

Frank and



Manufacturers of K-Prene®... the unequaled Urethane

### **Custom Urethane**

Industrial Applications





**Roll Bending Machines** 

THE REAL PROPERTY OF

8

Acrotech can cost effectively produce urethane parts in any volume you need. We can make parts that are sized under a cubic inch to over 400 pounds! We welcome you to check out all of our products and services in this catalog. In addition you can find us on the internet at www.acrotechinc.com for up to date pricing and further information.

Thank You,

Andy Oliver - President - Acrotech Inc.

- 30+ years of experience making urethane parts for a variety of industries
- Modern 33,000 sq. ft. manufacturing facility **100% Made in the USA**
- Urethane casting or compression mold processes – providing cost effective solutions
- Standard products available along with industry specific custom parts made to your specs
- Custom molded urethane parts in any durometer or color
- Captive facility with in-house mold construction and secondary machining
- High volume production sheet metal roll bending machines

# urethane products & services

**ROVATION #** 

### **Custom Urethane Molding:**

ADE /

AMERIC

Acrotech has been custom molding for decades. We are proudly the best in the business. No job is too small or too large. We successfully manage both high volume and individual orders.



### **Reverse Engineering:**

Often in industrial situations a part is needed for a project but the supply is gone or no longer produced. We are able to reverse engineer your part to fit and work just like it originally did resulting in a better end product.

### Hand Batch / Small Quantity:

Our hands on approach allows us to get personal with all of our customers. We are flexible and cost effective



r customers. We are flexible and cost effective at producing small volume runs. We take extra care to meet your needs.



### Custom Urethane is our specialty. See more online at: **WWW.acrotechinc.com**

### Large Batch / Machine Pour:

Utilizing multiple processing machines we service numerous larger volume OEM customers. Maintaining low overhead Acrotech can pour that you need all surprising cost savings over other in one service



**Urethane - Inspection**. Every part that is molded and machined at Acrotech gets a part number as well as a final inspection. We go the extra mile to clean up the urethane prior to shipping for a flawless product every time.

### **Mold Machining - Inserts:**

**Custom Durometers:** 

anywhere from (10A to 85D).

We have our standard durometers Yellow 40A, Black 60A, Orange 80A, Blue 90A, Red 95A and Brown 75D however we are able to pour urethane

We design and machine all molds in-house. Experienced machinists operate multiple manual and CNC machining centers. This allows better quality control and reduced lead times to our customers.



# A Print Prin

### Custom Colors:

Urethane can be molded in one of our **(20)** custom colors. Have a company color scheme? Product that needs to stand out? We can help make the color yours!

### **FDA Approved Urethane:**

Approved urethane for use in the food service industry, under section #177.21000 subpart F. We can make hoppers. paddles, mixers, conveyor parts and more.

### Shaft - Roller Recovery:

We are able to strip and recover a large variety of shafts. This includes multiple sizes, durometers, profiles and surface finishes. Parts can be refurbished at a fraction of the cost of OEM spare parts.

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Please see back cover for Acrotech's Terms, Conditions, Order/Warranty Information

# urethane compared to natural and synthetic rubbers

Urethane produced parts will in most cases outperform natural and synthetic rubbers. The composition and materials of urethane are of higher grades and are able to withstand a much broader range of extreme properties. It is important to remember that urethane can be more expensive in material costs but less expensive to manufacture. Urethane will in most every case outlast natural and synthetic rubbers and that should be taken into consideration when purchasing high quality urethane products and K-Prene<sup>®</sup> from Acrotech Inc.

Please view the chart below to compare just how well urethane stands alone from natural and synthetic rubbers.

PROPERTIES	NATURAL RUBBER	SBR or BUNA S butadiene styrene	<b>BUTYL</b> isobutylene isoprene	NITRILE (BUNA N) butadiene acrylonitrille	<b>NEOPRENE</b> chloroprene	URETHANE
Tensile Strength, (PSI) Pure Gum	Over 3000	Below 1000	Over 1500	Below 1000	Over 3000	1000-10,000
Hardness Range (Durometer A)	30-90	40-90	40-75	40-95	40-95	33-95 + (75 Shore D)
Specific Gravity (base material)	0.93	0.94	0.92	1.00	1.23	1.10
Vulcanizing Properties	Excellent	Excellent	Good	Excellent	Excellent	Excellent
Adhesion to Metals	Excellent	Excellent	Good	Excellent	Excellent	Excellent
Adhesion to Fabrics	Excellent	Good	Good	Good	Excellent	Excellent
Tear Resistance	Good	Fair	Good	Fair	Good	Outstanding
Abrasion Resistance	Excellent	Good to Excellent	Good	Good	Excellent	Outstanding
Compression Set	Good	Good	Fair	Good	Fair to Good	Good
Compression Set Cold	Excellent	Good	Bad	Good	Very Good	Fair
Rebound Hot	Excellent	Good	Very Good	Good	Very Good	Good
Electric Strength	Excellent	Excellent	Excellent	Poor	Good	Excellent
Electrical Insulation	Good to Excellent	Good to Excellent	Good to Excellent	Poor	Fair to Good	Fair to Good
Permeablity to Gases	Fair	Fair	Very Low	Fair	Low	Fair to Good
Acid Resistance: Dilute Concentrated	Fair to Good Fair to Good	Fair to Good Fair to Good	Excellent	Good Good	Excellent Good	Fair to Good Poor
Solvent Resistance: Aliphatic Hydrocarbons Aromatic Hydrocarbons Oxygenated (ketones, etc.) Lacquer Solvents Swelling in Lubricating Oil Oil and Gasoline Animal and vegetable Oils	Poor Poor Good Poor Poor Poor Poor	Poor Poor Good Poor Poor Poor Poor to Good	Poor Poor Good Poor Poor Poor Excellent	Excellent Good Poor Fair Very Good Excellent Excellent	Good Fair Poor Poor Good Good Good	Excellent Fair to Good Poor Poor Excellent Excellent
Water Absorption	Very Good	Good to Excellent	Very Good	Fair to Good	Good	Good @ room temp. Poor @ 212°F.
Resistance to: Ozone Sunlight Aging Heat Aging Flame Heat Cold Oxidation	Fair Poor Good Poor Good Excellent Good	Fair Poor Very Good Poor Excellent Excellent Good	Excellent Very Good Excellent Poor Excellent Good Excellent	Fair Poor Excellent Poor Excellent Good Good	Excellent Very Good Excellent Good Excellent Good Excellent	Outstanding Good Fair Good Excellent Excellent

#### What is K•Prene®?

**K**•**Prene**<sup>®</sup> is the trade name for the various grades of urethane elastomers formulated specifically by **Acrotech**. The **K**•**Prene**<sup>®</sup> formulations were designed to "fill the gaps" between rubbers with characteristic resilience and structural plastics with characteristic hardness. The result is a functional toughness matched by no other available material in either natural or man-made form.

**K**•**Prene**<sup>®</sup> urethane elastomers have higher oil and solvent resistance and better thermal stability than most general purpose rubbers and plastics. They have greater abrasion and tear resistance in combination with increased load bearing capacity than do the neoprene or natural rubbers. Their extensibility and impact strength are greater than those of most plastics materials.

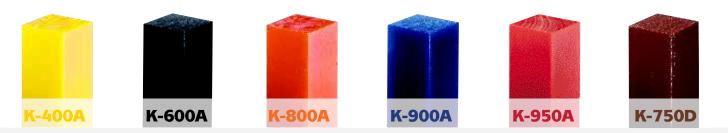
### **K**•**Prene<sup>®</sup>** Urethane Characteristics

- TDI and MDI chemical structures, both are available in polyether and polyester formulas.
- We manufacture over 25 formulations on a daily basis.
- Hundreds of other formulations are available to meet your most demanding application.
- Shore scale hardness ranging from 10A to 85D Durometer.

Technical information and important Urethane Charts can be found on our website: www.acrotechinc.com

### Selecting K•Prene® for limitless applications

Urethane provides a unique combination of properties. **These include:** high load-bearing capacity; toughness; hardness; abrasion resistance; and oil and ozone resistance.



#### K-400A Yellow 40A Durometer:

A low durometer material with a high coefficient of friction that will satisfy countless industrial needs such as rollers, bumpers, etc.

#### K-600A Black 60A Durometer:

High coefficient of friction and excellent tensile strength makes this material a good choice for feed rolls and many other industrial applications.

#### K-800A Orange 80A Durometer:

Good tear strength, abrasion resistance and excellent flex life. Good low temperature properties. Requires lower tonnage. Withstands greater deflection. Should not be used for material heavier than 20 gauge mild steel, except in special applications. Maximum recommended deflection 35%. **K-900A Blue 90A Durometer:** Withstands consistent flexing. Good cut resistance. Good load-bearing capacity. Recommended for most applications where large radius bends or difficult bends require large deflection or flow of K•Prene<sup>®</sup>. Maximum recommended deflection 25%.

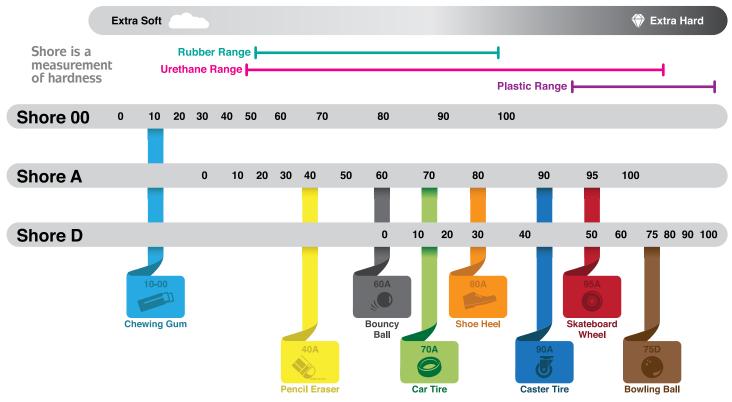
**K-950A Red 95A Durometer:** High tensile strength for higher blank-holding pressure. High load-bearing capacity. Best tear strength. Best cut resistance. Best abrasion/wear resistance. Recommended for most applications. Maximum recommended deflection 15%.

#### K-750D Brown 75D Durometer:

Great load-bearing capacity. Excellent machinability and abrasion resistance. Offers great rigidity, yet will deflect. Maximum recommended deflection 5%.

Our **K**•**Prene**<sup>®</sup> sample chains can be very helpful. Request your FREE sample keychain at: <u>WWWW.acrotechinc.com</u>

### **DUROMETER HARDNESS SCALE**



### **Physical Properties of K•Prene® Urethane**

PROPERTIES	ASTM STD.	K-400A	K-600A	K-800A	K-900A	K-950A	K-750D
Hardness, Shore A	D-2240	40	60	80	90	95	_
Shore D	D-2240	_	_	_	43	50	75
Tensile Strength, (PSI)	D-412	500	3500	3000	5500	6500	9700
Elongation, %	D-412	510	530	800	430	380	250
100% Modulus, (PSI)	D-412	90	280	400	1100	1800	4900
300% Modulus, (PSI)	D-412	200	390	625	2200	4300	_
Tear Strength, Split, Ib./in.	D-470	20	25	70	90	130	115
Tear Strength, Die C, Ib./in.	D-624	80	180	400	600	700	770
Abrasion Resistance, NBS Index	D-1630		45	110	175	300	475
Impact Resistance							
(Izod) ft. lb./in.	D-256	_	_	_	_	_	5
Compression Set, Method B, %	D-395	38	6	45	30	36	_
Compression Set, Method A, %	D-395	_	_	_	_	_	1
Bashore Resilience, %	D-2632	8	32	60	42	40	44
Bell Brittle Point, F.	D-2137		-70	<-130	<-80	<-80	<-83
Coefficient of Friction	D-1894			0.55	0.45	0.30	0.11
Compression Modulus, 5%, (PSI)	D-575	13.3	40	150	272	515	1796
Compression Modulus, 10%, (PSI)	D-575	28.2	80	274	530	982	4509
Compression Modulus, 15%, (PSI)	D-575	43.8	130	378	735	1372	5996
Compression Modulus, 20%, (PSI)	D-575		180	492	940	1811	7266
Compression Modulus, 25%, (PSI)	D-575	82.7	240	641	1240	2358	8433
Specific Gravity	D-792	_	1.16	1.08	1.11	1.13	1.21

# machining of K•Prene®

Machining of K•Prene<sup>®</sup> urethane proves useful when the required tolerances cannot be obtained by conventional molding methods, or when low production runs do not justify the cost of molds. We maintain a complete inventory of sheets, round rods, and bars in six different hardnesses which can often be used to make prototypes or limited production quantities.

