triple wall
- ▶ No cracking
- ▶ Available in straight and curved

8/4 RWC Rotary Wave Crease

- ▶ Improves folds w corrugation
- ▶ Less costly
- ▶ 8/4

BOHLER ROTARY SPECIALTY RULE

Bohler ST 5

ST 5 is a 5-tooth rule with a non-ground side that improves scrap ejection. It is most often used to accurately cut honeycomb and foam. The profile is precision ground for easy penetration. It can also be used for nicking and removable windows in corrugated containers.



- ✓ 5-tooth side bevel improves scrap ejection
- ✓ Ideal for honeycomb & foam
- ✓ Can be used for nicking & tear-out windows

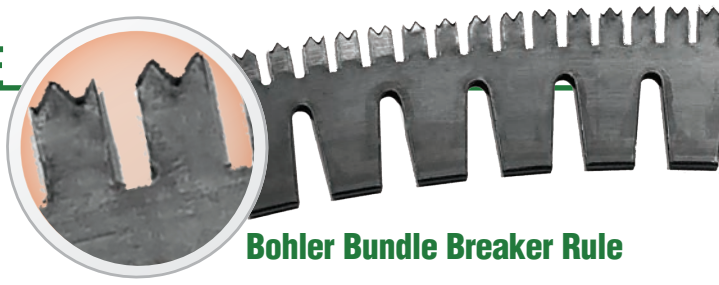
Bohler ST 20

ST 20 is a 20-tooth rule designed for cutting E flute and microflute corrugated board. The 20 teeth per inch profile provides a very clean product edge.



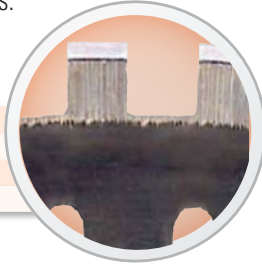
- ✓ 20-tooth for E & F flute
- ✓ Leaves very clean product edge

BOHLER ROTARY PERFORATING RULE



Bohler Non-Serrated Perforating Rule

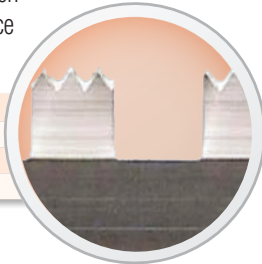
Bohler Non-Serrated Perforating Rule are made from center bevel rule with a wide variety of tooth/gap configurations. Each tooth is non-serrated, meaning the cutting rule does not have small teeth.



Thickness	4pt
Height	0.937" – 1.00"
Configuration	1/4" x 1/4", 3/8" x 3/8", 1/2" x 1/2"
Gap Depths	3/16" & 1/8"

Bohler Serrated Perforating Rule

This profile offers STC 12 teeth per inch. Serrated perforation is recommended for soft anvil diecutting and when the tooth is 6mm (1/4") or larger. This helps reduce crushing and flaking on the finished product.



Thickness	4pt
Height	0.937" – 1.00"
Configuration	1/4" x 1/4", 3/8" x 3/8", 1/2" x 1/2"
Gap Depths	3/16" & 1/8"

Bohler Bundle Breaker Rule

Bohler Bundle Breaker Rule is a pre-nicked rotary rule that reliably holds multiple outs together. Available in Fine, Standard, Strong, and Heavy.

Fine Bundle Breaker

- ✓ 0.045" nick every 1/4"
- ✓ 18% hold is the lightest hold configuration

Strong Bundle Breaker

- ✓ 0.045" nick every 1/8"
- ✓ 36% hold for shorter common knives and heavier board

Standard Bundle Breaker

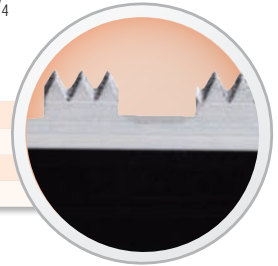
- ✓ 0.055" nick every 1/4"
- ✓ 22% hold for a wide range of corrugated materials

Heavy Bundle Breaker

- ✓ 0.055" nick every 1/8"
- ✓ 44% hold provides a firm hold on any job

Bohler Cut Crease Rule

This rule is made from 12-tooth rotary like cut/skip, except with a shallow depth of gap. The shallow gap is crease height, so it scores the board in the gaps between the teeth for a better fold, i.e. 1/4" x 1/4" 0.970" cut / 0.860" crease. It improves folding when perforating in the corrugated flute direction.

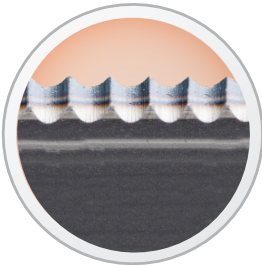


Thickness	4pt
Height	0.937" – 1.00"
Configuration	1/4" x 1/4", 3/8" x 3/8", 1/2" x 1/2"
Cut & Crease heights	vary by corrugated board

MARTIN MILLER ROTARY RULE

Martin Miller CF/CC 14

Commonly known as Clean-Cut and similar to Bohler US 10 CF/CC 14. This 14 tooth was designed to leave a very clean cut on the product. One side is shaved smooth, and the other side is ground tooth geometry. This rule is a true center bevel for accurate diecutting and dimensionally accurate boxes on multi-out dies.



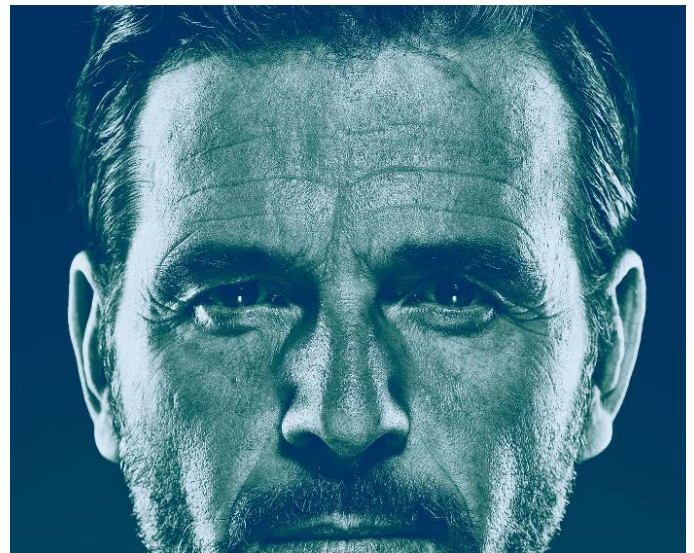
- ✓ Leaves clean cut on product edge
- ✓ True center bevel for dimensional accuracy
- ✓ Superior Voestalpine steel doesn't crack like other rule brands

Shallow Profile

Also known as Martin Miller 14T Fine Cut, this rule has a shallow gullet. It is renowned for its problem-solving ability on many substrates, including foam, plastic corrugated, automotive liners and carpets, and more. It may be used in flat diecutting on roller-bed presses.



- ✓ Requires less impression to cut
- ✓ Ideal for foam, plastic corrugated, automotive materials
- ✓ Also great for flat dies on flat-bed roller presses



Did You Know?

Bohler / Martin Miller rotary rule undergoes a thermal and mechanical stress relief to avoid fatigue cracks?

Combined with Bohler-produced steel, special edge hardening, and fine tooth grinding, it's easy to see why Bohler /Martin Miller is the absolute best rotary rule you can buy.

ReBound

MICROCELL



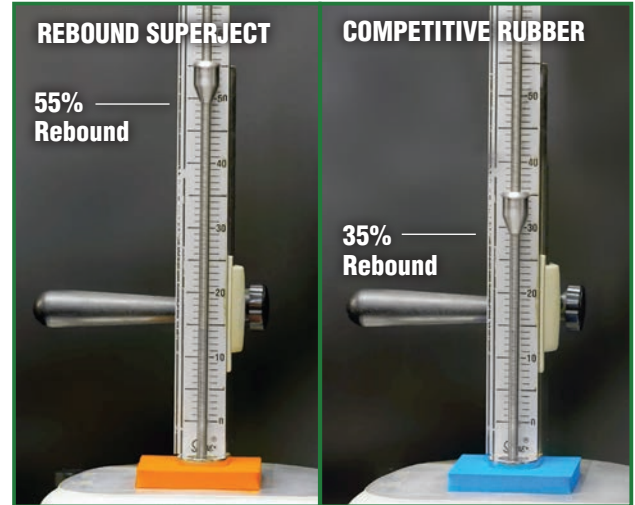
A full line of Microcell ejection materials exclusive to Freeman. The ReBound™ Rubber line offers superior resilience and long life.

REBOUND™ SUPERJECT™

Freeman's **ReBound SuperJect** is the newest and most exciting die ejection to hit the market in years. **ReBound SuperJect** is a superior microcell urethane ejector with over 50% more resilience or "rebound" than its microcell competitors.

Ideal for flat and rotary die ejection, ReBound's performance has proven exceptional with very low compression fatigue or degradation of cell structure. It also offers high tear strength and long life on press.

ReBound SuperJect has over **50% more resilience** than competitive microcell ejection materials and exhibits **23.1% less compression fatigue** after 100,000 impressions.



REBOUND™ ARMORCOAT™

ReBound
ARMOR

ReBound ArmorCoat is a brand new development that utilizes the tremendous energy return of ReBound SuperJect with the addition of a patent-pending top coat. The Armor coating adds additional life on press as well as enhanced stripping characteristics.

REBOUND™ FR-75™

ReBound FR-75 offers flat diemakers a higher-performing ejector for high-speed Bobst applications. Long-run tooling at full speed requires die ejection that will outlast the knife and not dry out in the storage rack. This new rubber excels at this but also provides a quicker return to full height than any other 75 durometer ejector!

REBOUND™ NO-CRUSH™

ReBound
NO-CRUSH

ReBound No-Crush is a super-soft ejection rubber with very high tear strength that was designed to eliminate unwanted crush marks on corrugated board. It applies a soft touch on corrugated cartons yet works best when paired with ReBound SuperJect and Armor Coat in the scrap areas. These three products work in concert to create a dynamic stripping differential for the perfect rotary cutting die.

REBOUND™ DURAJECT™

Available with ArmorCoat for extended life on press!

ReBound DuraJect was developed as a USA made alternative to the very expensive imported Vulkollan®-type ejection materials. DuraJect is the most dense version of ReBound and is excellent for slots and tight areas on both flat and rotary dies. Extra-firm yet highly resilient, it is also perfect for lead and trail edge trim breaker rubber.

Did you know about Freeman's Better-Than-Money-Back Guarantee?

Try a sheet of ReBound with confidence using Freeman's Better-Than-Money-Back guarantee! This line of microcell rubber is guaranteed to perform better than competitive rubber or more than your money back! Contact your local Technical Account Representative to order your ReBound Ejection Rubber worry-free!

MICROCELL EJECTION RUBBER



Diansuply RD-73

Diansuply RD-73 is a red microcell firm ejector that has excellent properties for flat and rotary. It's been used with success for many years in long-run folding carton applications and is incredibly long-lasting.

