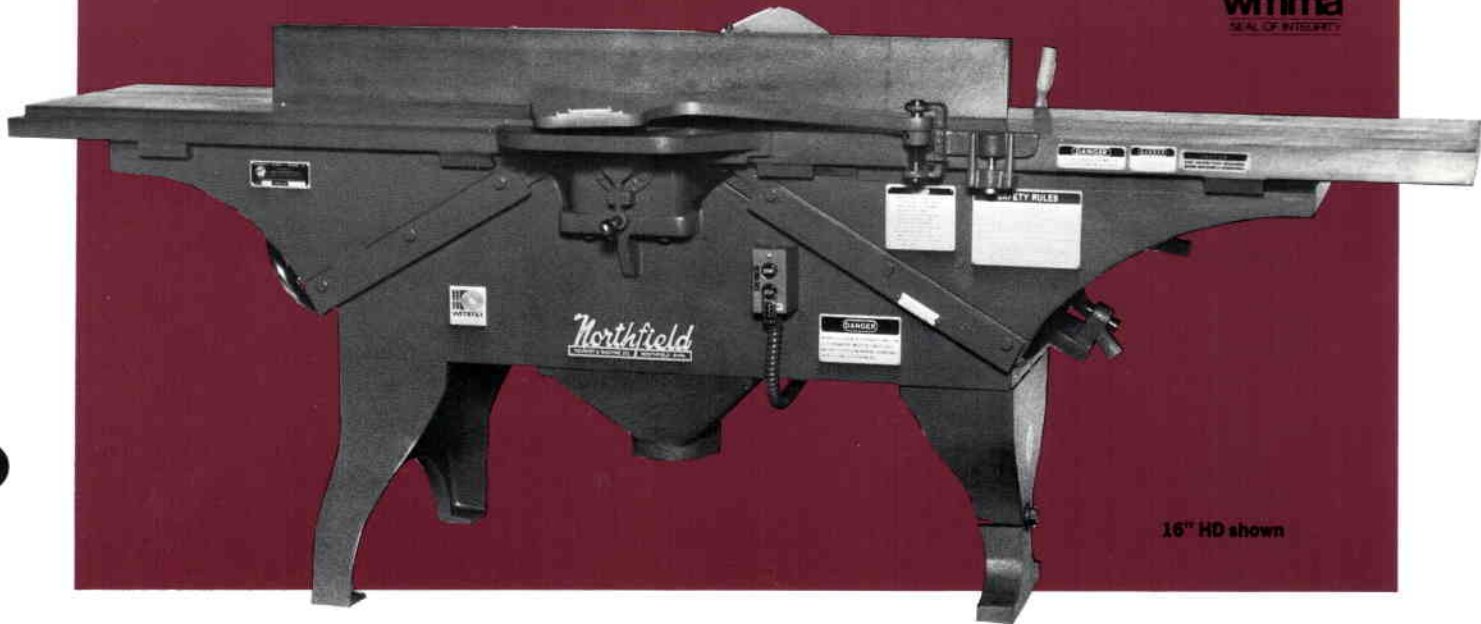


NORTHFIELD

12"-16"-24" HEAVY DUTY and PATTERNMAKER'S JOINTERS



for... **ACCURACY**

for... **Ease of
Operation**

for... **SPEED with
PRECISION**

for... **TROUBLE-FREE
DEPENDABILITY**

NORTHFIELD HEAVY DUTY and PATTERNMAKER'S JOINTERS

Northfield Heavy Duty and PATTERNMAKERS JOINTERS are designed and built for production and educational work where accuracy and fine quality of work are desired. Their design is such that the working surfaces are easily accessible to the operator. The weight is well distributed throughout making a well balanced and smooth operating machine.

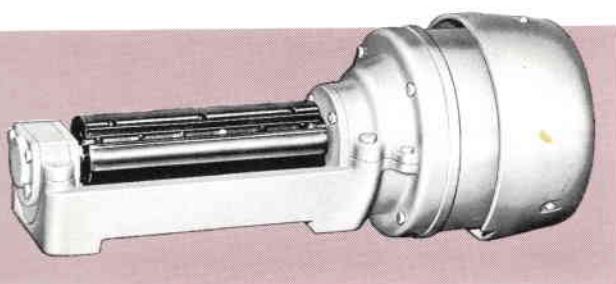
NORTHFIELD Heavy Duty and ..