The table below details the general machining characteristics of K•Prene<sup>®</sup> urethane **90A** durometer and harder. For K•Prene<sup>®</sup> urethane below **80A** durometer, cutting tools are often not satisfactory and grinding may be required. In some cases, machinability can be improved by freezing K•Prene urethane below **80A** durometer with dry ice or liquid nitrogen.

Machining of K•Prene<sup>®</sup> urethane is similar to that of metals, and in most cases the same tools can be used.

#### The principle differences between metal and urethane machining are:

#### **Modulus of Elasticity**

Urethanes are resilient and can be easily distorted, so care must be taken to avoid distortion due to holding or cutting forces.

#### **Softening Point**

Gumming, poor finishes and poor dimensional control will readily occur if excess heat is generated and allowed to accumulate. Proper tool geometry, feed rates and cutting speed in conjunction with coolants can usually overcome these problems. Watersoluble cutting oils and/or light machine oils are good coolants for urethanes.

#### Lower Thermal Conductivity

Heat generated by the cutting tools stays close to the tool and raises the urethane temperature rapidly. This heat must be controlled. Melting can occur above 350° F.

#### **Elastic Memory**

Elastic recovery occurs in urethanes both during and after machining, so the cutting tool must provide clearance to compensate accordingly. Without compensation, expansion of the urethane after cutting will result in increased friction between the cut surface and the cutting tool. Excess heat build-up will result. Elastic recovery after machining can result in smaller internal diameters or larger external diameters than were measured during cutting.

MACHINING APPLICATIONS	RECOMMENDED TOOLS	SIZE LIMITATIONS	MAXIMUM SPEEDS	WORKHOLDING RECOMMENDATIONS	SUGGESTIONS
Bandsawing	Sharp 2-4 hook carbide blade with raker set.	Max. 8" thick Min. 1/8" thick sheets.	1800 ft./min. (reduce to 1200 ft./min below 90A).	Vises or clamps (Not required with flats or sheets).	<ul><li> Rotate rounds when sawing.</li><li> Maintain high blade tension.</li></ul>
Cutting, Shearing, Slitting	Shears or belt-cutting machines with up to 1/8" knife blade	Thin sheets (up to 1/2").		Friction clamps.	Use bevel edge blades (square degree, compress urethane, resulting in uneven cuts).
Drilling	High speed 90° + twist drills with blunt point.	Min. of 3/8" (no minimum if clamped between steel).	600-800 RPM	Vises or clamps.	• Good tolerances possible with 75D, for other grades use over-size drills.
Tapping	Regular high speed taps.	None		Vises or clamps.	• Except for 75D, use over-size tap to allow for shrinkage or urethane.
Turning Boring	H.S.S. tool bits with positive rake of 5°-10°.	No limits on dia. length restricted (long soft bars may flex).	800 surface ft./min.	Angle of cut to work: 90° - 120°.	• Form tools may be used (especially when machining 75D).
Grinding	Tool post grinder 20-80 grit wheel.		Lathe-150 RPM or lower. Grinder-2000-3500 RPM.	Fixtures or friction mandrels.	• Air blast to eliminate build up.
Knifing	Carbide or H.H.S. razor sharp and as thin as possible.		600-1000 RPM	Fixtures or friction mandrels.	Use lubricant to help prevent dishing.
Milling	Sharp single-blade flycutters with 10° back rake and good clearance.	Min. 3/8" thick	Approx. 2000 surface ft./min.	Vise or double-face clamping tape.	• Flycutting at approx. 3" dia. give best results.



### **STANDARD URETHANE**



# precision cast sheets

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				Custom sha & sizes ar available
1		- nem		
	X	NIST.	-	ORIGIN
				Inspected and

- Sheets 1" and UNDER are available in **40A**, **60A**, **80A**, **90A**, **95A** and **75D** durometer.
- Can be cut to size Used for any application
- Pricing available online: www.acrotechinc.com

#### **Tolerances:**

Length: +1/4 - 0 Width: +1/4 - 0 Thickness: + / - 2% or + / - .010 (whichever is greater)

#### **Standard Available Sheets**

AVAILABLE THICKNESS (inches)	WIDTH (inches)	LENGTH MAX (inches)
1/16	1 - 24	72
1/8	1 - 24	72
3/16	1 - 24	72
1/4	1 - 48	96
3/8	1 - 48	96
1/2	1 - 48	96
5/8	1 - 48	96
3/4	1 - 48	96
1	1 - 48	96

Fractional incriments up to 6" are custom, please call

UP TO 48

#### for availability

1-1/16 thru 6

UP TO 96

# round rods

- Standard rounds available in 40A, 60A, 80A, 90A, 95A and **75D** durometer.
- Diameters over 4" and larger are available upon request
- Can be cut to size Used for any application
- Tolerance: Width & Height +/- .010, or 2% in Length - (Whichever is greater)
- Pricing available online: www.acrotechinc.com

Standard Size	S	Metric Roun (Made to ord	
DIAMETER (inches)	LENGTH (inches)	DIAMETER (mm)	LENGTH (mm)
1/4	12, 24	8	500
3/8	12, 24	10	500
1/2	12, 24, 36, 48	15	500, 1000
5/8	12, 24, 36, 48	20	500, 1000
3/4	12, 24, 36, 48	25	500, 1000
7/8	12, 24, 36, 48	30	500, 1000
1	12, 24, 36, 48	40	500, 1000
1-1/8	12, 24, 36, 48	50	500, 1000
1-1/4	12, 24, 36, 48	60	500, 1000
1-3/8	12, 24, 36, 48	70	500, 1000
1-1/2	12, 24, 36, 48	80	500, 1000
1-5/8	12, 24, 36, 48	100	500, 1000
1-3/4	12, 24, 36, 48		
1-7/8	12, 24, 36, 48		
2	12, 24, 36, 48		
2-1/8	12, 24, 36, 48		
2-1/4	12, 24, 36, 48		
2-3/8	12, 24, 36, 48		
2-1/2	12, 24, 36, 48	and the second se	
2-3/4	12, 24, 36, 48		
3	12, 24, 36, 48		
3-1/8	12, 24, 36, 48	And in case of the local division of the loc	
3-1/4	12, 24, 36, 48		10
3-1/2	12, 24, 36, 48		
3-3/4	12, 24, 36, 48		
4	12, 24, 36, 48		

Custom shapes & sizes are available!



4"+ please call for availability



# square & rectangle bars

Custom shapes & sizes are available!

- Available in **40A**, **60A**, **80A**, **90A**, **95A** and **75D** durometer.
- Custom made thicknesses available upon request
- Can be cut to size Used for any application
- Tolerance: Width & Height +/- .010, or 2% in Length (Whichever is greater)
- Pricing available online: www.acrotechinc.com

#### **Standard Sizes**

WIDTH x HEIGHT (inches)	LENGTHS (inches)
3/8 x 3/8	12, 24, 36, 48
1/2 x 1/2	12, 24, 36, 48
5/8 x 5/8	12, 24, 36, 48
3/4 x 3/4	12, 24, 36, 48
1 x 1	12, 24, 36, 48
1-1/4 x 1-1/4	12, 24, 36, 48
1-1/2 x 1-1/2	12, 24, 36, 48
1-3/4 x 1-3/4	12, 24, 36, 48
*2 x 2	12, 24, 36, 48
2-1/2 x 2-1/2	12, 24, 36, 48
*3x2	12, 24, 36, 48
3 x 3	12, 24, 36, 48
4 x 4	12, 24, 36, 48
5 x 5	12, 24, 36, 48

#### 6"+ are custom, please call for availability

(\*) can be ordered with a 1" center hole When ordering this please specify **"WITH CENTER HOLE"** 

Metric Sizes (Made to order)

WIDTH x HEIGHT (mm)	LENGTHS (mm)
25 x 25	500, 1000
**30x30	500, 1000
* * 50 x 50	500, 1000
**80 x 30	500, 1000
75 x 50	500, 1000
* * 110 x 45	500, 1000

(\*\*) Fits European style bottom dies



# tubes/spring

Our urethane tube and spring selection is among the largest available in the industry, with hundreds of mold combinations available to pour the perfect size. Tubes and springs can be used for any application and we encourage you to check out our website for further sizing and pricing information. Depending on your custom applications we can tailor these to specific durometers and colors.

Check out www.acrotechinc.com for more information and pricing.

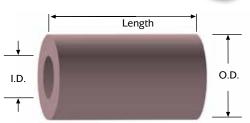
- Abrasion resistance
- Urethane does not fragmentize
- High load-carrying capability
- Protection from marring/galling
- Oil and solvent resistance
- Longer life
- Low noise
- 100% load-bearing surface

I.D. Ranges (inches)

1/8 thru 25/64

7/16 thru 4

- Vibration damping & shock absorbance
- Can be custom cut upon request
- Effectiveness between -30°F. and 180°F.
- Tolerance: Width & Height +/- .010, or 2% in Length - (Whichever is greater)
- Pricing available online: www.acrotechinc.com



Contact us for

custom I.D.'s. O.D.'s and

Lengths.

#### **Tubes/Springs – Metric** (Made to order)

Custom lengths upon request

<b>I.D.</b> (mm)	<b>O.D.</b> (mm)	Length Options (mm)
7	15	500
8.5	20	500
11	25	500
14	30	500
14	40	500
14	50	500
14	60	500
22	80	500
22	100	500

### washers, seals & gaskets

Lengths (inches)

12

24

- Almost any O.D./I.D. combination can be supplied.
- We have provided parts in quantities of thousands to just a few pieces.
- Durometer, size, color, etc., all supplied to your specifications.

O.D. Ranges (inches)

3/8 thru 3

3/4 thru 5

• Pricing available online: www.acrotechinc.com

Bulk or specific quantity packaging is available



### **INDUSTRIAL URETHANE**



### roller re-manufacturing & re-covering

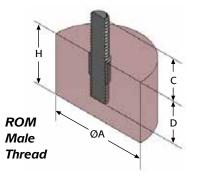
Acrotech can strip and recover almost any type of roller that you have. We are able to take down the current materials to the core and recover in any hardness of urethane that you would need. Special grooves, angles, widths and depths are also available when recovering your rollers with urethane at Acrotech.