- ✓ Flat applications
- ✓ High speed folding carton & paperboard
- ✓ With or without PSA



"We have been using Diansuply RD-73 for many years without fail.

Our dies run 3-6 million impressions without issue, job after job.

The knives will wear out before the RD-73 needs to be replaced. It's the only die ejection we will use."



Dave Hilton
Burd & Fletcher



Freeman Patriot Blue

Freeman Patriot Blue is a microcell medium ejector that has excellent properties for flat applications, such as offering less crush on corrugated board.

- ✓ Flat applications
- ✓ Rotary applications
- ✓ Corrugated board
- ✓ With or without PSA



"Patriot Blue rubber offers less crush on corrugated board than the competitor's red rubber.

The adhesive on Patriot Blue Rubber is much stronger than the adhesive on competitor's red rubber.

Once we apply the Patriot Blue rubber to the dieboard, it never comes off - the competitor's rubber does not completely stick until the die is run through the press."



Brian Verdonik, Plant Manager
Wescott Displays - Detroit, MI



Diansuply GN-88

Diansuply GN-88 is a green microcell extra-firm ejector. It is an excellent slot rubber for tight areas on flat and rotary dies. Available in straight cut, side wave, max point, and ZAG styles, with or without PSA.

- ✓ Flat applications
- ✓ Slot rubber
- ✓ Tight areas
- ✓ With or without PSA



"We have used GN-88 with success for years in various heights and widths. We started using GN-88 ZAG for the carton industry, and now GN-88 ZAG is our #1 ejection material to use on slots, oval punches, and various cut outs."



Greg Hoff
Rule Designs Inc.



Dura-Bull

Diansuply Dura-Bull is the highest performance slot rubber available as well as an excellent trim breaker. This rubber can compress to 80% without lateral expansion and return to full height with no damage. Available in sheets, straight strips, scalloped, and ZAG, with or without PSA.

- ✓ Flat applications
- ✓ Rotary applications
- ✓ Slot rubber
- ✓ Tight areas
- ✓ Trim breaker rubber
- ✓ ZAG-Cut for tight slots

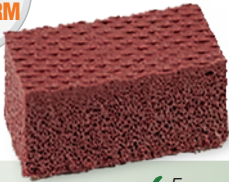


Did you know...?

Dura-Bull from Diansuply is perfect for shapes on lead edge trim breaker knives and as a slot rubber on rotary applications.

OPEN CELL EJECTION RUBBER

Freeman carries the largest selection of open cell rubber in the USA. We carry deep inventories of all durometers, which are available in rolls, sheets, strips, Max Point, wave cut, and cut-n-boxed pieces. All sizes available with or without PSA.



Diansuply T-75

Diansuply T-75 (also known as F-75) is an extra-firm open cell ejector for folding carton and thin substrates. It is proven to run at full speed on Bobst presses. Pair with GN-88 Green Slot rubber.

- ✓ Economical
- ✓ Flat applications
- ✓ High speed folding carton & paperboard



Diansuply B-65

Diansuply B-65 (also known as F-65) is a medium durometer black open cell ejector. It is used most often on clamshell presses, but also offers a variety of benefits when less crush is desired.

- ✓ Economical
- ✓ Flat applications
- ✓ Thicker substrates (esp. corrugated)
- ✓ Lower speed presses



Diansuply 6110

Diansuply 6110 offers a tighter cell structure, preferred by some converters diecutting paperboard. This rubber is produced one sheet at a time versus on a production line, resulting in a more consistent ejection material.

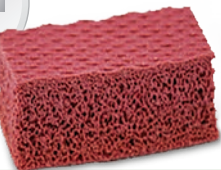
- ✓ Premium
- ✓ Flat applications
- ✓ High speeds
- ✓ Won't dry out quickly
- ✓ Tighter thickness tolerances



Diansuply 6220

Diansuply 6220 (also known as F-50) is similar in durometer to B-65 but has a tighter, more uniform cell structure and is preferred for faster running presses. This rubber is produced one sheet at a time versus on a production line, resulting in a more consistent ejection material.

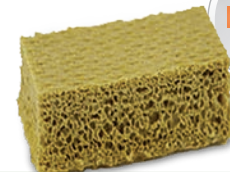
- ✓ Premium
- ✓ Flat applications
- ✓ High speeds
- ✓ Thicker substrates (esp. corrugated)



Diansuply F-70

Diansuply F-70 is a firm open cell ejector used for a variety of substrates and diecutting applications where an extra-firm ejector may not be desired.

- ✓ Economical
- ✓ Flat applications
- ✓ Shorter run applications



Diansuply K-60

Diansuply K-60 is a soft ejector for thicker substrates. It is often used for filler in large open areas on the die, without adding too much tonnage to diecut.

- ✓ Economical
- ✓ Less crush
- ✓ Flat diecutting of thicker materials & corrugated



Diansuply 6118

Diansuply 6118 (also known as F70P) is similar in durometer to F-70, but with a tighter cell structure and slightly softer footprint. This ejector is preferred by many converters. Also works well with plastics.

- ✓ Premium
- ✓ Flat applications
- ✓ Long run applications
- ✓ More spring than Diansuply F-70



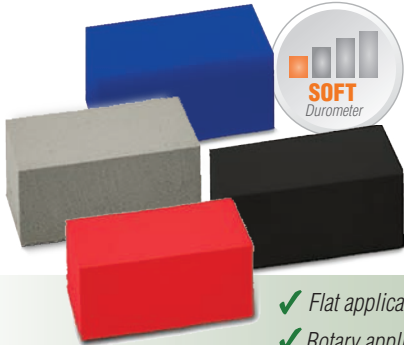
Diansuply 6320

Diansuply 6320 is similar in durometer to K-60, but it has a better cell structure for more uniform ejection on crushable products. It also won't dry out as fast in storage. This rubber is produced one sheet at a time versus on a production line, resulting in a more consistent ejection material.

- ✓ Premium
- ✓ Less crush
- ✓ Flat diecutting of thicker materials & corrugated

CLOSED CELL EJECTION RUBBER

Freeman stocks the largest selection of Closed Cell EPDM Rubber from both US manufacturers. Available in Gray, Red, Blue, Black and Brick in sheets, strips, Max-Point, wave cut, and cut-n-boxed pieces. All sizes available with or without PSA.



Diansuply G-257

Diansuply G-257 offers a soft touch and less crush on corrugated board. The EPDM closed cell offers long life and excellent resilience. Easily distinguish different heights on the die with different color options.

- ✓ Flat applications
- ✓ Rotary applications
- ✓ Primarily for diecutting corrugated board

Freeman P-390

Freeman P-390 is suitable for rotary applications, diecutting foam boards, and corrugated dies or plastic corrugated where "crush" is an issue. This soft, brick red EPDM rubber is most often used for product rubber on rotary dies.

- ✓ Rotary applications
- ✓ Can also be useful for scrap ejecting



Freeman F-257

Freeman F-257 also offers a soft touch and less crush on corrugated board. This EPDM material is preferred by flat diemakers due to the tighter thickness tolerances on 3/8" and 7/16" sizes.

- ✓ Flat applications
- ✓ Rotary applications
- ✓ Primarily for diecutting corrugated board

Freeman P-590

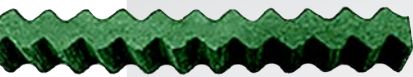
Freeman P-590 is made from waterproof EPDM rubber. This unique 75 durometer closed cell rubber is designed for specialty dies that cannot use open cell or microcell rubbers that absorb water.

- ✓ Flat applications
- ✓ Also functions well as a slot rubber



A Complete Offering of Ejection Rubber

Freeman offers a complete range of durometers, cut shapes, and dimensions of Open Cell, Closed Cell, Microcell, and other specialty ejection rubber. We stock deep inventories on all styles for your convenience.



ZAG



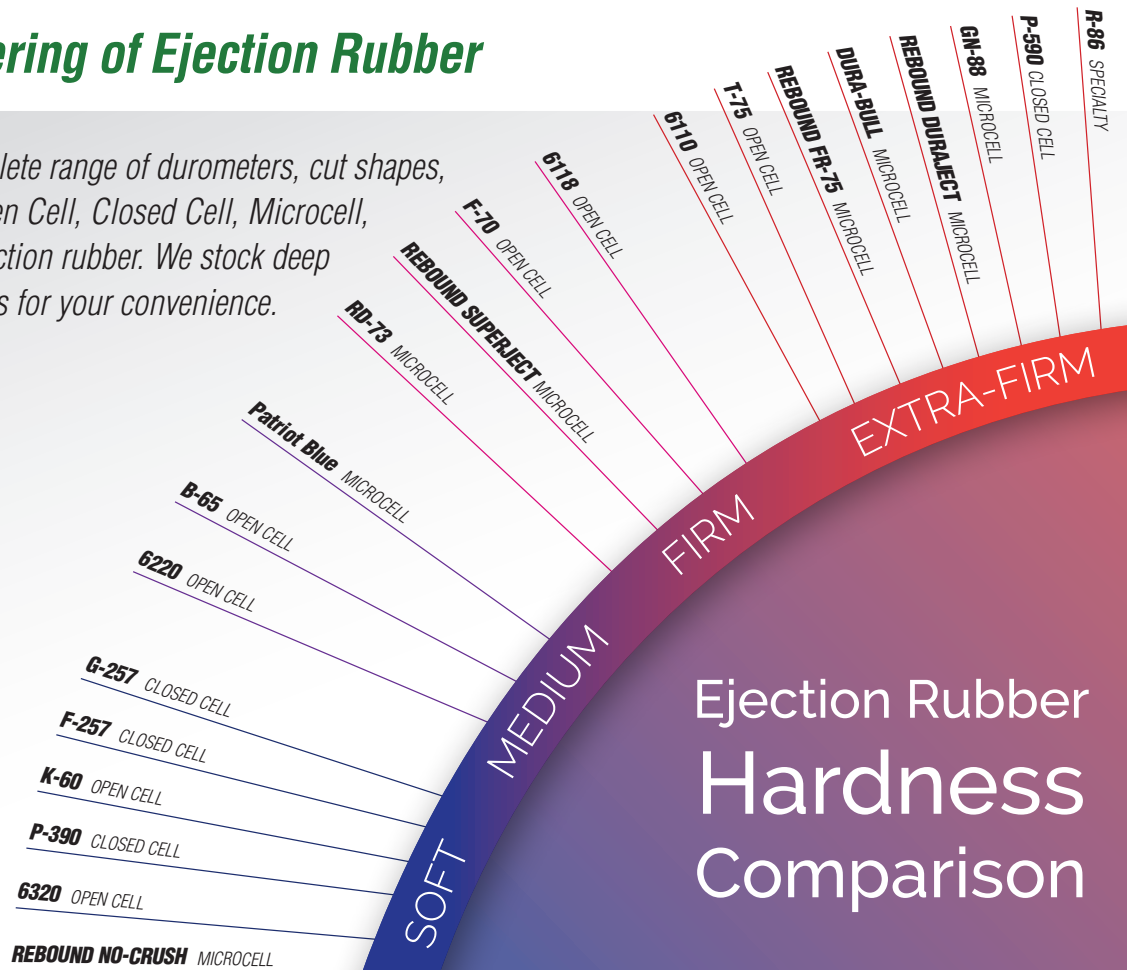
Maxpoint



Side Wave



Strips



Ejection Rubber
Hardness
Comparison

SPECIALTY EJECTION RUBBER



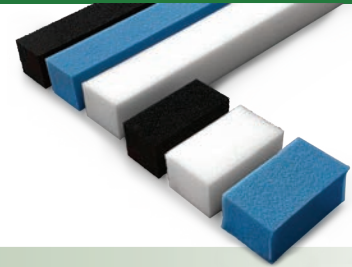
Nick / Profile Rubber

SprintRubba is the most popular selling C-profile. It protects nicks and provides uniform ejection. C-profile clamps the paper board sheet and prevents breaking of nicks. Adheres best with F-Bond Medium Adhesive.

