

# HARIG

**SUPER 612 PRECISION SURFACE GRINDER**



**3 BIG MODELS**  
**6" x 12" Table**

- **Hand Feed**
- **Hydraulic Longitudinal Feed**
- **Automatic**

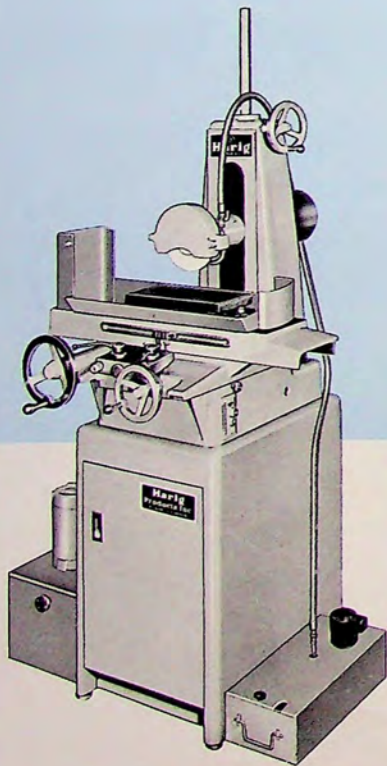
**HARIG** PRODUCTS, INC. 1875 Big Timber Road • Elgin, Illinois 60120

# NOW! THREE HARIG SUPER 612's TO SUIT YOUR EVERY NEED...

## SUPER 612

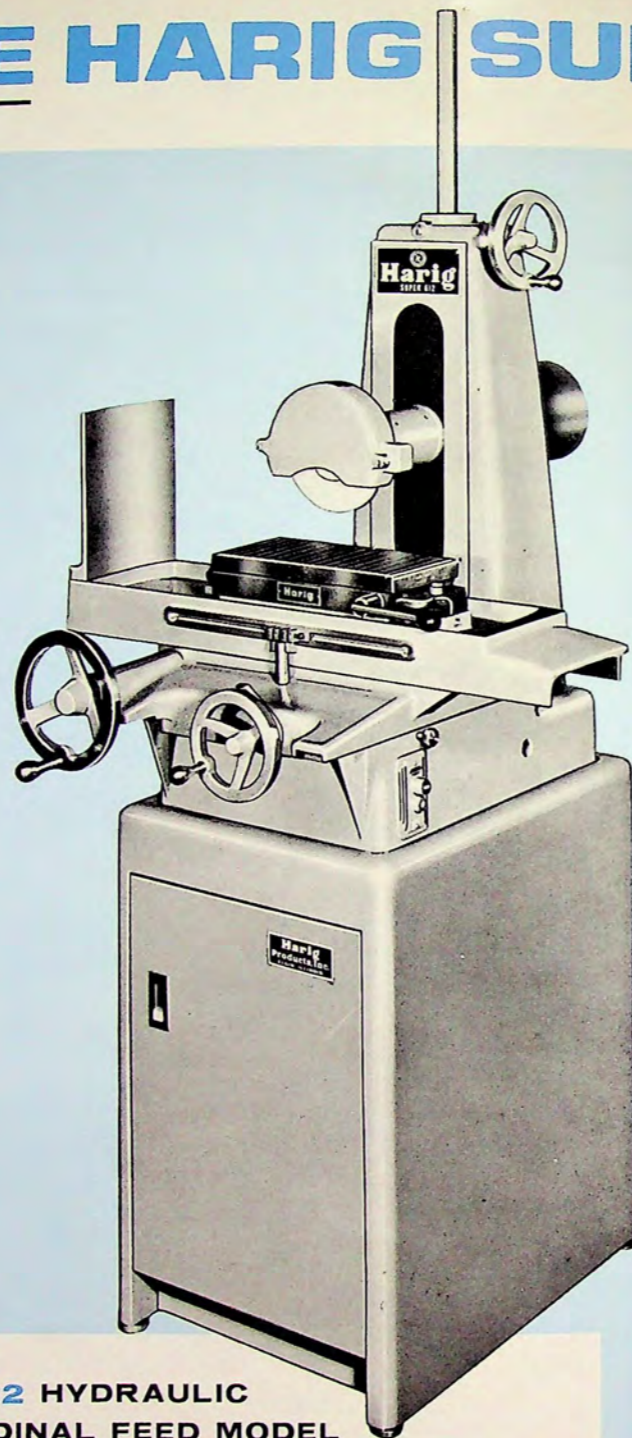
### HAND FEED MODEL

Harig's new Super 612 with choice of right or left hand feed is one of the metalworking industry's most popular surface grinders. This low cost precision machine has features usually found only on more expensive models. (See features page 4.) It's easy to operate . . . requires little maintenance and takes up a minimum amount of floor space. You'll find it's built with the precision quality you expect from Harig.