HEAVY RIBBED and CORED FRAME

The heavily ribbed and cored frame is cast in three pieces. The two inclines and bed are bolted to legs which are set to provide a wide, three point floor spread. Perfect alignment is insured at all times by the rocker base feature on the front leg. The legs are so placed as not to obstruct the feet of the operator permitting him to work in a comfortable, natural position.

EASILY ADJUSTABLE INCLINES

Inclines are placed at such an angle that they can be raised or lowered without interfering with the cutterhead. The outfeed incline is operated by a handwheel at the end of the machine. The infeed incline is adjustable and operated by a large wheel on the side of the machine and within easy reach of the operator.



ACCURATELY MACHINED, DYNAMICALLY BALANCED CYLINDER HEAD

The cylinder or cutterhead is made from a high carbon steel that is accurately machined and dynamically balanced. Four-knife heads are standard on all direct motor drive and PATTERNMAKER machines. Three-knife heads are standard on 12" and 16" heavy duty belt drive machines. Four-knife belt drive heads are available as optional extras on the 12" and 16" belt drive machines. All cutting circles are $4\frac{1}{4}$ " except the 24" machine which is $4\frac{1}{2}$ ". The knives are adjusted by integral, micrometer-type knife raising screws and held in place by fitted wedges.

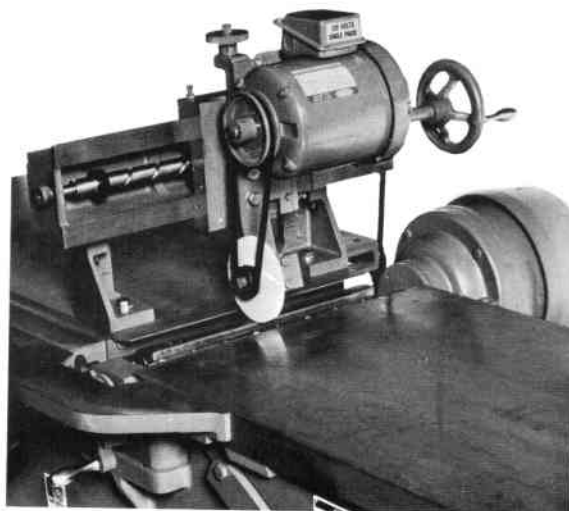
The cutterhead is mounted in a carefully machined, one-piece, cast-iron yoke. The yoke is carefully fitted into heavy supports on the frame of the machine.

SEALED FOR LIFE, PRECISION BALL BEARINGS

Both the direct motor and the belt drive machines are equipped with heavy-duty, sealed-for-life, precision ball bearings of more than ample size and overhead capacity.

FULL LENGTH CORED, BOX FORM TABLES

The overall length of the tables on all machines is 8 feet. Both tables can be drawn away from the cutterhead on a level independent of the inclines leaving an opening around the cylinderhead for adjustment of knives, etc. The rear table is provided with a rabbeting groove and the infeed table is equipped with a rabbetting arm. Both tables are of the box form construction and cored the full length. This is the finest type of table construction widely used in quality machine tools. This type of construction makes a very rigid table which cannot warp under any condition. The tables are equipped with removable steel lips.



KNIFE GRINDING and JOINTING ATTACHMENT

Knife grinders are available for all Heavy Duty Jointers. Features include $\frac{1}{2}$ hp motor, fast helix rail screw, and positive stop indexing for heel grinding.

