Features	 Assured concentricity .0005 Manual driven Quick, easy, and accurate loading Constant torque handle optional Compact and lightweight 	Assured concentricity .0005 Power driven/enclosed motor Quick, easy, and accurate loading Constant torque handle optional Compact and lightweight Optional extended stop for lengths up to 20"	Assured concentricity .0002 Manual driven Quick, easy, and accurate loading Constant torque handle standard Compact and lightweight
Description	The original and basic Spin Roll. Simply mount this compact, portable, lightweight workholder on a suitable machine, insert the workpiece between the three intermeshing contact rolls and against the adjustable end stop. Tighten the clamping knob (no additional clamping, fitting or adjusting is necessary). Turn the hand crank (on the shaft of one contact roll). All rolls revolve and rotate the piece on its own circumference, achieving precise concentricity while maintaining linear position. All set for easy, efficient, accurate grinding or other machining. Workpieces remove easily, Spin Roll assures exact duplication on multiple runs.	Identical to Model 525 but equipped with a 1/8 HP electric motor and gear reducer which produces 193 RPM on a direct drive output shaft. Greater versatility has been incorporated with an optional 20" adjustable, extended stop.	The 500-M automatically centers diameters and assures concentricity, linear positioning and precise duplication for any number of workpieces. Just mount the Model 500-M on the magnetic chuck of a surface grinder, adjust the finger stop to shank diameter and length of workpiece and proceed with grinding operation.
Specifications			
Overall Dimensions (inches)	6 ¹ /8 long x 4 ¹ /2 high x 4 wide	9 ¹ /2 long x 6 high x 10 wide	11 long x 6 ¹ / ₂ high x 7 wide
Workpiece Capacities: Diameter (inches) Length (inches)	½64 to 1½4 *5/8 to 5 standard	¹ / ₆₄ to 1 ¹ / ₄ * ⁵ / ₈ to 5 standard	1/64 to 11/4 *5/8 to 5 standard
Power	NA	1/8 HP (motor equipped with gear reducer producing 193 RPM on direct output shaft)	NA
Bearings	3 Permanently Sealed and Lubricated	3 Permanently Sealed and Lubricated	12 Permanently Sealed and Lubricated
Clamping	Single Clamping Knob	Single Clamping Knob	Adjustable Torque Handle
Weight (approx. lbs.)	9 lbs	24 lbs	19 lbs
Options	*Special roll widths available Optional torque handle	*Special roll widths available Optional torque handle Extended stop bracket for workpiece lengths up to 20"	*Special roll widths available
In accordance with our established policy of constant product improvement, the specifications and dimensions contained herein are subject to change without notice.			

525-P

500-M

525-M

Model

500-PT	500-VP	500-D
 Assured concentricity .0002 Power driven/enclosed motor Quick, easy, and accurate loading Constant torque handle standard Lubricated air clamp optional Compact and lightweight 	 Assured concentricity .0002 Power driven variable speed/enclosed motor Quick, easy, and accurate loading Constant torque handle standard Lubricated air clamp optional Lower silhouette 	 Assured concentricity .0002 Power driven variable speed/enclosed motor Quick, easy and accurate loading Lubricated air clamp standard Spin Roll has 2 interlock rolls parallel to base for use on cylindrical grinders. O.D., I.D., or cutter grinder Base furnished to fit requirements of your machine
Power driven by a 1/8 HP motor, this Spin Roll model can be used as an accessory or a self-contained bench unit. Now, even machine shops with minor capacity rotary operations cannot afford to be without this time, work and money-saver. Also available with special mounting platens for other machine tools.	Similar to the Model 500-PT Spin Roll but with these additional, special features: • variable speed control with a rheostat which permits selection of constant torque speeds between 0 and 200 RPM; • a lower silhouette (only 7 inches high), allowing for better work observation	This special Spin Roll model incorporates all the features of Model 500-VP but is provided with sturdy, solid cast base plates and structural components made to accommodate the particular dimensions of your machine and production requirements. (Data sheets supplied for specifications and approval)
		*
12 long x 10 ¹ /2 high x 8 wide	22 long x 7 high x 9 ³ /4 wide	variable to requirements
1/64 to 11/4 *5/8 to 5 standard	¹ / ₆₄ to 1 ¹ / ₄ * ⁵ / ₈ to 5 standard	1/64 to 11/4 *5/8 to 5 standard
1/8 HP, 110V	¹ /8 HP, (0 to 200 RPM)	¹ / ₈ HP , (0 to 200 RPM)
12 Permanently Sealed and Lubricated	12 Permanently Sealed and Lubricated	12 Permanently Sealed and Lubricated
Adjustable Torque Handle	Adjustable Torque Handle	Air Cylinder Closure including Lubricator-Filter
28 lbs	45 lbs	and Gage with 8' Air Hose 50 lbs
*Special roll widths available Lubricated Air Clamp	*Special roll widths available Lubricated Air Clamp	*Special roll widths available