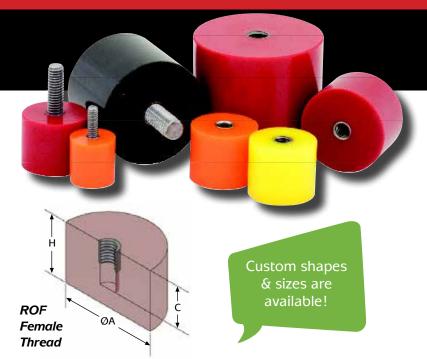
# bumpers

- Steel cores with male or female threads.
- Standard Bumpers are available in 40A, 60A, 80A, 90A, and 95A durometer.
- Pricing available online: www.acrotechinc.com



#### Standard Round Bumpers (ROM)

	H (inches)	C&D (inches)	<b>Thread</b> (inches)	Part No.
1	1	3/4	1/4 - 20	<b>ROM</b> 001
1-1/4	1	3/4	1/4 - 20	<b>ROM</b> 002
1-1/2	1-1/4	7/8	3/8 - 16	<b>ROM</b> 003
2	1-1/4	7/8	3/8 - 16	<b>ROM</b> 004
2-1/2	2	1	1/2 - 13	<b>ROM</b> 005
3	2-1/2	1	1/2 - 13	<b>ROM</b> 006



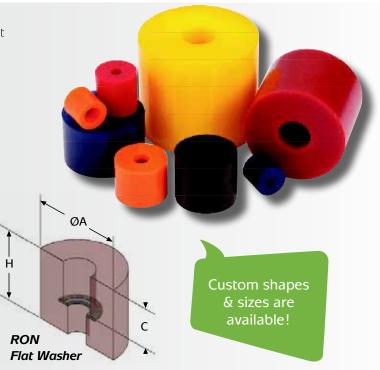
#### Standard Round Bumpers (ROF)

		C (inches)	Thread (inches)	Part No.
1	1	3/4	1/4 - 20	<b>ROF</b> 001
1-1/4	1	3/4	1/4 - 20	ROF002
1-1/2	1-1/4	7/8	3/8 - 16	<b>ROF</b> 003
2	1-1/4	7/8	3/8 - 16	<b>ROF</b> 004
2-1/2	2	1	1/2 - 13	<b>ROF</b> 005
3	2-1/2	1	1/2 - 13	<b>ROF</b> 006

- A flat washer is molded into the bumper and will accept a socket head cap screw of the size indicated.
- Available in 40A, 60A, 80A, 90A, and 95A durometer.
- Pricing available online: www.acrotechinc.com

#### Standard Washer Sizes (RON)

A (inches)	H (inches)	C (inches)	Cap Screw (inches)	Part No.
3/4	3/4	.250	1/4	<b>RON</b> 001
1	1	.500	1/4	<b>RON</b> 002
1-1/4	1	.750	3/8	<b>RON</b> 003
1-1/2	1-1/4	.750	3/8	<b>RON</b> 004
2	1-1/4	.750	1/2	<b>RON</b> 005
2-1/2	2	.750	1/2	<b>RON</b> 006
3	2-1/2	.750	1/2	<b>RON</b> 007





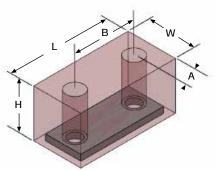
Counterbored to accept standard Socket head cap screws

### looking for bumper ideas? visit: **WWW.acrotechinc.com**



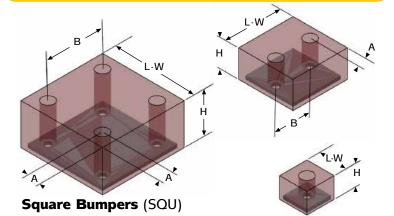
# bumpers

- Square and Rectangular bumpers are molded with a 1/8" aluminum base plate.
- Standard bumpers are available in **40A**, **60A**, **80A**, **90A**, and **95A** durometer.
- Pricing available online: www.acrotechinc.com
- *Counterbored to accept standard 1/4" socket head cap screws*



#### **Rectangle Bumpers (REC)**

<b>W</b> (inches)	L (inches)	H (inches)	A (inches)	<b>B</b> (inches)	Part No.
1	2	1/2	3/8	1-1/4	<b>REC</b> 001
1	2	3/4	3/8	1-1/4	<b>REC</b> 002
1	2	1	3/8	1-1/4	<b>REC</b> 003
1	2	1-1/2	3/8	1-1/4	<b>REC</b> 004
1-1/4	2-1/2	3/4	3/8	1-3/4	<b>REC</b> 005
1-1/4	2-1/2	1	3/8	1-3/4	<b>REC</b> 006
1-1/4	2-1/2	1-1/2	3/8	1-3/4	<b>REC</b> 007
1-1/2	3	3/4	1/2	2	<b>REC</b> 008
1-1/2	3	1	1/2	2	<b>REC</b> 009
1-1/2	3	1-1/2	1/2	2	<b>REC</b> 0010



#### L-W Н А В (inches) (inches) Part No. (inches) (inches) 3/4 1 Hole Centered **SQU**001 1 1 - 1/21 3/8 3/4 **SQU**002 2 1 3/8 1-1/4 **SQU**003 2-1/2 1 1/2 1-1/2 **SQU**004 3 1 - 1/21/22 **SQU**005 3 4 1-1/2 1/2 **SQU**006

# custom bumpers

Acrotech has made bumpers in countless shapes and sizes. Contact our applications department with any possible applications you would like to discuss. In addition to a general description, a print or a sketch, sample parts would be helpful if available.



#### 'M Т versa

Versa Rolls<sup>™</sup> are a low-cost alternative for wheels, casters, rollers, sheaves, etc. They are easily machinable and profiled to fit your applications.

- Two grades of tough K•Prene® urethane permanently bonded together, resulting in a hard anti-friction hub with softer outer tire.
- Available with a **90A** outer tire and an anti-friction **75D** hub.
- I.D.'s are slightly oversized to provide running clearance for 3/8" to 1" shafts.
- Tolerance: Width & Height +/-.010, or 2% in Length - (Whichever is greater).

16

- **75D** hub can serve as a bearing in some applications.
- Use to make low cost OEM components for your manufactured products.
- Pricing available online: www.acrotechinc.com

For special applications, other durometers are available!

12"

V

V

V

V

~

1

V

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1

V

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V

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V

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Length Length

Part

Number

**KVR**3015750

KVR3020100

KVR3515375

KVR3515500

**KVR**3515625

KVR3515750

**KVR**3525750

KVR37520100

KVR4015375

KVR4015500

KVR4015625

KVR4015750

KVR4020100

KVR4030100

KVR4520100

KVR5015375

KVR5015500

KVR5015625

KVR5015750

KVR5020100

KVR6015375

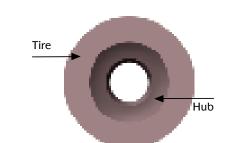
KVR6015500

KVR6015625

**KVR**6015750

KVR6020100

**KVR**6550150



#### Standard Versa Roll<sup>™</sup> Sizes (✓ = Available)

Tire O.D. (inches)	Hub O.D. (inches)	Hub I.D. (inches)	Part Number	12" Length	24" Length	Tire O.D. (inches)	Hub O.D. (inches)	Hub I.D. (inches)
1-1/2	3/4	3/8	<b>KVR</b> 15075375	~	_	3	1-1/2	3/4
	1	No Bore	KVR1510000	~	_		2	1
	1	3/8	KVR1510375	~	_	3-1/2	1-1/2	3/8
	1	1/2	KVR1510500	~	_		1-1/2	1/2
	1	3/4	KVR1510750	_	~		1-1/2	5/8
1-3/4	1	3/8	KVR17510375	~	_		1-1/2	3/4
1-7/8	1	1/2	KVR187510500	~	_		2-1/2	3/4
2	1	1/4	KVR2010250	~	_	3-3/4	2	1
	1	3/8	KVR2010375	~	_	4	1-1/2	3/8
	1	1/2	KVR2010500	~	_		1-1/2	1/2
	1-1/2	3/8	<b>KVR</b> 2015375	~	_		1-1/2	5/8
	1-1/2	1/2	KVR2015500	~	_		1-1/2	3/4
	1-1/2	5/8	KVR2015625	~	~		2	1
	1-1/2	3/4	KVR2015750	~	~		3	1
	1-1/2	7/8	KVR2015875	~	~	4-1/2	2	1
	1-1/2	1	KVR2015100	~	~	5	1-1/2	3/8
2-1/2	1-1/2	3/8	KVR2515375	~	_		1-1/2	1/2
	1-1/2	1/2	KVR2515500	~	_		1-1/2	5/8
	1-1/2	5/8	KVR2515625	~	~		1-1/2	3/4
	1-1/2	3/4	<b>KVR</b> 2515750	~	~		2	1
	1-1/2	1	<b>KVR</b> 2515100	~	~	6	1-1/2	3/8
2-3/4	1-1/2	1/2	KVR27515500	~	_		1-1/2	1/2
	1-1/2	5/8	KVR27515625	~	~		1-1/2	5/8
3	1-1/2	No Bore	KVR3015000	~	<b>v</b>		1-1/2	3/4
	1-1/2	3/8	KVR3015375	~	_		2	1
( )	1-1/2	1/2	KVR3015500	~	_	6-1/2	5	1-1/2
	1-1/2	5/8	KVR3015625	~	~			

### See more industrial urethane applications at: **www.acrotechinc.com**

solid urethane balls

Made to order in several durometers and offered in different colors. Please specify durometer.

#### Urethane balls can be used for:

- Check valves
- Relief valves
- Light load ball bearings
- Pricing available online: www.acrotechinc.com

Diameter (inches)	Part No.
3/4	<b>Ball</b> 0304
1	Ball1000
1-1/2	Ball1102
1-5/8	Ball1508
2	Ball2000
2-1/2	Ball2102
2-5/8	Ball2508
3	Ball3000

# metal backed sheets

Cut, drill, and saw these sheets to suit your needs. Make your own bumpers, wear pads, machinery mounts, etc. Backing is 10 ga. (.135) mild steel. Available in any standard durometer. Other backings or urethane thicknesses available.

ACROTECH	Urethane Thickness (inches)	Standard Sizes (inches)
	1/4	
	3/8	
	1/2	6 x 6, 12 x 12
	5/8	or 24 x 24
	3/4	
	7/8	
	1	

# hammer

The Acrotech Hammer is made from 75D urethane. It is a harder hammer but not exactly a dead blow. Urethane hammers have more bounce to them but will not mark or mar material. They are long lasting and highly durable. We are able to make custom hammers for you or with your logo or your specifications.

#### Some suggested uses for this hammer:

- Mill/Lathe tool changing
- Automotive
- Engine building
- Field work
- Woodworking
- Pricing available online: www.acrotechinc.com

Durometer	Part No.
75D	<b>UHM</b> 0125



# tool holsters

Designed to reduce costly repairs and down time of expensive pneumatic tools used in fast paced assembly lines. Available in K•Prene<sup>®</sup> **90A** which is hard and slick, insuring easy-in and easy-out, yet will flex upon contact. Mounting holes at top and bottom mean secure and easy installation. Contact our factory for additional sizes or styles.

#### • Pricing available online: www.acrotechinc.com

Taper ID	Cup Length	Overall Length	Part No.
4" to 1-1/2"	5"	7-1/2"	500-0221
Straight ID 2"	5-3/4"	6-1/4"	500-9201



# slick strip™ tape (10mil.)

When applied to metal surfaces, this pressure sensitive tape will reduce friction and protect finished stock (wood, metal, etc.) from scratches and dents. To apply, cut to length with scissors, remove adhesive protector and apply to clean, dry surface. Work hardens.