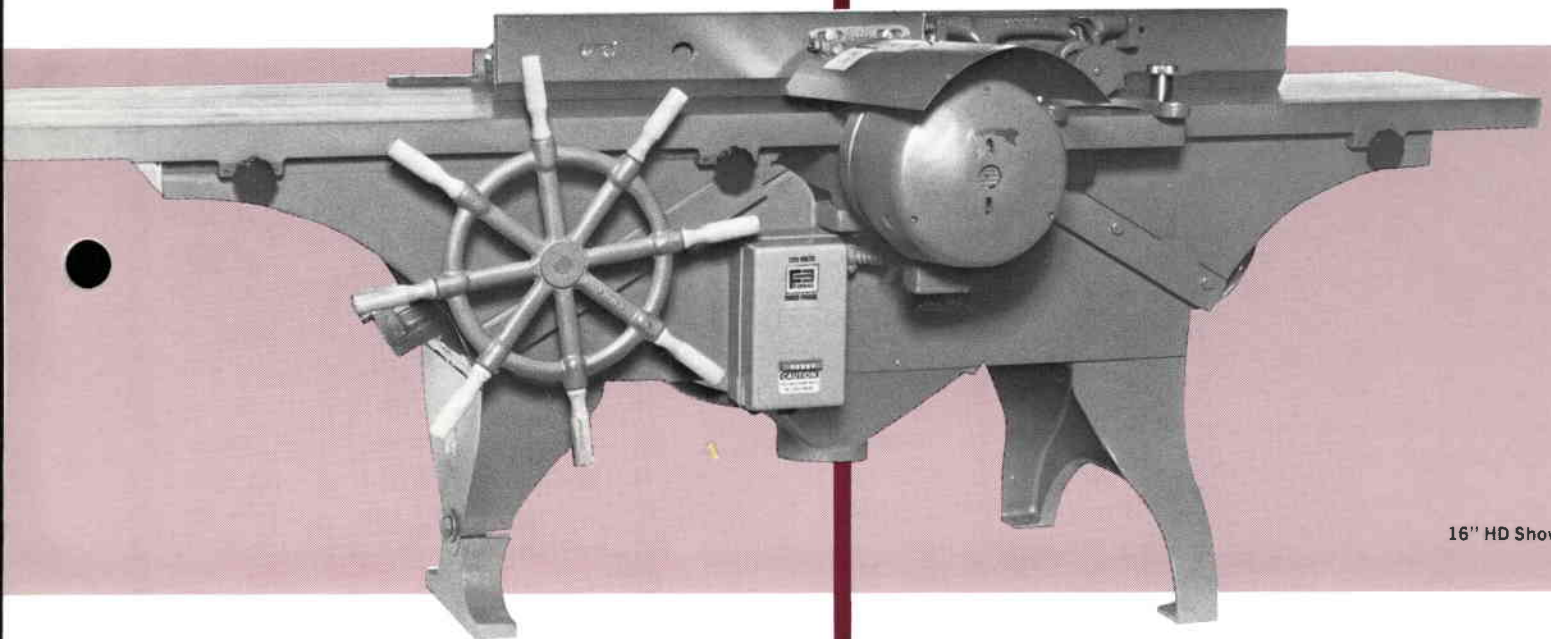
.....Patternmaker's JOINTERS

QUICKLY ADJUSTABLE FENCE

On all Heavy Duty and Patternmaker machines a quickly adjustable fence which tilts 45° to the right is furnished. Fence angularity is accomplished through an Acme thread screw and handknob, with a positive stop provided at the 90° position. As an optional extra, a fence that tilts both left and right 45° is available. Both styles of fences can be placed at an angle to the head for shear cutting.

DIRECT MOTOR DRIVE INTEGRAL WITH CYLINDER HEAD

12" and 16" machines are equipped with 3HP, 3600 RPM, totally-enclosed, fan-cooled motors. The front plate of the motor is cast as part of the cylinder yoke. 24" machines are equipped with 5HP motors of the same type. 5, 7½ and 10HP motors are available as optional extras on all models. The motor rotor is mounted on the cylinder head shaft which is extended through the motor. This design integrates the cylinder head bearings and motor as a complete unit. The motor is controlled by a magnetic starter with overload and low voltage protection.



16" HD Shown

GUARDING



Standard equipment on Northfield Heavy Duty Jointers is the front and rear guards. The front guard is the swing out type with spring tension. The shield is made of aluminum. The rear guard is attached to the fence and moves with it, keeping the cutterhead in back of the fence protected at all times. A hand brake is available that stops the cutterhead. This can be ordered with a switch that stops the power upon application of the hand brake.