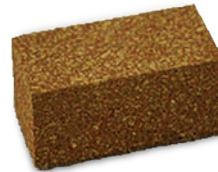
- ✓ 9.5mm Height
- ✓ 5mm or 8mm Width
- ✓ 30 Meters / box
- ✓ 50 Strips / box

Stripping Foams

Stripping foams are most commonly used on stripping fixtures. Available in strips and pieces, without PSA.



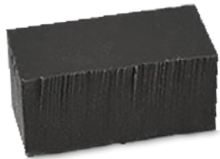
- ✓ Economical 2 lb. white foam for short runs
- ✓ Popular 6 lb. black foam for medium runs
- ✓ Slightly firmer 6 lb. blue foam for medium runs



Diansuply Cork

Diansuply's Cork ejection rubber is an extremely firm cork and rubber combination. It is ideal for crushing corrugated or pulling corrugated through the die cutter.

- ✓ Sheets, Strips, or Blocks
- ✓ With or without PSA
- ✓ 30 Meters / box
- ✓ 50 Strips / box



Diansuply R-86

Diansuply R-86 is a high-quality, extra-firm trim breaker rubber offering excellent consistency. R-86 also functions as an excellent slot rubber.

- ✓ Sheets
- ✓ Scalloped
- ✓ Straight Strips
- ✓ With or without PSA
- ✓ Maxpoint Strips



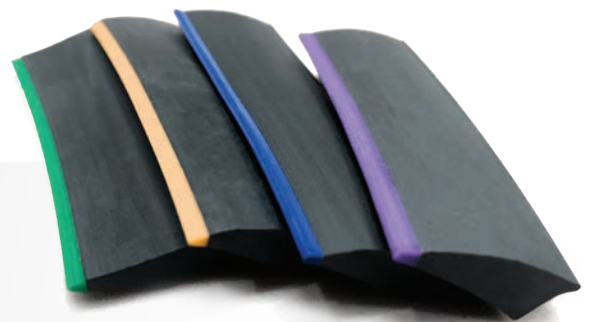
Gum Rubber

Gum Rubber is a proven durable and dense slot rubber designed for use in very narrow areas.

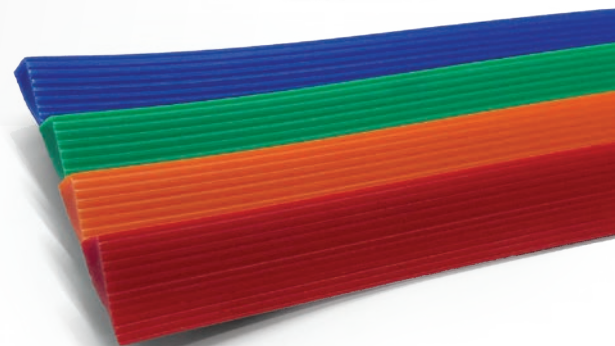
- ✓ Sheets
- ✓ Scalloped
- ✓ Straight Strips
- ✓ No PSA
- ✓ Maxpoint Strips

Freeman Cushion Crease is featured in our Hardware & Accessories section.

Used primarily on rotary tooling, Freeman Cushion Crease mounts on both sides of 90° scores to reduce cracking and improve scoring on corrugated board. The 60-65 Durometer Cushion Crease crushes the corrugated fluting, allowing proper scoring and better folding.



Now available with your logo! Minimums apply.



DIE ADHESIVES



F-Bond Cyanoacrylates

F-Bond is a complete line of high-quality cyanoacrylate adhesives that includes a range of viscosities for any diemaking application as well as accompanying products for usage and cleanup.

F-Bond Thin

Made for general purpose applications and is extremely fast setting.

F-Bond Medium

Rapid setting medium viscosity adhesive with good flexibility.

F-Bond Thick

Rapid setting high viscosity, ideal for gap filling applications.

F-Bond Rotary Adhesive

Freeman F-Bond Rotary was developed in response to rotary diemakers' requests for a fast-setting cyanoacrylate that consistently bonds 100% of the time. The key to F-Bond Rotary is a unique centipoise and formulation. This cyanoacrylate sets very quickly without flashing off prior to a complete bond.



F-Bond Accelerator

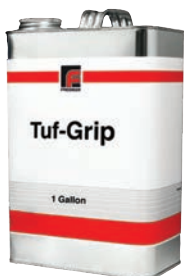
This accelerator neutralizes acidic dieboard and creates a surface that will instantly bond with F-Bond cyanoacrylate. It speeds up production and reduces any chance of failed bonds. Available in an 8 oz. pump spray or 10 oz. aerosol can.

ASI Debonder

This excellent cyanoacrylate adhesive remover is a single component material that will remove cured adhesive from work stations and other things stuck together.

Bottle Accessories

Dosing Tips and **Piercing Caps** made for F-Bond bottles are also available.



Tuf-Grip

Tuf-Grip is a very strong solvent-based contact cement used as an alternative to super glue or cyanoacrylates. Primarily used for rotary ejection rubber. Available in 1-gallon metal containers.

BirchBond

BirchBond is an excellent adhesive developed specifically for bonding $\frac{5}{16}$ " Birch Dieboard when manufacturing dies with the Gerber router system. It is easily and quickly applied with a brush or roller.



BirchBond White – our original formula. Rolls on white and dries clear.

BirchBond Pink (MPG) – designed for quick adhesion of $\frac{5}{16}$ " birch dieboards. Rolls on pink and dries pink.

BirchBond Gold – has a slightly higher viscosity and a higher initial tack. Rolls on gold and dries clear.

Z-Bond

Z-Bond adheres ejection rubber to UV Coated and Melamine laminated dies, yet can be easily removed with no residue. It is made from a specially-formulated, proprietary blend of water-based PSA. It was designed solely for use on steel rule dies with slick coatings.



DieStrip

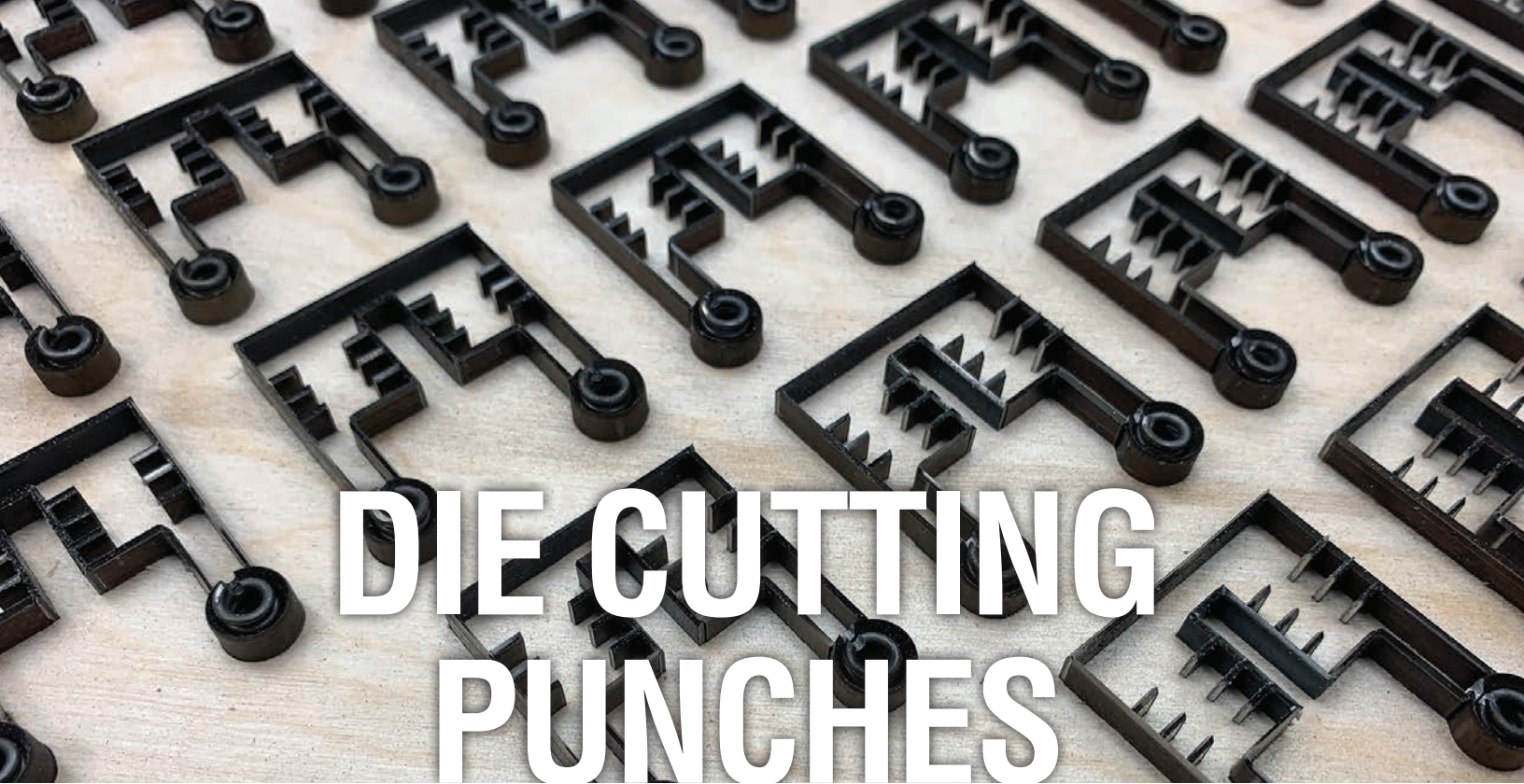
DieStrip is specially formulated to hold ejection materials securely and strips cleanly when re-rubbing the die. Rubber can easily be pulled off by hand or scraped off with a wood chisel. DieStrip leaves little to no residue on the dieboard.



