# **Shear Blades**

BachKnives is an excellent source for all types of shear blades. Blades are manufactured using state-of-the-art production, finishing, and heat treating equipment, enabling us to supply tooling of remarkable consistency and reliability. Every shear blade is individually inspected to ensure you receive zero-reject quality.

BachKnives offers a wide range of blades:

- Cut-to-length shears
- Squaring shears
- Crop shears
- Bow-tie shears
- Bar shears
- Billet shears
- Scrap shears
- Customized applications

We are known for our remarkable **Hermanite** shear blade alloys for shearing 1/2" stainless, high tensile plate, ultra-high strength steels, hot and cold band.

#### Alloys

- Forged Hermanite Alloys
- Carbide
- Carbide Inlay
- Powdered Metal
- Forged Tool Steel (D2, T1, H13, etc.)
- Inconel 718

## **Scrap Chopper Blades**

BachKnives offers scrap chopper blades in tool steel, carbide, and powder metal. Our blades are manufactured using state-of-the-art production, finishing, and heat treating equipment, enabling us to supply tooling of remarkable consistency and reliability. Every scrap chopper blade is individually inspected to ensure you receive zero-reject quality.



# **Hydraulic Clamp Nuts**

BachKnives is proud to partner with Noris Armaturen in offering exceptional hydraulic clamping products. Noris Armaturen is well known for producing high-quality products backed by excellent engineering "know-how".



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## **Tooling storage**

BachKnives custom designs storage units to protect your investment. Contact our knowledgeable sales engineers for a customized solution for your tooling storage needs.

# **Other BachKnives Products and Services**

- Training seminars for ISO continuing education certification
- Plastic shims
- Sharpening services
- In-house troubleshooting









## **An ISO Certified Company**



### **Contact Information**

General Email info@bachknives.com

Phone & Fax p (800) 726-BACH (2224) f (516) 621-7217

www.bachknives.com

For over 60 years, Bachknives has earned an exceptional reputation for quality service and integrity. Our tooling features the most advanced combination of design and material selection to enhance tool life and optimize performance. We utilize **micro-alloyed** refined steels and are proud of the advanced heat-treating methods, state-of-the-art finishing equipment and stringent quality control standards. Our tooling is consistently reliable and reliably consistent.

www.bachknives.com



# **Rotary Slitter Tooling**

#### **Knives**

Our slitter knives are manufactured using state of the art materials and the latest technology and production techniques. We start with the highest quality European forged material, vacuum harden and triple temper to Rockwell held to ±1, then finish with lapping and polishing to produce the finest metal slitter knives.

We offer the best-suited and successful grades for slitting and shearing HSLA, AHSLA, Duplex<sup>®</sup>, stainless steels, nickel alloys, copper, brass, titanium, indium aluminum, hot rolled steels, phosph, bronze, clad, and laminated metals.

#### **Spacers**

Our spacers are manufactured from the finest through-hardened tool steels with the same precision tolerances as our knives. We also provide light weight executions in polyamid and tool steel. All spacers are clearly etched for easy identification.

### Capabilities

#### Alloys

- Forged Hermanite Alloys
- Carbide with BachKnives' Mirror Finish
- Powdered Metal
- Forged Tool Steel (D2, M2, T1, H13, etc.)
- Stainless Steel
- Aluminum

#### **Precision Tolerances**

- Thickness +/-0.000040" (+/- 0.000020" can also be achieved)
- Flatness within 0.000080"
- Parallelism better than 0.000080"
- 2-3 microinch (0-1 can also be achieved on carbide)
- H5 bore tolerances where necessary

#### Hardening

- Conventional heat treating processes
- Vacuum treating processes
- Triple tempering





# **Stripper Rings**

Stripper rings are a critical component in the slitting process. All rings are manufactured using BachKnives' precision tolerances. We offer a variety of stripper rings and customized clad rings for ultra-sensitive surfaces. The following stripper ring types are available to meet your processing requirements:

- Clad Stripper Rings
- Snug-fit Rubber Stripper Rings (Buna and Polyurethane)
- Highly Polished Steel Stripper Rings
- Aluminum and Phenolic Rings



# BachKnives AccuSet Shimless

BachKnives designs and builds AccuSet Shimless Systems to suit our customers' exact production needs. The AccuSet Shimless System consists of knives, spacers, and stripper rings, all driven by a custom-designed computer program.

#### Advantages of the BachKnives AccuSet Shimless System:

- Eliminate the use of plastic shims and the quality issues associated with them
- Fast, accurate setups
- Reduce tooling resets
- Strip widths in 0.0005" or 0.001" increments (clearances in 0.00025" and 0.0005")
- Minimize the number of tools per cut
- Enhanced repeatability
- Maximum slitter production and efficiency
- Minimize burr and camber issues
- Increased knife life

For complete details on our AccuSet Shimless System, visit us at www.bachknives.com.





Operator ID	123			
Job	ADC123-456 💟			List
Spacer Optimization	2001 + .001			
Abbreviated Listing				
Material	Stainless			
Knife Penetration				]
Gauge	020			
Material UTS	200 K			
Knife Clearance	-			
Usable Arbor Length	24 .000			
Coil Width	24 .000			
Coil Weight	3000			
Knife Thickness	.2000			
Scrap	.060			
Center or Shoulder	CV			Shoulder Offset
Job Detail				
<b>Delete Customer</b>	Order	Knife Penetration		Width
perete customer			5 1	,000
			= $=$	
			5 2	000

### Quills

BachKnives' precision quills are preloaded assemblies designed to provide ultra-close tolerances and guaranteed consistency for your dedicated slitting. The precision tooling is pre-loaded on sleeves and carefully calibrated. These pre-loaded sleeves install in a matter of minutes. Our quill system achieves consistently better slit edges and longer production runs than conventional tooling. These quill systems are ideal for long running dedicated jobs where a high-level of repeatability is required or jobs that require a quick setup.

#### Advantages of the BachKnives quill system:

- Installed and ready to slit in minutes
- Eliminate operator setup calculations thanks to pre-loaded tooling
- Tighter strip width tolerances
- Minimize burr and camber
- · Excellent repeatability from set-up to set-up
- System design isolates guill from slitter shoulder curtailing effect of shoulder runout and offset



Maximize slitter uptime

### **Over-Arm Separator**

BachKnives' over-arm separator discs are made from through-hardened tool steel. They are polished with tapered sides and rounded edges. These hard discs (54-56 Rockwell "c") prevent edge damage to your strip and last longer than the standard discs offered in the industry. We maintain an inventory of popular sizes and discs can be manufactured to your dimensions.

### **Over-Arm Separator Spacers**

Along with over-arm separator discs, we also supply over-arm spacers in:

- Phenolic
- Nylon
- Aluminum
- Clad steel



### **Separator plates**

BachKnives' separator plates are well known for their exceptional quality and durability. They are manufactured from through-hardened alloy steel, carefully ground and straightened. Our plates are flat and run true. All ODs are well rounded and smooth. IDs are nicely chamfered. The optional double polished sides offer maximum protection of sensitive strip edges.

Plates are available up to 72+" in diameter from 0.060" thick. Bores can be plain or with keyway or lug. We also offer core drive discs for a variety of machines.