

# Ingersoll Rand®

## Industrial Surface Preparation



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The new **IR Ingersoll Rand** corporate and brand identity, introduced in 2000, is now being incorporated into product identification and packaging, as well as all communications. While most product photography in this catalog still reflects the previous symbol and logotype signature, you will soon see our new look on everything IR.



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# Finishing Tools



Advancements in manufacturing and production have transformed the world of industrial finishing. While the need for traditional, heavy-duty material removal continues in many segments, increases in precision and reductions in waste have changed overall demands. New materials require different tool speeds and attachments. A greater focus on product quality has tightened the standards of finishing. Parts and components must match surrounding surfaces with impeccable accuracy. With these changes in materials and processes, exactness and finesse in finishing operations have taken on new significance.

Likewise, finishing technicians are a key factor in producing ultimate product quality. These are men and women who depend on resources that encourage and maximize their special set of skills. Today's operators deserve and require tools that contribute to quality of performance...and quality of life.

Ingersoll-Rand has provided tools for industry for more than a century, combining the best engineering talent, top-quality materials, and the strongest support in the business. Our classic designs have set performance standards that endure today. Our latest introductions reflect emerging trends in tool use, changing technology, and new materials. Whatever the application, Ingersoll-Rand industrial tools bring out the best in your operator's skills, and contribute to the ultimate quality of your products and processes.

As a major worldwide supplier of finishing tools, systems, and accessories, Ingersoll-Rand is a valuable technology resource. Ingersoll-Rand offers a variety of finishing tools — from heavy metal grinding to precision sanding — that will match your needs and requirements.

## Cyclone Finishing Tools

Cited by the Industrial Design Excellence Award program for their pioneering ergonomic design, Ingersoll-Rand's Cyclone finishing tools were created for a wide variety of tasks. These innovative tools are lighter and easier to maneuver, yet have more power and less vibration than competitive models. There's a complete range of speeds and configurations, plus a full selection of Cyclone accessories.

## Sanders / Polishers / Buffers

Reflecting the rapidly changing demands of industrial finishing, sanders, polishers and buffers have emerged as a key segment. Constant process improvement throughout industry now results in less waste on castings and molded parts, shifting emphasis from material removal to surface finishing. The Ingersoll-Rand line of sanders, buffers and polishers includes models based on the popular Cyclone and Pro Series tool lines...and now features a complete range of Cyclone random orbital sanders as well.

## ErgoPro Series Grinders

Ingersoll-Rand's ErgoPro Series offers a complete line of heavy-duty tools designed with outstanding safety features and state-of-the-art ergonomic enhancements for increased operator comfort and superior performance. This line comes equipped with interchangeable internal parts to simplify stocking and repairs. The excellent power-to-weight ratio makes your operators top performers. ErgoPro Series models feature best-in-class vibration dampening technologies, the Ingersoll-Rand motor controller, integral guard, and self-locking throttle lever to prevent accidental operation.

These products reflect the IR philosophy of High Performance Ergonomics—user oriented design that provides real-world productivity benefits...based on a systematic, objective measure of ergonomic factors for validation and value.



High Performance Ergonomics

## Choosing and Using Grinder Accessories

For safety and performance, always select the proper abrasive wheel for your job. Cup wheels remove large amounts of metal and are good for open spaces. Depressed center wheels are ideal for use in rough grinding operations and all-around heavy material removal. In applications where a horizontal grinder is required, choose Type One wheels.

Choose tools with enough horsepower to drive the abrasive wheel you are using, and allow the grinder's speed to work for you. Bearing down on under-powered tools slows the rpm output and reduces overall efficiency.

## Grinder Safety Tips

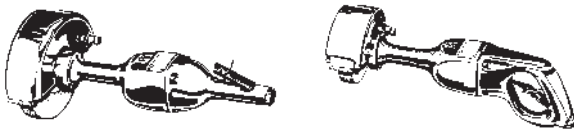
Always use eye protection. Use only recommended equipment and adapters. Inspect grinding wheels closely for any imperfections or damage such as cracks, pitting, or broken edges. Always make sure that the tool speed does not exceed the maximum operating speed marked on the wheel or wheel package. Use correct size guards, flanges, blotters, spindles, and mounting practices to ensure operator safety.