Width (inches)	Length	Part No.
1	36 yards	<b>SST</b> 1001
1-1/2	36 yards	<b>SST</b> 1015
2	36 yards	<b>SST</b> 1002
3	36 yards	<b>SST</b> 1003
4	36 yards	<b>SST</b> 1004
6	36 yards	<b>SST</b> 1006
22	10' min.	<b>SST</b> 1022

- UHMW Polyethylene
- 4 mil. backing
- Withstands temperatures up to 150° F.
- Pricing available online: www.acrotechinc.com

# k-20 adhesive

Especially formulated to withstand continuous flexing. Exhibits great strength when used to bond K•Prene<sup>®</sup> to K•Prene<sup>®</sup>, metal, or plastic. Two-part kit composed of equal containers of resin and hardener.

- For applying urethane to urethane OR urethane to steel.
- K-20 has high tensile strength, yet remains flexible to withstand continuous shock of press strokes.
- Composed of a two-part A and B kit. 1+ year shelf life.
- Pricing available online: www.acrotechinc.com

Description	Part No.
1/2 Pint Kit (2 – 1/4 Pint Cans)	<b>KPA</b> 202
1 Pint Kit (2 – 1/2 Pint Cans)	<b>KPA</b> 203
2 Pint Kit (2 – 1 Pint Cans)	<b>KPA</b> 204



### **K-20 Adhesive Applications:**

- Wear pads
- Clamping pads
- Stripping pads
- Pressure pads
- Embossing pads
- Wiping blocks
- Fixture blocks



- Urethane die pads
- Steel clamping plates
- Steel stipper plates
- Steel pressure plates
- Steel sub-plates
- Steel holders
- 45 minute pot life 12 hour cure time 2-3 day full cure

Apply long lasting urethane for woodworking applications. See more at: **WWW.acrotechinc.com** 

# urethane drive wheels



- Available in **80A** durometer other durometer's are available upon request.
- Tires/Wheels can be used in other applications to drive various other materials beyond wood without marking or damaging.
- Non-marking: Won't mark pre-surfaced or pre-finished stock as does steel or rubber wheels.
- Eliminates slippage: Excellent traction out performing steel wheels and they provide feed control for higher output.
- Gone are Raised Grain Problems: The high-friction of the tire/wheel provides more traction with less pressure, eliminating the major cause of raised grain. This will increase the overall quality of the product
- Economical to use: Tires/Wheel are easy and quick to change.
- Pricing available online: www.acrotechinc.com

#### **3 Hole Bolt Pattern**

<b>O.D.</b> (inches)	I.D. (inches)	Width (inches)	Part No.
4-3/4	2	2	<b>DW3</b> 0009
5-1/2	2-3/16	2	<b>DW3</b> 0010
5-1/2	2-3/8	2	<b>DW3</b> 0011
6	2-1/4	2	DW30012
6-5/16	2-3/4	2	<b>DW3</b> 0013
6-5/8	2-3/4	1	<b>DW3</b> 0014
6/5/8	2-3/4	2	<b>DW3</b> 0015
7	2-1/4	2	<b>DW3</b> 0016
8-3/4	4	2	<b>DW3</b> 0017
6	2-3/4	2	<b>DW3</b> 0018
5-1/2	3	2	<b>DW3</b> 0019
7-5/16	2-3/4	2	DW30020
5-1/2	3	1	DW30021
5-1/2	2-1/4	3/4	DW30022
5-1/2	2-1/4	2	<b>DW3</b> 0023

**DESIGNED WITH 3 OR 6 BOLT MOUNTING HOLES** to fit various re-usable hubs on woodworking **Moulders, Planers and Re-Saws like:** 

- Weining<sup>®</sup>
- Extema<sup>®</sup>
  Wadkin<sup>®</sup>

• Diehl®

... and more

- Mattison<sup>®</sup>
- Baker®
- SCMI®
  - , .
- Bridgewood<sup>®</sup>

#### **6 Hole Bolt Pattern**

<b>O.D.</b> (inches)	I.D. (inches)	Width (inches)	Part No.
4-3/4	3	3/4	<b>DW6</b> 0040
5-1/2	3	3/4	<b>DW6</b> 0041
6-5/8	3-3/8	3/4	<b>DW6</b> 0042
4-3/4	3	2	DW60043
6	3	3/4	<b>DW6</b> 0047

### re-covering bonded drive wheels



Weinig® Molders Available in 80A durometer.

O.D. (inches)	Width (inches)	Part No.
5-1/2	2	500-0079
5-1/2	1-3/16	500-0080
5-1/2	3/4	500-0081
4-1/2	2	500-1102



# power feed tires

Urethane tires feed better and cost less than the rubber-coated hubs which are standard on many feeders.

- Available in **60A** durometer other durometer's are available upon request.
- Durometer 70A recommended for rough stock and 60A recommended for smooth surfaces.

**REPLACEMENT TIRE ONLY:** Tire fits re-usable 2 piece hub

POWER FEEDER MODELS: Fits most import and standard domestic feeders and Cantek and Co-matic models AF38, AF48. Other models include:

• Silver<sup>®</sup> • Northech<sup>®</sup> • Powermatic<sup>®</sup> ...and others

#### **6 Hole Bolt Pattern**

O.D. (inches)	Width (inches)	Part No.
4-3/4	2-3/8	<b>SHT</b> 0066

# press fit povver feed tires

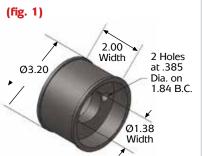
- Urethane tires feed better and cost less than the rubber-coated hubs which are standard on many feeders.
- Urethane tires are available in 60A Durometer other durometer's are available upon request.
- Durometer 70A recommended for rough stock and 60A recommended for smooth surfaces.

Fits models like: Powermatic<sup>®</sup>, Maggi<sup>®</sup>, Steff<sup>®</sup>, Univer<sup>®</sup>, Rockwell<sup>®</sup>, Oliver<sup>®</sup>, Forest City<sup>®</sup>... and many more. Also made to fit PFH-0070 standard hub. (fig. 1)

Description	O.D. (inches)	<b>Width</b> (inches)	Part No.	
Tire	3	1	<b>PFT</b> 0060	
Tire	4-3/8	1-3/4	<b>PFT</b> 0061	
Tire	4-7/8	1-3/4	<b>PFT</b> 0062	
Tire	4-3/8	2	<b>PFT</b> 0063	
Tire	4-3/8	2-1/4	<b>PFT</b> 0064	
Tire	4-3/8	2	* <b>PFT</b> 0065	
*This ribbed design works best for slick surfaces. Tire OD's increase when installed.				
Hub - Fits all	tires except <b>PFT</b>	-0060	<b>PFH</b> 0070	

Tire mounting tools (see fig. 2) PFHTOOL





Assembled: Tire will expand after pressing on hub. OD size listed is before pressing on hub.

Narrow Stock: PFT-0063 is recommended for stock 1" wide or less.

### re-covering bonded power feed wheels



Description	O.D. (inches)	Width (inches)	Part No.
SMALL Power Feeder- Commatic®, Delta®, Grizzley® etc.	3-1/8	1-1/8	<b>RFP</b> 001
LARGE Power Feeder-Delta®, Jet®, Nandini®, Steff®, Maggi® etc.	4-5/8	2	<b>RFP</b> 002



# high performance

K•Prene<sup>®</sup> has become a great option for numerous automotive racing applications. Due to ongoing efforts with handling and increasing speed, K.prene<sup>®</sup> urethane is a material that many use as an advantage in the competitive racing field. Racing is not the only market where urethane is used, OEM manufacturers can benefit from the long lasting, strong, abrasion resistant characteristics of urethane.

spring rubbers

Coil Over Spring Rubbers for 3"–3-1/2" Springs Spring Rubbers for 5"-5-1/2" Springs

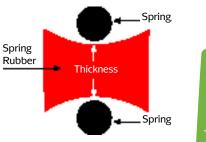
<b>Thickness</b> (inches)	
.600	
.700	
.850	
1	

· Use dimensions,	between o	coil springs	to determine	part size.

- Cut part and feed in between coil springs.
- Approximate clearance between bottom of coil spring and top of rubber radius is 1/4".
- Pullouts are optional.

5"-5-1/2" Springs

• Pricing available online: www.acrotechinc.com



Can be further customized. Call for details: 1-800-345-0583

Thickness (inches)
1/2
5/8
3/4
7/8
1
1-1/8
1-1/4
1-3/8
1-1/2
1-5/8
1-3/4
1-7/8
2
2-1/8
2-1/4
2-1/2
2-3/4
3

# automotive & other high performance

- There are many K•Prene® applications for the automotive industry.
- They weigh less than existing metal parts and have significant tensile strength.
- Sway bar (stabilizer bar) bushings
- Control arm bushings
- Leaf spring bushings
- Strut rod bushings

- Shock bushings
- Bump stops and street stops
- Shock reservoir isolators

... or many other custom applications that your automobile, motorcycle or snowmobile needs may require.



#### 3"-3-1/2" Springs

### Durometer:

(hardness color table)

- 40A: Soft
- **60A:** Hard
- 80A: X Hard
- 95A: XX Hard

### **METAL FORMING**

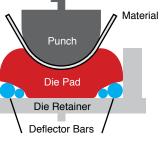


#### **Metal Forming Applications Using Urethane**

Why use K•Prene® urethane in forming applications? There are several families of urethane elastomers, but not all of them will perform equally well. Even within one grade of a given urethane formulation, cured properties can vary widely. K-Prene® urethane is specifically compounded and processed by Acrotech Inc., to maximize the characteristics desired for optimum tool and die operation. Some of the major advantages of urethane are non-compressibility, resiliency, and the ability to form and hold metal without marring its surface finish. It behaves similar to a solid fluid with a memory; under force it will change its shape, but its volume will remain constant. Urethane will produce high, uniform and continuous counter pressure under load. And, when the load is removed, it quickly returns to its original shape.

### Application Examples where K-Prene® Urethane Can Be Used in Metal Forming

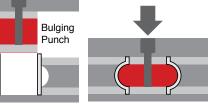
Radius Forming with Deflector Bars Urethane die with deflector bars positioned under pad. Bars are graduated in size to control deflection of urethane. This	Puncl Die Pa
helps form the difficult bends.	Die Reta Deflector
Universal Die Pad The urethane pad for a female die is both economical and versatile. A single pad can be used for several applications.	
Die Springs Urethane is economical and provides greater forces per deflection than conventional steel springs. Urethane creates counter acting force (cushion) when deflected or compressed.	



#### **Bulging Punch**

In bulging applications, urethane offers much longer service life than rubber, and is very cost effective compared to expanding/shrinking steel punches. Displacement of a urethane punch under compression forces metal outward into the desired

shape. The amount of bulge is determined by the depth of stroke. When the ram is raised (after stroke), urethane will resume its normal shape and the bulged part can be easily removed.

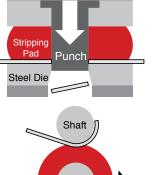


**Alignment Plates** 

#### **Stripping Pad for Punching** A standard urethane pressure pad is machined to fit around the punch. This is an easy, economical method of constructing a durable, oil resistant, high pressure stripping pad.



A rotating steel shaft coated with K•Prene® working with another steel shaft positioned directly above, results in round parts with little or no flats on the leading or trailing ends.



Shaf



The information and suggestions in this brochure are based upon the best laboratory and technical information available to us. Any recommendations or suggestions are made without warranty or guarantee, since the conditions of use are beyond our control. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents nor to constitute a permission, inducement or recommendation to practice any invention covered by any patent owned by Acrotech Inc. or by others, without authority from the owner of the patent.

# acro-hyde™

.030 x 18" wide x 100 ft.

.015 x 36" wide x 20 ft.(min.)

.030 x 36" wide x 20 ft.(min.)

