



DIE EJECTION PRODUCT & PROCESS GUIDE

IT'S IN OUR DNA!

*It's not just what we do—
it's a part of who we are...*

GREEN G'RILLA™ ■
1995

22000 SERIES ■
2011

12000 SERIES ■
2012

10000 SERIES ■
2017

KRUSE™ ■
2022

..... ■ **RED RHINO™**
1997

..... ■ **MR75**
2012

..... ■ **MR50**
2014

»» **SOLUTION DRIVEN**

»» **CONTINUOUS INNOVATION**

»» **PROVEN PRODUCTS FROM
THE TRUSTED SOURCE**



Monroe Rubber & Plastic, Inc.

*An employee owned and
operated company.*

The Science of Die Ejection

Our only focus: Engineering, manufacturing and
supplying die ejection materials.

No one else can say that.

Simplifying the complex science of die ejection.

Monroe Rubber & Plastic, Inc.

Monroe Rubber and Plastic is a leader in engineering, manufacturing, and supplying high-quality die ejection materials through continuous innovation for more than 28 years.

Monroe offers a wide array of synthetic ejection elastomers providing consistent ejection forces with minimal compression set for both flatbed and rotary cutting die applications resulting in:



**LONGER LASTING
PERFORMANCE**



**FASTER
RUN TIMES**



**GREATER
OUTPUT**



**Products Are Proudly
Manufactured in the USA**



Our Website



THE ISEGA CERTIFICATION INSTITUTE APPROVES MONROE RUBBER AND PLASTIC'S COMPLETE LINE OF EJECTION MATERIALS

At Monroe Rubber and Plastic, we strive to exceed the needs of our customers. That's why we are excited to announce that, in response to increased international demand, our complete line of ejection materials is approved by the ISEGA certification institute, ensuring they meet the strict standards set by the EU Directive for food contact materials. Our customers can safely use these products for the manufacture of cutting dies, which are used in the production of folding boxes for food packaging.

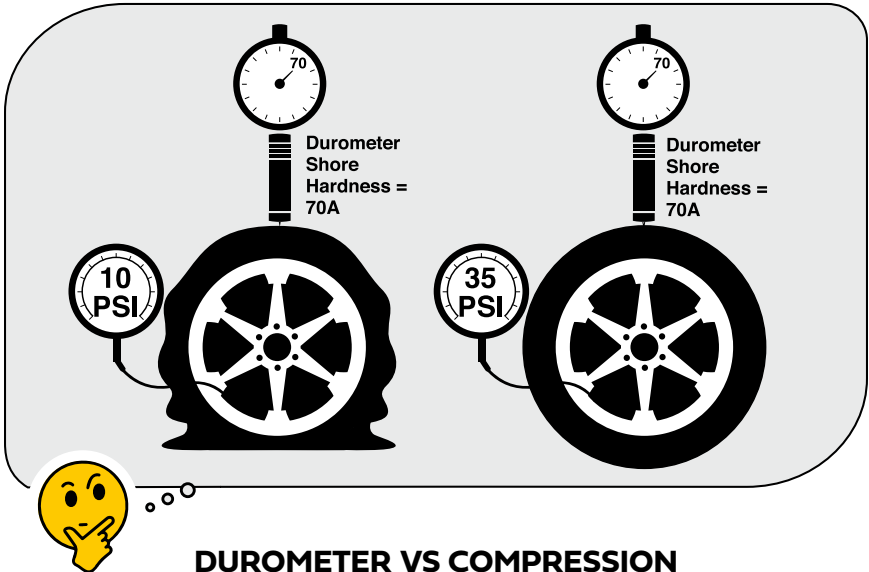
We understand the importance of food safety and are committed to providing high-quality products that exceed industry regulations. For more information on our line of ISEGA certified die ejection materials, please give us a call at 1-734-241-7101.



SELECTING THE RIGHT EJECTOR

COMPRESSION/DEFLECTION

WHY IS COMPRESSION FORCE DEFLECTION IMPORTANT?



