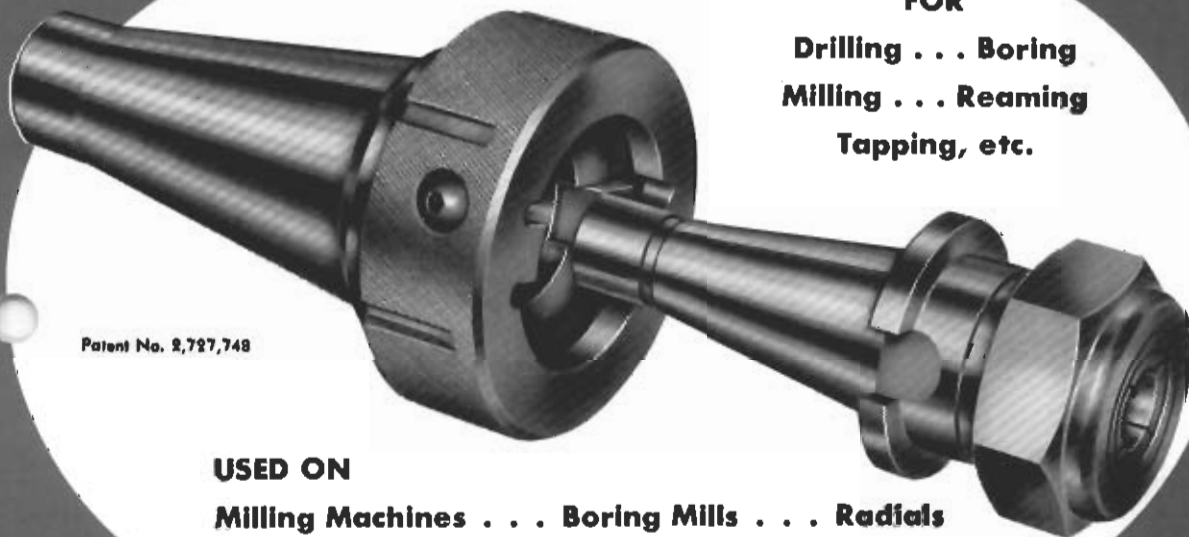


# ERICKSON

*Quick Change*

# HOLDERS

DEVERELL ASSOCIATES  
WELLINGTON  
REC. 12 MAY 1971  
ANSD. ....



