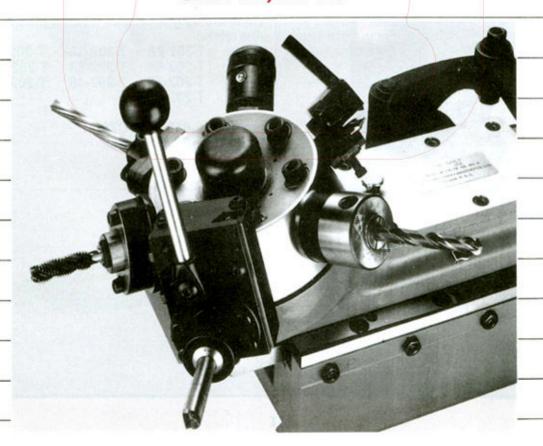
# CYCLEMATIC

SPINDLE TOOLING

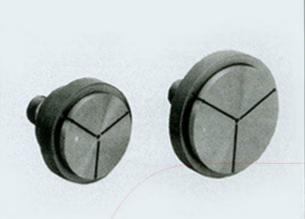
OPTIONAL EQUIPMENT FOR
CYCLEMATIC HIGH SPEED
HIGH ACCURACY

# **MANUAL LATHES:**

CTL-618EM, CTS-27, CTL-27, CHR-68, CP-27



#### SPINDLE TOOLING



### Step Chuck

#### REGULAR DEPTH CAPACITY

Step chucks and closers are carried in stock in 2",3",4",5" and 6"sizes for immediate delivery. They are 3/8" larger in diameter than the rated size, so the full capacity may be readily applied. Steps may be applied to a depth of 1/2" in these regular step chucks.

#### **Extra Depth Capacity**

Step chucks and closers are carried in stock in 2",3",4",5" and 6" sizes. These step chucks are made so the full rated capacity step may be applied to the maximum depth 0f 1 1/4". An extra depth capacity step chuck closer is required for each size extra depth capacity step chuck.

Tool No : T-CT-02 · T-CT-03 · T-CT-04 T-CT-05 · T-CT-06

For : CTL-618EM · CTS-27 · CTL-27 · CHR-68 · and CP-27

1-1



#### step chuck closers

The closer fits directly to the machine spindle and has a taper corresponding to the taper on the periphery of the step chuck for closing the step chuck. A step chuck closer is required for each size step chuck to place the closing pressure over the stepped area of the chuck resulting in greater gripping power and accuracy. A = Threaded, B = Taper

When ordering specify for taper or threaded nose spindle.

Tool No : T-202-2A · T-202-3A · T-202-4A

T-202-5A · T-202-6A · T-202-2B · T-202-3B · T-202-4B · T-202-5B

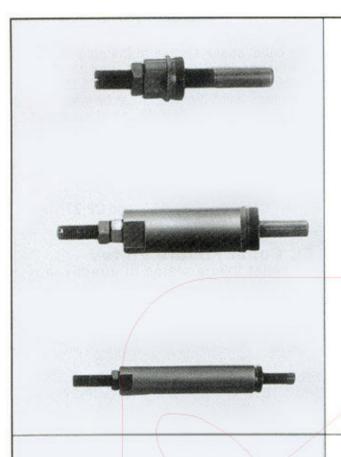
T-202-6B.

For : CTL-618EM · CTS-27 ·

CTL-27 · CHR-68 ·

and CP-27

1-2



**Threaded Positive Stops** 

The 5C solid, ejector, and long stops are threaded into and positively shoulder locked in the 5C collet. (Standard 5C collets have internal threads for threaded stops.)

All stops are adjustable for the desired part length to the maximum depths listed below.

Solid Stop-

For chucking parts to a depth of 3 1/8" from the collet face. Tool No : T-SS-1

**Ejector Stop-**

For chucking parts to a depth of 2 3/4" from the collet face. Tool No : T-ES-1

Long Stop-

For chucking parts to a depth of 7 1/2" from the collet face. For work to and including 7/8" round, 3/4" hex and 19/32" square.

Tool No : T-LS-1

For : CTL-618EM · CTS-27 · CTL-27 · CHR-68 · and CP-27

2-1



**Universal Collet Stop** 

This stop converts 5C collets into solid stop or spring ejector stop collets, without alteration of the standard collets. The application of this stop to the collet requires no machining, in other words, all collets up to and including 1"capacity can be used in the regular manner or as solid stop collets or as spring ejector stop collets.

Tool No : T-UCS-25

For : CTL-618EM / CTS-27 · CTL-27 · CHR-68 · and CP-27

2-2



With Dead Length 5C Collets and 2" 5C Step Chucks, shoulders and faces can be machined to exact length, regardless of O.D. variations.

Parts are loaded against a solid stop in the inner collet which is spring loaded against the spindle face.

The low-cost inner collet and step chuck have a soft face and pilot hole to permit boring to size.

Tool No : T-DLC-16 · T-DLC-32

For : CTL-618EM · CTS-27 CTL-27 · CHR-68 ·

and CP-27



#### **Plug Chuck**

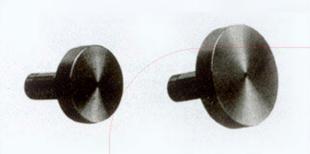
The collet shank section of the plug chuck is finished for direct application to your machine spindle. The nose section is 1 15/32" in diameter and 1 3/4"long. It can be machined In place for the greatest degree of accuracy to suit your particular requirements for special arbors.