**ACH**18030

**ACH**36015

ACH36030

General Properties:	Specifications	Values	<section-header><text><text></text></text></section-header>
Durometer:	D2240	85A	Description Part No.
pecific Gravity:	D792	1.20	.015 x 2" wide x 100 ft. ACH02015
ensile Properties:	D638		.015 x 4" wide x 100 ft. ACH02015
Modulus at100% strain		800 psi	
Modulus at300% strain		1800 psi	.015 x 6" wide x 100 ft. ACH06015
Modulus at break		7000 psi	.030 x 6" wide x 100 ft. ACH06030
Modulus of elasticity			.015 x 12" wide x 100 ft. ACH12015
up to 10% strain		30 psi	.030 x 12" wide x 100 ft. ACH12030
up to 10% strain Elongation at break		30 psi 400%	.030 x 12" wide x 100 ft.      ACH12030        .015 x 18" wide x 100 ft.      ACH18015

See how effective Acro-Hyde<sup>™</sup> is with a sample piece of 18GA steel that has been painted. Adding Clamping Tape to your female die will help keep Acro-Hyde<sup>™</sup> in place for repeated use / production bending.

30%

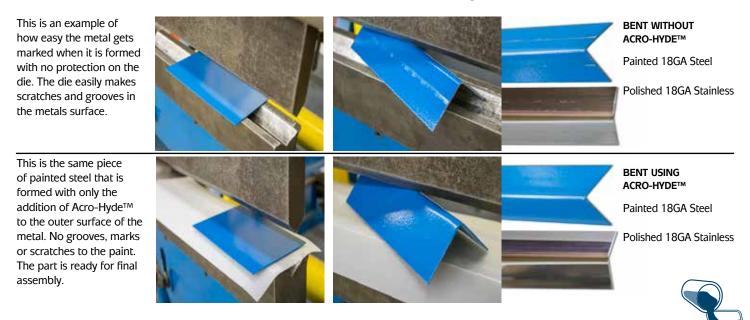
425pli

D624

Set at break

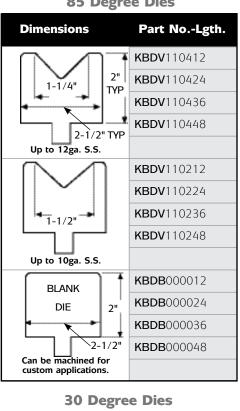
Die C

**Tear Properties:** 



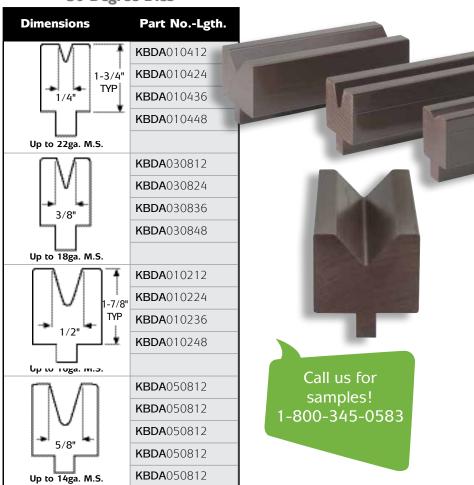
# press brake dies

#### **90 Degree Dies** Dimensions Part No.-Lgth. **KBDV**010412 ►| |• 1/4" **KBDV**010424 1-3/4" TYP **KBDV**010436 **KBDV**010448 1-1/4" TYP Up to 22ga. M.S. KBDV030812 KBDV030824 **KBDV**030836 3/8" KBDV030848 Up to 18ga. M.S. **KBDV**010212 **KBDV**010224 **KBDV**010236 1/2 **KBDV**010248 Up to 16ga. M.S. **KBDV**050812 **KBDV**050824 1-7/8" 5/8" TYP **KBDV**050836 **KBDV**050848 Up to L4ga. M.S. **KBDV**030412 **KBDV**030424 **KBDV**030436 3/4" **KBDV**030448 Up to 13ga. M.S. **KBDV**070812 **KBDV**070824 **KBDV**070836 KBDV070848 Up to 12ga. M.S. **KBDV**100012 **KBDV**100024 **KBDV**100036 1" KBDV100048 Up to 11ga. M.S. Note: All dies have standard 1/2" x 5/8" tang.



K•Prene® urethane female dies are designed for production and will not leave die marks! They feature tremendous load-bearing capacity and excellent resistance to abrasion. These are manufactured in 48" lengths and can be butted together as needed. They are lightweight, easy to handle, stocked for immediate delivery and may be shipped via UPS.

- Standard in 75D durometer.
- Desired opening equals 8X the material thickness of Mild Steel.
- Stainless Steel requires 10X the material thickness for die opening.
- NOT recommended for coining.
- Comparable to steel dies when used for air bending.
- Larger unique sizes are available.
- Pricing available online: www.acrotechinc.com



**85 Degree Dies** 

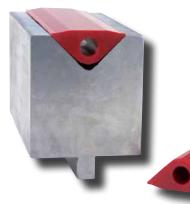
# acroform™ inserts

For a quick and effective way to avoid die marks on stainless steel, pre-painted material, etc. simply position these 1" or 2" inserts in corresponding 90° bottom dies! The K•Prene® insert will conform to a variety of punch tips. In addition to eliminating the secondary procedure expense of removing die marks, your die will now act like a universal bottom die.

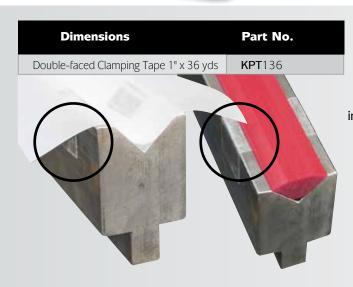
- The forming of expanded metal or mesh is simplified, as cracking is reduced and often eliminated.
- This product is available in **95A** durometer.
- Also available in softer durometers.
- Economical
- Fitted in seconds
- Removed in seconds
- Forms many bends
- No marking
- Accurate forming

- Sharper bends
- Reduced springback
- Uses existing female dies
- No matted dies required
- Eliminates wear
- Worn out dies become precision dies

Dimensions	Part No Lgth.
	<b>KAF</b> 16100012
1/2" H	<b>KAF</b> 16100024
	<b>KAF</b> 16100036
- <b>-</b>	<b>KAF</b> 16100048
2" Insert	<b>KAF</b> 16200012
	<b>KAF</b> 16200024
1" Н	<b>KAF</b> 16200036
<b>—</b>	<b>KAF</b> 16200048
2" Insert	<b>KAF</b> 16200012WCH
	<b>KAF</b> 16200024WCH
1"н	<b>KAF</b> 16200036WCH
<b>—</b>	<b>KAF</b> 16200048WCH



View website for pricing: www.acrotechinc.com



### **double-faced clamping tape** This double-faced tape securely holds Acroform<sup>TM</sup> and Acro-Hyde<sup>TM</sup>

in place. It eliminates the need for fixtures, clamping devices, bolts, etc.



### Urethane Parts for Piranha® Ironworkers

Piranha® is a registered trademark of Mega Manufacturing, Inc. Mega Manufacturing, Inc. is not affiliated in any way with Acrotech Inc.

Durometer/Color	Piranha Part No.	Acrotech Part No.	Pir	anha	<sup>®</sup> Iroi	work	er M	odel	Num	bers					
			P-2	P-36	P-40	P-50	P-50	P-70	P-90	P-110	P-120	P-140	PIII-	PII-	PII-
PUNCH ASSEMBL'	Y : STRIPPER BLC	CK				(P-3)							65/88	110	140
90A-Blue & 95A-Red	0330403	PIR-P35/P50 & 500-0218	~	V	~	~	~								
90A-Blue & 95A-Red	0340403	PIR-P70/P90 & 500-0182						~	~	~	~	~			
SHEAR HOLD-DO	WN ASSEMBLY :	SHEAR URETHANE													
95A-Black	0330207	500-5470					~								
95A-Black	0340207	500-9975							~	~	~	~			V
95A-Black	0350207	501-0087						V						V	
95A-Black	0376227	501-0089											V		
SHEAR HOLD-DO	WN ASSEMBLY :	ANGLE URETHANE													
95A-Black	03302081	500-7043					V								
95A-Black	0340208	500-9974							~	~	~	~			V
95A-Black	0350208	501-0090						V						V	
95A-Black	0376228	501-0091											V		
SHEAR HOLD-DO	WN ASSEMBLY :	ROUND BAR URETHANE													
95A-Black	0330209	501-0092					V						V		
95A-Black	0340209	501-0093						V	~	~	~	~		V	V

O.D.

I.D.

O.A.L.

# strippers-Wiedemann®

- For Wiedemann<sup>®</sup> W–20, W–30, W45, & Centrum<sup>®</sup> Models
- Standard in 90A Durometer other Durometers available.

#### 112 Style Tooling

	Slyle	Toomig				
Stn.	Shape	Face Dia. (inches)	I.D. (inches)	O.D. (inches)	<b>Lgth.</b> (inches)	Part No. (90A)
В	Std	1-5/32	31/32	2	1-27/32	500-1453
С	Std	1-23/32	1-15/32	2-1/16	2-1/16	500-1455
D	Std	2-7/32	1-31/32	3	1-1/2	500-1456
D	1" sq.*	2-7/32	1-31/32	3	1-1/2	500-1520
D	Rect**	2-7/32	1-31/32	3	1-1/2	500-1511
E	Std	2-29/32	3-3/32	4-9/32	1-1/2	500-1457
E	Rect**	2-29/32	3-3/32	4-9/32	1-1/2	500-1459
F	Std	3-11/16	3-3/32	4-9/32	1-1/2	500-1462
F	2" sq.*	3-11/16	3-3/32	4-9/32	1-1/2	500-1467
F	Rect**	3/11/16	3-3/32	4-9/32	1-1/2	500-1526
G	Std	4-13/16	3-15/32	4-25/32	1-1/2	500-1463
G	Rect**	4-13/16	3-15/32	4-25/32	1-1/2	500-1527
K	Std		*1"a	ind 2" squai	res only	
K	Rect**		** 1/2" and	l narrower r	ectangles or	ly



### Custom Strippers are our specialty. Contact us at: **WWW.acrotechinc.com**

### punch strippe SUrs



- Longer Tool Life: These strippers generate high holding pressure and strip the blank cleanly from the punch, resulting in an optimum working condition for the punch and longer effective work life.
- Easy To Use: Simply push stripper onto punch shank (I.D. is slightly undersized to grip punch). First stroke of press forces punch tip through stripper bottom.

Metric

- Very high load-bearing capacities.
- Safer than steel springs, since they do not fragmentize.
- Ideal for punching odd shaped holes.
- Pricing available online: www.acrotechinc.com

View website for more information: www.acrotechinc.com

Part No.

MSS006045

MSS006053

MSS006071

**MSS**08045

MSS008053

**MSS**008071

**MSS**010045

MSS010053

**MSS**010056

**MSS**010071

**MSS**013045

MSS013053

**MSS**013056

**MSS**013071

**MSS**016045

MSS016053

**MSS**016056

MSS016071

MSS020045

MSS020053

MSS020071

**MSS**025045

MSS025053

**MSS**025071

MSS032045

#### SurStrip<sup>™</sup> Punch Strippers

Length

(in.)

1 - 1/4

1 - 1/2

1-1/4

1 - 1/2

1-3/4

1 - 1/4

1-1/2

1 - 3/4

2

1-1/4

1 - 1/2

1-3/4

2

1-1/4

1 - 1/2

1-3/4

2

2 - 1/4

1-3/4

2

1-1/4

1 - 1/2

1-3/4

2

1-3/4

2

2-1/4

2 - 1/2

2-3/4

O.D.

(in.)