Wood Glue Applicator Bottles

Non-stick, plastic glue bottles in popular and convenient sizes are available (empty) for die shop use. The screw-on plastic spout, which can be cut to desired opening size, gets the glue into the tight places where you need it.





DIE CUTTING PUNCHES



Freeman is Pace Punches' largest distributor in North America, carrying deep inventories for quick shipping. Pace Punches are the absolute best punches for your tooling – each punch is precision surface ground for height tolerance and the knife edge closely resembles and wears similar to Bohler rule. This results in quicker make-ready and long life on press.



✓ Surface Ground

Every single punch is surface ground to exact height

✓ Close Tolerance

Measurements are within 0.0005"

✓ Even Wear

Pace Punches wear similarly to Bohler rule for long press runs

✓ Long Lasting

Heat treat and precision grinding result in long life on press

✓ Nicks Available

Pace Punches are available pre-nicked for fast make-ready

✓ Customizable

Custom diameters and heights available

"We use Pace Punches because we feel the height tolerance, sharpness and the longer bevel is by far the best punch that we have used as we get a very clean cut even when cutting thicker materials.

The other great future we have found is the punches seem to wear evenly with the cutting rule which helps eliminate over cutting and damaging the cutting strike plate."



Kelly Morris, Die Shop Manager
Hoosier Gasket - Indianapolis, IN



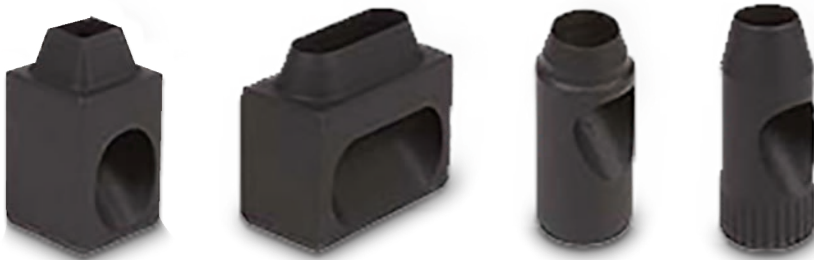
Tube

Available with springs and rubber ejectors



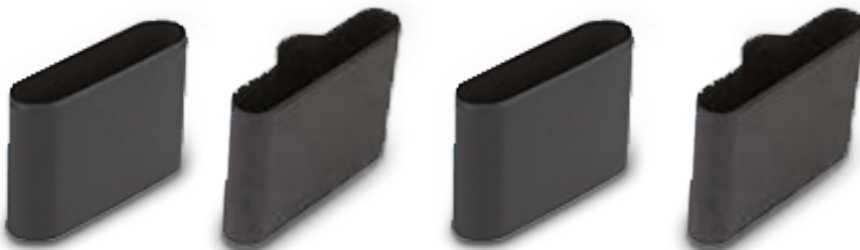
Serrated Rotary

Perfect for cutting corrugated board on both flat and rotary dies



Side Outlet

100% stripping



Seamless

Eliminate nicks for easy stripping



Heavy Duty

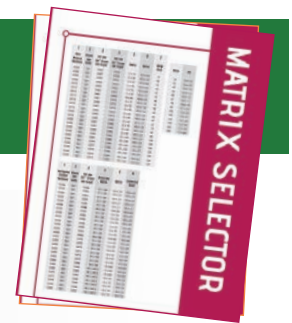
Cut heavier and thicker materials easily



Specialty Shapes

Save time on your irregularly shaped cuts

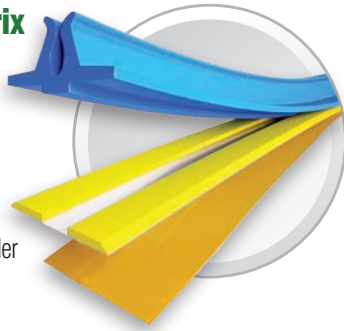
MATRIX



Freeman stocks deep inventories and a wide selection of C&T Matrix, the world's leading manufacturer of creasing matrix. Our Matrix Selector Guide can help you decide which product is best for you. Visit our website, www.DieBoard.com, to view all our technical documents.

Channel XTC Plastrix Matrix

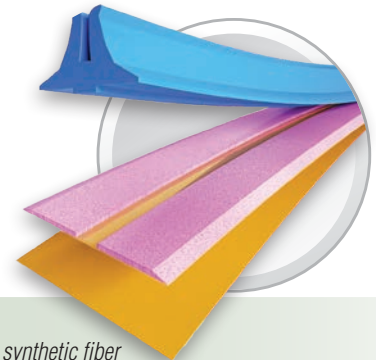
Formerly known as Bobst® Syntrix, Plastrix is a proven high-grade 12mm PVC matrix. It offers the strength of plastic with a lower profile of a mylar base. The mylar base is incredibly strong – even an accidental double sheet will not separate the matrix shoulder from the base. Plastrix is easy to skive and gets operators up and running fast.



- ✓ Best selling & most cost effective solution in our line
- ✓ Widest range of creasing matrix available
- ✓ Manufactured from high grade PVC for excellent cost to performance ratio
- ✓ Available in centered and off-center

Channel Pink Skive-able Matrix

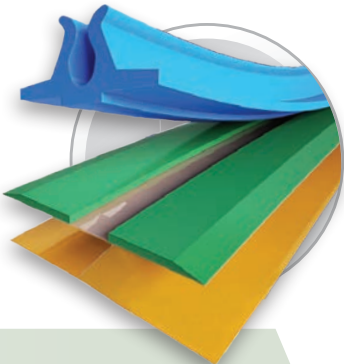
Durable and easy to skive, PINK is made with patent-protected Rosadium fiber. The strong adhesive bond provides the strength and durability for many repeat runs.



- ✓ High-quality matrix from synthetic fiber
- ✓ Rosadium fiber is easy to skive
- ✓ Strong adhesive for long runs
- ✓ Available in centered and off-center

Channel Corrugate Matrix

This matrix was designed specifically for corrugated board. The extra-wide base reduces cracking on corrugated scores, especially when paired with our Red Soft “C” rubber. The extra-wide base also eliminates movement of the matrix on press and fishtailing.



- ✓ 20mm wide base specifically designed for corrugated board
- ✓ Works best paired with Red Soft “C” profile rubber SKU #084815
- ✓ Crushes corrugated top and bottom for improved folding without cracking
- ✓ Available in centered, off-center, and U-bend for double scores

Original Channel Matrix

The Original Channel Matrix is perfect for Heidelberg and flat bed diecutters. The strong steel-backed matrix provides increased rigidity for cylinder diecutting, and remains rigid even when the cutting plate flexes. Also great for short-medium runs and hand-fed presses.



- ✓ Widest range of metal based PVC matrix available on the market
- ✓ Color coded PVC plastic shoulders according to the size
- ✓ Available in centered and off-center variations
- ✓ Available with both standard and extra strong tape



Red Soft “C” Rubber works well with Channel Corrugate Matrix.



We also offer a matrix cutter featured in our Hardware & Accessories section.

COUNTERPLATES

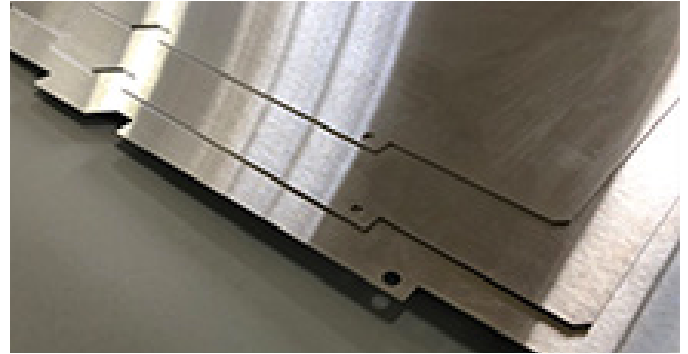
STEEL COUNTERPLATES

MatchPlate Counterplate

MatchPlate Steel Counterplates are manufactured utilizing a proprietary steel that machines easily.

Available in all Bobst sizes as well as Iberica, Sanwa, Kama, Brause, Heidelberg, and custom sizes.

- ✓ Works best with MatchPlate Bits
- ✓ Machines extremely easily on counter cutters
- ✓ Wear hardens on press to Medium-Hard
- ✓ Eliminates ghosting that phenolic counters can cause
- ✓ Faster make-ready than phenolics
- ✓ Reduces angel hair and dust



Marco Medium-Hard Counterplate

Marco Medium-Hard Steel Counterplates are manufactured with heat treat to 35 Rockwell and a special flattening process to ensure a dead flat plate.

Available in most Bobst sizes from 102-162 large format as well as Iberica and Sanwa press sizes. Freeman also stocks 1mm and 1.5mm thick blanks for custom laser-cutting.

- ✓ German precision manufacturing and high quality steel
- ✓ Average 33-35 Rockwell
- ✓ Special flattening process ensures a flat plate every time
- ✓ 1mm, 1.5mm, & blanks available
- ✓ Pairs best with MatchPlate bits

MatchPlate Bits

Our unique tapered single-pass MatchPlate Bits easily mill precisely tapered channels, eliminating double pass cutting and time-consuming rounding of sharp channel edges. Over 30 channel widths in stock.

- ✓ Heavy 1/4" shank solid carbide
- ✓ Unique tapered bit eliminates double pass cutting & sharp corners
- ✓ 30 sizes available from .045" to .119"



Did you know...

The combination of our steel plates and MatchPlate Bits increases throughput, reducing machining time from 4 hours to 1 hour!

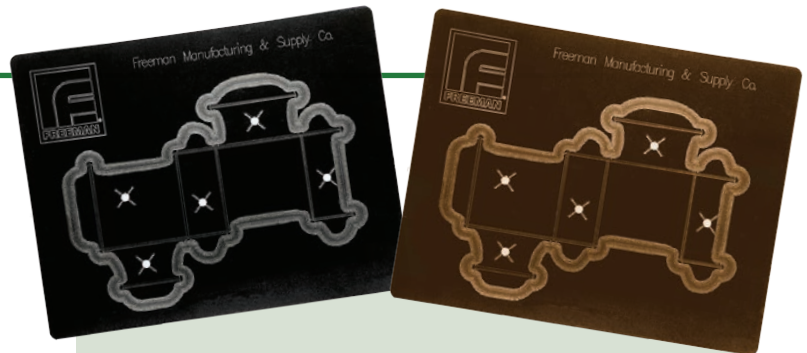
PHENOLIC COUNTERPLATES

Black Rigid Counterplate

This plate is manufactured to very tight tolerances allowing for consistent channel depth accuracy. It mills cleanly with our UHP bits to produce a smooth channel for precise creasing.

Rillma Flex Counterplate

This plate is also manufactured to very tight tolerances, but with the added benefit of a flexible liner or backer. This flexible backer allows the counters to be removed without breaking and be reused. It mills cleanly with our UHP bits to produce a smooth channel for precise creasing. Available with or without PSA.