Tool No : T-CT-01

For : CTL-618EM · CTS-27 ·

CTL-27 · CHR-68 · and CP-27

3-1



#### **5C Collet Fixture Plates**

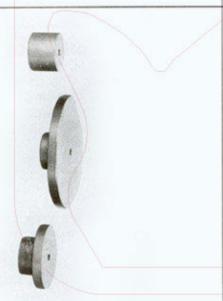
5C collet fixture plates fit directly in CYCLEMATIC Lathe spindles. They can be machined for mounting of parts. Flange is 1" thick and there are two diameters available, 3 3/8" and 4 3/8".

Tool No : T-304A 3 3/8" · T-304B 4 3/8"

For : CTL-618EM · CTS-27 ·

CTL-27 · CHR-68 · and CP-27

3-2



#### Fixture Plates

The fixture plates are machined all over for direct application to the headstock spindle. Three sizes are available: 3", 5" and 8 7/8" diameter. The flange section is 3/4" thick. The center hole is 7/16" in diameter. These plates can be machined to become a fixture or for mounting fixtures to hold work or for mounting special purpose chucks.

( Specify for taper nose spindle )

When ordering, specify whether for taper or threaded nose spindle. A = Threaded.

B - Taper

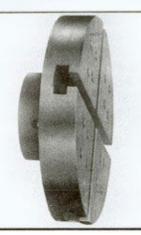
Tool No : T-FP-3A . T-FP-5A . T-FP-8A

T-FP-3B · T-FP-5B · T-FP-8B

For : CTL-618EM · CTS-27,

CTL-27 · CHR-68 · and CP-27

3-3



#### **Face Plates**

7" diameter face plates are used for holding irregular shaped pieces. Holes are drilled and tapped to permit the use of standard 5/16"  $\times$  18bolts.

( Specify for taper nose spindle )

When ordering, specify whether for taper or threaded nose spindle. A = Threaded, B = Taper Tool No : T-FP-07A · T-FP-07B

For : CTL-618EM · CTS-27 · CTL-27 · CHR-68



#### **Fixture Plates**

The fixture plate is machined all over for direct application to the headstock spindle. This plate can be machined to become a fixture or for mounting fixtures to hold work. The fixture plate is available in 3", 5" or 7" diameter, 3/4" thick. The center hole is 7/16" in diameter.

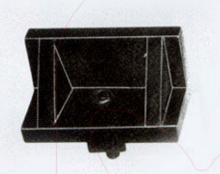
When ordering, specify whether for taper or threaded nose spindle.

Tool No : T-316 ( Threaded ) T-317 ( Taper )

For : CTL-618EM · CTS-27 · CTL-27 · CHR-68 ·

and CP-27

4-1



#### **Angle Plate**

The angle plate fastens directly to the T-slot of the face plate and is used to support work at right angle to the face plate. Work clamping surface is 1 1/2" × 3"

Tool No : T-AP-07

For : CTL-618EM · CTS-27 ·

CTL-27 · CHR-68

and CP-27

4-2



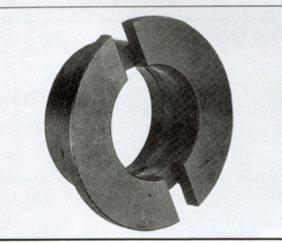
#### 5C Headstock center

The headstock center is required when work is to be held between centers. This center requires LT-01-108S or LT-01-108C drive plate to drive work.

Tool No : LT-01-109

For: CTL-618EM · CTL-27

4-3



#### **Drive Plate**

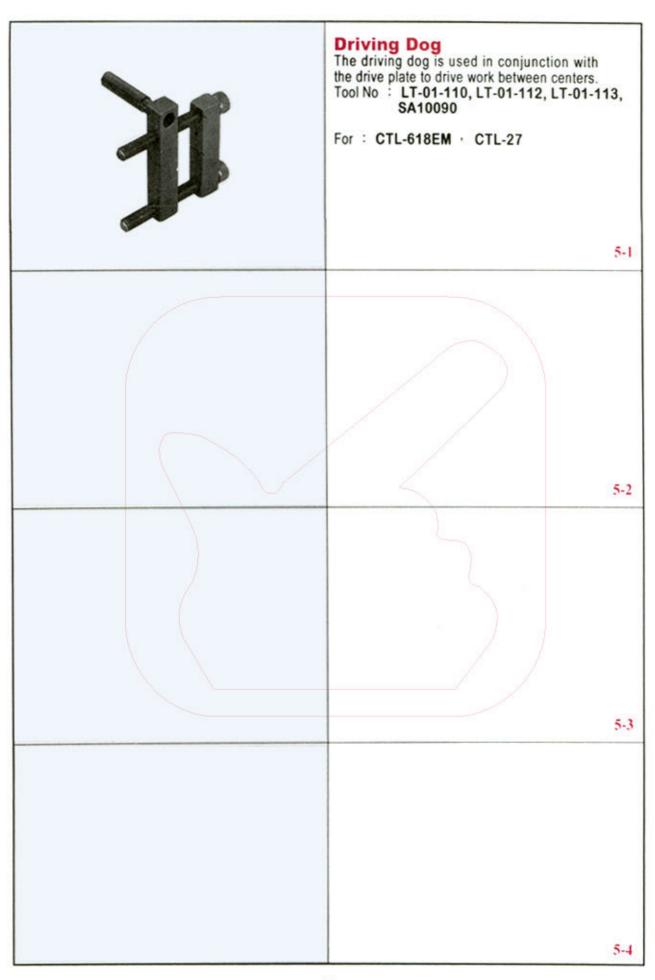
The drive plate mounts on the spindle nose and is used in conjunction with the driving dog to drive work between centers. When ordering, specify for taper nose spindle.