## Mounting a Grinding Wheel

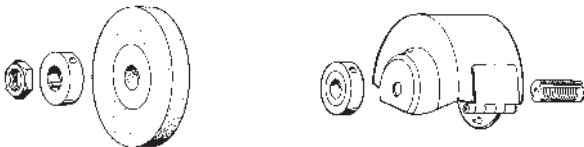
When mounting a grinding wheel on any portable power tool, be sure to:

- Inspect the grinding wheel closely for any imperfections or damage such as cracks, pitting or broken edges.
- Verify that the tool's spindle does not exceed the maximum operating speed marked on the wheel or wheel package.
- Use correct size guards, flanges, blotters, spindles and mounting practice as shown below.

### Horizontal Grinders



**TYPE 1 Straight Wheels**



Wheel Sizes: 6" and 8"

Spindle Sizes: 5/8" (16mm) and 1" (25mm)

### Vertical and Angle Grinders

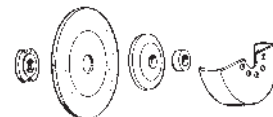


**TYPE 27 Depressed Center Flat Wheels**



Threaded Wheel Sizes: 7" and 9"  
Type: Spindle Sizes: 5/8" and 7/8"

Threaded Wheel Sizes: 7" and 9"  
Type: Spindle Sizes: 5/8" and 7/8"

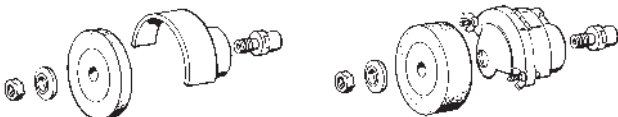


Spindle Size: 3/8"

### Small Horizontal Grinders



**TYPE 1 Straight Wheels**



Wheel Sizes: 2", 3" and 4"  
Spindle Sizes: 3/8"  
(10mm) and 1/2" (12mm)

Wheel Sizes: 2", 3" and 4"  
Spindle Sizes: 3/8"  
(10mm) and 1/2" (12mm)

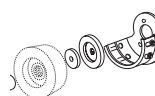
**TYPE 28 Depressed Center Saucer Wheels**



Threaded Wheel Sizes: 7" and 9"  
Type: Spindle Sizes: 5/8" and 7/8"

Non-Threaded Wheel Sizes: 7" and 9"  
Type: Spindle Sizes: 5/8" and 7/8"

**TYPE 6 and 11 Cup Wheels**



Wheel Sizes: 5" and 6"  
Spindle Sizes: 5/8" and 7/8"

**TYPE 13-1" Thick Saucer Wheels**



Wheel Size: 7"  
Spindle Size: 5/8"

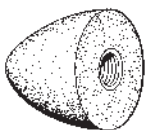
**WARNING:** Always use eye protection. Use only recommended equipment and adapters. Consult parts bulletin for details. Do not use if actual tool RPM is greater than nameplate RPM. Check RPM each shift or upon changing accessory. For further safety information, consult ANSIB7.1 and ANSIB186.1.

# Finishing Tools

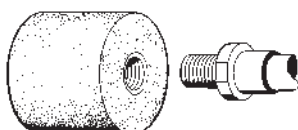
## Cone and Plug Wheel Grinders



TYPE 16, 17, 18, 18R and 19 Cone and Plug Wheels



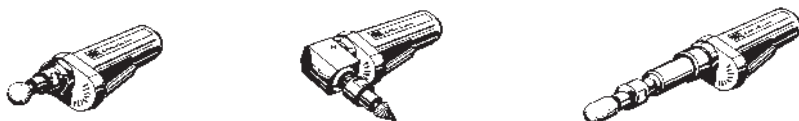
Wheel Sizes: 1 1/4" and 3" (max. dia.)



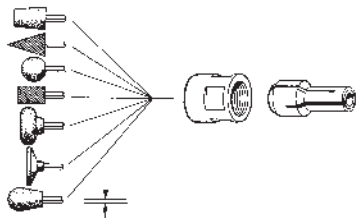
Spindle Sizes: 3/8", 1/2" and 5/8"

There's more to today's finishing process than the tools of the trade. Ingersoll-Rand is an information resource for your business, and can assist in creating more effective and productive workplace configurations, as well as tool recommendations. Your selection and purchase of finishing tools has a direct effect on process and product quality. Your decision can make a difference in finishing efficiency – and in the improved quality and durability of finishes. So before you make your next purchase decision, contact your local IR representative or distributor for assistance and information regarding the latest IR product and technology developments.

## Collet Type Grinders



Mounted Wheels and High Speed Steel or Carbide Burs



Collet Sizes: 1/8", 1/4" and 3/8"

(3, 6 and 10mm)

Mandrel Diameters: 1/8", 1/4" and 3/8"

(3, 6 and 10mm)