Black Rigid

- ✓ Thicknesses from 0.4 mm - 1.3 mm (0.016" - .0512")
- ✓ 42" x 42" sheets

Rillma Flex

- ✓ Thicknesses from 0.4 mm - 1.0 mm
- ✓ 42" x 42" sheets
- ✓ With or without PSA

Bits for Counterplate Cutting

Freeman also stocks a full line of UHP Phenolic counter cutter bits, parting bits, and skiving bits. Please see our website, www.DieBoard.com, for complete details and part numbers.



Check out our complete line of Counter Cutting Hardware on page 38.

GENERAL DIEMAKING HARDWARE

MALLETS



Rawhide and Elastomer Mallets - Regular and Safety Size

Garland Rawhide Mallets



Our Rawhide Mallets are constructed from the finest materials and manufactured in the USA. Freeman's innovative #4 Long Rawhide Safety Mallet offers a 4¾" head – compared to the traditional 3½" – providing an additional level of safety and longer life. Our #2 and larger mallets are available with energy-absorbing foam grips for improved ergonomics and comfort.

SKU	Size	Diameter	Length
081028*	#0	1"	2"
081029*	#1	1¼"	2½"
081030	#2	1½"	3"
081031	#3	1¾"	3½"
081032	#4	2"	3½"
081002	#4 Long Head	2"	4¾"
081003	#4 Long Head & Handle	2"	4¾"
081000	#5	2¾"	4¼"
081001	#6	2¾"	4¾"



Premium Elastomer Mallets

These heavy-duty mallets are constructed with an advanced elastomer resin for durability and toughness. This innovative #4 Long Elastomer Safety Mallet offers a 5" head – compared to the traditional 3½" – providing an additional level of safety. Our elastomer mallets are available with durable foam grips for improved ergonomics, comfort and grip.

SKU	Size	Diameter	Length
081040	#4	2"	3½"
081041	#4L Long	2"	5"
081042	#5	2¾"	4¼"
081043	#6	2¾"	4¾"
59304100	#4 Head Only	2"	3½"
59304500	#4L Head Only	2"	5"
59304900	#5 Head Only	2¾"	4¼"
59305300	#6 Head Only	2¾"	4¾"



Vaughan Rawhide Mallets

Vaughan Rawhide Mallets deliver firm blows from a larger striking face and have a proportionately longer handle. Rawhide heads made in England are compressed under hydraulic pressure, and then seasoned for durability. The mallets are assembled in the USA with top quality hardwood handles. Available with optional foam grips for added comfort and grip.

SKU	Size	Diameter	Length
081037	#4	2"	3½"
081018	#4 with Grip	2"	3½"
081038	#5	2½"	4"
081020	#5 with Grip	2½"	4"
081044	#6	2¾"	4½"
081021	#6 with Grip	2¾"	4½"



Big Red Fiberglass Elastomer Mallets

Big Red Mallets are constructed with a durable elastomer head and a strong yet lightweight fiberglass handle and ergonomic rubber grip for comfort and safety. Heads are removable for replacement or rotation for even better wear. #4 Long and #6 Long are most popular for safety and long life. Sizes include #4, #4L, #5, #6, and #6L.

SKU	Size	Diameter	Length
59308300	#4 - Fiberglass Handle	2"	3½"
59308700	#4L Long - Fiberglass Handle	2"	5"
59309100	#5 - Fiberglass Handle	2¾"	4¼"
59309500	#6 - Fiberglass Handle	2¾"	4¾"
59309600	#6L Long - Fiberglass Handle	2¾"	5½"
59308750	#4L Long Head Only	2"	5"
59309702	#6L Long Head Only	2¾"	5½"



Big Orange Fiberglass Elastomer Mallets

Big Orange Mallets are constructed with a 5½" durable elastomer head and a strong yet lightweight fiberglass handle and ergonomic rubber grip for comfort and safety. Big Orange Mallets are a favorite for serrated-rotary diemaking.

SKU	Size	Diameter	Length
59309900	#6L Long w/ Fiberglass Handle	2¾"	5½"
59309910	#6L Long Head Only	2¾"	5½"

GENERAL DIEMAKING HARDWARE

Standard Mylar®

Freeman Mylar is an economical grade of mylar and provides the best value. Available in 2" & 3" cores, and single-matte for perfect plotting and minimal smudging. Double matte is available via special order. For our Premium Mylar, see page 39.

- ▶ 150 ft. or 300 ft. rolls
- ▶ Thicknesses of .003" or .005"
- ▶ Matte on one side for perfect plotting
- ▶ 2" or 3" cores
- ▶ Roll widths of 36", 42", 48", 54", or 60"



Speedee Puller

The Speedee Puller with magnetic pin and feet extracts rule vertically for reduced fatigue and injury. Eliminates damage to the dieboard and kerf. Works on rule up to 1½" tall and 2PT through 6PT. **SKU #59966200**



Econo-Puller

Economical, heavy-duty rule puller for 2-, 3-, and 4-PT rules up to 1.250". Plastic feet in various heights and feet available. **SKU #59958900**



Manual Rule Pullers

Standard Rule Pullers with hardened teeth for extracting Steel Rule for boards. *Please see our website, www.DieBoard.com, for complete options and part numbers.*

Pneumatic Grinder

This Pneumatic Grinder conveniently hooks up to the on-press air supply. Complete with various depth settings and variable speeds. Creates perfect 90° nicks every time. This grinder uses 50mm x 8mm arbor grinding wheels.

SKU #59952900



Aluminum Oxide Nicking / Grinding Wheels

Nicking and Grinding wheels are bonded and reinforced for easily and quickly creating nicks in steel rule. Aluminum oxide is added to the wheels for longer wear.

- ▶ Bonded and reinforced
- ▶ Thicknesses from .006" to .062"
- ▶ Diameters of 1", 1½", 1¾", 2", 2¼", and 50mm
- ▶ Mandrel sizes of ⅛", ¼", ⅜", 1.8mm, and 8mm



Perf-A-Type & Tracks

This complete selection of numbers, characters, and letters are made from sharper, high-grade material to create perforations with less pressure for identification on corrugated board. Special characters include the dash, slash, recycled symbol, and more. Options include Standard ¾" height, Mini-Perf ⅜" height, and with or without adhesive.

The durable plastic track holds Perf-A-Type in place for pre-assembly and affixing to the dieboard. Tracks are available with tapered or square rails and with or without PSA.

Please see our website, www.DieBoard.com, for all Perf-A-Type part numbers.

Perf-A-Type Track product information is listed below.



SKU	Style	Height	Length
59103430	Perf-A-Track Black	0.055"	36"
59104170	Perf-A-Track Blue Rigid	0.075"	36"
59104910	Perf-A-Track Green	0.074"	60"
59108240	Perf-A-Track Red Rigid	0.125"	36"
59108610	Perf-A-Track White Rigid w/ PSA	0.125"	36"
59108980	Perf-A-Track Yellow Flexible	0.125"	66"
59109350	Perf-A-Track Yellow	0.145"	36"
59105280	Perf-A-Track Blue Mini	0.041"	36"
59105650	Perf-A-Track Blue Mini	0.094"	36"
59106020	Perf-A-Track Red Mini	0.041"	36"
59106390	Perf-A-Track Red Mini	0.190"	36"

ROTARY DIEMAKING HARDWARE



Round Washers

Round die washers made of solid steel protect the bolt holes on rotary tooling. The pre-bent curved washer flattens out and locks into place on a rotary die when installed.



SKU	Style	Washer Diameter	Hole Diameter
59977400	Cone Washer	1"	3/8"
59977200	Plain Washer	1"	7/16"
59939000	Curved Washer	1"	7/16"
59949900	Slotted Washer	1"	3/8"

Speed Washers

Speed Mount Washers save time and money by eliminating slow and costly counterboring of laser-cut holes for steel washers. Simply laser-cut a hole and insert the washer. Available in blue and yellow with solid steel insert washer. Outside dimensions are 1" x 1 1/8".



SKU	Style	Hole Diameter
59965000	Blue Oval	3/8"
59965010	Blue Round	3/8"
59949950	Yellow Round	3/8"

Elongated Oval Washer – Slotted

The slotted elongated oval washer has a 2 1/2" adjustability for rotary die attachments. They are 1.4mm thick and bendable for radius adjustment.



SKU	Washer Width	Washer Length	Slot Width	Slot Length
59977600	1 1/8"	3 1/4"	3/8"	2 1/4"

Adjustable Rotary Washers

These machined adjustable 2- & 4-way washers have an adjustable slot for 2" hole spacing and 3/8" widths for standard bolts. Straight style only. Choose from aluminum, plastic, or steel. Red 2-way adjustable speed washer also available.



SKU #59936435

SKU	Washer Width	Washer Length	Slot Width	Slot Length
59946090	1"	2 1/2"	3/8"	2"
59932100	1 1/4"	3 1/4"	5/16"	2 3/8"
59931800	1 1/8"	1 1/8"	3/8"	3/8"
59931900	3/4"	3"	5/16"	2 3/8"
59932000	3/4"	4"	5/16"	3 3/8"
59932200	1 1/8"	3 3/4"	5/16"	2 7/16"
59936435	1"	3"	10mm	60mm

Key Hole Plate

Steel key hole plate for quick-mount rotary die systems enables safety handle to lock into the die for lifting or adjusting on press.



SKU	Washer Width	Washer Length	Slot Width	Slot Length
59946000	1 1/8"	2 5/8"	3/4"	3/4"

Rule Curve Set

This unique tool block set enables diemakers to re-curve rule to a different diameter, eliminating the need to stock additional diameters of rule. **SKU #59721200**

Miter Blades

These Miter Blades are specifically made for Helmod 1.50" bench cutter, reducing the need to hand-grind bevels on rule joints.



SKU	Description
59906900	7° Miter Set for 1.50" Rotary Rule
59908100	Standard Miter/Cutter Set - 1.50"

LeGard - Lead Edge Guards

LeGards are Lead Edge supports that bolster the knife to prevent bending or complete roll-over of the cutting rule on rotary dies. Available in many proven profiles and also in a new surface mount.



SKU	Description
59966900	L-Shape LeGard for 0.937"-1.125" Knife
59821500	U-Channel LeGard 0.800"
59947000	Jumbo L-Shape LeGard for 1.125"+
59966950	Jumbo U-Shape LeGard Brace

Bridge Supports

These solid steel supports reinforce the rotary die at the bridge or notch. Exclusive, custom design manufacturing available. **SKU #59936300**



Cast LeGard Surface Mount

Surface mount rule supports are used to support the lead edge knife and are also useful for rebuilds, revisions and repairs.



SKU	Size
59957610	1 1/16" L x 1/2" W x 3/8" H with Mounting Holes



Rotary Hoops

Aluminum hoops are made for quick-mounting rotary die systems. The aluminum billet is machined both sides or one side and has hardened threaded inserts.