When ordering, specify whether for taper or

threaded nose spindle. S = Taper C = Threaded

Tool No : LT-01-108S . LT-01-108C

For : CTL-618EM · CTL-27





#### Single Tool Holder

The Single Tool Holder is mounted directly to the CHR-68 turret. The single tool holder takes one standard 3/8" square tool bit.

Tool No : TH-01

For: CHR-68

6-1



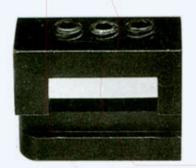
#### **Double Tool Holder**

The Double Tool Holder is mounted directly to the CHR-68 turret. The double tool holder takes two standard 3/8" square tool bits.

Tool No : TH-02

For : CHR-68

6-2



#### Triple Tool Holder

The triple tool holder fits directly to the turret and is used to hold three standard 3/8" square tool bits or for spacing two tools. The tool holder body is made of hardened steel.

Tool No : TH-03

For : CHR-68

6-3

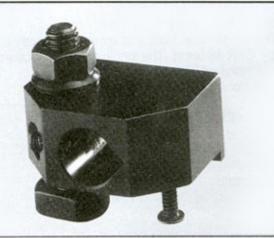


#### **Boring Tool Holder**

The boring tool holder is for direct application to the eight station turret. It is used for holding 5/8" diameter boring bars, turning tools or split bushings. The body of the boring tool holder is made of hardened steel.

Tool No : TH-04

For: CHR-68



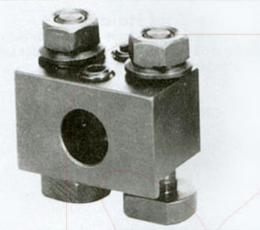
**Boring Tool Holder** 

The hardened steel holders mount directly to eight station turret. Boring tools align to center line height of 90° degree slot.

Tool No : TH-04A

For: CHR-68

7-1



# Drill and Shank Tool Holders

The hardened steel holders mount directly to eight station turret. They are used for holding drills directly or with split bushings, or for holding any of the 5/8" round shank turret tooling

Tool No : TH-05

For: CHR-68

7-2



**Adjustable Tool Holder** 

The adjustable tool holder permits setting of center drills, drills, reamers and other end-working tools to the exact center of workpiece.

The holder is mounted directly to the eight station turret and holds 5/8" diameter tool shanks or bushings in a ground-finish hole.

Tool No : TH-06

For: CHR-68

7-3



#### **Drill chuck Arbor**

Hardened and ground drill shank arbors are available in the following sizes :

Tool No : TH-07-1 ( JT1 # )

TH-07-2 (JT2 #) TH-07-3 (JT2A #) TH-07-4 (JT33 #)

For : CTS-27 · CHR-68



#### **Tool Holders**

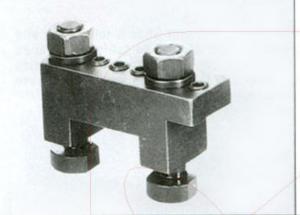
Straight and 15° angle tool holders for the slide tool, the recessing tool and the drill and turn tool, are available in either the plain or knee type. The holders take standard 1/4" tool bits.

Tool No : TH-08-1 · TH-08-2 · TH-08-3 ·

TH-08-4

For: CTS-27 · CHR-68

8-1



#### **Quadruple Tool Holder**

The quadruple tool holder which mounts directly to the turret will take four standard 3/8" square tools. This holder can be set up with four tools cutting on the front of work or with three tools cutting on front and one on rear of work.

Tool No : TH-09

For : CHR-68

8-2



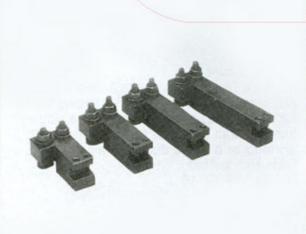
#### **Universal Tool Post**

The universal tool post, which mounts directly to the turret, permits many possible arrangements for mounting tool bits, depending on job application. Holder takes 3/8" square tool bits.

Tool No : T-UP-01

For : CHR-68

8-3



#### **Extension Tool Holders**

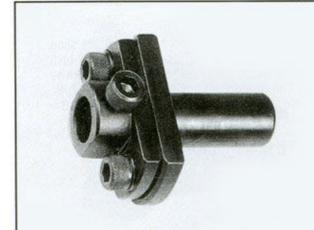
Extension Tool Holders are used for turning or, with optional holders shown below, for boring knurling or cutoff.

Extension Tool Holders are available in four sizes 2" · 3" · 4" and 5" lengths (measured from centerline of T-bolts to extension end of holder ) .

Holders mount directly to the chucker turret and take standard 3/8" square tool bits for turning operations.

Tool No : T-ET-14 (2") · T-ET-15 (3") · T-ET-16 (4") · T-ET-17 (5") ·

For: CHR-68



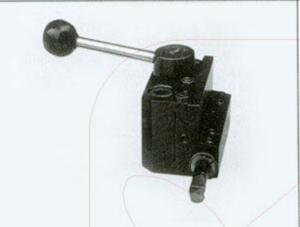
**Adjustable Holder** 

The adjustable holder is used for holding endworking tools, such as drills and reamers. The holder provides the means for adjusting the cutting edge of the tool to its proper center relation with the work. Uses standard 1/2" split bushings.