Patent No. 2,727,748

**FOR**  
**Drilling . . . Boring**  
**Milling . . . Reaming**  
**Tapping, etc.**

**USED ON**  
**Milling Machines . . . Boring Mills . . . Radials**  
**Turret Lathes, etc.**

**Your Standard MMS Tapered Tools**

**CAN BE ADAPTED TO**  
**ERICKSON QUICK CHANGE**  
**TOOL HOLDERS**

REVISED EDITION

**All this . . . *Plus* ERICKSON QUALITY**

# ERICKSON *Quick Change* TOOL HOLDERS

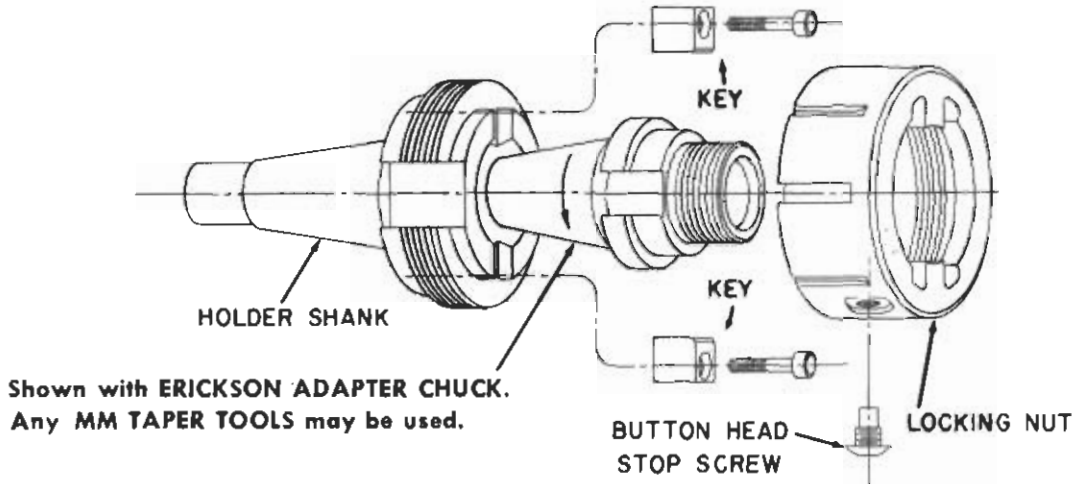


FIG. 1

## A Simple Grinding Operation Makes your Adapter suitable for ERICKSON *Quick Change* HOLDER

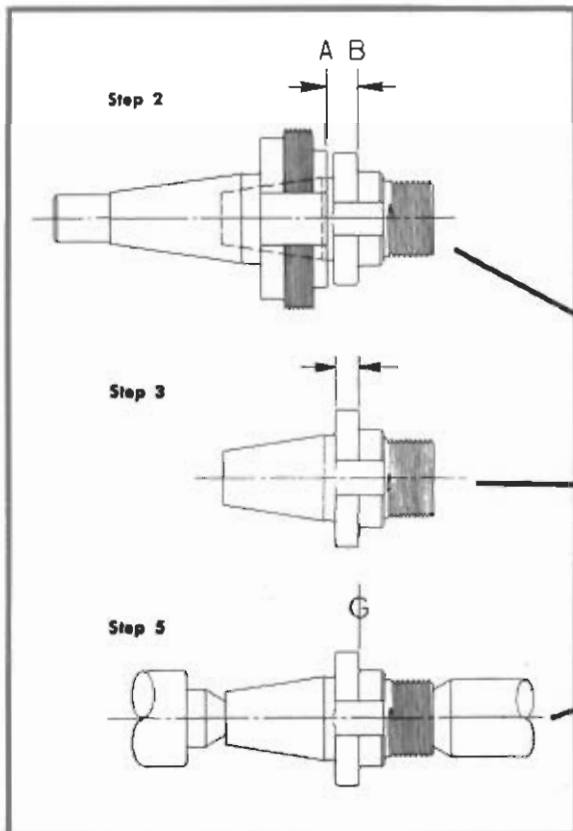


FIG. 2

- Step 1** Take screw out of locknut and remove locknut.
- Step 2** Remove keys, insert adapter selected and turn slightly so you can depth-mike from face of adapter to face of holder.
- Step 3** Mike thickness of flange on adapter.
- Step 4** Gage distance subtracted from DEPTH-MIKED distance gives amount to be removed from front face of adapter flange.
- Step 5** Place adapter between centers and grind face to calculated thickness.

**EXAMPLE:** Assume depth-miked distance (as in Step 2) is .470" and thickness of flange on adapter (Step 3) is .375".

Gage distance on #30 MM socket holders is .420". This indicates .050" to be removed from face of adapter. This is arrived at by taking distance of adapter flange to face of holder (Step 2) and subtracting gage distance etched on holder (.470" minus .420" equals .050"). NOTE: Gage dimensions will be different for other MM sockets.

### Note:

Your present Standard MMS Tapered Tools can be used with Erickson Quick Change Holders.

# MORSE TAPER HOLDERS

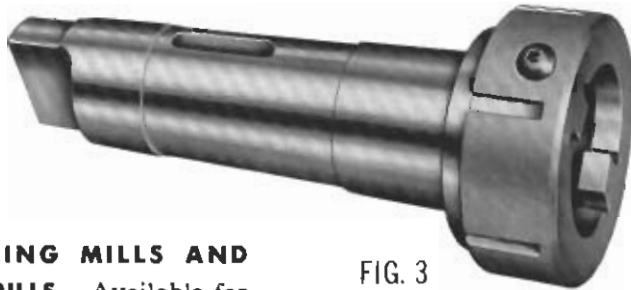
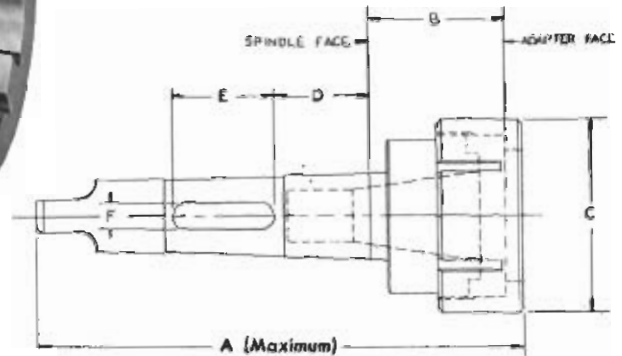


FIG. 3

**FOR BORING MILLS AND RADIAL DRILLS** . . Available for spindles that have #4, #5, #6 or #7 Morse Taper hole. Keeper slots are provided to lock adapter in spindle. Erickson Quick Change Holders are heat treated and ground for accuracy.