DUROMETER VS COMPRESSION FORCE DEFLECTION (PSI)

Our focus is on “Performance”! Compression Force Deflection, measured in pounds per square inch (PSI), is the accurate test method to measure material firmness at varying compressive levels – *a true representation of performance as an ejector in an application.*

Durometer is the measure of the hardness of a material's surface. Since it only measures a small point of the material surface with limited penetration, the test method is less accurate in determining ejector performance.



Scan for the Functional Range of Motion Calculator and Chart.



PRODUCT REFERENCE GUIDE

FUNCTIONAL RANGE OF MOTION CHART

[Learn More About Functional Range of Motion](#)



Products	Firmness	Typical Application		Compression/Deflection Force (PSI) at Various Percentages of Compression									
		Rotary	Flat	10%	20%	25%	30%	40%	50%	60%	70%	80%	90%
KRUSE™	Xtra Soft	✓	✓	4	5	5.4	5.9	7.2	9.3	13.6	25	65	
MR 50	Xtra Soft	✓		6	8.5	9	9.6	11.5	15	22.5	43.5	120	
10000	Soft	✓	✓	7	9.6	10.5	11.5	13.8	17.6	25.6	47.4	132	
12000	Soft	✓	✓	8	11.5	13	14.4	18	23.5	36.5	77.5	190	
MR 1100	Medium	✓	✓	10.2	15	16.8	18.4	22.5	29	44.5	82	205	
22000	Medium	✓	✓	11.3	16	17.8	19.5	24	31	46.3	90.4	220	
Super Strip - 27	Medium	✓	✓	14.5	20.5	22.4	24.3	28.9	36	51.2	92.4		
MR 24	Medium	✓		13.6	20.3	22.7	25	32.2	44	77	191		
Red Rhino™	Medium	✓	✓	15.5	23	25.2	27.6	33	41.5	60	114	250	
MR 35	Firm	✓	✓	19.5	29.8	33	36	43.3	55	80.5	155		
MR 75	Firm		✓	22.4	33	36.2	39.5	47.7	61	113.5	165		
MR 40	Firm	✓	✓	25.7	40	44.7	49.3	60.6	95	125	225		
Green Grilla™	Firm		✓	31	49.4	56	62	78.2	106.4	166	291		
BK-85	Firm	✓	✓	32.4	52.5	59.5	66	82.8	110.5	167	300		
Super Strip - 45 (std.)	Xtra Firm	✓	✓	39.5	59.7	66.2	72.5	86.8	110	154.2	267		
Super Strip - 65	Xtra Firm	✓	✓	63.4	106.8	122.7	137.9	173.8	232.7				
13500 Cork	Xtra Firm		✓	60.9	99.2	119.9	145.3	225.9					

LOWEST PSI AT COMPRESSION

HIGHEST PSI AT COMPRESSION

FUNCTIONAL RANGE OF MOTION



MAXIMUM COMPRESSION



FAILURE



PRODUCT COLOR OPTIONS CHART

The below ✓'s indicate products readily available. All products can be manufactured in any of the below colors but will require a minimum quantity commitment for each order and a slightly longer lead time.

Products	White	Black	Gray	Red	Tan	Orange	Blue	Brick Red	Green	Dark Green
KRUSE™		✓	✓							
MR 50	✓	✓		✓			✓			
10000		✓	✓	✓	✓	✓	✓			
12000		✓	✓	✓	✓	✓	✓			
MR 1100		✓								
22000	✓	✓	✓	✓	✓	✓	✓		✓	
MR 24		✓								
Red Rhino™		✓		✓			✓			
MR 35									✓	
MR 75						✓	✓	✓		
MR 40	✓					✓	✓			
Green G'rilla™										✓
BK 85	✓	✓					✓			

Product names and part numbers do not reference durometer values. Please refer to the Functional Range of Motion Chart above or our website, monroerubber.com, for further technical information.