Tool No : T-AH-10

For : CTS-27 · CHR-68

9-1



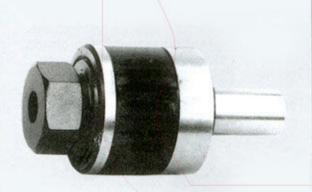
**Taper Slide** 

The T-TS-14 Taper Slide is for turning and boring tapers and can be set for any desired angle. This unit has a hardened and precision ground slide for sustained accuracy and ease of operation. The T-TS-14 Taper Slide has 7/8" shank carbide tool bits.

Tool No : T-TS-14

For : CHR-68

9-2



### Releasing Tap Holder

( Collet Type )

The releasing tap holder has a completely enclosed releasing mechanism. Holders are furnished for right-hand tapping and easily converted for left-hand tapping. Taps are held in the holder with standard 1/2 "split tap bushings.

Tool No : T-RT-16

For: CTS-27 · CHR-68

9-3



#### Knee Tool

The Knee Tool is of one piece heat treated alloy steel construction. Used for turning from the turret the knee tool can turn a single diameter with one tool, two diameters with two tools or a single diameter and chamfer. Takes 1/4" tool bits.

Tool No : T-KT-16

For: CTS-27 CHR-68

9.4

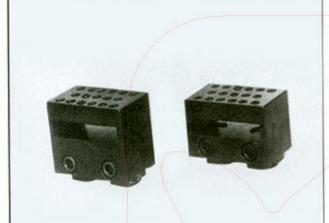


Double Tool Block With the T-DT-01 Tool Block mounted on the straight and taper turning slide, combinations such as taper turning and chamfering, facing and grooving, turning two tapers and many more are possible. The T-DT-01 Tool Block holds two 5/16"tool bits permitting dual machining operations.

Tool No : T-DT-01

For : CHR-68

10-1



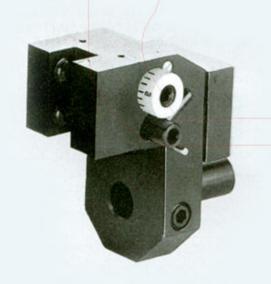
Multiple Tool Holder

This tool holder has an opening 7/16" × 2 1/8" permitting the use of standard 3/8" square tool bits in any multiple to capacity. By using the multiple tool holder, many operations such as under-cutting, chamfering and grooving can be done in one operation. When ordering, specify whether the holder is to be used in the front or rear position.

Tool No : T-FMH-06 (Front) T-RMH-06 (Rear)

For : CHR-68

10-2



#### Adjustable Knee Tool

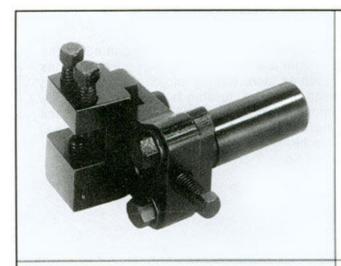
Two different sizes are available to cover the variations in turning length and work diameter requirements.

Micrometer screw adjustment provides graduations in . 001" increments.

The two sizes are designed to include the use of standard 1/2" split bushings to permit combinations of drill and turn, or center drill and turn. Slide travel 5/8". Takes 3/8" tool bits.

| Tool No. | Max. Turning Length | Max.Work Diameter |
|----------|---------------------|-------------------|
| T-AK-116 | 1"                  | 1*                |
| T-AK-219 | 1 3/16*             | 2*                |

For: CTS-27 · CHR-68



# **Centering And Facing Tool**

The centering and facing tool is used in the turret. It faces the stock to the required length and, at the same time, centers the work for subsequent drill operations. Maximum drill capacity is 5/16".

Tool No : T-CFT-16

For: CTS-27 · CHR-68

11-1



#### Releasing Tap Holder

The releasing tap holder has a completely enclosed releasing mechanism with 1/2" diameter bushing.

Tool No : T-RT-08

For: CTS-27 · CHR-68

11-2



### **Releasing Die Nut Holder**

The releasing die nut holder is used for production threading. The holder is made for releasing quickly at the end of the turret travel.

Tool No : T-RRD-05

For: CTS-27 + CHR-68

11-3



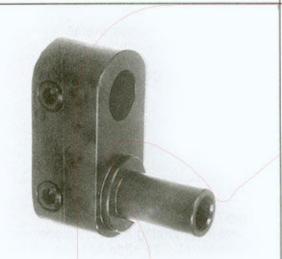
# Releasing Acorn Die Holder

The releasing acorn die holder is used for production threading. The holder is made for releasing quickly at the end of the turret travel. The capacity is 1/4"to 5/16". Uses No. 2 die.

Tool NO : T-RAD-05

For: CTS-27 · CHR-68

12-1



#### **Drill and Turn Tool**

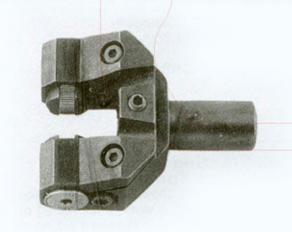
Combine your turning and drilling operations to speed production and save turret stations. The Drill and Turn Tool Holder mounts directly to the six station turret.

The Drill and Turn Tool Holder has 5/8" bore for mounting standard tool holders. The center bore takes, standard 5/8" diameter split type bushings for holding drills and other end working tools.

Tool No : T-DT-16

For: CTS-27 · CHR-68

12-2



#### **Knurling Holder**

The knurling tool is used for knurling work from the turret. Knurls are mounted in swivel holders that can be set at any angle for straight or diamond knurling. A pair of knurls is furnished with each tool. A standard 1/2" bushing can be used for spot drilling, etc.