All of the above features are included on the PATTERNMAKER'S JOINTERS.

PATTERNMAKER TILTING INFEEED TABLE

On the PATTERNMAKER'S JOINTER the infeed table is adjustable to 5° in relation to the cutterhead. This is extremely useful for planing draft on deep ribs and large bevels on various pattern components.

BELT DRIVES TO YOUR SPECIFICATIONS

Jointers can be furnished with a belt drive if desired. A cutterhead speed of 4,500 RPM is recommended, but other speeds can be furnished according to customer specifications.

SPECIFICATIONS...

FOR NORTHFIELD HEAVY DUTY and PATTERNMAKER'S JOINTERS

MACHINE SIZE	12"	16"	24"	12" PM	16" PM	24" PM
Length of Knives	12"	16"	24"	12"	16"	24"
Knife Size	12"x1 1/4"x 1/8"	16"x1 1/4"x 1/8"	24"x1 1/4"x5/32"	12"x1 1/4"x 1/8"	16"x1 1/4"x 1/8"	24"x 1 1/4"x5/32"
Knives per head, DMD	4	4	4	4	4	4
Knives per Head, Belt Drive	4	3 (4 opt.)	4	4	4	4
Cutting Circle	4 1/4"	4 1/4"	4 1/2"	4 1/4"	4 1/4"	4 1/2"
Overall Length of Tables	96"	96"	96"	96"	96"	96"
Height of Tables from Floor ..	32 1/2"	32 1/2"	32 1/2"	32 1/2"	32 1/2"	32 1/2"
Rear Table — Width	17"	21"	27"	17"	21"	27"
Infeed Table — Tilts	Stationary	Stationary	Stationary	5°	5°	5°
Fence Size	52"x5 1/2"	52"x5 1/2"	52"x5 1/2"	52"x5 1/2"	52"x5 1/2"	52"x 5 1/2"
Fence Tilts	45°	45°	45°	45°	45°	45°
Maximum Rabbet Depth	5/8"	5/8"	3/4"	5/8"	5/8"	3/4"
Drives Available	Direct Motor V-Belt	Direct Motor V-Belt	Direct Motor V-Belt	Direct Motor V-Belt	Direct Motor V-Belt	Direct Motor V-Belt
Motor Size	3HP	3HP	5HP	3HP	3HP	5HP
Cutterhead RPM Vee-Belt*	4500	4500	4500	4500	4500	4500
Cutterhead RPM Direct Motor Drive	3600	3600	3600	3600	3600	3600
Optional Motor Size	5, 7 1/2, 10HP	5, 7 1/2, 10HP	5, 7 1/2, 10HP	5, 7 1/2, 10HP	5, 7 1/2, 10HP	5, 7 1/2, 10HP
Hand Brake	Extra	Extra	Extra	Incl**	Incl**	Incl**
Net Weight	1650	1825	2200	1750	1975	2400
Domestic Shipping Weight	1800	2000	2300	1950	2025	2600
Export Shipping Weight	2350	2500	2850	2450	2600	3000
Cubic Measure	121 cu. ft.	144 cu. ft.	152 cu. ft.	121 cu. ft.	144 cu. ft.	152 cu. ft.
Floor Space	34" x 96"	38" x 96"	44" x 96"	34" x 96"	38" x 96"	44" x 96"

EQUIPMENT

Each machine is furnished complete with one set high speed steel knives, cutting depth gauge, necessary wrenches, steel lips, maintenance and parts manual, 200-208, 230/460, 575 volt, 3 phase 60 cycle motors are standard.

EXTRAS

Knife grinder and jointing attachment, four knife heads, hand brake, switch for hand brake, Warner electric brake, balanced knife sets, dial type knife setting gauge, two way tilting fence, 110 or 24 volt at pushbutton, Nema 12 electrics with disconnect, Surty front guard (12 & 16 only), single phase in belt drive only. For extras not listed contact factory.

*Or to customer's specification

**Includes switch to shut off power upon application of hand brake

Warranty information available by contacting factory.

Northfield FOUNDRY & MACHINE CO.

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