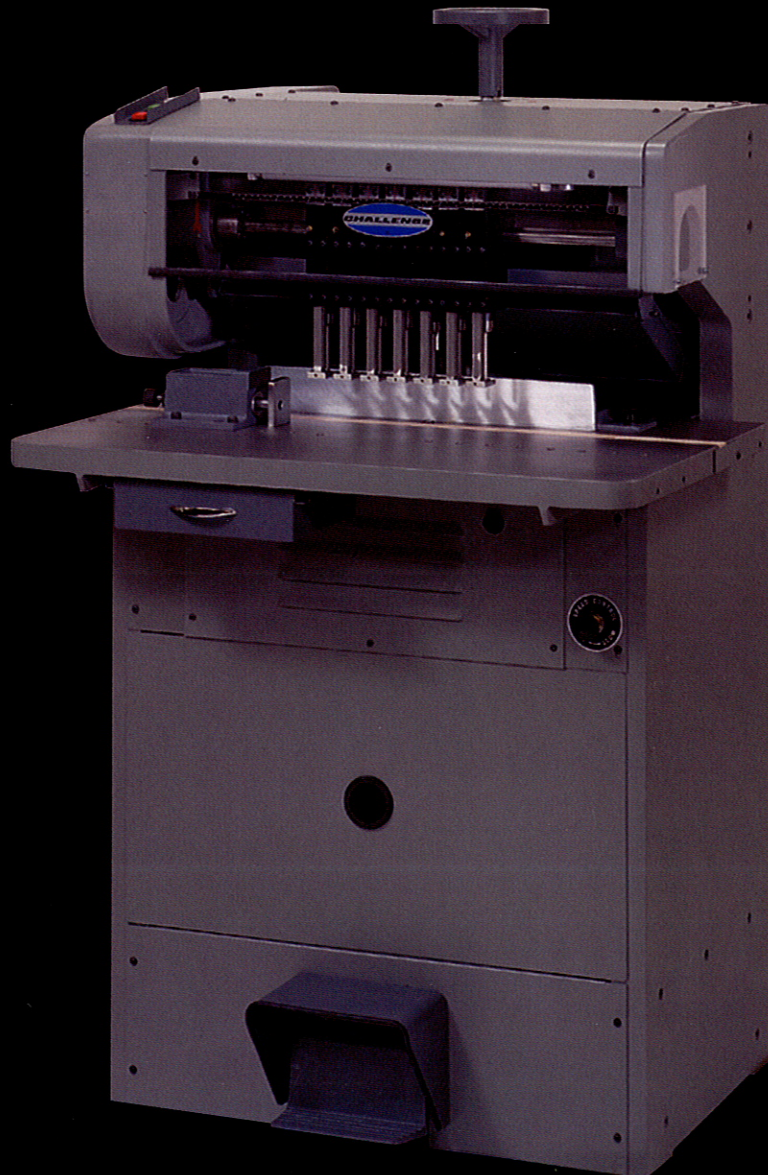


MS-10A
DRILL

CHALLENGE PRODUCTS



MS-10A MULTI-SPINDLE DRILL



The MS-10A Heavy Duty Power Paper Drill For High Production Drilling

Features

- High Production Multi-Hole Drilling
- Drills Up To 10 Holes In One Stroke
- Maximum Drill Bit Diameter 1/2"
- 2 1/2" Drilling Capacity
- Powerful Hydraulic Operation
- Easy Head Adjustment
- Variable Speed Stroke Control
- Automatic Paper Chip Removal
- Rugged Cast Iron Construction
- Flexible Side Guide Adjustments
- Multi-Splined Drive Shaft
- Backgage Adjustments
- Lighted Work Surface

Production Drilling

The MS-10A is flexible. You can quickly drill any job up to 10 holes in one stroke. Now your big drilling jobs are completed quickly and economically. You also can drill a variety of multiple hole patterns easily. Simply add and adjust drilling heads by sliding them along the splined shaft. A special three-drill head is available with drill bits on 1" centers.

Powerful Hydraulic Drilling

A touch to the foot pedal brings the drilling heads down to the table under hydraulic power. The paper is drilled and the heads are released automatically and returned to the starting position. The speed of the heads on the downward stroke is adjustable providing you with the most efficient drilling and production operations on all types of jobs and paper stocks.

Built To Last

The MS-10A is all cast iron construction. This drill is quality built by highly trained technicians with years of experience. The MS-10A is a drill that is designed and built to stand up to years of heavy duty drilling use. It is a drill you can depend on to get your jobs done - productively and on time.

Standard Equipment

- Two Backgage Filler Blocks
- Twelve 1 1/4 x 6" Wood Drilling Blocks
- Manual Drill Sharpener
- Paper Chip Disposal Drawer
- Tool Drawer

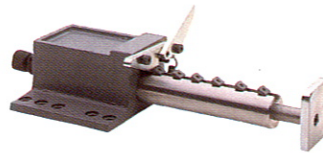


MS-10A Accessories



Standard Drilling Head

The standard drilling head has a 2½" lift capacity and comes with one ¼" hollow drill bit. (Other drill bit sizes can be ordered extra.) The MS-10A handles up to ten standard drilling heads giving you top production speed.