PRODUCT COLORS - PART NUMBERS

Stripper Foam

Blk - 7100

KRUSE™

Blk - MRK100

Gry - MRK300

MR 50

Wht - MR50000

Blk - MR50100

Red - MR50500

Blue - MR50900

10000

Blk - 10100

Gry - 10300

Red - 10500

Tan - 10700

Or - 10800

Blu - 10900

12000

Blk - 12100

Gry - 12300

Red - 12500

Tan - 12700

Or - 12800

Blu - 12900

MR 1100

Blk - 27100

22000

Wht - 22000

Blk - 22100

Gry - 22300

Red - 22500

Tan - 22700

Or - 22800

Blu - 22900

Grn - 22G00

MR 24

Blk - MR24100

Red Rhino™

Blk - 24100

Red - 26500

Blu - 26900

MR 35

Grn - 35600

MR 75

Or - MR75800

Blu - MR75900

Brk Red - MR7500

MR 40

Wht - 27000

Or - 27800

Blu - 27900

Green G'rilla™

Drk Gm - MR26600

BK-85

Wht - MR26000

Blk - MR26100

Blu - MR26900

Super Strip 27-65 Density

Wht 27 - 42000

Wht 45 - 40000

Wht 65 - RG000

13500 Cork

Cork - 13500

DIE EJECTION PRODUCTS

FOR FLAT & ROTARY STEEL RULE DIES

-  Rotary Die Applications
-  Flat Die Applications

- AVAILABLE WITH OR WITHOUT PRESSURE SENSITIVE ADHESIVE (PSA)
- CUSTOM SHAPE SERVICES AVAILABLE
- WIDE ARRAY OF COLOR OPTIONS



STRIPPER FOAM

Six pound density foam to stabilize sheets on a stripper tool.

SHAPES

- Sheet Size ✓ Strips
- 54" x 72" ✓ Blocks
- ✓ Custom Profiles

COLORS - PART NUMBERS

- Blk - 7100



NEW

KRUSE™ XTRA SOFT

Kwik Response Ultra Soft Ejector, a rapid response ejector with low compression/deflection to reduce board crush. Can also be used as pull bands.

SHAPES

- Sheet Size ✓ Strips
- 22" x 42" ✓ Blocks
- ✓ Custom Profiles

COLORS - PART NUMBERS

- Blk - MRK100
- Gry - MRK300



MR 50 XTRA SOFT

The ideal elastomer for product ejection when fragile laminates are on the corrugated or when our 10000 is too firm.

SHAPES

- Sheet Size ✓ Strips
- 22" x 42" ✓ Blocks
- ✓ Custom Profiles

COLORS - PART NUMBERS

- Wht - MR50000
- Blk - MR50100
- Red - MR50500
- Blue - MR50900



10000 SOFT

Slightly softer than 12000. 10000 does it all for recycled board; crush-free product ejection, good scrap elimination, and at a low cost.

SHAPES

- Sheet Size ✓ Strips
- 22" x 42" ✓ Blocks
- ✓ Custom Profiles

COLORS - PART NUMBERS

- Blk - 10100
- Gry - 10300
- Red - 10500
- Tan - 10700
- Or - 10800
- Blu - 10900



AVAILABLE WITH OR WITHOUT PSA

CUSTOM SHAPE SERVICES AVAILABLE

WIDE ARRAY OF COLOR OPTIONS



12000 SOFT

Formulated for product ejection to pair ideally with 22000 in scrap areas.

SHAPES

- Sheet Size ✓ Strips
- 22" x 42" ✓ Blocks
- ✓ Custom Profiles

COLORS - PART NUMBERS

- Blk - 12100
- Gry - 12300
- Red - 12500
- Tan - 12700
- Or - 12800
- Blu - 12900



MR 1100 MEDIUM

Developed to keep up with advances in the die cutting process. Replaces the old Black Open Cell.