530-M	530-PT	530-VP
Assured concentricity .0002 Manual driven Quick, easy, and accurate loading Constant torque handle standard Compact and lightweight Ideal for rotating larger diameters	Assured concentricity .0002 Power driven/enclosed motor Quick, easy, and accurate loading Constant torque handle standard Lubricated air clamp optional Compact and lightweight Ideal for rotating larger diameters	Assured concentricity .0002 Power driven variable speed/enclosed motor Quick, easy, and accurate loading Constant torque handle standard Lubricated air clamp optional Lower silhouette Ideal for rotating larger diameters
Having the same advantages offered by Model 500-M, the Model 530-M will accommodate workpiece diameters from 11/4" to 3".	This model is identical in performance to the manual Model 530-M but is powered by its own self-contained motor.	This model is similar to the 530-PT but with a variable speed control with a rheostat which permits selection of constant torque speeds between 0 and 200 RPM.
13 long x 7 high x 9 ³ /4 wide	13 long x 11 high x 93/4 wide	24 long x 7 high x 9 ³ /4 wide
1 ¹ / ₄ to 3 * ⁵ / ₈ to 5 standard	1 ¹ / ₄ to 3 * ⁵ / ₈ to 5 standard	1 ¹ / ₄ to 3 * ⁵ / ₈ to 5 standard
NA	1/8 HP, 110V (motor & gear box which produces193 RPM on direct drive output shaft)	¹ /8 HP, 110V (0 to 200 RPM)
12 Permanently Sealed and Lubricated	12 Permanently Sealed and Lubricated	12 Permanently Sealed and Lubricated
Adjustable Torque Handle	Adjustable Torque Handle	Adjustable Torque Handle
22 lbs	30 lbs	52 lbs
*Special roll widths available	*Special roll widths available Lubricated Air Clamp	*Special roll widths available Lubricated Air Clamp

RVM-100 MRV-10 Model **Features** · Assured concentricity to .00005 T.I.R. Assured concentricity to .00005 T.I.R. · Quick, easy, and accurate loading · Quick, easy, and accurate loading · Mounts vertically or horizontally · Mounts vertically or horizontally Portable Portable Finished lengths from ¹¹/₁₆ to 8" standard Finished lengths from ¹¹/₁₆ to 3" standard · Handle fits choice of positions for operation Inspects the concentricity and straightness of Similar to RVM-100 Description circular or round shafted objects quickly, safe-This miniature Rotary "V" Block is designed for inspection of small circular products ly and accurately. Workpiece is inserted between the three requiring true concentricity. intermeshing contact rolls and against the

Specifications

Overall Dimensions (inches)
Workpiece Capacities:
Diameter (inches)
Length (inches)

Power

Options

Bearings Clamping Weight (approx. lbs.) 71/4 long x 41/2 high x 61/4 wide

end stop which has been adjusted to the length required. The workpiece rotates on its own circumference, achieving precise concentricity while maintaining linear positioning. Because of the greater ratio of diameter of rolls to diameters of workpiece, the workpiece makes many revolutions per turn of the rolls.