SKU	Diameter
59811900	7"
59812100	8.2"
59812500	9 1/2"
59813100	10 1/2"
59813400	14 1/2"
59814300	19 3/16"
59814350	19 3/16" (1-Sided)
59814600	Hoop Screws
59814950	Hoop Washers

ROTARY DIEMAKING HARDWARE

FREEMAN CUSHION CREASE

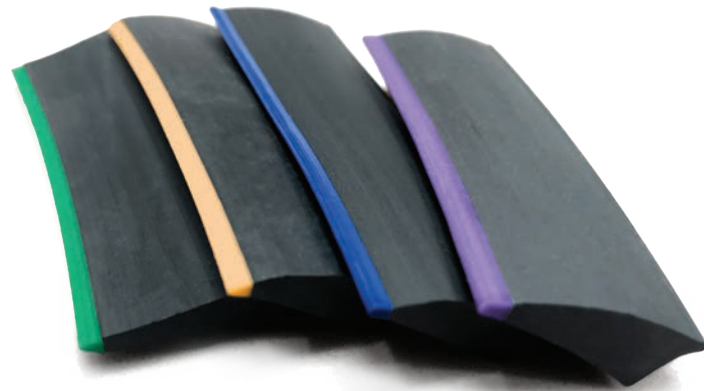


Used primarily on rotary tooling, Freeman Cushion Crease mounts on both sides of 90° scores to reduce cracking and improve scoring on corrugated board. The 60-65 Durometer Cushion Crease crushes the corrugated fluting, allowing proper scoring and better folding.

Stripe Cushion Crease

This style of Cushion Crease has unique colored stripes that allow diemakers to determine the correct height at a glance. Available in boxes or 164' coils.

SKU	Height	Color	Box	SKU	Height	Color	Coil
59634700	0.225"	Gray	50'	59637800	0.225"	Gray	164'
59635300	0.275"	Green	82'	59637810	0.275"	Green	164'
59635900	0.300"	Gold	82'	59637820	0.300"	Gold	164'
59636300	0.315"	Blue	66'	59637830	0.315"	Blue	164'
59636700	0.335"	Purple	66'	59637840	0.335"	Purple	164'
59637300	0.355"	Orange	66'	59637850	0.355"	Orange	164'
59637500	0.375"	White	50'	59637860	0.375"	White	164'
59637310	0.400"	Pink	36'	59637870	0.400"	Pink	164'



Solid Color Cushion Crease

A Freeman exclusive! Solid Color Cushion Crease is manufactured with a proven profile and printed with height identification for mistake-free application. Also available in custom colors and custom logo printing.*

SKU	Height	Color	Length
59634300	0.175"	Black	50'
59634690	0.225"	Gray	50'
59635290	0.275"	Green	50'
59635890	0.300"	Yellow	40'
59636305	0.315"	Blue	40'
59636705	0.335"	Purple	36'
59637295	0.355"	Orange	36'
59637495	0.375"	White	30'
59637330	0.400"	Red	30'

*Minimum order quantities apply. Please call for details.



Black Cushion Crease

The Black Cushion Crease profile has been a diemaker's staple for years. Prevents cracking and aids in folding. This economical version is great for both short and long run applications at a great value.

SKU	Height	Length
59635700	0.300"	40'
59636100	0.315"	40'
59636500	0.335"	36'
59636900	0.355"	36'



FLAT DIEMAKING HARDWARE

T-Nuts

High quality T-Nuts available in threaded or threadless designs, for mounting and aligning dies and fixtures. Standard and heavy duty available. Standard or metric thread. *Please see our website, www.DieBoard.com, for complete dimensions and part numbers.*



Dieboard Glue

Easily and quickly bond birch dieboard with a brush or roller using **BirchBond**. It offers a high built-in wet tack that helps prevent board movement during clamping. **MPG Pink Glue** is a fast-bonding, water-based glue. Its pink color allows the diemaker to easily see the adhesive and whether it was applied evenly.



SKU	Description
022710	BirchBond - 1 Gallon
022715	BirchBond - 5 Gallon
59404100	MPG Pink - 1 Gallon
59404300	MPG Pink - 5 Gallon

H-Clips

H-Clips strengthen the dieboard and hold the knife in place when producing Cavity Dies.



SKU	Style
59946100	A-Type
59946200	B-Type
59946300	C-Type

Edge Corner Protectors

Plastic corner protectors for flat dies.

SKU	Description
59941400	Blue Edge Protector 3/4"
59941500	Red Edge Protector 5/8"



Red Joint Supports

These red plastic supports keep 0.918" and 0.937" steel rule aligned at the joint line. **SKU #59957600**



Guide Pins

Guide pins locate material onto a die prior to platen cutting.

SKU	Style	Base Size	Length	Diameter
59944100	Brass Guide Pins	1/4"	1/8"	
59944200	Brass Guide Pins	3/8"	1/8"	
59944600	P-100 Guide Pins	1/4"	7/8"	1/8"
59944700	P-101 Guide Pins	1/4"	1 1/16"	1/8"
59944800	P-102 Guide Pins	1/4"	1 1/4"	1/8"
59944900	P-104 Guide Pins	1/4"	2"	1/8"
59945000	P-132 Guide Pins	1 1/32"	1 1/16"	1/4"
59945100	Blue Stop Guide Pins (100 pc.)			

GERBER™ DIES

Parting Bit

Parting bits are designed for quick die perimeter separation and hand-hole cutting on 5/16" dieboard.

SKU	Size
59279700	1/4" Quick Parting Tool, spiral cutter



Dowel Pins

Dowel pins are used to perfectly align the two halves of a board produced on a Gerber router system.

SKU	Diameter	Length
59950700	3/16"	5/8"
59950750	1/4"	5/8"



Kerf Bits for Steel Rule Dies

These high-performance bits last longer and have the lowest deflection of any other bit on the market. The improved 5-flute geometry keeps the bit cool so the edges stay sharp. An overheated bit causes the edges to round-over and tear the wood fiber, causing poor kerf quality, extra clean-out, and premature bit breakage. *Please see our website, www.DieBoard.com, for complete dimensions and part numbers.*



- ▶ From 2 pt. to 6 pt.
- ▶ 1/8" Perimeter Cutters
- ▶ 0.240" Clean Out Bits

BAYSEK™ DIES

Suction Cups

Baysek style suction cups are made from high quality silicone for best performance on press. Complete selection of cups, 90° and standard barbed and flanged bases, double-end 6mm fittings and plugs, and high quality, long-lasting vacuum hoses.

SKU	Description
59933300	A-20 Suction Cup
59934200	B-28 Suction Cup
59936400	C-30 Suction Cup
59936405	C-33 Suction Cup
59936430	D-41 Suction Cup - Lead Edge
59936440	D-47 Suction Cup
59936410	Barbed Suction Cup Holder
59936415	Barbed Suction Cup Holder 90°
59936420	Flanged Suction Cup Holder
59932702	6mm x 1/8" RPT 38mm Solid Plug
59943205	M6-1/8" RPT Double-Female, Self-Seal Fitting
59976502	6mm x 4mm Nitra Tubing 100 ft. (30 m) - Black
59976505	6mm x 4mm Nitra Tubing 100 ft. (30 m) - Blue
59976515	6mm x 4mm LLDPE Premium Tubing 984 ft. (~300 m) - Black
59976510	6mm x 4mm LLDPE Premium Tubing 984 ft. (~300 m) - Blue



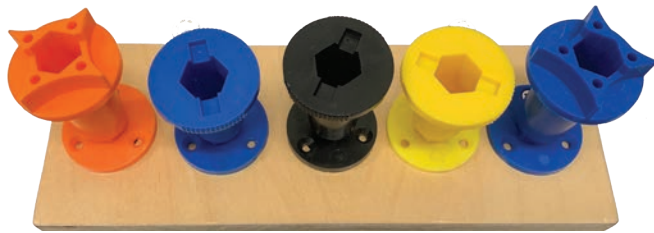
Mini U LeGard

Small U-Channel LeGard for Baysek style dies. Reinforces knife to stand up to roller style press.

SKU	Style
59821500	U-Channel 0.800"



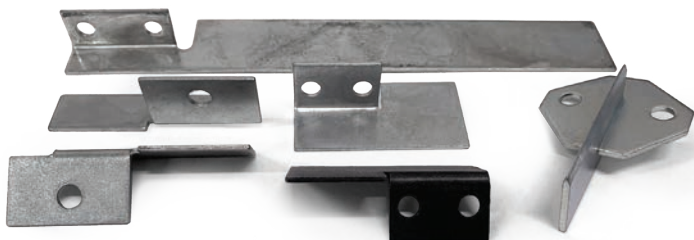
STRIPPING HARDWARE



Bobst® Bolts

Bobst® nuts and bolts are used to hold upper and lower stripping fixtures together. Available in many colors and 43mm or 50mm diameters.

SKU	Style
59805000	Blue Nuts for Centerline
59802900	Blue 43mm Bolts for Centerline
59803200	Blue 50mm Bolts for Centerline
59805301	Green Nuts for Centerline
59803500	Green 50mm Bolts for Centerline
59805600	Orange Nuts for Centerline
59803800	Orange 50mm Bolts for Centerline
59806200	Yellow Nuts for Centerline
59804700	Yellow 43mm Bolts for Centerline
59805900	Red Nuts for Centerline
59804100	Red 43mm Bolts for Centerline - Low Profile
59804400	Red 50mm Bolts for Centerline
59803303	Black Nuts for Centerline
59803304	Black 50mm Bolts for Centerline



Separator Knives

These left and right-handed trim separators, as well as deep and shallow center knives, are for different thicknesses of dieboards.

SKU	Style
59819100	Trim Separator - Left-Handed, Shallow
59819700	Trim Separator - Right-Handed, Shallow
59819150	Trim Separator - Left-Handed, Deep, 2-Hole, Zinc
59819750	Trim Separator - Right-Handed, Deep, 2-Hole, Zinc
59819200	Trim Separator - Left-Handed, Deep, 2-Hole, Black
59819300	Trim Separator - Right-Handed, Deep, 2-Hole, Black
59962200	Center Knife Separator

Tie Bolts

Available in Hex Head for the Quick-Lock System and Hollow for the Sprinthera Blanker.

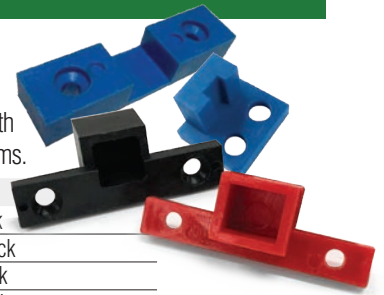
SKU	Style
59817000	Hollow Head Tie Bolt - Silver
59803250	Hollow Head Tie Bolt - Gold
59803100	Hex Head Tie Bolt
59815500	Lock Nut for Tie Bolt
59817600	Tie Bolt Screw
59817900	Tie Bolt Screw - Long



Centerline Blocks

These blocks align the stripping units with the cutting die on Centerline press systems.