### SUPER 612 HYDRAULIC LONGITUDINAL FEED MODEL

An ideal machine where power longitudinal feed is all that's needed. This simplified hydraulic surface grinder has manual cross feed and heavy duty base. Hydraulic components in this model are identical to the high quality units in the new AUTOMATIC Super 612. Available in left hand feed, rack and pinion only. Standard Super 612 features on page 4 also apply to this model.



## NEW HARIG SUPER 612

### AUTOMATIC MODEL

#### Hydraulic Longitudinal Feed— Electric Cross Feed

HIGH QUALITY HYDRAULIC LONGITUDINAL FEED, COMPLETE WITH BUILT IN TANK and PUMP, CYLINDER, VALVE CONTROL for VARIABLE SPEED from 0 to 50 S.F.M., DIAL CONTROLLED CROSS FEED, and HAND WHEEL DISCONNECT

The new Harig Super 612 Automatic Surface Grinder features hydraulic longitudinal and electric cross feeds. Both movements are integrated for automatic grinding. There is also automatic forced lubrication to all wear surfaces with constant recirculation and filtering. Other important features:

- Solidly built, well engineered low pressure hydraulic system using most advanced components.
- ON-OFF valve permits instantaneous shut-off of table movement.
- Separate flow control valve with big knob for easy regulation of table speed (0-50 S.F.M.)
- Hand wheel inter-lock for safety disengagement when using hydraulic table movement.