1/64 to 11/4 11/16* to 8

Manual

Precision Ground Centers

Adjustable Spring Pressure

20 lbs

*Special roll widths available for shorter lengths

31/2 long x 31/4 high x 3 wide

1/64 to 1/4 11/16* to 3

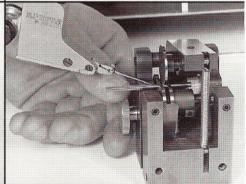
Manual

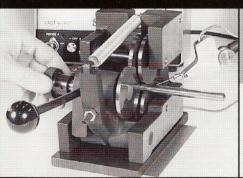
Precision Ground Centers

Automatic Adjustable Spring Pressure 2 lbs

*Special roll widths available for shorter lengths











St. Mary manufacturing corp.

1254 Erie Avenue

North Tonawanda, NY 14120-3095

The Spin Roll Principle

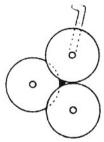
St. Mary's unique Spin Roll work holding fixtures provide low-cost, precision cylindrical grinding or other machining capabilities. A patented design, employing three intermeshing contact rolls, assures precise, repeatable, automatic linear positioning and concentricity up to .0002".

Available in nine manual and motorized models, Spin Rolls mount easily on many standard shop machines. including most internal, cylindrical (ID & OD) or surface grinders, drill presses, finishing, cutting, chucking, and other machine tools.

Standard models accommodate workpieces from 1/64" to 3" diameter and 5/8" to 5" lengths, with an optional mounting bracket on Model 525-P for lengths up to 20".

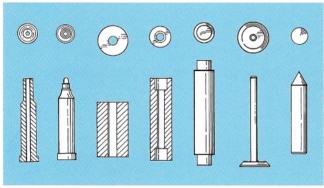
Workpieces can be loaded quickly, easily and accurately, allowing the Spin Roll to be used efficiently for both pro-

totype and production machining.



Automatic concentricity (within .0002"), linear positioning, and precise duplication for any number of workpieces are assured by the Spin Roll's three intermeshing contact rolls which revolve and rotate the cylindrical piece on its own circumference.

Three intermeshing contact rolls are the basis of the Spin Roll principle



Some typical examples of workpieces turned on Spin Rolls

Spin Roll Rotary "V" Block

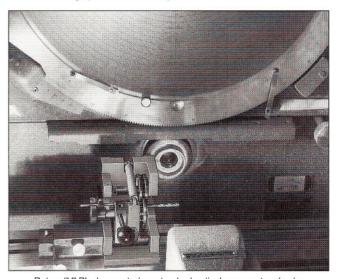
With St. Mary's Rotary "V" Block, the concentricity and straightness of circular or round shafted objects can now be inspected guickly, (to within .00005) safely and accurately by a practically unskilled operator!

Just insert the workpiece between the three intermeshing contact rolls and against the end stop which has been adjusted to the length required. The workpiece rotates on its own circumference, achieving precise concentricity while maintaining linear positioning. Because of the greater ratio of diameter of rolls to diameters of workpiece, the workpiece makes many revolutions per turn of the rolls.

The rolls in the Spin Roll Rotary "V" Block are especially lapped for true roundness. The female contact rolls are mounted on dead centers and the intermeshing (or clamp) roll is mounted on a permanently sealed bearing. The rolls are so true that only a slight turn of the clamping roll provides for accurate checking of any diameter by means of a mechanical or electronic indicator or optical comparator.

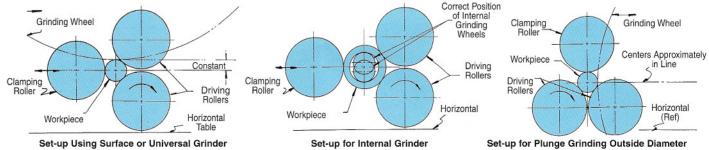
The Spin Roll Rotary "V" Block loads, locks and releases quickly and simply by means of its adjustable spring loaded arm. Assures exact duplication on multiple runs.

A Micro Rotary "V" Block (Model MRV-10) is also available for inspection of small circular parts requiring true concentricity (within .00005).



Rotary "V" Block mounted on standard optical comparator checks concentricity and size of rotary cutting tool.

Some Typical Spin Roll Set-Ups



Set-up for Internal Grinder

Set-up for Plunge Grinding Outside Diameter