High Speed Milling Attachments

A Complete Line

Manufactured by
The Bridgeport Machines, Inc.
52 Remer Street
Bridgeport • Connecticut
DEVELOPMENT

In 1927 the Bridgeport Pattern & Model Works pioneered the type of equipment outlined in this catalog.
As a result of our effort to provide industry with a universal tool of this kind we can refer you to practically all the leading concerns in this country and abroad who today are users of these Machines.
In 1938 when the BRIDGEPORT TURRET MILLING MACHINE was introduced further expansion was necessary and our Firm was changed to THE BRIDGEPORT MACHINES, INC.

BASIC FEATURES
ALL OUR MODELS HAVE THESE FEATURES IN COMMON

SPINDLE chrome nickel alloy heat treated and ground.

SPINDLE HOUSING high grade semi-steel casting.

SPINDLE BEARINGS precision preloaded ball bearings properly spaced for maximum radial and thrust capacity.

LUBRICATION one oil cup (wick feed) provides fresh oil to all spindle bearings.

ALUMINUM V BELT PULLEYS accurately machined and balanced.

BALL BEARING MOTORS suitable for operation at any angle.

ALUMINUM CANOPY protects motor from dirt. Contains reversible switch for Right and Left hand operation.

MOTOR SUPPORT AND BELT HOUSING one piece aluminum motor support and belt housing swivels completely around spindle making it possible to use Attachment at any angle.

MOTORS REMOVE instantly for mounting in difficult locations or change of belt.

ANGULAR SETTINGS mounting face of adapters accurately graduated.

PULLEYS PROPORTIONED to give good traction and long belt life.

PIVOTALLY MOUNTED MOTORS for simple adjustment of belt tension.

A SELF CONTAINED UNIT designed for easy mounting on other machines when not in use on miller.

SPECIAL PULLEYS providing speeds to suit special conditions are available at slight extra cost.

DESIGN of units and adapter makes it possible to mount Attachment on front and both sides of overarm. This feature is important.
THE ¼ H.P. ATTACHMENT IS A POPULAR MACHINE. IT IS UNEXCELLED FOR ALL TYPES OF MILLING UP TO ¼” DIAMETER IN TOOL STEEL

SPECIFICATIONS. Spindle heat treated and ground, machined to take draw in collets with a ½” maximum capacity. It is mounted in four precision preloaded bearings with bearings on pulley end floating in housing to compensate for expansion or contraction of spindle. Speeds of 465-675-1000-1500-2140-4250 R.P.M. are provided by six step V grooved aluminum pulleys. Collets 3” long are furnished allowing the use of double end mills.
INVESTIGATE THE APPLICATIONS OF THIS TOOL THOROUGHLY

We believe it to be the most versatile instrument that can be bought. It can be used for milling, drilling, and boring at all angles without changing the setup of the work. It is a precision tool that can be depended upon to take care of the most accurate type of work.
SPECIFICATIONS. Spindle heat treated and ground, with No. 2 Morse Taper. Collets to fit this taper from \(\frac{3}{8}\)" to \(\frac{1}{2}\)" diameter. Quill is treated with a special chromium process giving it a surface hardness one point below the hardness of a diamond. Housing is lapped and closely fitted to the ground and lapped quill. Travel of quill \(\frac{3}{8}\)". Dependable micrometer depth stop, graduated in thousands. Positive quill lock, rack and worm feed for drilling and boring. Six spindle speeds 275-425-700-1050-2100 and 3250 R.P.M. The spindle has six splines and is driven by pulley mounted on separate ball bearings. Weight of spindle and quill balanced to provide sensitivity necessary for fine end milling. Heavy duty 1/2 HP Motor provides ample power to meet most severe milling conditions within capacity of machine. Spindle provided with automatic collet ejection. Four bolt mounting assures rigidity and equal distribution of working strains. Duplicate work and contour milling can be performed by attaching tracer arm to quill. Spindle can also be furnished with No. 7 B. & S. taper or B-S Collets if preferred.
THE ½ H.P. ATTACHMENT HAS THE SAME FEATURES AS THE ¼ H.P. MACHINE EXCEPT THAT IT IS BUILT PROPORTIONATELY HEAVIER.

SPECIFICATIONS. Spindle heat treated and ground, machined to take collets up to ¼” diameter. Collets are furnished sizes ½” to ¾” for straight shank end mills and adapters for No. 7 R & S. or No. 2 Morse Tapers for taper shank cutters. Spindle speeds are 275-425-700-1050-2100-4250. Large spindle and bearings give ample capacity for heavy cuts.
WE can supply adapters for mounting Bridgeport Attachments on any type of machine. Illustrated below are the types most commonly used.

V Type Overarm Adapter

Above illustration shows crosscut section of STANDARD DUAL ADAPTER mounted on round overarm

This picture illustrates the 1/4 H.P. Unit without the Adapter. One of the advantages of our design is the ability to mount our Attachments on small milling machines and on special production machines where the room is limited.

Becker Vertical Miller Installation

Universal Adapter for round overarms Furnished at extra cost

Hand Miller Installation

COLLETS • ADAPTER SLEEVES

No. 2 MORSE or No. 7 B. & S.
COLLET for Master Attachment

B-3 COLLET for 1/4 H.P. Attachment

R-8 COLLET for 1/2 H.P. Attachment

R-8 ADAPTER for No. 2 Morse or No. 7 B. & S. Taper
# Milling Attachments

**Bridgeport** Attachments have no limited field. They serve the one man tool shop or the largest automotive, electrical and machine tool industries with equal satisfaction.

**Bridgeport** Special spindles are used for diamond boring and profiling type-writer parts, automobile engine blocks, refrigerator parts and dozens of other applications.

**A Bridgeport** Attachment in your shop will prove a most useful all purpose tool, invaluable on tricky time eating jobs.

**Bridgeport** attachments will fit the NEW TURRET MILLING MACHINE which can be bought with or without the Milling Unit.

## Speeds Recommended for High Speed End Mills

<table>
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<tr>
<th>Dia. of End Mill</th>
<th>Annulated Tool Steel Peripheral Speed</th>
<th>Soft Steel Peripheral Speed</th>
<th>Cast Iron Peripheral Speed</th>
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<td>306</td>
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</table>

Can your present equipment meet these recommended speeds?

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**THE BRIDGEPORT MACHINES, INC.**

Sold by

**W. P. CHILDS**

P. O. BOX 700

ATLANTA, GEORGIA