

Retractable Mandrels

The Sunnen KR and BLR series of honing mandrels with retractable stone assemblies ensure greater efficiency in virtually all bore sizing and finishing operations.

The new retractable KR mandrel series is available for diameter ranges from .185"-.744" (4,70-18,90 mm). The longer BLR series of retractable mandrels is also available for the same diameter range, and incorporates a longer stone.



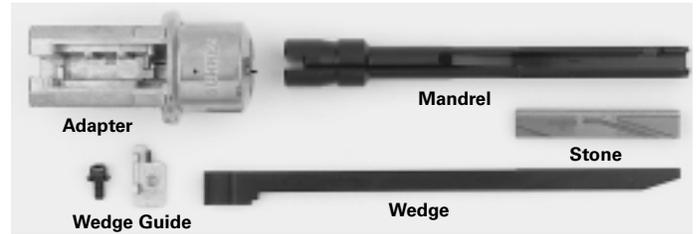
Retractable mandrel and stone assemblies are available at the same price as the non-retractable mandrel units.

Benefits of Sunnen's Retractable Mandrels:

- Stones are retracted from the cutting position for much easier loading and unloading of parts which increases production and lowers manufacturing costs.
- Stronger mandrels remove stock at a faster rate, increasing production speeds and lowering cost per part honed.
- Units come with extended wear surfaces (shoes) standard, in either hard steel or plated diamond. This ensures longer service life and significantly reduces centerline changes from cycle to cycle. Also, downtime is lowered which increases productivity and reduces unit costs.
- Mandrel units have hardened wedges to prolong wedge life. This assures high performance honing from start to finish for better cost efficiency.
- The stone retraction feature is ideal for use in automated applications facilitating loading and unloading, reducing labor costs.
- Retraction marks and scratches that can occur when taking the part off the mandrel after honing are greatly minimized. This ensures a consistently higher-quality end product.

How To Order

To order a retractable KR-16 or BLR-16 13,36 mm - 14,15 mm (.526"-.557") diameter mandrel, simply add "R" after the "K" or after the "BL" from the corresponding table on pages 20 - 42 in this catalog. SEE EXAMPLE BELOW (from page 36 of catalog):



Retractable Mandrel Options

Diamond Plated Super Mandrels —

Designed to provide a long-wearing guide shoe to increase mandrel life in some applications...plus faster stock removal in difficult materials (chrome, carbide). Plated with 220 grit diamond. Available 4-6 weeks after receipt of order.

Carbide Shoe Mandrels —

(Available on Special Order)

Two types of Carbide Shoe Mandrels are available for high-production applications. Available in either Round Carbide Rod Inserted and Full Carbide Shoe Mandrels. In the correct application they will last significantly longer than standard hardened mandrels and prevent galling in exotic materials such as 303 stainless steel. When ordering full-carbide type specify starting and finish diameter.

Available 4-6 weeks after receipt of order.

Extended Shank Mandrels —

(Available on Special Order)

Extended Shank Mandrels are available for honing parts that are too long to be honed with a standard mandrel.

Available 4-6 weeks after receipt of order.

Metal Bond Superabrasive Insert Mandrels —

(Available on Special Order)

For applications where a long lasting mandrel is needed and the materials being honed reacts negatively with either a hardened or carbide shoe mandrel. Single or double insert mandrels in either Borazon/CBN or diamond are available. Available 4-6 weeks after receipt of order.

Order 1-5 For Complete K16 or J-K16 Honing Units

Diameter Range 12,57 mm - 15,72 mm .495" - .619"	1 K16 Mandrel* Includes wedge			1 J-K16 Mandrel* Includes wedge			2 Truing Sleeve	3 Adapter For J-K16 mandrels order J-K16-A adapter	4 Alignment Bushing	5 Honing Stone
	mm	inches	Mandrel With Standard Shank Choose One Suffix	Steel Mandrel With Extra-Long Shank Choose One Suffix	With stone retainer and wedge guide	For machines with fully adjustable spindle nose				
12,57-13,36	.495-.526	K16-495A	H SD	J-K16-495A	H SD	S-495	K16-A	C-495		
13,36-14,15	.526-.557	K16-526A	H SD	J-K16-526A	H SD	S-526	K16-A	C-526	Contact Customer Service For Availability	
14,15-14,94	.557-.588	K16-557A	H SD	J-K16-557A	H SD	S-557	K16-A	C-557		
14,94-15,72	.588-.619	K16-588A	H SD	J-K16-588A	H SD	S-588	K16-A	C-588		

* H = hardened steel
SD = diamond plated

Example: KR16-526AH

KR16-A

KR16-_____

Mandrels & Stone Kit Accessories

LN-610 Stone Selection Kit



A complete assortment of Sunnen Precision Graded Honing Stones for your everyday bore-sizing and finishing requirements.

- Contains stones for practically any routine honing job (K or P28 Honing Unit Groups) in the 3,2 mm-152 mm (1/8"-6") diameter range.
- Stone Selection Tables on each drawer facilitate quick selection of the right honing stone for each job – for different materials and desired surface finishes.
- Cuts honing cost per part – use of correct stone increases stone life and reduces honing time per piece.
- Orderly storage of all 224 honing stones in 72 separate compartments avoids confusion, substitution and loss of stones.
- "Back-up" stock provided in Kit (3 or more of each stone) prevents running out of a specific stone.
- Profitable for the production shop, too – adequate variety of stones avoids delays in processing pilot runs, helps determine best-suited stone for economical production.

The complete Stone Selection Kit with 224 stones is priced at over 25% savings from the list price of individual items. Kit includes storage cabinet, a 2-1/2-power magnifying glass for easy stone identification, tweezers for handling small stones, and a stone dressing stick.

The Utility Cabinet may be purchased separately (stones and accessories not included).
Shipping Weight: 11 kg (24 lbs.)

LN-609 Utility Cabinet

Plain white drawer fronts permit user to write and erase stone numbers when written with pencil.
Shipping Weight: 7,7 kg (17 lbs.)

LN-602 Utility Cabinet

Drawer fronts have same stone charts as printed on cabinet supplied with LN-610 Kit.
Shipping Weight: 7,7 kg (17 lbs.)

LN-650 Mandrel Storage Cabinet

A sturdy all-steel cabinet for conveniently storing Sunnen Mandrel supplies and accessories. The upright cabinet provides storage for 112 complete mandrel assemblies from D2 through Y32 sizes. The lower cabinet consists of three shelves which can be used for storage of larger mandrels as well as related supplies. Shipped assembled. Ready to use.

Dimensions:

1701 mm (67") Height

889 mm (35") Width

610 mm (24") Depth

Shipping Weight: 135 kg (297 lbs.)

LN-650 Mandrel Storage Cabinet shown with LN-651 Accessory Storage Drawer Unit



Mandrel Storage Racks

SL-30

For Mandrels requiring separate adapters. Each rack holds 16 honing units.

Includes drain pan.

Shipping Weight: 2,5 kg (5.5 lbs.)



SL-38

For lifetime honing units with 38,1 mm (1-1/2") diameter shank. Rack holds 8 units.

Includes drain pan.

Shipping Weight: 2,3 kg (5 lbs.)



SL-37

For lifetime honing units with 44,4 mm (1-3/4") diameter shank. Rack holds 7 units.

Includes drain pan.

Shipping Weight: 2,3 kg (5 lbs.)