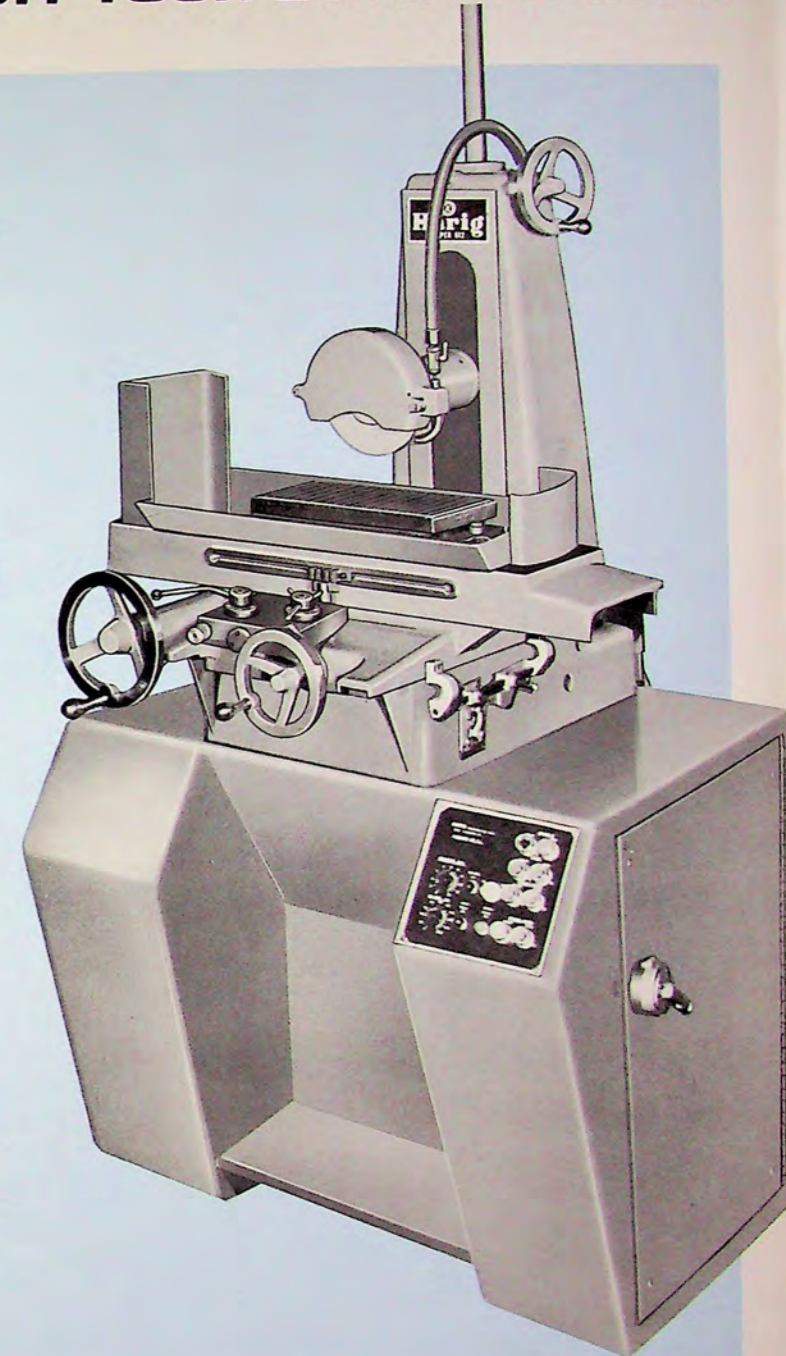
#### CONSOLE TYPE CABINET BASE

A completely new console cabinet is available for the new automatic series. The following units are built in or completely enclosed within the cabinet:

- |                        |                             |
|------------------------|-----------------------------|
| Control panel          | Hydraulic pump and tank     |
| Electricals and wiring | *Wet grinding pump and tank |
- \*Wet grinding system is extra charge accessory

#### ELECTRIC CROSS FEED

The electric cross feed increment is variable and dial-controlled from the console panel. Selection can be made in increments from .010 to 1/4". The total amount of automatic cross feed can be varied from 1/4" to 6". Easily set adjustable dogs vary this distance. This automatic feed keeps the wheel in action



without operator attention until a complete pass across the work piece has been made and then automatically reverses the cross feed. Changing from manual to automatic cross feed is fast and simple. Press the cross feed start button and dial the amount on the console panel.

# LONG PRECISION LIFE ON HARIG GRINDERS

Filtered Oiling to all wear surfaces washes away damaging grinding dust

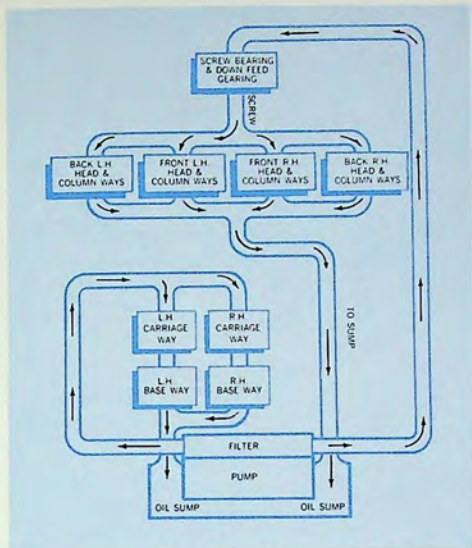


Diagram of Automatic Lubrication & Filtering System

## Automatic Forced Lubrication

This is a continuous flow oiling system. Electric pump goes into operation as soon as machine is started. Lines carry oil to all ways, screws, gears—return lines bring oil back to pump where it is filtered and recirculated through machine. This feature triples life of the machine and preserves original accuracy . . . washes away damaging grinding dust . . . reduces maintenance and replacement parts costs.

## IMPORTANT FEATURES

on all HARIG SUPER 612 Surface Grinders

- **HIGH SPEED SPINDLE**

This accessory quickly interchanges with the standard Harig spindle. Only a few minutes are required to make the change.

- **DIRECT DRIVE SPINDLE**

No frayed or slipping V-belts to replace. Full power transmission. Quiet operation . . . vibration free (produces fine work finishes). Spindle pressure unit insures a constant steady wheel position without plunge or side thrust—an important advantage particularly in side-wheel grinding.