Holders can be supplied without Keeper Key Slots, with reduced overhang



| For Machine  | Morse Taper | A                               | B                              | C                             | D                     | E | F | Socket |
|--------------|-------------|---------------------------------|--------------------------------|-------------------------------|-----------------------|---|---|--------|
| 4 MTH-30     | 4           | 6 <sup>1</sup> / <sub>16</sub>  | 2 <sup>1</sup> / <sub>16</sub> | 2 <sup>3</sup> / <sub>4</sub> | (CUSTOMER TO SPECIFY) |   |   | 30     |
| 5 MTH-30     | 5           | 8 <sup>9</sup> / <sub>16</sub>  | 2 <sup>1</sup> / <sub>16</sub> | 2 <sup>3</sup> / <sub>4</sub> | "                     | " | " | 30     |
| *5 MTH-30 GL | 5           | 8 <sup>9</sup> / <sub>16</sub>  | 2 <sup>1</sup> / <sub>16</sub> | 2 <sup>3</sup> / <sub>4</sub> | "                     | " | " | 30     |
| 5 MTH-40     | 5           | 9 <sup>1</sup> / <sub>4</sub>   | 3                              | 4 <sup>1</sup> / <sub>8</sub> | "                     | " | " | 40     |
| 6 MTH-40     | 6           | 11 <sup>1</sup> / <sub>16</sub> | 2 <sup>7</sup> / <sub>16</sub> | 4 <sup>1</sup> / <sub>2</sub> | "                     | " | " | 40     |
| *6 MTH-40 GL | 6           | 11 <sup>1</sup> / <sub>16</sub> | 2 <sup>7</sup> / <sub>16</sub> | 4 <sup>1</sup> / <sub>2</sub> | "                     | " | " | 40     |
| 7 MTH-40     | 7           | 13 <sup>1</sup> / <sub>16</sub> | 2 <sup>1</sup> / <sub>8</sub>  | 4 <sup>1</sup> / <sub>8</sub> | "                     | " | " | 40     |

\*Giddings and Lewis horizontal mills have flats provided to fit slots in end of spindle. #6 MT Holder with #30 MMT socket and #7 MT Holder with #30MM socket may be furnished.

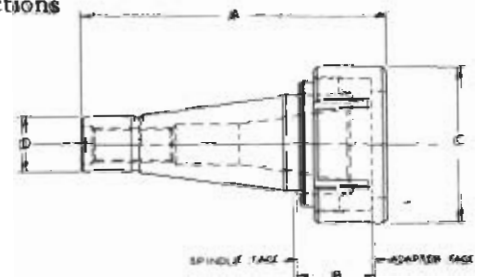
Also available with No. 9 B & S—used in many small Vertical Mills. Erickson Quick Change Holders may be furnished for all vertical and horizontal Milling Machines. Prices upon application.

# MILLING MACHINE HOLDERS

Erickson Quick Change Milling Machine Holders fit standard Milling Machine tapers in your spindle. Standard driving flange with drive slots is used. Shank is tapped for standard drawbar. Each STANDARD Quick Change Holder takes next smaller taper tool adapter. Your present MM tapered tools may easily be mated with an Erickson Quick Change Holder. Each holder is marked with gage dimension. (See instructions page 2.)



FIG. 4



## 40 and 50 MMS TAPER HOLDERS

|           | A                              | B                             | C                             | D     | Socket |
|-----------|--------------------------------|-------------------------------|-------------------------------|-------|--------|
| 40 MMH-30 | 5 <sup>5</sup> / <sub>16</sub> | 1 <sup>3</sup> / <sub>8</sub> | 2 <sup>3</sup> / <sub>4</sub> | .987  | 30     |
| 50 MMH-40 | 7                              | 1 <sup>5</sup> / <sub>8</sub> | 4 <sup>1</sup> / <sub>8</sub> | 1.548 | 40     |

30 MMT HOLDER with 30 MM socket, 40 MMT HOLDER with 40 MM socket, 50 MMT HOLDER with 50 MM socket, 60 MMT HOLDER with 50 MM socket and 50 MMT HOLDER with 30 MM socket also available. Prices upon application.