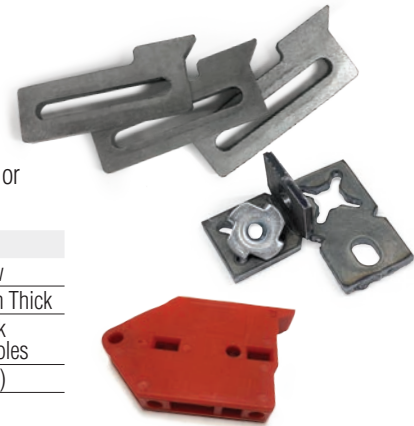
SKU	Style
59802000	Large Red Centerline Block
59800800	Large Black Centerline Block
59801410	Large Blue Centerline Block
59801400	Small Blue Centerline Block



Clamping Jaw

Installed next to the laser-cut rail on an upper stripping unit. Made with plastic or solid steel.

SKU	Style
59808030	Plastic Clamping Jaw
59808010	25mm Clamping Jaw, 6mm Thick
59967220	48" Length x 1/4" Thick Steel Stripper Rails w/Holes
59967225	Rail Clamp (for T-Nut)



Corey Clamp

This nylon clamping jaw is made for a laser-cut dieboard's stripping rail.

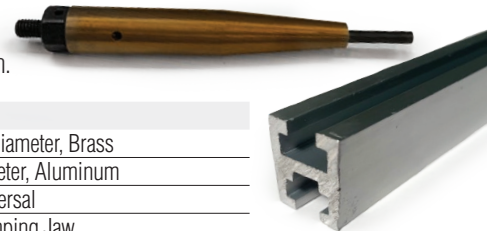
SKU	Size
59808300	15mm
59808600	3/8"



Spring Loaded Pins

Narrow and standard body, spring-loaded lower stripping pin.

SKU	Description
59962600	Thin Body Pin - 3/8" Diameter, Brass
59808020	Lower Pin - 3/8" Diameter, Aluminum
59808025	Lower Pin Rail - Universal
59808015	Lower Pin Rail - Clamping Jaw



Spacers

Wide variety of stripping fixture spacers for reduced weight upper stripper units. The new Blue Oval and Clear-Purple are the most popular.

SKU	Size	Style
59964300	7/8"	Black
59964400	7/8"	Black w/Divets
59964500	7/8"	Clear-Purple
59964600	7/8"	Green
59964700	1 1/8"	Blue
59964710	7/8"	Blue Oval
59964715	1 1/2" x 3/8"	Alum. Blanker Spacer



STRIPPING HARDWARE CONTINUED

Stripping Pins

Stripping pins are used to punch the scrap through an opening in the lower block unit. Machined for accuracy, hardened, and anodized. Available in crowned top (with teeth), pin top, or flat top.



SKU	Size	Style
59967300	1.8 mm	Flat Top
59967400	2 mm	Crown Top
59967600	2 mm	Flat Top
59967700	2 mm	With Point
59967800	3 mm	Crown Top
59968000	3 mm	Flat Top
59968100	3 mm	With Point
59968200	4 mm	Crown Top
59968400	4 mm	Flat Top
59968500	4 mm	With Point
59968600	5 mm	Crown Top
59968700	5 mm	Flat Top
59968800	5 mm	With Point
59968900	6 mm	Crown Top
59969000	6 mm	Flat Top
59969100	6 mm	With Point

SKU	Size	Style
59969200	7 mm	Crown Top
59969300	7 mm	Flat Top
59969400	7 mm	With Point
59969500	8 mm	Crown Top
59969600	8 mm	Flat Top
59969700	8 mm	With Point
59969800	9 mm	Crown Top
59969900	9 mm	Flat Top
59970000	9 mm	With Point
59970100	10 mm	Crown Top
59970200	10 mm	Flat Top
59970300	10 mm	With Point
59970400	14 mm	Flat Top
59970600	15 mm	Flat Top
59970700	15 mm	Crown Top

Automatic Stripping Pins

Stripping pins in cartridges for an automatic pin setter. Available in crown top.

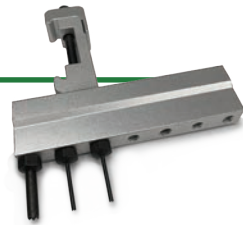


SKU	Size	Style
59967405	2 mm	Crown Top Auto
59967805	3 mm	Crown Top Auto
59968205	4 mm	Crown Top Auto
59968605	5 mm	Crown Top Auto

Screw-In Upper Stripping Pins

Available in Crown Top or Flat Top for upper fixture stripping units.

SKU	Size
59967500	2 mm
59967900	3 mm
59968300	4 mm
59970702	5 mm
59970500	15 mm



Spring Pins

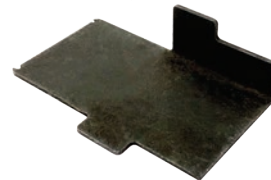
Also known as Roll Pins, these can be used as an alternative to stripping pins. Made of black oxide rolled steel.

SKU	Diameter	Length
59951100	1/4"	2"
59950900	1/8"	2"
59951000	3/16"	2"
59951200	3/16"	2"



Stripping Plates

Hardened steel stripping plates are used where stripping pins won't get the job done. Claws grip the scrap for dynamic stripping. 50mm high and 1mm thick. Available in many sizes with left and right bend.



SKU	Width	Style
59970800	5 mm	Bent Left
59970900	5 mm	Bent Right
59971100	7 mm	Bent Left
59971200	7 mm	Bent Right
59971300	9 mm	Bent Left
59971400	9 mm	Bent Right
59971600	11 mm	Bent Left
59971700	11 mm	Bent Right
59971900	15 mm	Bent Left
59972000	15 mm	Bent Right
59972100	20 mm	Bent Left
59972200	20 mm	Bent Right
59972300	25 mm	Bent Left
59972400	25 mm	Bent Right

COUNTER CUTTING

Counterplate Mounting Pins

Counterplate mounting pins locate and transfer the phenolic counterplates for accurate registration. Made from machined delrin plastic or aluminum.

SKU	Style
59951300	Aluminum Counterplate Pins (Machined)
59951400	Black Counterplate Pins
59951500	Red Counterplate Pins
59951600	White Counterplate Pins (Machined)
59951700	White Counterplate Pins (Molded)
59951800	White Nylon Square Counterplate Bushing
59950500	Blue Counterplate Rubber Rings - 3/8" Diameter



Locator Pin Puller

Handy tool for pulling the phenolic locator pins with ease. **SKU #59938400**



Channel Cutters

Channel Cutters are designed to cut creasing channel profiles in phenolic counter material. The smooth cutting edge geometry virtually eliminates chatter, lifting, and gouging.

SKU	Diameter	Depth of Cut	Shank
59262200	0.045"	0.090"	1/8"
59262300	0.060"	0.125"	1/8"



Counterplates

Black Rigid Counterplate

has the tightest thickness tolerance of +/- 0.03mm, allowing for board-to-board and channel depth consistency. One side of the board has a "structured surface" that allows adhesive to easily bond without affecting the thickness tolerance. When milled, it produces a clean channel for precise creasing.



Black Rigid

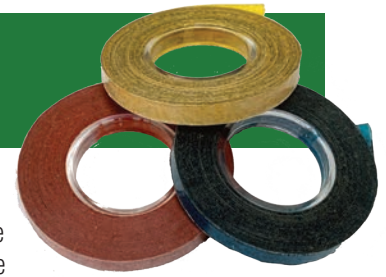
- ▶ Thicknesses from 0.4 mm - 1.3 mm (0.016" - .0512")
- ▶ 42" x 42" sheets

Rillma Flex

- ▶ Thicknesses from 0.4 mm - 1.0 mm
- ▶ 42" x 42" sheets
- ▶ With or without PSA

Rillma Flex is made of a phenolic counter material with milled creasing channels. This can be matched perfectly to the paperboard in use. Available with or without adhesive foil on the back as well as a flexible white backer for re-use.

MAKE-READY ITEMS



Premium Mylar®

Freeman Premium Mylar is manufactured with a precise thickness tolerance and unrolls easily with no edge curl or memory. Available in clear both sides, or matte-one-side for smudge-proof plotting. Double matte is available via special order. For our Standard Mylar, see page 33.

- ▶ 300 ft. rolls
- ▶ Thicknesses of .003" or .005"
- ▶ 3" cores
- ▶ Roll widths of 36", 42", 48", 54", or 60"



Ink Jet Exposure Film

This affordable Ink Jet film for rotary plate making negatives will not lift under heat. It is available with a 2" core and is .004" thick, 44" wide, and 33 yards long. **SKU #59500500**



Spot Sheet

Spot Sheet

This pre-compressed, non-tear, moisture-resistant paper with 3" laminate core is perfect for easy spot tape and plotter use.

SKU	Thickness	Width	Length
59966400	0.004"	42"	164'
59966500	0.004"	53½"	164'



Matrix Cutter

The matrix bench press is used to quickly and repeatedly produce 45° cuts in the matrix for a multiple-up die, saving time and money for quick make-ready. The 45° miter cuts allow for tight mounting on the steel counterplate, leading to higher-quality end results. **SKU #59977610**

Paper/Fiber Spot Tape

Make-Ready Tape is used to compensate for uneven rule height or variations in the die cutting surface. Available in many thicknesses and widths.

SKU	Thickness	Width	Color
59953700	.001"	¼"	Blue
59953800	.001"	½"	Blue
59953900	.001"	¾"	Blue
59949002	.002"	¼"	Red
59954000	.002"	½"	Red
59954100	.002"	¾"	Red
59954000	.002"	¼"	Red
59949004	.001"	¼"	Yellow
59954200	.002"	¼"	Yellow
59954300	.003"	½"	Yellow
59973200	0.0015"	½"	N/A
59973300	0.0015"	¼"	N/A
59973400	0.003"	¼"	N/A
59973500	0.003"	¼"	N/A
59973600	0.006"	½"	N/A
59973700	0.006"	¼"	N/A

Steel Tape

Metal self-adhesive tape.

SKU	Thickness	Width	Color
59972700	0.001"	5/16"	Blue
59972800	0.001"	5/16"	Red
59972900	0.002"	7/32"	Green
59973100	0.005"	5/16"	Blue



Quoins

Quoins quickly lock up dies and furniture strips into the chase. The "T" handle (sold separately) is used to operate the quoins.

SKU	Size
59954605	3" (76mm)
59954800	6" (152mm)
59955000	9" (230mm)
59955100	"T" Handle



Cut Resistant Gloves

Tight fitting, cut-reducing gloves, coated for extra durability.

SKU	Style	Size
59300700	Gray Palm	Small
59300500	Gray Palm	Medium
59300300	Gray Palm	Large
59300900	Gray Palm	X-Large
59301100	Gray Palm	2X-Large
59301300	Yellow Kevlar Slip Resistant	One Size



DIEMAKING EQUIPMENT



Hel mold EZ Benders (pictured) and other Hel mold equipment are available on our website.