Maximum capacity is 1/2" Tool No : T-KH-08

For: CTS-27 · CHR-68

12-3



#### Tool Holder Extension

The tool holder extension provides a means for balancing a turret setup. It will extend short tooling to balance with the length of longer tooling. For example, it makes up the difference in length between a tap holder and a standard drill. Extension body is 1 5/8" long.

Tool No : T-HE-16

For : CTS-27 · CHR-68

13-1



Adjustable Rotary Stops
The Adjustable Revolving Stock Stop is capable of maximum length variation of 3/4", from 3 1/8" minimum to 3 7/8" maximum overall.

Tool No : T-RS-201

For: CTS-27 · CHR-68

13-2



Slide Tool
This tool is for turning and boring operations from the turret. The slide head takes 5/8" diameter shank tools and has a travel of 7/8" which is controlled by a fine pitch screw with a dial graduated in thousandths.

Tool No : T-ST-10

For : CTS-27 , CHR-68

13-3

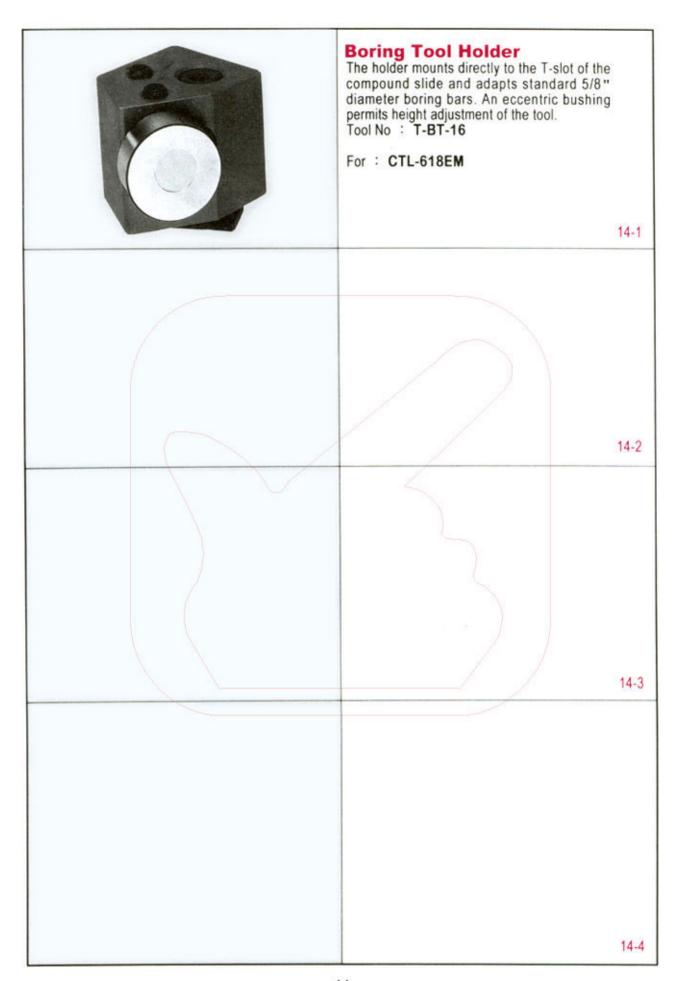


## Quick-Acting

Recessing Tool
The recessing tool, shown at the left, is used to perform recessing work, back facing or chamfering operations in the same setting of the work as other turret operations. The 7/32" travel either side of center is governed by adjustable stops. The recessing tool head takes the 5/8" diameter shank tool holders.

Tool No : T-QAR-10

For: CTS-27 · CHR-68



#### **OPTIONAL EQUIPMENT**



**Tool Setting Gage** 

The tool setting gage for double tool cross slide is an essential aid for fast, accurate setting of tool bits to the spindle centerline of your CYCLEMATIC CTL-27, CTS-27 machine. With the CYCLEMATIC tool setting gage slow scale measurement for setting tools on center is eliminated.

Tool No : T-301

For: CTS-27 · CTL-27

15-1



**Tool Setting Gage** 

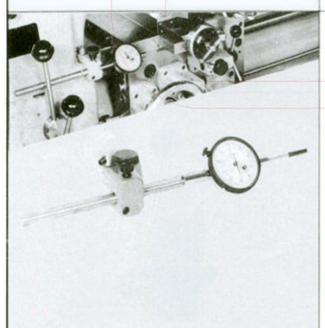
The tool setting gage is an essential aid for fast, accurate setting of tool bits and boring bars to the spindle centerline of your CYCLEMATIC CHR-68 and CTL-618 Lathes.

The ground surface "A" is for setting tools cutting on front of work piece. Surface "B" is used for setting tools cutting on rear of work piece. The gage is adjustable for its respective machine.

Tool No : T-302 For CHR-68

Tool No : T-303 For CTL-618 EM

15-2



**Carriage Length Indicator** 

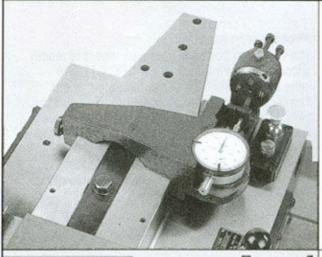
The carriage length indicator permits full carriage travel, thus allowing for "close to spindle machining". The carriage length indicator is a needed accessory when producing parts to exact shoulder lengths or when facing to close tolerances.

The fully jeweled dial indicator reads directly in .001" increments with a range of 1". The long rod allows the indicator to be extended to a distance of 6 1/2".