## TURRET LATHE HOLDERS

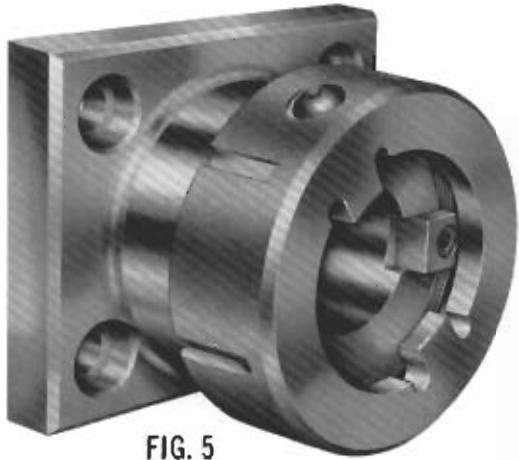
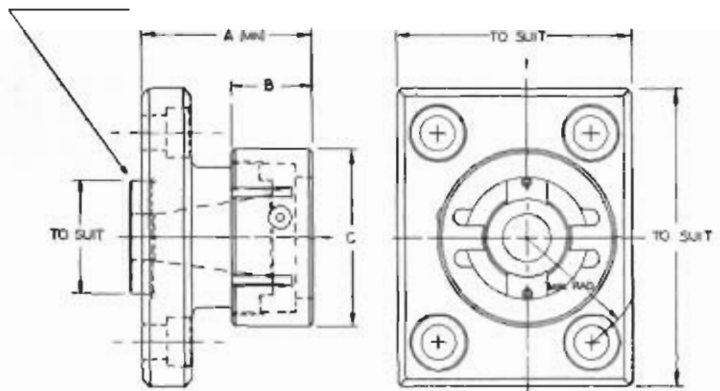


FIG. 5

Removable pilot may be used when turret is in alignment with spindle. For best performance when turret is not in alignment, pilot should be removed and holder indicated for correct alignment with spindle.



Increase the capacity of your turret lathe by using series of tools in one position held in Erickson Quick Change Turret Lathe holder. Standard sizes for most machines are offered. Your standard Milling Machine Tool adapter can be used in this style "Quick Change" holder. Mounting data must be furnished when ordering.

|         | A     | B     | C     | Socket | Min. Bolt Rad. |
|---------|-------|-------|-------|--------|----------------|
| TL-H-30 | 2 5/8 | 1 1/4 | 2 3/4 | 30     | 1 3/4          |
| TL-H-40 | 3 5/8 | 1 1/2 | 4 1/8 | 40     | 2 1/2          |

## STRAIGHT SHANK HOLDERS

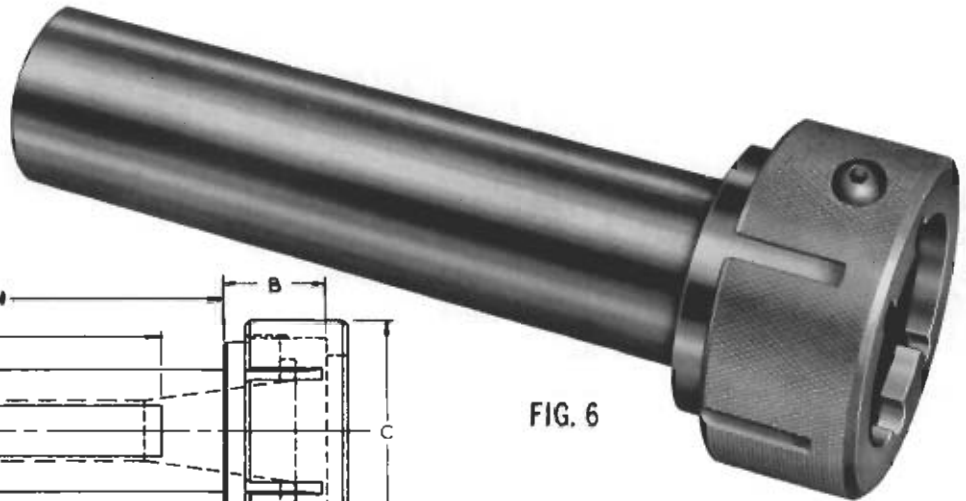
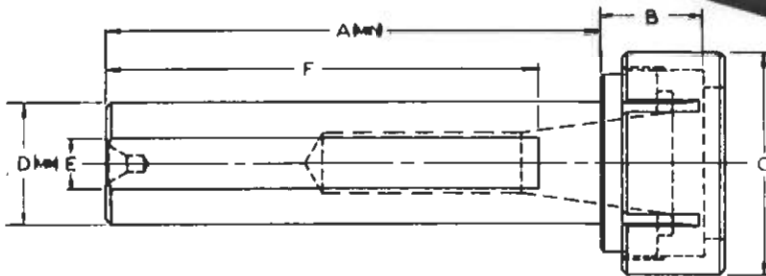


FIG. 6



Straight Shank Holders can be furnished with #30 or #40 MMS Socket. Dimensions of shank must be furnished when ordering. Holders with smaller shanks available. Prices upon request.

|        | A     | B     | C     | D     | E-F     | Socket |
|--------|-------|-------|-------|-------|---------|--------|
| SSH-30 | 2     | 1 3/8 | 2 3/4 | 1 1/4 | To suit | 30     |
| SSH-40 | 2 3/4 | 1 1/2 | 4 1/8 | 1 3/4 | To suit | 40     |