11/16

3/4

13/16

7/8

1

1 - 1/4

1-1/8

1-1/2

I.D.

(in.)

3/16

1/4

5/16

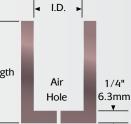
3/8

1/2

5/8

3/4

					meene			
I.D. (in.)	<b>O.D.</b> (in.)	Length (in.)	Part No.		<b>I.D.</b> (mm)	<b>O.D.</b> (mm)	<b>Lgth</b> . (mm)	
7/8	1-3/4	1-3/4	<b>KSS</b> 078134		6	19	45	
		2	<b>KSS</b> 078200		6	19	53	
		2-1/4	<b>KSS</b> 078214		6	19	71	
		2-1/2	<b>KSS</b> 078212		8	21	45	
		2-3/4	<b>KSS</b> 078234		8	21	53	
1	2	1-3/4	<b>KSS</b> 100134		8	21	71	
		2	<b>KSS</b> 100200		10	23	45	
		2-1/4	<b>KSS</b> 100214		10	23	53	
		2-1/2	<b>KSS</b> 100212		10	23	56	
		2-3/4	<b>KSS</b> 100234		10	23	71	
1-1/4	2-1/2	2	<b>KSS</b> 114200		13	26	45	
		2-1/4	<b>KSS</b> 114214		13	26	53	
		2-1/2	<b>KSS</b> 114212		13	26	56	
		2-3/4	<b>KSS</b> 114234		13	26	71	
		3	<b>KSS</b> 114300		16	30	45	
1-1/2	2-3/4	2	<b>KSS</b> 112200		16	30	53	
		2-1/4	<b>KSS</b> 112214		16	30	56	
		2-1/2	<b>KSS</b> 112212		16	30	71	
		2-3/4	<b>KSS</b> 112234		20	38	45	
		3	<b>KSS</b> 112300		20	38	53	
2	3	2-1/4	<b>KSS</b> 200214A		20	38	71	
	3-1/4	2-1/4	<b>KSS</b> 200214		25	50	45	
3	4	2-1/4	<b>KSS</b> 300214A		25	50	53	
	4-1/2	2-1/4	<b>KSS</b> 300214		25	50	71	
	1	1			32	60	45	
	(in.) 7/8 1 1 1-1/4 1-1/2 2 3	(in.)(in.) $7/8$ $1-3/4$ $7/8$ $1-3/4$ 1212121-1/42-1/21-1/22-3/412121-1/22-3/4112331/4344-1/2	$\begin{array}{c c c c c } (in.) & (in.) & (in.) \\ \hline 7/8 & 1-3/4 & 1-3/4 & 2 \\ 2 & 2-1/4 & 2 \\ 2-1/2 & 2-3/4 & 2 \\ 1 & 2 & 1-3/4 & 2 \\ 2-3/4 & 2-1/2 & 2 \\ 2-1/4 & 2-1/2 & 2 \\ 2-1/4 & 2-1/2 & 2 \\ 2-3/4 & 2 \\ 1-1/4 & 2-1/2 & 2 \\ 2-3/4 & 3 \\ 1-1/2 & 2-3/4 & 2 \\ 1-1/2 & 2-3/4 & 2 \\ 2-1/4 & 3 \\ 1-1/2 & 2-3/4 & 2 \\ 1-1/2 & 2-3/4 & 2 \\ 2-1/4 & 3 \\ 1-1/2 & 2-3/4 & 2 \\ 3 & 2-1/4 & 3 \\ 1-1/4 & 3 & 2-1/4 \\ 3 & 4 & 2-1/4 \\ 3 & 4 & 2-1/4 \\ 3 & 4 & 2-1/4 \\ 3 & 4 & 2-1/4 \end{array}$	$ \begin{array}{c c c c c c c } \hline (in.) & (in.) & Part No. \\ \hline (in.) & 1-3/4 & KSS078134 \\ \hline 2 & KSS078200 \\ \hline 2-1/4 & KSS078210 \\ \hline 2-1/2 & KSS078212 \\ \hline 2-3/4 & KSS078212 \\ \hline 2-3/4 & KSS078234 \\ \hline 1 & 2 & 1-3/4 & KSS100134 \\ \hline 2 & KSS100200 \\ \hline 2-1/4 & KSS100214 \\ \hline 2-1/2 & KSS100212 \\ \hline 2-3/4 & KSS100212 \\ \hline 2-3/4 & KSS100234 \\ \hline 1-1/4 & 2-1/2 & 2 & KSS114200 \\ \hline 2-1/2 & KSS114210 \\ \hline 2-1/2 & KSS114212 \\ \hline 2-3/4 & KSS114214 \\ \hline 2-1/2 & KSS114214 \\ \hline 2-3/4 & KSS114234 \\ \hline 3 & KSS114300 \\ \hline 1-1/2 & 2-3/4 & 2 & KSS112200 \\ \hline 1-1/2 & 2-3/4 & 2 & KSS11220 \\ \hline 1-1/2 & 2-3/4 & 2 & KSS112212 \\ \hline 2 & 3 & 2-1/4 & KSS112214 \\ \hline 1 & 2 & 2-3/4 & KSS112234 \\ \hline 3 & 3 & KSS112300 \\ \hline 2 & 3 & 2-1/4 & KSS200214A \\ \hline 3 & 4 & 2-1/4 & KSS300214A \\ \hline 3 & 4 & 2-1/4 & KSS300214A \\ \hline 3 & 4 & 2-1/4 & KSS300214A \\ \hline \end{array} $	I.D.O.D.Length (in.)Part No.7/81-3/41-3/4KSS0781342KSS0782002-1/4KSS07821422-1/2KSS0782122-3/4KSS078234121-3/4121-3/42KSS1002002-1/4KSS10021422-1/223/4KSS10021422-1/223/4KSS1002142-1/2KSS1002122-3/4KSS1002341-1/42-1/22-3/4KSS1142102-1/2KSS1142142-1/2KSS1142142-1/2KSS1142142-3/4KSS1142343KSS1143001-1/22-3/42-3/4KSS1122122-3/4KSS11221422-3/43KSS112300232-1/4KSS200214A342-1/4KSS300214A4-1/22-1/44-1/22-1/44-1/22-1/44-1/4KSS300214A	$ \begin{array}{ c c c c c c } \hline I.D. & O.D. & Length \\ (in.) & (in.) & (in.) & Part No. \\ \hline \hline \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	I.D.      O.D.      Length (in.)      Part No.        7/8      1-3/4      1-3/4      KSS078134        2      KSS078200        2-1/4      KSS078214        2      KSS078214        2-1/2      KSS078214        2-1/2      KSS078234        1      2      KSS078234        1      2      1-3/4        2      KSS100200        2-1/4      KSS100214        2      KSS100200        2-1/4      KSS100214        2      KSS100214        2-1/2      KSS100214        2-1/2      KSS100214        2-1/2      KSS114200        2-1/2      KSS114214        13      26        2-1/2      KSS114214        13      26        2-1/2      KSS112200        1-1/2      2-3/4        2-1/2      KSS112200        16      30      53        1-1/2      2-3/4        2-1/2      KSS11220        16      30        3      K



O.D.

#### Standard Sizes-

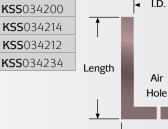
• Strippers with I.D. of 3/16", 1/4" and 5/16" have 1/16" dia. air holes

• All others have 1/8" air holes

#### Metric Sizes-

• Metric and custom are available. Call for pricing!





# e<sup>®</sup> tubes/

Available in 95A durometer, tubes/springs are useful in applications where vibration, corrosion and magnetism prevent the use of steel springs. Also, urethane springs have proven to be safest, most efficient and reliable compression material for punching, stamping and drawing dies.

The K•Prene® urethane Tube/Spring material is a polyether-elastomer that reacts similarly to an incompressible fluid. The volume of material moved by compression is displaced laterally in the form of bulging sides. An approximate change in the diameter of our K•Prene® urethane Tubes/Springs can be made by increasing the diameter by the same amount of compression.

- Abrasion resistance
- They do not fragmentize
- High load-carrying capability
- Protection from marring/galling
- Longer life
- Oil and solvent resistance
- Low noise
- Vibration damping and shock absorbance
- 100% load-bearing surface
- Effectiveness between -30° F. and 180° F.

Fits Punch Body							
Diam (in.)	O.D. (in.)	Lgth. (in.)	Part No.				
3/16	11/16	1-1/4	<b>KPS</b> 0316H01104				
	High	1-1/4	KPS0316H01102				
	Press	12	KPS0316H12000				
1/4	3/4	1	KPS0104H01000				
	High Press	1-1/4	<b>KPS</b> 0104H01104				
	FICSS	1-1/2	KPS0104H01102				
		1-3/4 <b>KPS</b> 0104H01					
		12	<b>KPS</b> 0104H12000				
	7/8	1	KPS0104V01000				
	Very	1-1/4	<b>KPS</b> 0104V01104				
	High Press	1-1/2	KPS0104V01102				
		1-3/4	<b>KPS</b> 0104V01304				
		12	<b>KPS</b> 0104V12000				
	1	1	KPS0104U01000				
	Ultra	1-1/4	<b>KPS</b> 0104U01104				
	High Press						
		1-3/4	<b>KPS</b> 0104U01304				
		12	KPS0104U02000				
5/16	13/16	1-1/4	<b>KPS</b> 0516H01104				
	High Press	High 1-1/2 KPS05					
	11033	1-3/4	<b>KPS</b> 0516H01304				
6		2	KPS0516H02000				
		12	<b>KPS</b> 0516H12000				

Punch Body Diam	<b>O.D</b> .	Lgth.	Part	
(in.)	(in.)	(in.)	No.	
3/8	7/8	1	KPS0308H01000	
	High Press	1-1/4	<b>KPS</b> 0308H01104	
	11035	1-1/2	KPS0308H01102	
		1-3/4	KPS0308H01304	
		2	KPS0308H02000	
		12	<b>KPS</b> 0308H12000	
	1	1	KPS0308V01000	
	Very High	1-1/4	KPS0308V01104	
	Press	1-1/2	KPS0308V01102	
		1-3/4	KPS0308V01304	
			2	KPS0308V02000
		12	KPS0308V12000	
	1-1/8	1	KPS0308U01000	
	Ultra High	1-1/4	KPS0308U01104	
	Press	1-1/2	KPS0308U01102	
		1-3/4	KPS0308U01304	
		2	<b>KPS</b> 0308U02000	
		12	<b>KPS</b> 0308U12000	