- **CROSS FEED LOCK**

Furnished as standard equipment. Provides positive lock without table dislocation.

- **LONGITUDINAL FEED STOP**

Furnished as standard equipment.

- **SPINDLE HOUSING**

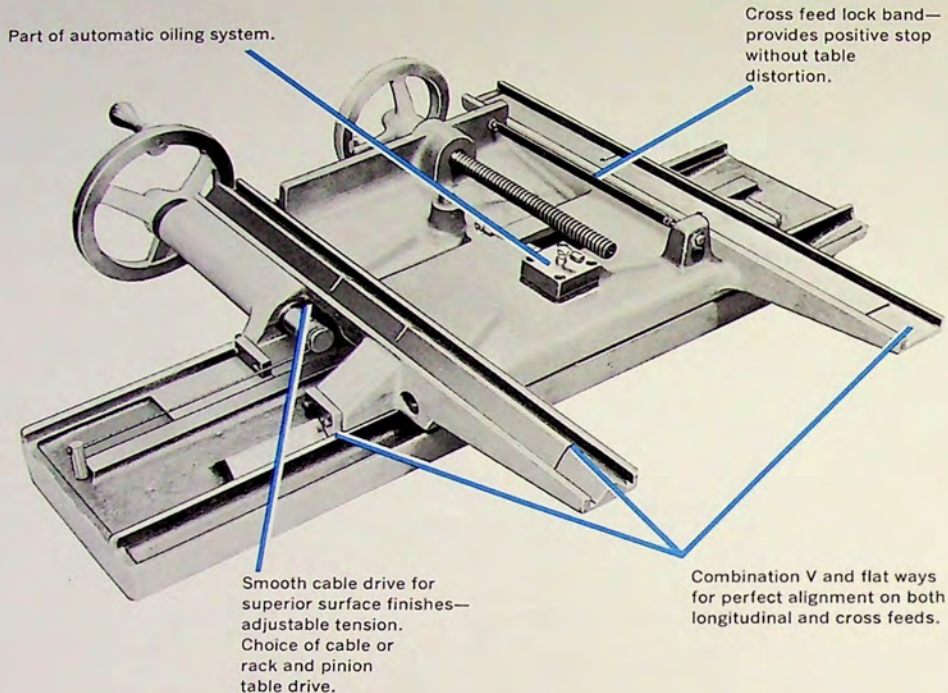
Solid one piece construction of spindle housing and vertical slide are important factors in the vibration-free operation and fine finishes possible with the Harig Super 612.

- **DUST GUARDS**

Harig design provides most complete dust protection throughout the machine.

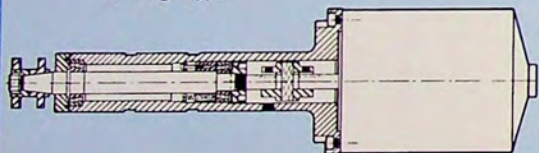
The machine is designed with heavy, well ribbed castings to provide the utmost stability for high precision work. Ways are fully scraped for the greatest accuracy. Operators like the easy table action assured by Harig's oiling system.

## TABLE ASSEMBLY



## DIRECT DRIVE SPINDLE

Cartridge Type

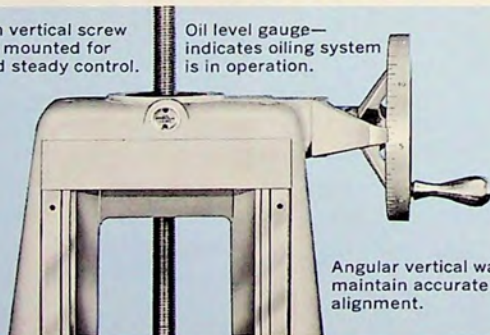


Super precision bearing—dynamically balanced motor.

## ELEVATOR ASSEMBLY

Precision vertical screw centrally mounted for close and steady control.

Oil level gauge—indicates oiling system is in operation.



Angular vertical ways maintain accurate alignment.

