

HEALD 273A Universal Internal Grinder

The 273A Universal Internal Grinder has proven itself as the performance standard for single-part to job-lot production. Although bore grinding is the 273A's primary function, the machine's designed-in versatility make it a capable machine for external, face, and some rotary surface grinding.

The machine design incorporates frictionless hydrostatic ways under both the table and cross slide, which ensures smooth, accurate and long lasting operation. This, coupled with the superior dampening characteristics of a cast iron base, offers the ability to produce very close-tolerance, high-quality work.

Overall capacity of the 273A ranges from the smallest of workpieces, up through workpieces requiring 20" of swing or weighing 1,000 lbs. The table's 20" of travel allows for 16" of grinding stroke. The wheelhead cross slide travel is 1-1/2", with automatic feed via the hydraulic feed box of 0.050". Wheelslide feed increments, on diameter, are 0.0001" to 0.0006". The workhead has a total adjustment of 10" to the front and 7-1/2" to the rear.

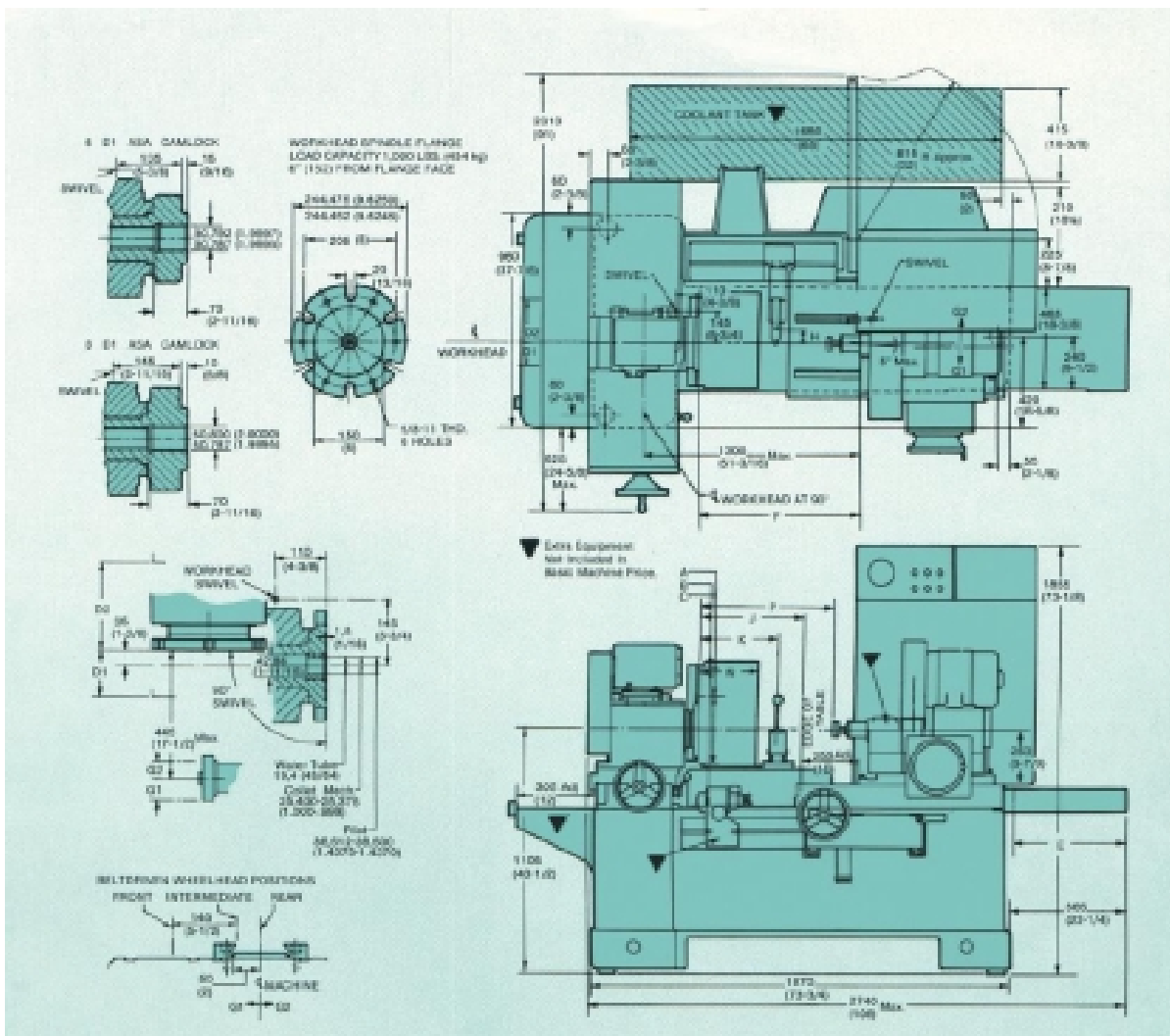
The SNI 273A Package Includes:

- Reestablishment of all OEM alignment tolerances.
- Restoration of hydrostatic ways.
- Updating of all hydraulic and electrical controls.
- Variable speed workhead drive.
- New guarding.
- New machine warranty (One Year).
- Documentation.

Standard Options Include:

- Variable speed wheelhead drive arrangement, eliminating the need for pulley changes.
- Workhead angular setting device, for accurate swivel positioning.
- Facing attachment, for face grinding feed control.
- Angular truing unit - manually operated.
- Radius truing unit - manually operated.
- Wheelheads - straight shank, belt-driven style (new or rebuilt).
- Quills for above mentioned wheelheads.
- Digital positioning scales.
- Fixture operating mechanisms.

273A Specifications



CAPACITIES		METRIC	ENGLISH	SPEEDS AND FEEDS	METRIC	ENGLISH
A	Swing in std. chuck guard...	505 mm	20"	Table speeds for grinding...	0-5.5 mpm	0-18 fpm
B	Max. swing over table extension, workhead parallel to table without chuck guard, no workslide travel. limited table travel.†...	620 mm	24-1/2"	Workhead speeds, reversible...	0-500 rpm	0-500 rpm
C	Swing, workhead swiveled 90° †...	330 mm	13"	Rapid traverse of table...	5.5 mpm	18 fpm
D1	Workhead positioning travel, front...	250 mm	10"	One turn cross feed handwheel ...	1.25 mm on dia.	.050"
D2	Workhead positioning travel, rear...	190 mm	7-1/2"	Wheelslide feed increments, on dia...	0.003-0.015 mm	.0001-.0006"
E	Maximum table travel ...	505 mm	20"	One turn workslide handwheel...	2.5 mm	.100"
F	Workhead flange to wheelslide ...	0-1050 mm	0-41-1/2"	One turn table handwheel...	95 mm	3-3/4"
G1	Wheelhead cross slide travel, front ...	19 mm	3/4"	DRIVE	50 HZ.	60 HZ.
G2	Wheelhead cross slide travel, rear...	19 mm	3/4"	Pump motor...	1/2 hp @1000 rpm	@1200 rpm
H	Diamond adjustment, front...	35 mm	1-1/2"	Workhead motor (DC)...	1-1/2 hp @3450 rpm	@3450 rpm
H	Diamond adjustment, rear...	35 mm	1-1/2"	Wheelhead motor...	5 hp @3000 rpm	@3600 rpm
J	Workhead flange to table edge ...	750 mm	29-1/2"	Coolant pump motor...	1/2 hp @1500 rpm	@1800 rpm
K	Workhead flange to dresser...	835 mm	32-7/8"	GENERAL		
N	Workhead flange to guard edge ...	205-305 mm	8-12"	Capacity of oil tank ...	40L	11 gal
P	Grinding stroke, maximum ...	405 mm	16"	Capacity of coolant tank...	205 L	55 gal
P	Grinding stroke, minimum...	6.5 mm	.250"	Dimensions - base on floor...	1870 x 960 mm	73-3/4 x 37-7/8"
				Floor space with or without coolant tank	2740 x 2310 mm	108" x 91"
				Net weight, approx...	3350 kg	7400 lb
				Gross weight crated, approx. ...	3850 kg	8500 lb
				Gross weight boxed, approx. ...	4310 kg	9500 lb

Notes:
Specifications are subject to change without notice.
Illustrations shown above are taken directly from the Cincinnati Milacron brochure 2-273A-3 Issue 1, and reflect "Extended Base" version of 273A.
† May be increased by use of optional equipment; Please consult factory.



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