SHAPES

- Sheet Size ✓ Strips
- 18" x 36" ✓ Blocks
- ✓ Custom Profiles

COLORS - PART NUMBERS

- Blk - 27100



22000 MEDIUM

The best product to start with for all corrugated dies. 22000 is a popular choice because of its wide application range and economical price.

SHAPES

- Sheet Size ✓ Strips
- 22" x 42" ✓ Blocks
- ✓ Custom Profiles

COLORS - PART NUMBERS

- Wht - 22000
- Blk - 22100
- Gry - 22300
- Red - 22500
- Tan - 22700
- Or - 22800
- Blu - 22900
- Grn - 22G00



MR 24 MEDIUM

Has a compression/deflection force slightly less than Red Rhino. Developed to be used on the lead edge of rotary dies.

SHAPES

- Sheet Size ✓ Strips
- 18" x 36" ✓ Blocks
- ✓ Custom Profiles

COLORS - PART NUMBERS

- Blk - MR24100

DIE EJECTION PRODUCTS

(CONTINUED)

FOR FLAT & ROTARY STEEL RULE DIES

 Rotary Die Applications

 Flat Die Applications

AVAILABLE WITH OR WITHOUT PSA

CUSTOM SHAPE SERVICES AVAILABLE

WIDE ARRAY OF COLOR OPTIONS



RED RHINO™ MEDIUM

Economically priced, covers a wide range of applications including male blanker faces, die cutting of folding carton and corrugated. Pairs with Green G'rilla for a perfectly balanced die.

SHAPES

- ✓ Strips
- ✓ Blocks
- ✓ Custom Profiles

Sheet Size
18" x 36"

COLORS - PART NUMBERS

- Blk - 24100
- Blu - 26900
- Red - 26500



MR 35 FIRM

In specific applications where Red Rhino is a little too soft, and MR 40 is too firm, MR 35 is the perfect fit for when the job requires this specific ejection force.

SHAPES

- ✓ Strips
- ✓ Blocks
- ✓ Custom Profiles

Sheet Size
18" x 36"

COLORS - PART NUMBERS

- Grn - 35600



MR 75 FIRM

A microcellular elastomer without the large holes and thickness variances of the old 75 rubber. It outperforms and outlasts, so you can get jobs on and off press more consistently.

SHAPES

- ✓ Strips
- ✓ Blocks
- ✓ Custom Profiles

Sheet Size
18" x 36"

COLORS - PART NUMBERS

- Or - MR75800
- Blu - MR75900
- Brk Red - MR7500



MR 40 FIRM

An excellent alternative to using Super Strip in larger scrap areas. The ejection force of this product is lower than Super Strip, but higher than Red Rhino.

SHAPES

- ✓ Strips
- ✓ Blocks
- ✓ Custom Profiles

Sheet Size
18" x 36"

COLORS - PART NUMBERS

- Wht - 27000
- Blu - 27900
- Or - 27800



AVAILABLE WITH OR WITHOUT PSA

CUSTOM SHAPE SERVICES AVAILABLE

WIDE ARRAY OF COLOR OPTIONS



GREEN G'RILLA™ FIRM

Recommended for tight areas to prevent material build-up. Formulated to pair with Red Rhino for perfect balance.

SHAPES

- Sheet Size ✓ Strips
- 18" x 36" ✓ Blocks
- ✓ Custom Profiles

COLORS - PART NUMBERS

- Drk Grn - MR26600



BK-85 FIRM

A high density, super-resilient ejector with tight tolerances providing the extra push needed in slots or tightly ruled areas of the die. Also suitable as a trim breaker rubber.

SHAPES

- Sheet Size ✓ Strips
- 18" x 36" ✓ Blocks
- ✓ Custom Profiles

COLORS - PART NUMBERS

- Wht - MR26000 Blu - MR26900
- Blk - MR26100



SUPER STRIP MEDIUM - XTRA FIRM

A resilient, high ejection force product used for slot ejection. As it compresses, it doesn't bulge making it ideal for slots and punches. Available in various hardness: 27, 45, 65 density.