The carriage length indicator can be mounted to your CTL-618 Lathe without machining.

Tool No : T-CLD-618

For: CTL-618 EM



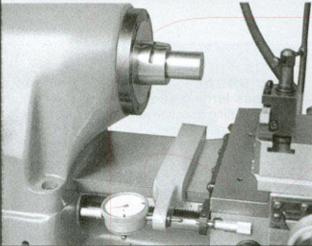
Four Position Indicator Stop for Cross Slide

The Four Position Indicator Stop is quickly and easily mounted on the cross slide and carriage of the CTL-618 Lathe. The unit has a four station, easily Indexed, stop drum with adjustable reference screws. The indicator is a . 0001" jeweled bearing type with a built-in feature protecting the indicator against over-travel.

Tool No : T-FDS-618

For: CTL-618 EM

16-1



Indicator Carriage Stop

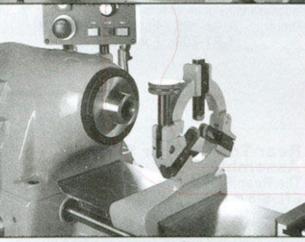
The micrometer carriage stop is a useful accessory when producing parts with exact shoulder lengths or when facing to close tolerances.

The indicator reads in .0005" increments. The micrometer reads in .001". Each CTL-618 Lathe is machined for direct application of the indicator stop.

Tool No : T-CSD-618

For: CTL-618EM

16-2



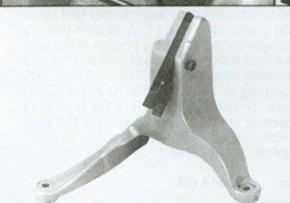
**Steady Rest** 

Long cylindrical work held between centers requires a steady rest to prevent such work from springing away from a cutting tool. A steady rest is also used when there are machining operations to be performed on the end of work which prohibits the use of the tailstock center. The steady rest has a maximum capacity of 3"

Tool No : T-SR-300

For: CTL-618 EM

16-3

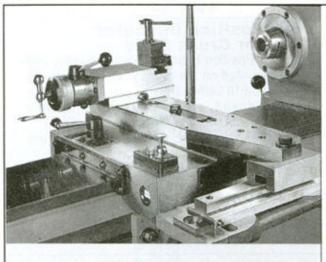


#### **Follow Rest**

When you have work that is small in diameter in relation to length, it may spring away form the cutting tool. In such cases, the follow rest applied to the carriage, as shown, will assure you of accurate work.

Tool No : T-FR-300

For: CTL-618 EM



# **Taper Turning Attachment**

The turning or boring of precision tapers is readily accomplished on the CYCLEMATIC CTL-618 lathe by the use of a taper turning attachment...

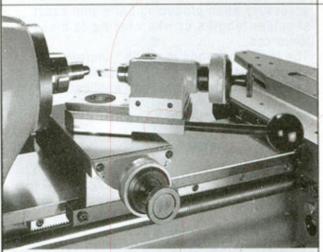
The taper turning attachment is based on the sine bar principle-swiveling the guide bar from one end. Graduations for setting guide bar are in 1/8" taper per foot and in degrees.

The taper turning attachment mounts directly on the back of the lathe bed and is adjustable along the bed to suit the work.

Tool No : TL-T-01

For : CTL-618 EM

17-1



#### Radius Turning Attachment

The radius turning attachment is used for precision turning of concave or convex surfaces up to 1 1/2" radius. Useful for turning punches, dies, ball shaped valve seats, and special spherical cutting tools.

The swivel slide is mounted on precision preloaded ball bearings for accuracy and rigidity.

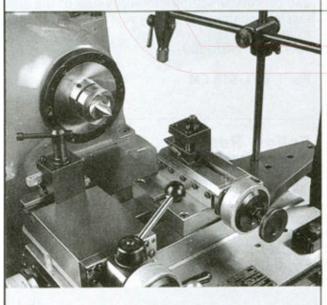
The swivel slide moves through 360°.

Hardened feed screws are mounted on preloaded ball bearings and have adjustable dials graduated in thousandths of an inch.