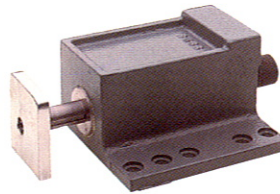
Automatic Trip Side Guide

This side guide automatically releases after drilling allowing the lift to be moved to the next position. Mostly used for closely spaced multi-hole drilling this guide accepts fixed gages and comes with six adjustable stops.



Triple Drilling Head

The triple drilling head has a 2½" lift capacity. This special head comes with three ¼" hollow drill bits on fixed 1" centers. (Other drill bit sizes can be ordered extra.)



Right Hand Side Guide

You can use this guide alone for single lift drilling, use it with another guide for drilling two lifts in one stroke, or use it for drilling a lift on the left and right side guides with two strokes.



Large Hole Drill Head

The large hole drill head is part of the large hole conversion kit which allows drilling of 9/16" to 1½" holes. The MS-10A handles two large hole heads with a center-to-center range of 5 to 17¾" and a backage range from 0 to 2⅝".



Plastic Drilling Blocks

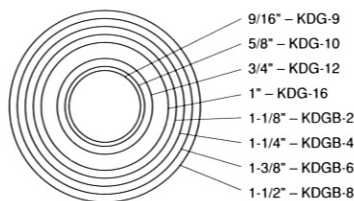
Plastic drilling blocks (pictured) are recommended for large hole drilling jobs. Wood blocks should be used with standard drill bits.



Hollow Drill Bits

2" drilling capacity hollow drill bits come in 13 sizes from ⅛" to ½" in diameter.

2½" drilling capacity hollow drill bits come in 4 sizes: ¼", ⅜", ⅝", and ½".



Large Hole Drilling

Sample (not to scale) of large hole drilling sizes available. Drill bit part numbers are listed after sizes for easy reference.

9/16" - KDG-9
5/8" - KDG-10
3/4" - KDG-12
1" - KDG-16
1-1/8" - KDGB-2
1-1/4" - KDGB-4
1-3/8" - KDGB-6
1-1/2" - KDGB-8

Additional Accessories

Extra Side Guide Stops

Additional side guide stops are used with the automatic trip side guide and easily placed in the guide slot and adjusted with Allen screws.

Extension Side Tables

Left and right side tables each 22 x 48" give you additional working area. Order left table, right, or both.

Two Hand Controls

Both hands are required to operate the power buttons in order to activate the MS-10A.



MS-10A DRILL

Experience & Service

Over sixty years ago Challenge pioneered the industry's first paper drilling machines. Today Challenge builds on this experience with the latest drilling technology. Coupled with a world-wide dealer network that provides product information, parts, and superior factory-trained service personnel you can depend on Challenge Products. Crafted with pride in the U.S.A. since 1870.

Specifications

DRILLING

Maximum Number Of Drill Heads	10 Heads
Drill Sizes Available* (2" capacity)	1/8" to 1/2" / 3 - 13 mm
Drill Sizes Available (2 1/2" capacity)	1/4" to 1/2" / 6 - 13 mm
Center-to-Center Maximum	21" / 53 cm
Distance of Heads Minimum**	1 1/4" / 3.2 cm
Minimum Distance Between Holes	
With Adjustable Stops	3/8" / 9.5 mm
With Fixed Gages	1/4" / 6 mm
Maximum Drilling Capacity	2 1/2" / 6.35 cm
Strokes Per Minute (adjustable)	18 to 26
Backgage Adjustment	0 to 9" / 0 - 23 cm
Vertical Adjustment of Individual Heads	1/4" / 6 mm

DIMENSIONS

Table Size	24" x 36" / 61 x 91 cm
Table Height	38" / 96.5 cm
Overall Height	60" / 152 cm
Floor Space Needed	35" x 40" / 89 x 102 cm
Net Weight (approximate)	1350 lbs / 675 kgs
Shipping Weight (approximate)	1660 lbs / 830 kgs

ELECTRICAL

Standard:	3 Phase, 60 Hz, AC. Pump: 3/4 HP. Spindle Motor: 3 HP. 208 Volts/14 Amps, 230 Volts/12.8 Amps (service size 20 Amps), or 460 Volts/6.6 Amps (service size 15 Amps).
Optional:	1 Phase, 60 Hz, AC. Pump: 3/4 HP. Spindle Motor: 3 HP. 208 Volts/26.5 Amps or 230 Volts/24.2 Amps. Service size 40 Amps.

* Special large hole drilling (up to 1 3/4" in diameter) is possible with the conversion kit.

** Three hole drilling heads are available for drilling 3 holes on 1" centers.

This machine must be wired to an individual line through a disconnect box with the proper voltage at the machine.

Challenge reserves the right to make changes to any product or specification without notice and without incurring responsibility to existing units.

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For more information on this or other Challenge products, call your local Challenge dealer or for the dealer nearest you call:

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