# ERICKSON *Quick Change* TOOL ADAPTERS

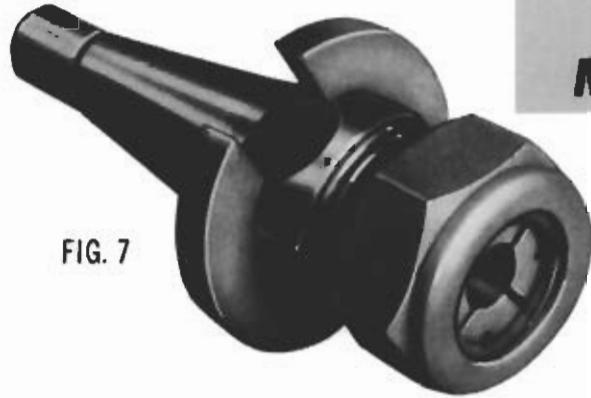


FIG. 7

Standard Erickson Milling Machine Chucks may be adapted for use in Quick Change Holders. Used for holding drills and mills, reamers, etc.

## ERICKSON COLLET CHUCK MILLING MACHINE ADAPTERS

| Adapter | Range           | Hex.    | Taper |
|---------|-----------------|---------|-------|
| 209-30  | .375" to .093"  | 1"      | 30    |
| 109-30  | .563" to .218"  | 1 1/4"  | 30    |
| 189-30  | .750" to .218"  | 1 1/2"  | 30    |
| 109-40  | .563" to .218"  | 1 1/4"  | 40    |
| 189-40  | .750" to .218"  | 1 1/2"  | 40    |
| 409-40  | 1.000" to .093" | 2 3/8"  | 40    |
| 509-40  | 1.625" to .218" | 3 3/8"* | 40    |

\*Round, with spanner holes.



FIG. 8

Heavy Duty Model incorporates Positive Drive. The floating driver imparts positive drive to the tool and protects against pull-out on heavy milling and tapping applications. Used for End Mills and Taps.

### HEAVY DUTY MODEL

| Adapter | Range           | Nosepiece   | Taper |
|---------|-----------------|-------------|-------|
| F09-30  | .750" to .156"  | 1 1/8" Hex. | 30    |
| F09-40  | .750" to .156"  | 1 3/8" Hex. | 40    |
| G09-40  | 1.312" to .250" | 2 3/4"      | 40    |

G09-50 also available—prices upon request.

\*\*Round, with spanner slots.



FIG. 9

### Note:

Any Tool with MMS Taper can be used in Erickson Tool Holders. (Use procedure outlined on page 2.)

## END MILL ADAPTERS

End Mill adapters are available for all standard nominal shanks 3/16" to 1" diameter. All have set screw holes. Standard dimensions apply.

| Adapter   | Diam. of Hole | Taper |
|-----------|---------------|-------|
| EM-187-30 | .187          | 30    |
| EM-375-30 | .375          | 30    |
| EM-500-30 | .500          | 30    |
| EM-625-30 | .625          | 30    |
| EM-187-40 | .187          | 40    |
| EM-375-40 | .375          | 40    |

| Adapter   | Diam. of Hole | Taper |
|-----------|---------------|-------|
| EM-500-40 | .500          | 40    |
| EM-625-40 | .625          | 40    |
| EM-750-40 | .750          | 40    |
| EM-875-40 | .875          | 40    |
| EM-100-40 | 1.000         | 40    |

# SHELL AND FACE MILL ADAPTERS

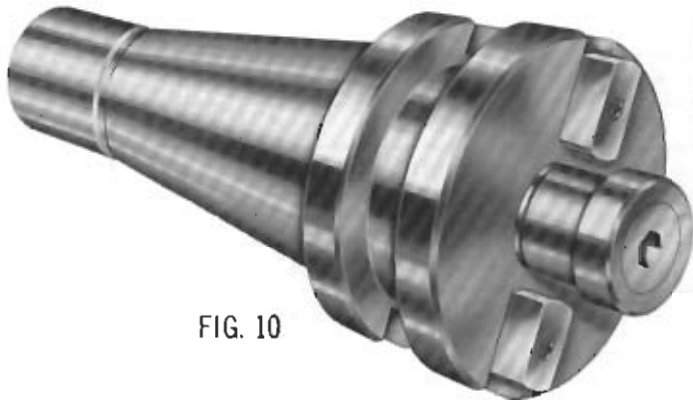
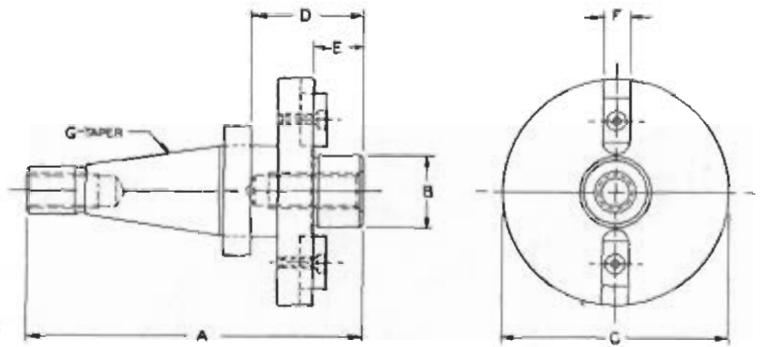