SHAPES

- Sheet Size ✓ Strips
- 9.75" x 19.5" ✓ Blocks
- ✓ Custom Profiles

COLORS - PART NUMBERS

- Wht 27 Density - 42000 **MEDIUM**
- Wht 45 Density - 40000 **XTRA FIRM**
- Wht 65 Density - RG000 **XTRA FIRM**



13500 CORK XTRA FIRM

An extra firm material that should be used sparingly due to the possibility of tonnage overload. Ideal for areas where you want to flat crush the substrate.

SHAPES

- Sheet Size ✓ Strips
- 18" x 36" ✓ Blocks
- ✓ Custom Profiles

COLORS - PART NUMBERS

- Cork - 13500

SHEETS, BLOCKS, & STRIPS

ORDER REFERENCE GUIDE

All Monroe Rubber and Plastic products can be converted into blocks or strips in any profile.

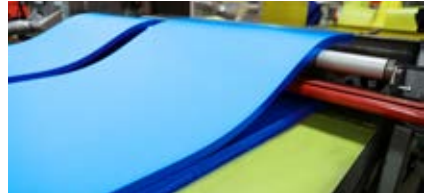
AVAILABLE WITH OR WITHOUT PSA

CUSTOM SHAPE SERVICES AVAILABLE

WIDE ARRAY OF COLOR OPTIONS

SHEETS | All of our products are readily available in sheet form with or without PSA in any specified thickness.

When ordering sheets, specify the die ejector product, the color, with or without PSA, and the specified thickness.



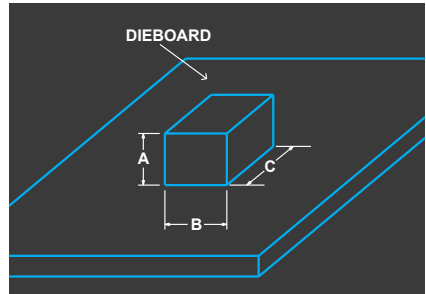
BLOCKS | When ordering blocks, specify the dimensions in the following sequence:

A = Height of Block (material thickness)

B = Width of Block

C = Length of Block

Example: When ordering a block with 5/8" height, 7/8" width, and 1-1/4" length, specify as: 5/8" x 7/8" x 1-1/4"



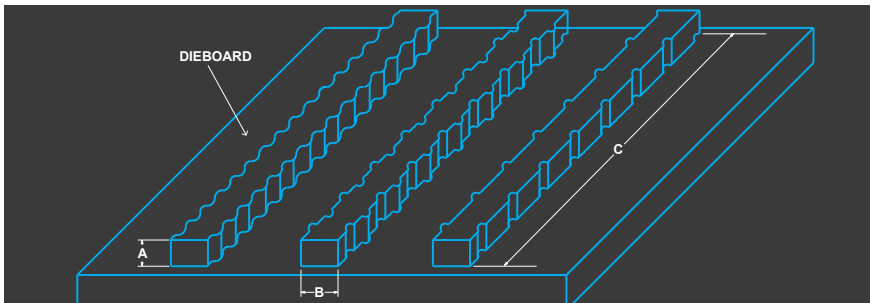
STRIPS | When ordering strips, specify the dimensions in the following sequence:

A = Height of Strip (material thickness)

B = Width of Strip (measured at widest point)

C = Length of Strip

Example: When ordering a strip with 3/8" height, 1/2" width, and 18" length, specify as: 3/8" x 1/2" x 18"



All strips are available in any product and any color.