=its Punch Body			
<b>Diam</b> in.)	<b>O.D.</b> (in.)	<b>Lgth.</b> (in.)	Part No.
1/2	1	1	<b>KPS</b> 0102H01000
	High Press	1-1/4	<b>KPS</b> 0102H01104
	11035	1-1/2	<b>KPS</b> 0102H01102
		1-3/4	<b>KPS</b> 0102H01304
		2	<b>KPS</b> 0102H02000
		24	<b>KPS</b> 0102H24000
	1-1/8	1	<b>KPS</b> 0102V01000
	Very High	1-1/4	<b>KPS</b> 0102V01104
	Press	1-1/2	<b>KPS</b> 0102V01102
		1-3/4	<b>KPS</b> 0102V01304
		2	<b>KPS</b> 0102V02000
		24	<b>KPS</b> 0102V24000
	1-1/4	1	<b>KPS</b> 0102U01000
	Ultra High	1-1/4	<b>KPS</b> 0102U01104
	Press	1-1/2	<b>KPS</b> 0102U01102
		1-3/4	<b>KPS</b> 0102U01304
		2	<b>KPS</b> 0102U02000
		24	<b>KPS</b> 0102U24000

for K-Prene® Tubes & Springs pricing

Fits

Visit

www.acrotechinc.com

Length

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### Need a custom size? Call us at: **WWW.acrotechinc.com**

its Punch Body Piam	O.D.	Lgth.	Part	Fits Punch Body Diam	<b>O.D</b> .	Lgth.	Part	Fits Punch Body Diam	O.D.	Lgth.	Part
in.)	(in.)	(in.)	No.	(in.)	(in.)	(in.)	No.	(in.)			No.
5/8	1-1/8 High	1	KPS0508H01000	7/8	1-5/8 High	1-1/2	KPS0708H01102	1	Diam (in.)      O.D. (in.)      Lgth. (in.)        1      1-3/4 High Press      1-1/4      KPS        1-1/2      KPS        1-3/4      KPS        2      KPS        2-1/4      KPS        2-1/2      KPS        2-1/4      KPS        2-1/4      KPS	KPS1000H01104	
	Press	1-1/4	KPS0508H01104		Press	1-3/4	KPS0708H01304		Press		KPS1000H0110
		1-1/2	KPS0508H01102			2	KPS0708H02000				KPS1000H0130
		1-3/4	KPS0508H01304			2-1/4	KPS0708H02104				<b>KPS</b> 1000H0200
		2	KPS0508H02000			2-1/2	KPS0708H02102				KPS1000H0210
-		24	KPS0508H24000			2-3/4	KPS0708H02304				KPS1000H0210
	1-1/4 Very	1	KPS0508V01000			3	KPS0708H03000				KPS1000H0230
	High	1-1/4	KPS0508V01104			24	KPS0708H24000				KPS1000H2400
	Press	1-1/2	KPS0508V01102		1-3/4	1-1/2	KPS0708V01102		2 Verv		KPS1000V0110
		1-3/4	KPS0508V01304			1-3/4	KPS0708V01304		High		KPS1000V0110
		2	KPS0508V02000			2	KPS0708V02000		Press		KPS1000V0130
-	1 2 12	24	KPS0508V24000			2-1/4	KPS0708V02104				KPS1000V0200
	1-3/8 Ultra	1	KPS0508U01000			2-1/2	KPS0708V02102				KPS1000V0210
	High	1-1/4	KPS0508U01104			2-3/4	KPS0708V02304				KPS1000V0210
	Press	1-1/2	<b>KPS</b> 0508U01102			3	KPS0708V03000				KPS1000V0230
		1-3/4	KPS0508U01304			24	KPS0708V24000				KPS1000V0300
		2	KPS0508U02000		2	1-1/2	KPS0708U01102				KPS1000V0400
	1 2 (0	24	KPS0508U24000			1-3/4	KPS0708U01304		2 1 / 2		KPS1000V2400
6/4	1-3/8 High	1-1/4	KPS0304H01104			2	KPS0708U02000				KPS1000U0110
	Press	1-1/2	<b>KPS</b> 0304H01102			2-1/47	KPS0708U02104		High		KPS1000U0110
		1-3/4	<b>KPS</b> 0304H01304				<b>KPS</b> 0708U02102		PIESS		KPS1000U0130
		2	<b>KPS</b> 0304H02000			2-3/4	KPS0708U02304				KPS1000U0200
			<b>KPS</b> 0304H02104			3	<b>KPS</b> 0708U03000 <b>KPS</b> 0708U24000				KPS1000U0210
		2-1/2 24	<b>KPS</b> 0304H02102 <b>KPS</b> 0304H24000			24	MPS0708024000				KPS1000U0210 KPS1000U0230
-	1-1/2	1-1/4	KPS0304H24000							3	KPS100000230
	Very	1-1/2	KPS0304V01102							 	
	High Press	1-1/2				Visit				24	KPS1000U0400
	FICSS	2	KPS0304V01304 KPS0304V02000			icrotechi Prene® T		1-1/4	2-1/2	24	KPS1000U2400 KPS1104H0200
		2-1/4	<b>KPS</b> 0304V02000	S			on values	1-1/4	High	2-1/4	KPS1104H0200
		2-1/4	KPS0304V02104		• •	npetitive			Press	2-1/4	KPS1104H0210
		2-3/4	KPS0304V02304							2-3/4	KPS1104H0234
		2-374	<b>KPS</b> 0304V02304							3	<b>KPS</b> 1104H0300
-	1-3/4	1-1/4	<b>KPS</b> 0304V24000							24	KPS1104H0300
	Ultra	1-1/2	<b>KPS</b> 0304001104			Mar		1-1/2	2-3/4	24	KPS1102H0200
	High Press	1-3/4	<b>KPS</b> 0304U01304			N.		1-172	High	2-1/4	KPS1102H0200
	11035	2	<b>KPS</b> 0304U02000						Press		
		2-1/4	<b>KPS</b> 0304U02104			1.65				2-1/2	KPS1102H0210
		2-1/4	<b>KPS</b> 0304U02102		and I			0		2-3/4	KPS1102H0230
		2-3/4	KPS0304002304							3	KPS1102H0300
		2-3/4	<b>KPS</b> 0304U24000			1				24	<b>KPS</b> 1102H2400



### **ROLL BENDING MACHINES**

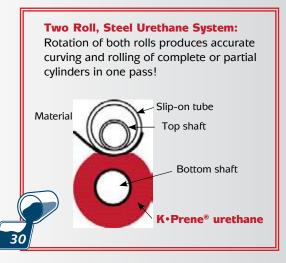
Acrotech machines best fit into an OEM type fabrication/ manufacturing facility where high volume, consistent parts are required at low cycle times.

### The Benefits of "One Pass" Two Roll Bending Machines

- Roll parts with a minimum of flat on the leading and trailing ends for easier welding and better looking parts.
- Increase production and lower costs because there is no preforming required.
- Roll perforated and other difficult materials without fluting or kinking. Roll prefinished materials (stainless, aluminum, prepaint, etc.) without damaging parts.
- Easy set up and operations with excellent repeatability and quick tooling changes.

### Understanding Two Roll Principle

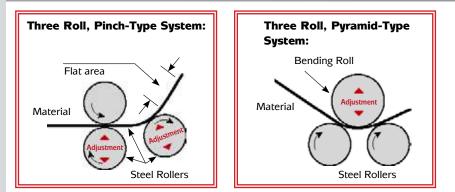
The two roll method is comprised of a steel top roll and urethane bottom roll. The steel roll is pushed into the urethane roll. The urethane roll under pressure will not compress but rather deflect around the steel roll. This is the same function as hydraulic fluid in a hydroforming process. Sheet metal is then inserted between the two rolls and the urethane forms or wraps the metal against the steel roll as it rotates forming a curved surface. The radius of the formed part is controlled by the radius of the steel roll and the natural spring-back of the material. Changing the radius of the steel roll will change the radius of the formed part.



Send us your material. We will roll a sample for you!

#### Some of the disadvantages of a Three Roll, Pinch-Type or Pyramid-Type system include:

- The work piece is not confined during the bending process, and several passes might be required with roll adjustments necessary after each pass. This is relatively slow and requires considerable skill on the operators' part.
- The ends of blanks must be pre-formed on other equipment (or cut off which means material waste).
- Flat areas may form between cutouts and perforations in a part, eliminating the possibility of making such openings while the piece part is flat, requiring more complex process.
- Fluting or kinking of material will occur especially in parts with cutouts and perforations.
- It is practically impossible to roll prefinished (polished, painted, enameled, etc.) material without the possibility of damaging finished surfaces (cracking and scratching).



# roll bending

Every model in Acrotech's unique line of Two Roll Bending Machines is designed and built for production and precision. These machines will roll a variety of materials and configurations into cylinders with virtually no flats on the ends!

### models 1212, 1618 and 1824

Built to meet the demands of production involving small, light gauge parts. Pneumatic lock-up is standard on all models for increased productivity. 120V 1PH standard wiring simplifies installation. 220 or 440V 3PH wiring is also available.

### model V-1006

If you would like to see our machines in action, call us or check out the videos on our web site! www.acrotechinc.com

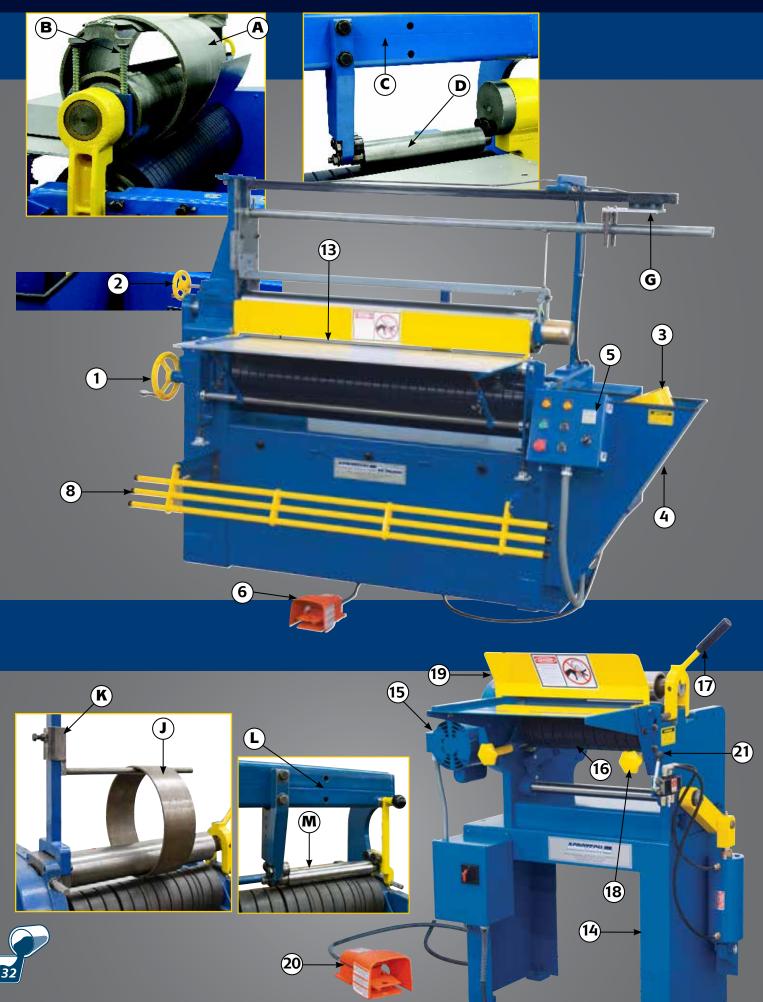
11

The unique design of the cantilevered rolls mounted in a vertical position, allows the parts to simply drop from the machine at the end of the rolling cycle, greatly increasing productivity. Its short, sturdy rolls are ideally suited for narrow parts such as clamps, brake bands, hole saws, light fixtures, etc.

### LD & HD models

Designed for the production of larger, heavier gauge parts. The drop arm and the lower roll are positioned pneumatically on all LD machines and hydraulically on the HD models. (See pages 32-33 for standard and optional accessories).





### LD & HD models

Standard Equipment and Optional Accessories (See page 32 for specifications).