FIG. 10



|           | A                              | B     | C                              | D                              | E                              | F                              | G  |
|-----------|--------------------------------|-------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|----|
| FM-7.5-30 | 4 <sup>1</sup> / <sub>16</sub> | .750  | 2 <sup>3</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>16</sub> | 3 <sup>1</sup> / <sub>16</sub> | 30 |
| FM-10-30  | 4 <sup>1</sup> / <sub>16</sub> | 1.000 | 2 <sup>3</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>16</sub> | 3 <sup>1</sup> / <sub>16</sub> | 30 |
| FM-12-30  | 4 <sup>1</sup> / <sub>16</sub> | 1.250 | 2 <sup>3</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>16</sub> | 1/2                            | 30 |
| FM-15-30  | 5 <sup>1</sup> / <sub>16</sub> | 1.500 | 3 <sup>3</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>16</sub> | 3/8                            | 30 |
| FM-20-30  | 5 <sup>1</sup> / <sub>16</sub> | 2.000 | 4 <sup>3</sup> / <sub>16</sub> | 2 <sup>1</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>16</sub> | 3/8                            | 30 |
| FM-15-40  | 6 <sup>1</sup> / <sub>16</sub> | 1.500 | 3 <sup>3</sup> / <sub>16</sub> | 2 <sup>1</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>16</sub> | 3/8                            | 40 |
| FM-20-40  | 6 <sup>1</sup> / <sub>16</sub> | 2.000 | 4 <sup>3</sup> / <sub>16</sub> | 2 <sup>1</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>16</sub> | 3/8                            | 40 |
| FM-25-40  | 6 <sup>1</sup> / <sub>16</sub> | 2.500 | 4 <sup>3</sup> / <sub>16</sub> | 2 <sup>1</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>16</sub> | 3/8                            | 40 |

Adapters furnished complete with lock screw and washer.