Tool No : T-RT-108 For : CTL-618 EM

T-RT-208 For : CTS-27

17-2

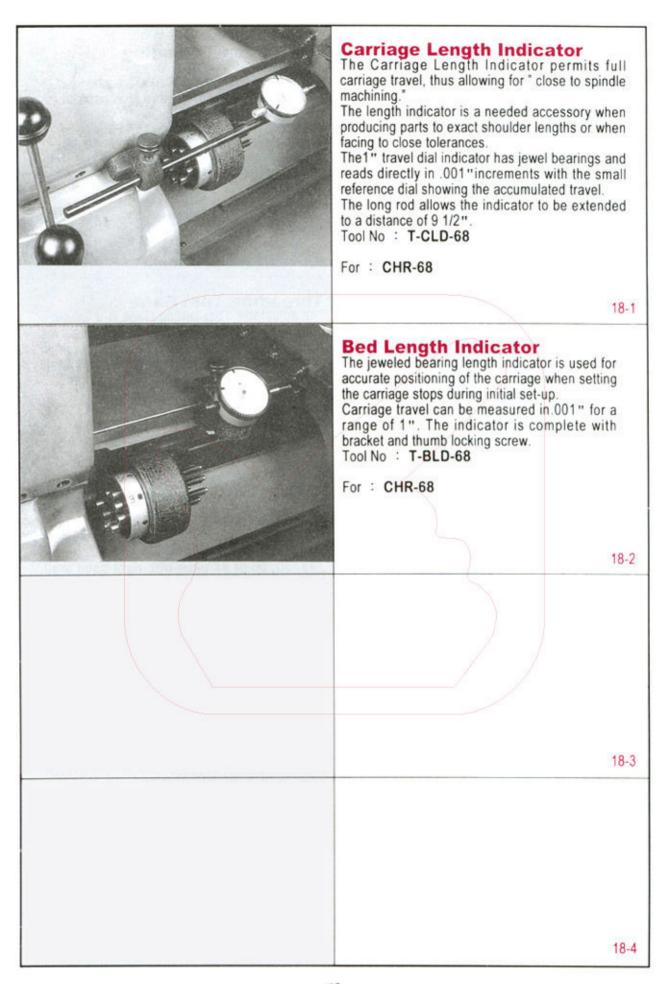


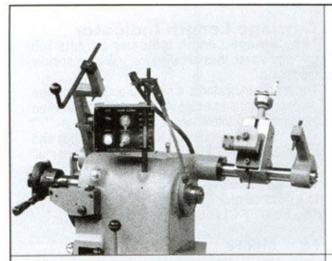
Rear Tool Holder Slide Assembly

The Rear Tool Holder Slide Assembly for CTL-618 machines, as shown with a L-3023 tool post in place, can be quickly mounted to the carriage cross slide. The top slide travel is 3/4" and is controlled by an easy reading feed screw dial graduated in.001". A double locking arrangement maintains the position of the slide and tool holder. The rear tool holder slid assembly consists of the RTS-10-1 base with mounting screws and RTS-10-2 tool holder slide .Optional tool holders for rear slide assembly are the L-3023 wedge type tool post, T-RMH-06 Multiple tool holder.

Tool No : T-RTS-10

For: CTL-618 EM





#### **Production Threading** Unit

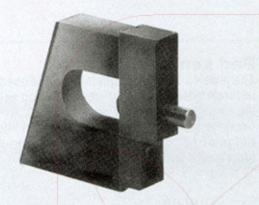
This production threading unit will assure you consistent high accuracy threaded parts at

Lead screws and followers are available in 12, 13, 14, 16, 18, 20, 24, 28, 32, 36, 40, 48, 50, 56, or 64 pitch with right hand lead.

Tool No : CHR-68-09

For : CHR-68

19-1



Threading Tool Gage
The adjustable Tool-setting Gage is a valuable aid in reducing time required for complete setups and for the replacement of threading tools during production runs. Gage is supplied as optional equipment with the threading units.

Tool No : T-TG-68

For: CHR-68

19-2



#### Lead Screws

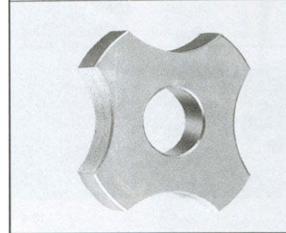
Hardened and ground lead screws are available in 12, 13, 14, 16, 18, 20, 24, 28, 32, 36, 40 48, 50, 56 or 64 pitch with right-hand lead. Left-hand lead screws or other pitches are special and made to order.

Blank lead screws are also available.

Tool No : LB-09S

For: CHR-68

19-3



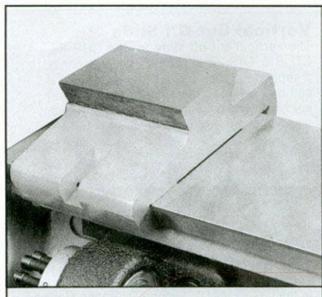
#### Lead Screw Followers

A bronze follower threaded to match the thread of the lead screw is required for each pitch of lead screw. The followers are available in the same standard pitches as lead screws.

Left-hand and other pitches are special and made to order.

Tool No : LB-09F

For : CHR-68



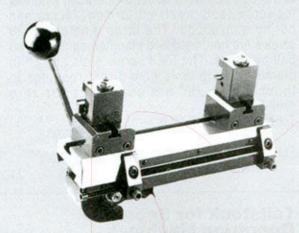
#### Bed Adapter for Double Tool Cross Slide

The bed adapter is used for mounting the standard double tool cross slide normally used on Second Operation Machines. This permits the use of all double tool cross slide accessory tooling such as standard tool holders, multiple tool holders, the straight and taper turning slide and any combination of this tooling applicable to the job being run.

Tool No : CHR-68-08

For: CHR-68

20-1



#### **Double Tool Cross Slide**

The cross slide base provides the needed rigidity when forming, cutting off, or turning with the straight and taper turning slide attachment. The cross slide is easily operated by a hand lever. Two threaded feed stops are provided for fine adjustment of each tool position.

Tool No : CHR-68-12

For : CTS-27, · CHR -68 · CP-27 · CTL-27

20-2

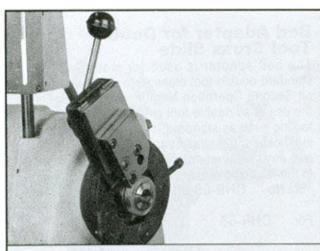


#### Straight and Taper Turning Slide for Double Tool Cross Slide

This attachment can be used on the front or rear of the double tool cross slide. It is for straight or angular turning, back facing, undercutting or for turning long slender parts that cannot be readily formed by a full width tool. Two of the attachments may be mounted on the double tool cross slide for turning or boring two different angles at one setting of the work, such as valve seats or bevel gears. The swivel base is graduated in degrees and can be swiveled and locked to any angle. The lever operated rack and pinion slide travel of 1 3/4" is controlled in either direction by adjustable stops. The tool post takes standard 5/16" square tool bits.