Hel mold EZ Heavy Duty Rule Benders

An essential shop tool for making steel rule dies, this bender can be used with various male and female dies in order to form rule to the desired shape. Cam design reduces bending force needed. For use up to 6 PT rule. *Please see our website, www.DieBoard.com, for complete dimensions and part numbers.*

Hel mold EZ Heavy Duty Notchers

Used for notching and bridging rule, this heavy duty notcher easily notches steel rule. Cam design reduces bending force needed. Available with a curved base for rotary rule. For use up to 6 PT rule. *Please see our website, www.DieBoard.com, for complete dimensions and part numbers.*

Modular Marco Notcher Set

This tool steel reversible female plate mounts to stationary backing block and one piece male knife set. *Please see our website, www.DieBoard.com, for complete dimensions and part numbers.*



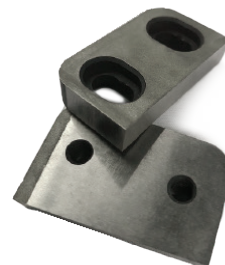
Hel mold Rule Cutters

A sturdy tool to cut steel rule to length, this cutter's knives are readily removable for sharpening or replacement. For use up to 6 PT rule. *Please see our website, www.DieBoard.com, for complete dimensions and part numbers.*

Cutter Blades

Made from high grade tool steel for long life.

SKU	Description
59907200	Cutter Knives - Lower Only 1½"
59907300	Cutter Knives - Lower Only 2⅞"
59907400	Cutter Knives - Lower Only 2⅞"
59907800	Cutter Knives - Upper Only 1½"
59907900	Cutter Knives - Upper Only 2⅞"
59908000	Cutter Knives - Upper Only 2⅞"
59907500	Cutter Blade Set 1½"
59907600	Cutter Blade Set 2"
59907700	Cutter Blade Set 3"



CONVERSION CHART

FRACTIONS	IN.	MM
$\frac{1}{64}$	.0156	0.3969
$\frac{1}{32}$	.0313	0.7938
$\frac{3}{64}$.0469	1.1906
$\frac{1}{16}$.0625	1.5875
$\frac{5}{64}$.0781	1.9844
$\frac{3}{32}$.0938	2.3813
$\frac{7}{64}$.1094	2.7781
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$\frac{9}{64}$.1406	3.5719
$\frac{5}{32}$.1563	3.9688
$\frac{11}{64}$.1719	4.3656
$\frac{3}{16}$.1875	4.7625
$\frac{13}{64}$.2031	5.1594
$\frac{7}{32}$	.2188	5.5563
$\frac{15}{64}$	.2344	5.9531
$\frac{1}{4}$	.250	6.350
$\frac{17}{64}$	.2656	6.7469
$\frac{9}{32}$	.2813	7.1438
$\frac{19}{64}$	.2969	7.5406
$\frac{5}{16}$	.3125	7.9375
$\frac{21}{64}$	.3281	8.3344
$\frac{11}{32}$	.3438	8.7313
$\frac{23}{64}$	.3594	9.1281
$\frac{3}{8}$	.375	9.525
$\frac{25}{64}$	.3906	9.9219
$\frac{13}{32}$	.4063	10.3188
$\frac{27}{64}$	.4219	10.7156
$\frac{7}{16}$	.4375	11.1125
$\frac{29}{64}$	.4531	11.5094
$\frac{15}{32}$	.4688	11.9063
$\frac{31}{64}$	.4844	12.3031
$\frac{1}{2}$	.500	12.700

POINT	IN.	MM
1	0.0142	0.36
2	0.0283	0.71
3	0.0425	1.08

FRACTIONS	IN.	MM
$\frac{33}{64}$	.5156	13.0969
$\frac{17}{32}$	.5313	13.4938
$\frac{35}{64}$	.5469	13.8906
$\frac{9}{16}$	.5625	14.2875
$\frac{37}{64}$	.5781	14.6844
$\frac{19}{32}$	.5938	15.0813
$\frac{39}{64}$	.6094	15.4781
$\frac{5}{8}$	.625	15.875
$\frac{41}{64}$	.6406	16.2719
$\frac{21}{32}$	.6563	16.6688
$\frac{43}{64}$	.6719	17.0656
$\frac{11}{16}$	.6875	17.4625
$\frac{45}{64}$	.7031	17.8594
$\frac{23}{32}$	.7188	18.2563
$\frac{47}{64}$	.7344	18.6531
$\frac{3}{4}$	.750	19.050
$\frac{49}{64}$	.7656	19.4469
$\frac{25}{32}$	.7813	19.8438
$\frac{51}{64}$	.7969	20.2406
$\frac{13}{16}$	.8125	20.6375
$\frac{53}{64}$	.8281	21.0344
$\frac{27}{32}$	.8438	21.4313
$\frac{55}{64}$	.8594	21.8281
$\frac{7}{8}$	.875	22.225
$\frac{57}{64}$	.8906	22.6219
$\frac{29}{32}$	.9063	23.0188
$\frac{59}{64}$	.9219	23.4156
$\frac{15}{16}$	.9375	23.8125
$\frac{61}{64}$	.9531	24.2094
$\frac{31}{32}$	.9688	24.6063
$\frac{63}{64}$	.9844	25.0031
1	1.00	25.400

POINT	IN.	MM
4	0.0568	1.44
6	0.0852	2.16
8	0.1136	2.88

Introducing the **NEW**

WWW.DIEBOARD.COM

by Freeman Manufacturing & Supply Company



Freeman is your one-stop shop for Marco Dieboard, PSC Dieboard, Bohler Rule, Diansuply Rubber, Pace Punches, Quick Chase Die Supplies, and much more!

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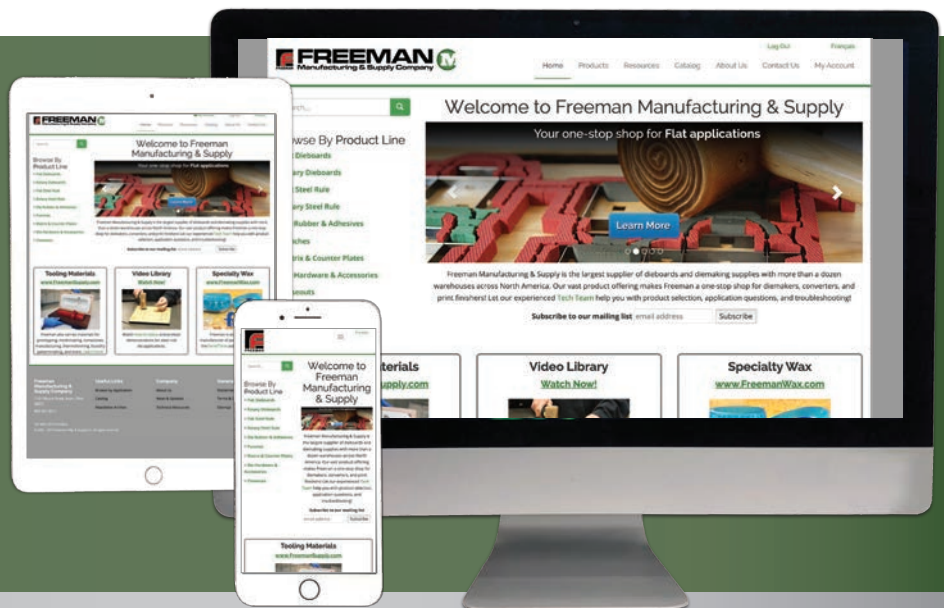
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FREEMAN LOCATIONS

Branch Locations and Public Warehouses

Freeman has strategically placed satellite locations across North America with customer service representatives ready to help. Thousands of products are stocked at these locations as well as public warehouses to reduce your shipping costs.

Strategic & Effective Stocking

Freeman's inventory staff constantly monitors sales and stocking data across the country to properly provide the right amount of products at each location.

Worldwide Shipping

Freeman ships orders all across the globe and has various international distributors available to supply customers with top-quality products.



OHIO (HEADQUARTERS)

1101 Moore Road
Avon, OH 44011
TEL 800-321-8511
TEL 440-934-1902
FAX 440-934-7200

ILLINOIS

727 N. Larch Avenue
Elmhurst, IL 60126
TEL 800-628-6971
FAX 440-934-7200

ONTARIO

3600B Laird Road Unit 8
Mississauga, ON L5L 6A7
TEL 800-345-9259
FAX 586-774-1019

QUEBEC

3475 boul Pitfield
Montreal, QC H4S 1H3
TEL 800-263-7699
TEL 514-335-3530
FAX 514-335-3225

CALIFORNIA

20153 Paseo del Prado
Walnut, CA 91789
TEL 800-325-2100
FAX 440-934-7200

KENTUCKY

917 Landis Lane
Mt. Washington, KY 40047
TEL 502-955-5535
FAX 440-934-7200

OREGON

15745 N. Lombard St., Ste. 100
Portland, OR 97203
TEL 800-558-0866
FAX 262-789-5407

TEXAS

3152 S.E. Loop 820
Fort Worth, TX 76140
TEL 800-792-1047
TEL 817-551-7301
FAX 817-568-0908

GEORGIA

5060 N. Royal Atlanta Dr. Ste. 6
Tucker, GA 30084
TEL 770-493-4131
FAX 440-934-7200

KANSAS

5755 S. Hoover Road Bldg. #5
Wichita, KS 67215
TEL 800-792-1047
FAX 817-568-0908

NORTH CAROLINA

101 Bailey Street
Mocksville, NC 27028
TEL 800-321-8511
FAX 440-934-7200

WISCONSIN

4921 South 2nd St.
Milwaukee, WI 53207
TEL 800-558-0866
TEL 262-789-9800
FAX 262-789-5407

MICHIGAN

27655 Groesbeck Highway
Roseville, MI 48066
TEL 800-345-9259
TEL 586-774-1210
FAX 586-774-1019

PENNSYLVANIA

203 Enterprise Rd.
Lititz, PA 17543
TEL 800-631-4230
TEL 717-653-5300
FAX 717-653-7372

TERMS & CONDITIONS

Returned Goods

To save transportation charges, and facilitate handling of merchandise upon our receipt, we request that no merchandise be returned without prior written authorization.

Damaged Goods

Merchandise given to a transportation firm is their responsibility to deliver in satisfactory condition. If merchandise is delivered damaged, the customer should note as such on freight bill and file a claim with the delivering carrier. Regulations require that hidden damage, identified upon unpacking, must be reported within ten (10) days of delivery in order to file a proper claim.

Liability/Warranty Statement

Our products are intended for sale to industrial and commercial customers. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute a warranty, expressed or implied, including any warranty or merchantability or fitness, nor is protection from any law of patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is replacement of our materials and in no event shall we be liable for special, incidental, or consequential damages.

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CONTACT US

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