# MORSE TAPER ADAPTERS

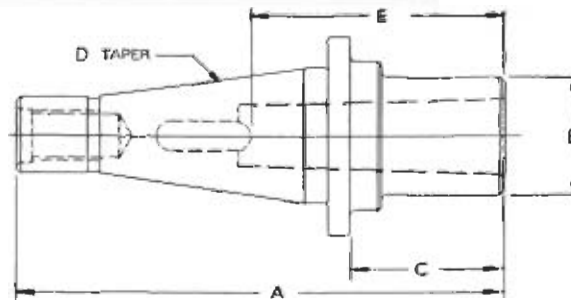


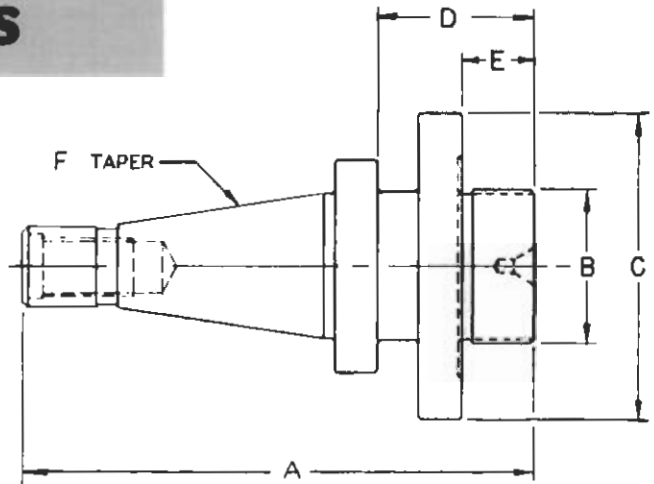
FIG. 11

|         | Morse Taper | A                              | B                              | C                              | D  | E                              |
|---------|-------------|--------------------------------|--------------------------------|--------------------------------|----|--------------------------------|
| 2MTA-30 | 2           | 4 <sup>1</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>16</sub> | 30 | 2 <sup>1</sup> / <sub>2</sub>  |
| 3MTA-30 | 3           | 5 <sup>1</sup> / <sub>2</sub>  | 1 <sup>3</sup> / <sub>16</sub> | 2 <sup>3</sup> / <sub>16</sub> | 30 | 3 <sup>1</sup> / <sub>16</sub> |
| 4MTA-30 | 4           | 7 <sup>1</sup> / <sub>16</sub> | 1 <sup>3</sup> / <sub>16</sub> | 4 <sup>3</sup> / <sub>16</sub> | 30 | 3 <sup>3</sup> / <sub>16</sub> |
| 2MTA-40 | 2           | 5 <sup>3</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>2</sub>  | 1 <sup>1</sup> / <sub>16</sub> | 40 | 2 <sup>1</sup> / <sub>2</sub>  |
| 3MTA-40 | 3           | 5 <sup>1</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>2</sub>  | 1 <sup>1</sup> / <sub>16</sub> | 40 | 3 <sup>1</sup> / <sub>16</sub> |
| 4MTA-40 | 4           | 6 <sup>3</sup> / <sub>16</sub> | 1 <sup>1</sup> / <sub>16</sub> | 2 <sup>1</sup> / <sub>16</sub> | 40 | 3 <sup>3</sup> / <sub>16</sub> |
| 5MTA-40 | 5           | 9 <sup>1</sup> / <sub>16</sub> | 2 <sup>1</sup> / <sub>16</sub> | 5 <sup>1</sup> / <sub>16</sub> | 40 | 4 <sup>1</sup> / <sub>16</sub> |

# BORING HEAD ADAPTERS



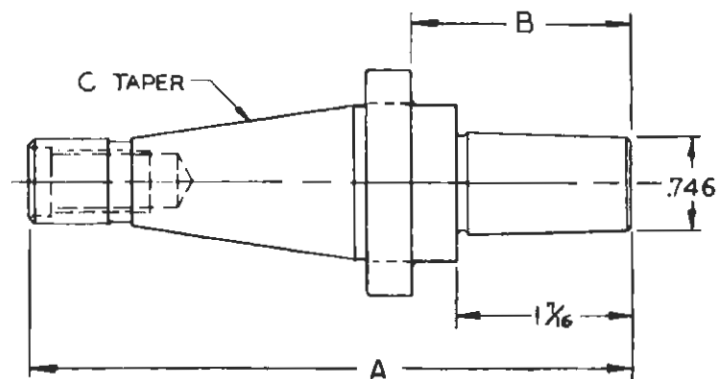
FIG. 12



| Adapter     | A     | B-Thread  | C     | D     | E     | F-Taper | For                              |
|-------------|-------|-----------|-------|-------|-------|---------|----------------------------------|
| CRA-875-30  | 4 1/8 | 3/8-18    | 2 1/8 | 1 3/8 | 3/8   | 30      | Craley No. 1 and 3               |
| CRA-1312-30 | 4 1/2 | 1 3/8-18  | 2 3/8 | 1 3/8 | 3/8   | 30      | Craley No. 2 and 4               |
| CHD-30      | 5     | 3/4-16    | 1 3/8 | 1 5/8 | 3/8   | 30      | Chandler D-1 1/2 - 2 1/2         |
| CHJ-30      | 4 3/4 | 1/2-20    | 1 1/2 | 1 1/4 | 3/8   | 30      | Chandler J                       |
| CRA-875-40  | 5     | 3/8-18    | 2 3/8 | 1 3/8 | 3/8   | 40      | Craley No. 1 and 3               |
| CRA-1312-40 | 5 3/8 | 1 3/8-18  | 2 3/8 | 1 1/2 | 3/8   | 40      | Craley No. 2 and 4               |
| CHD-40      | 5 3/8 | 3/4-16    | 1 3/4 | 1 1/8 | 3/8   | 40      | Chandler D-1 1/2 - 2 1/2         |
| CHJ-40      | 4 3/4 | 1/2-20    | 1 3/8 | 1 3/8 | 3/8   | 40      | Chandler J                       |
| CH-35-40    | 5 3/8 | *1 1/4-10 | 2 3/8 | 1 3/8 | ..    | 40      | Chandler 3 1/2 - 4 1/2           |
| FL-1437-40  | 5 3/8 | 1 3/8-12  | 3 1/2 | 1 3/8 | 3/8   | 40      | Flynn 8, 10, 12, 30, 35, 45      |
| FL-20-40    | 5 3/8 | 2-12      | 3 1/2 | 1 3/8 | 3/8   | 40      | Flynn 20, 32, 33, 36, 47, 48, 49 |
| EV-40       | 5 3/8 | 1 1/2-12  | 2     | 1 1/2 | 1 1/2 | 40      | Everede                          |
| CRI-40      | 5 3/8 | 1 1/2-18  | 1 3/8 | 1     | 1/2   | 40      | Criterion No. 3                  |
| MA-750-40   | 5 3/8 | 3/4-16    | 1     | 1     | 1/2   | 40      | Maxwell 30, 40, 50               |
| MA-10-40    | 5 3/8 | 1-14      | 1 1/4 | 1 1/4 | 3/4   | 40      | Maxwell 60                       |
| MA-12-40    | 5 3/8 | 1 1/4-12  | 1 1/2 | 1 3/8 | 3/4   | 40      | Maxwell 31, 41, 70               |
| MA-175-40   | 6 1/8 | 1 3/4-12  | 2     | 2     | 1 1/2 | 40      | Maxwell 32, 42                   |
|             |       | *Tap      |       |       |       |         |                                  |