## SPECIFICATIONS

	Hand Feed	Hydraulic Long. Feed	Automatic
Longitudinal Travel.....	12½"	12½"	12½"
Cross Feed Travel.....	7¼"	7¼"	7¼"
Vertical Working Height (under 7" wheel).....	12½"	12½"	12½"
Platen Working Area.....	6" x 12"	6" x 12"	6" x 12"
Grinding Wheel.....	7" x ½" x 1¼"	7" x ½" x 1¼"	7" x ½" x 1¼"
Elevator Handwheel Graduation.....	.0005	.0005	.0005
Cross Feed Handwheel Graduation.....	.001	.001	.001
Spindle Speed.....	3450 RPM	3450 RPM	3450 RPM
Floor Area.....	21" x 25"	21" x 25"	30" x 37"
Weight of Machine.....	540 lbs.	650 lbs.	650 lbs.
Weight of Cabinet Base.....	100 lbs.	150 lbs.	250 lbs.

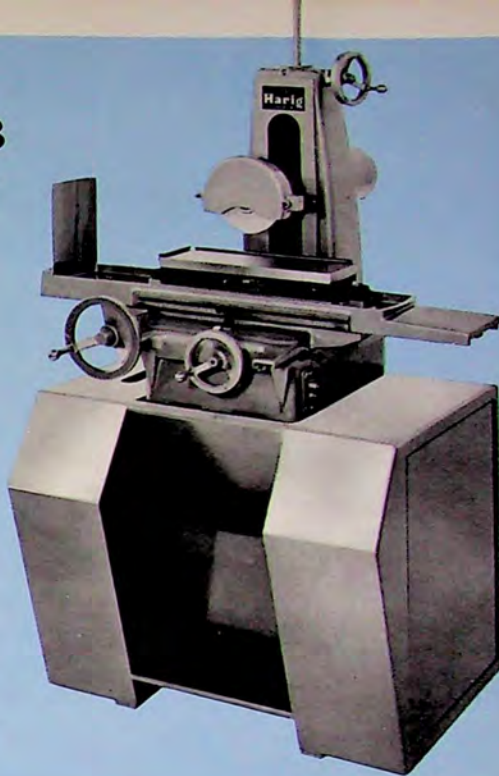
# NEW HARIG 6x18 SURFACE GRINDER

Larger capacity grinder offered in  
3 console cabinet models

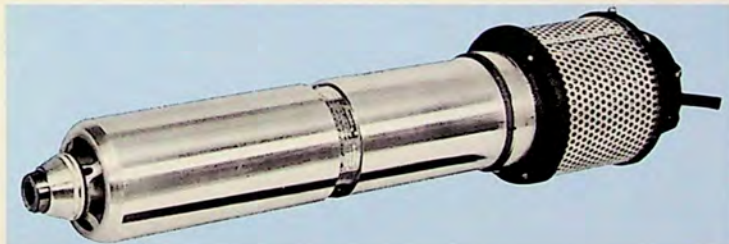
- HAND OPERATED
- HYDRAULIC LONGITUDINAL FEED
- AUTOMATIC

Now there's a companion for the famous HARIG SUPER 612—the new SUPER 618 with 18" longitudinal capacity. 1 HP direct drive spindle for full power transmission and fine work finishes.

The console cabinet, standard on all 3 models, is designed for maximum operator convenience. It completely encloses the electrical control and wiring. On the Hydraulic Longitudinal Feed and Automatic machines, the additional electrical and all hydraulic components including pump and tank are enclosed in the console cabinet. When the optional wet grinding system is furnished, the console also encloses the main components.



## HARIG SUPER 612 ACCESSORIES



**High Speed Spindle with VARI-SPEED Control.** This HIGH SPEED SPINDLE is easily and quickly interchangeable with the Harig standard cartridge spindle. The variable speed control unit allows any speed to be obtained up to 45,000 RPM. This is a distinct advantage in being able to set the exact speed to get best results with each particular wheel type, size and material to be ground.

**Heavy Duty Base.** This is an optional extra for the hand feed model only. For heavier work or where maximum stability is required.

**Wet Grinding Attachment.** Coolant system complete with tank, pump, piping and splash guards. System is completely enclosed on Automatic model.



Built in dust collector system  
on Hand Feed Model.  
(Exterior collectors on Automatic or  
Hydraulic Longitudinal Feed Models.)



Mist Coolant



Rotary Chuck Attachment



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