Tool No : CTS-27-07

For : CTS-27 · CTL-27 · CHR-68



#### **Vertical Cut-Off Slide**

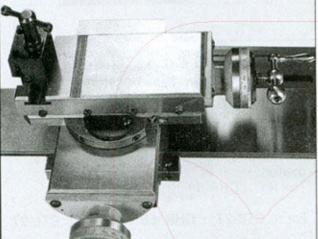
The vertical cut-off slide for the CHR-68, CTL-618, CTS-27 and CTL-27 Lathes permits a separate station for cut-off operations. It can be applied to the spindle nose without machining and is mounted with bolts provided.

Tool No : LB-68-11

For: CTL-618 Series CHR -68

Tool No : CTS-27-08 For : CTS-27 · CTL-27

21-1



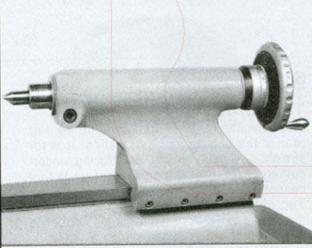
#### **Compound Slide**

The compound slide rest can be readily applied to the CYCLEMATIC Second Operation Machine for screw feed precision turning, facing and boring operations. The large diameter feed screws are hardened and mounted on preloaded ball bearings. The feed screw dials are 2" in diameter. Both dials give direct readings in thousandths and are adjustable for zero settings.

Tool No : CTS-27-10

For : . CTS-27 . CTL-27 . CP-27

21-2



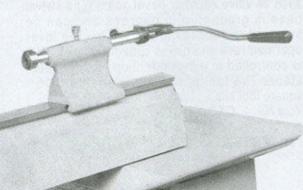
#### Tailstock for Second Operation Machines

The tailstock is applied directly to the bed ways in place of the turret. It is ordered for center work.

Tool No : CTS-27-11

For: CTS-27 · CTL-27

21-3

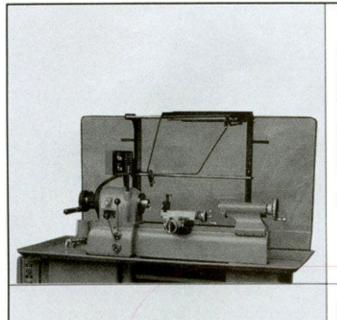


#### **End-Working Slide**

The slide is for deep hole drilling - lapping or any other operation requiring a tool travel up to 5 1/2".

Tool No : CTS-27-09

For: CTS-27 · CTL-27



# Chip and Coolant Shield

This transparent plastic chip and coolant shield is optional equipment on the CYCLEMATIC CTL- 618EM, CTL-27, and CHR-68 Lathes.

The hinged section is adjustable to left or right to suit work requirements.

Extended sections offer additional splash prevention.

Tool No : T-CS-10

For : CTL-618EM · CTS-27

CTL-27 · CHR-68

22-1



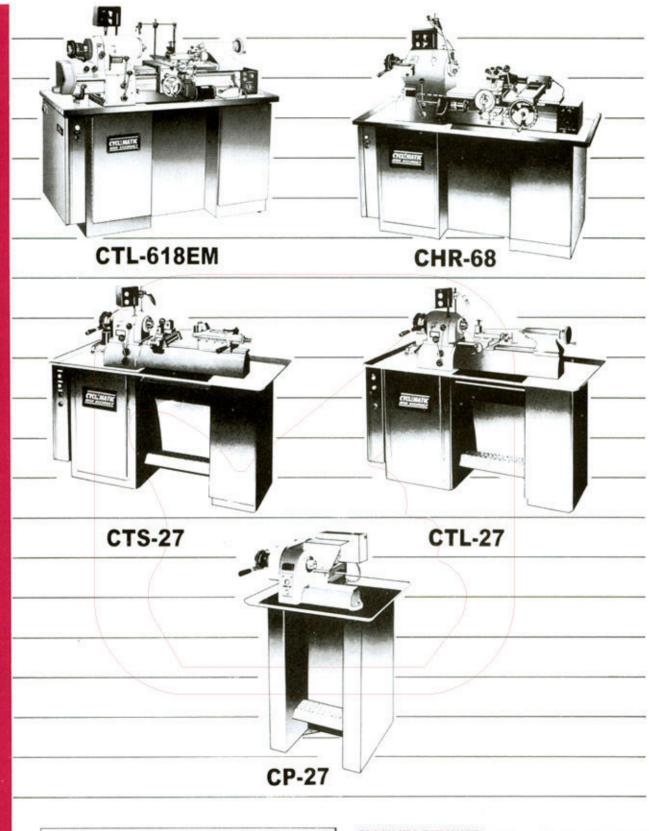
#### **Male Center**

This male center has an 11/16" head diameter and is furnished with all CYCLEMATIC tailstocks. All centers are hardened and ground.

Tool No : T-MC-2

For : CTL-618EM · CTL-27

22-2



## DISTRIBUTOR:

#### MANUFACTURER:

#### CYCLEMATIC MACHINERY CO.,LTD.

20, LANE 50, MIN SHENG RD.,

SHEN KANG, TAICHUNG, TAIWAN.

TEL:04-5625393 / 5626509 FAX:886-4-5620298

E-mail: matic88@ms77.hinet.net http://www.cyclematic.com http://www.cyclematic.com.tw http://www.Toolrooms.com http://www.Toolroom.com.tw