# CHUCK ADAPTERS

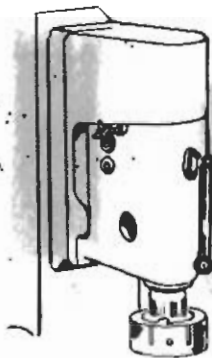
These adapters are standard for any chuck having #3 Jacobs internal taper. Other sizes can be quoted. All adapters are hardened and ground.



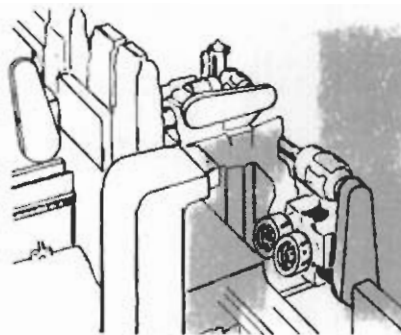
|        | A     | B     | C  |
|--------|-------|-------|----|
| JT3-30 | 4 3/4 | 1 3/4 | 30 |
| JT3-40 | 5 1/8 | 1 3/4 | 40 |



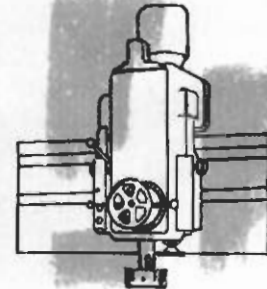
# TYPICAL APPLICATIONS of Erickson Quick Change Tool Holders and Adapters



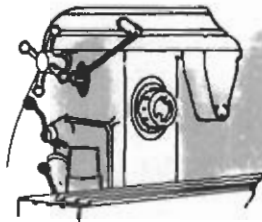
JIG BORERS



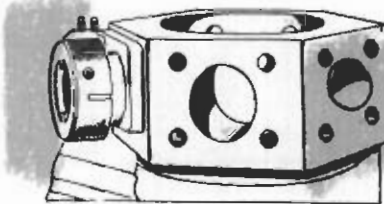
AUTOMATED TRANSFER MACHINE



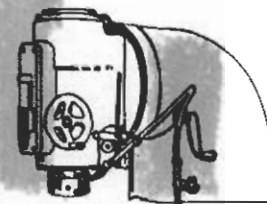
RADIAL DRILLS



PLAIN TYPE MILLS



LATHE TURRETS



UNIVERSAL TYPE MILLS

ERICKSON QUICK CHANGE  
HOLDERS AVAILABLE FOR  
SMALL MILLING MACHINES

Bridgeport R8, No. 9 B & S, and No. 30 MMS holders can be furnished with adapters to suit. Adapters in various styles already described will be made in appropriate sizes for this smaller series. Prices on application.

## HOW TO ORDER

- On all holders with **Keeper Key slots**—we must have complete dimensions showing location of **Keeper Key slot**.
- On holders with drawbar threads—please give drawbar thread desired.
- Advise **type** of machine, taper if applicable, dimensions of shank, **Keeper Key** data, drawbar thread, and other pertinent data.

COLLET CHUCKS • FLOATING HOLDERS • TAP CHUCKS • TAP HOLDERS • AIR-OPERATED CHUCKS  
EXPANDING MANDRELS • SPECIAL HOLDING FIXTURES

## ERICKSON TOOL COMPANY

34350 SOLON ROAD • SOLON, OHIO (Greater Cleveland)

248-1000 Area 216

COLLET CHUCKS • EXPANDING MANDRELS • AIR-OPERATED CHUCKS • FLOATING HOLDERS • TAP CHUCKS  
• AUTOMATIC INDEXING • MASTER SPACERS • DIAPHRAGM CHUCKS • PUSH-ON ARBORS • QUICK-CHANGE HOLDERS  
• EXPANDING COLLETS • END-CLAMPING CHUCKS • AIR CYLINDERS (allowing stock to pass through)  
• EXPANDING JAW MANDRELS • SPECIAL HOLDING FIXTURES (including gear-holding)  
• BORING HEADS • BORING BARS • SPADE DRILLS • RECESSING TOOLS • POWER JAW CHUCKS