GROOVY
G'RILLA™



MR WAVE™



MR POINT™



EJECTOFLEX™



SIDEWAVE™



CONVERTING TECHNOLOGY

[Learn More](#)

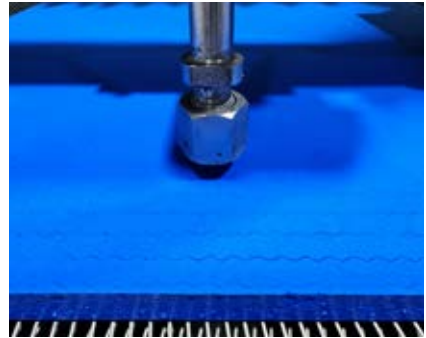
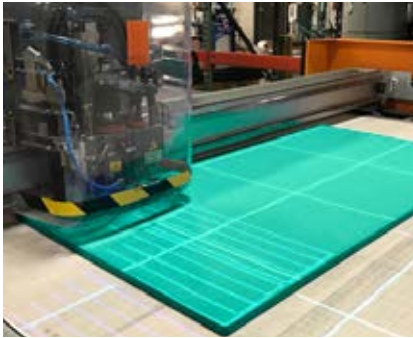


Monroe Rubber and Plastic offers in-house converting support to supply their products in blocks, strips, or any custom shape.

- AVAILABLE WITH OR WITHOUT PSA
- CUSTOM SHAPE SERVICES AVAILABLE
- WIDE ARRAY OF COLOR OPTIONS

CONVERTING CAPABILITIES:

- CAD
- SKIVING
- DIECUTTING
- WATERJET
- KNIFE CUTTING



Scan for a free die ejection product sample.

SPECIALTY COATING

TOPCOAT TECHNOLOGY

TopCoat to the Rescue!

STATIC DISSIPATIVE

ABRASION RESISTANCE =
LONGER EJECTOR LIFE!

RESISTS INK & ADHESIVE BUILDUP

CUSTOM SHAPE SERVICES AVAILABLE



[Learn More](#)



Our proprietary formulation provides a strong and resilient surface coating with low friction interface that can be added to our elastomer products. TopCoat resists delamination as it is applied with no adhesives resulting in a permanent chemical and mechanical bond to the elastomer.

TopCoat is available in sheet format and can be converted into custom shapes. Choose from thicknesses ranging from .015" - .060" with finishes in matte or semi-smooth.



EJECTION EFFICIENCY

Provides less tonnage and better controlled force ejection.



IMPROVES STRIPPING

Ideal for tight scrap areas, hangers, and punches.



OPTIMAL BALANCE

Customizable tool offering ultimate die and press balance.

PRODUCTS COMPATIBLE WITH TOPCOAT:

KRUSE™

MR 50

10000

12000

MR 1100

22000

MR 24

RED RHINO™

MR 35

MR 75

MR 40

GREEN G'RILLA™

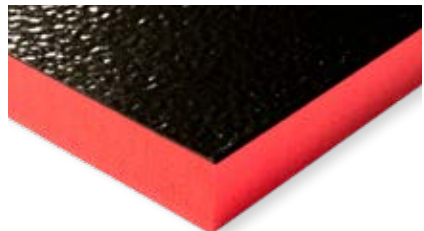
BK-85

SUPER STRIP

13500 CORK



MATTE FINISH



SEMI-SMOOTH FINISH



THE RIGHT MATERIAL FROM THE RIGHT RESOURCE

*Your committed resource for the industry's widest
selection of quality die ejection materials.*



Monroe Rubber & Plastic, Inc.

720 Detroit Ave
Monroe, MI 48162

800-521-0109

| 734-241-7101

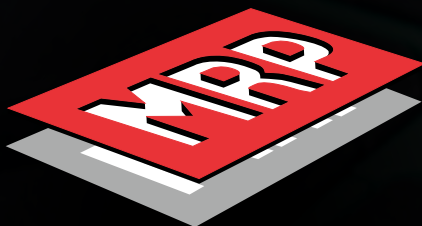
| monroerubber.com

The Science of Die Ejection

Our only focus: Engineering, manufacturing and
supplying die ejection materials.

No one else can say that.





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operated company.*

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