#### STANDARD EQUIPMENT

- (1) **Roll Position Control** single hand wheel provides quick parallel roll adjustment.
- (2) **Rotating Counter** indicates roll position in increments for repeat set up.
- (3) Automatic Overarm Operates sequentially with K•Prene<sup>®</sup> roll raising and lowering. Automatically locks in place.
- (4) Automatic Overarm Guard protects operator from moving overarm.
- (5) Push-Button Control and Signal Light buttons control roll and overarm cycle. Light indicates when machine is ready for operation.
- (6) **Guarded Foot Switch** leaves operator's hands free to feed material.
- **7** Electricals are UL Compliant. (not shown)
- (8) Safety Knee Bar provides additional safety for the operator. Tripping the bar stops roller rotation, lowers overarm, disengages rolls, and shuts off power simultaneously.
- Electro-Hydraulic Control (HD) for roll positioning and automatic overarm; all models have motor driven rolls. (not shown)
- (10) Electro-Pneumatic Control (LD) for roll positioning and automatic overarm. (not shown)
- (1) **Bearings** pre-packed and sealed in upper and lower roll assemblies. Each shaft is fitted with heavy-duty, self-aligning spherical roller bearings. (not shown)
- (12) Anti-Deflection System prevents bowing in upper and lower roll assemblies, and provides for perfect cylindrical parts. (not shown)
- (13) **Feed Table** Machine Supported; units are adjustable for height and feed angle and includes finger guard.

#### **OPTIONAL ACCESSORIES**

- (A) Tooling Slip on Tubes when the diameter required is larger than what the top shaft will produce, a Slip-On Tube is used. The tubes are developed per part size and increase the forming diameter capability of the top shaft. Quickly change the tube by simply slipping them on and off the top shaft as needed. A Slip-On Tube will be required for each specific part.
- Slip-On Tube Support facilitates removal of finished piece-part. Adjustable in height, this accessory supports slip-on tubes to prevent pinching curved cylinders against lower roll when removing finished parts.
- **C** Small-OD Mounting Fixture required for rolling parts smaller in diameter than the standard top roll.
- (D) Small-OD Shaft Assembly available in various lengths and diameters for rolling material to a diameter smaller than standard top roll. Must be used in conjunction with Small-OD Mounting Fixture.
- E Auto Timer for controlling partial curvature of material 90°, U-bends, etc. Can be used in conjunction with Part Ejectors for automated rolling and part ejection. (not shown)
- (F) Reversing Control gives added flexibility for special jobs. (not shown)
- **(G) Part Ejector** for increased production, part ejectors and part feeders can be developed for most parts.
- (H) Motorized Roll Position Control speeds the set-up from one job to another. (not shown)
- (1) Additional Control Features can be custom built per customer requests. Features such as light curtains, special guarding...etc

# 1618, 1824 & 1212 models

#### Standard Equipment and Optional Accessories (See page 32 for specifications).

#### **STANDARD EQUIPMENT**

- Floor Stand provides ergonomic work positions for rolling blanks
- (15) **Motorized Roll Drive** delivers necessary power to drive blank material through the forming coils
- (16) Lower Roll Steel Core, with Grooved K•Prene® Urethane completes the forming operation with amply forming pressure
- (17) **Manual Quick-Release Lever** allows rolled part removal with simple pivot downs
- (18) Single–Lever Roll Engagement Adjustable dual hand knobs provide quick roll adjustment
- (19) Adjustable Feed Table with Finger Guard machine supported; adjustable for height and feed angle and includes a finger guard
- Guarded Electric Footswitch leaves operators hands free to feed material
- (21) **Pneumatic Lock-up** with a hand actuated control lever to raise and lower urethane roll

#### **OPTIONAL ACCESSORIES**

- (J) **Tooling Slip on Tubes** when the diameter required is larger than what the top shaft will produce, a Slip-On Tube is used. The tubes are developed per part size and increase the forming diameter capability of the top shaft. Quickly change the tube by simply slipping them on and off the top shaft as needed. A Slip-On Tube will be required for each specific part.
- Slip-On Tube Support facilitates removal of finished piece-part. Adjustable in height, this accessory supports slip-on tubes to prevent pinching curved cylinders against lower roll when removing finished parts.
- (L) Small-OD Mounting Fixture required for rolling parts smaller in diameter than the standard top roll.
- Small-OD Shaft Assembly available in various lengths and diameters for rolling material to a diameter smaller than standard top roll. Must be used in conjunction with Small-OD Mounting Fixture. Permits rolling diameters as small as one inch.



# roll bending machines

If you have large-volume needs for complete or partial cylinders with little or no flats on the ends, our machines will produce your parts quickly and cleanly. This includes polished materials containing large cutouts or perforations!

### **Roll Benders Specifications**

Model Acrotech	Model Di-Acro®	-	oacity I steel Metric		ing length f rolls Metric		eter of roll Metric		eter of om roll Metric		ing speed f.p.m. Metric	Motor hp.
1212	-	12 ga.	2.7mm	12"	305mm	3-1/2"	88.9mm	9"	229mm	22	670.6CMPM	1.0
1618	M1835	16 ga.	1.5mm	18"	457mm	3-1/2"	88.9mm	6"	152mm	15	457.2CMPM	1.0
1824	-	18 ga.	1.2mm	24"	610mm	3-1/2"	88.9mm	6"	152mm	15	457.2CMPM	1.0
LD-1418	A1835	14 ga.	1.9mm	18"	457mm	3-1/2"	88.9mm	9"	229mm	23.2	707.1CMPM	1.5
LD-1118	A1840	11 ga.	3.1mm	18"	457mm	4"	102mm	9"	229mm	23.2	707.1CMPM	1.5
LD-1224	A2440	12 ga.	2.7mm	24"	610mm	4"	102mm	9"	229mm	23.2	707.1CMPM	1.5
LD-31618	A1850	3/16"	4.8mm	18"	457mm	5"	127mm	9"	229mm	19.8	603.5CMPM	3.0
LD-1024	A2450	10 ga.	3.4mm	24"	610mm	5"	127mm	9"	229mm	19.8	603.5CMPM	3.0
LD-1230	A3050	12 ga.	2.7mm	30"	762mm	5"	127mm	9"	229mm	23.2	707.1CMPM	1.5
HD-31624	B2460	3/16"	4.8mm	24"	610mm	6"	152mm	12"	305mm	16.0	487.7CMPM	5.0
HD-1030	B3060	10 ga.	3.4mm	30"	762mm	6"	152mm	12"	305mm	19.5	594.4CMPM	3.0
HD-1236	B3660	12 ga.	2.7mm	36"	914mm	6"	152mm	12"	305mm	19.5	594.4CMPM	3.0
HD-31630	B3070	3/16"	4.8mm	30"	762mm	7"	178mm	12"	305mm	16.0	487.7CMPM	5.0
HD-1036	B3670	10 ga.	3.4mm	36"	914mm	7"	178mm	12"	305mm	16.0	487.7CMPM	5.0
HD-1248	B4870	12 ga.	2.7mm	48"	1220mm	7"	178mm	12"	305mm	19.5	594.4CMPM	3.0
HD-31636	B3680	3/16"	4.8mm	36"	914mm	8"	203mm	12"	305mm	16.0	487.7CMPM	5.0
HD-1048	B4880	10 ga.	3.4mm	48"	1220mm	8"	203mm	12"	305mm	16.0	487.7CMPM	5.0
HD-1160	B6080	11 ga.	3.1mm	60"	1520mm	8"	203mm	12"	305mm	16.0	487.7CMPM	5.0
HD-1672	B7280	16 ga.	1.5mm	72"	1830mm	8"	203mm	12"	305mm	22.9	698.0CMPM	1.5
V-1006	V	10 ga.	3.4mm	6"	152mm	4"	102mm	8"	203mm	22.0	6.68CMPM	0.75

### Uses for Acrotech roll bending machines

- Air tanks
- Architectural designs
- Catalytic converters
- Chemical or nuclear industrial containers
- Chimney flues
- Commercial vehicle panels
- Compressor casing for air conditioning

- Electric motor casings
- Exhaust systems
- Fan blades
- Fire extinguishers
- Gas or fluid tanks
- Hole saw blades
- Lighting fixtures
- Misc. ducting components
- Misc. rings and bands

- Motor and blower housings
- Name plates
- Pipe clamps
- Pressure vessels & tanks
- Sleeve bearings
- Tank heater elements
- Washing machine tubes
- Water heaters

Acrotech Roll Bender Warranty

Defective parts of a Roll Bending Machine manufactured by ACROTECH will be replaced or repaired at no charge for twelve (12) months following delivery to the original purchaser. Labor is included for the first 90 days. This warranty becomes void when products have not been used according to instructions furnished by ACROTECH nor does it cover any altered parts or unauthorized repairs. We cannot be responsible for the cost of repairs made or attempted outside of our factory. All other warranty claims are made FOB our plant, providing such item(s) is returned freight prepaid to our plant for examination.



#### This warranty does not apply to parts, components or systems not manufactured by ACROTECH.

These products are covered instead by the existing warranties, if any, of their manufacturers. Normal service items with a reasonable life expectancy of less than one year are warranted only to the extent of the reasonable life under normal use and service.

## roll bending machine restoration

Acrotech will restore your used Di-Acro<sup>®</sup> / Acrotech Roll Bending Machines based on your requirements. We can overhaul every aspect of these machines in house to maximize your productivity while keeping costs down.



### roller recovering service

We are able to strip and recover your used roll bending urethane roller. These rollers can be recovered quickly to reduce production downtime. Purchasing a spare roller for your machine will eliminate any downtime while your other roller is being re-covered. In addition to the Acrotech and Di-Acro<sup>®</sup> machines we are also able to recover competitors rollers quickly and cost effectively.



# custom rolling avaiable

Have a short run? Don't want to invest in a rolling machine yet? We will custom roll your material!









### Acrotech Terms, Conditions & Ordering Information

#### To Order

Indicate the part number (or the dimensions if there is no part number), along with the durometer and quantities desired for each part. Minimum orders required as noted.

#### Terms

Net due 30 days with approved credit, C.O.D., Visa, MasterCard, Discover and American Express.

#### Availability

Products are available in **K-400A**, **K-600A**, **K-800A**, **K-900A**, **K-950A** and **K-750D**, unless noted otherwise, and often can be shipped the same day as ordered.

#### Prices

Subject to change without notice. Cutting charges may be additional.

#### **Return Policy**

Please note, custom and non-standard orders shipped to customer specifications cannot be returned. A 20% re-stocking fee will be charged when returning stocked products.

To return defective goods for replacement or credit, Acrotech must be notified within 30 days of your receipt of the material. All requests for credited returns must be confirmed with Acrotech before the material is returned. Acrotech's liability for returned materials is limited to the cost of our materials.

### **Acrotech Warranty**

Standard and custom urethane products will be warrantied for a period of 60 days after shipment from defects in material only. Misuse of the urethane material voids the warranty. Parts cannot be guaranteed to perform for specific applications without full disclosure of application prior to manufacturing by ACROTECH.

ACROTECH's liability under this warranty shall not exceed the amount paid for the product.

THIS IS ACROTECH'S SOLE WARRANTY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, WHICH ARE HEREBY EXCLUDED, INCLUDING IN PARTICULAR ALL WARRANTIES OF MERCHANTABILITY, FITNESS OR ANY LOSS, DAMAGE OR EXPENSES DIRECTLY OR INDIRECTLY RELATED TO THE USE OF ITS PRODUCT OR FROM ANY OTHER CAUSE OR FOR CONSEQUENTIAL DAMAGES INCLUDING, WITHOUT LIMITATION, LOSS OF TIME AND LOSS OF PRODUCTION.

IT IS EXPRESSLY UNDERSTOOD THAT ACROTECH IS NOT RESPONSIBLE FOR DAMAGE OR INJURY CAUSED TO OTHER PRODUCTS, MACHINERY, PROPERTY OR PERSONS BY REASON OF THE USE OF ITS PRODUCTS.

Urethane technical information and pricing of our products can be found online at: www.acrotechinc.com



Manufacturers of K.Prene®... the unequaled Urethane

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