



# GEOMETRIC THREADING TOOLS

*Die Heads, Roll Heads, Chasers & Thread Rolls*

## 2016 PRODUCT OVERVIEW



VERS-O-TOOL®

Acme-FETTE™

*Customer Service*

**PHONE: 800-358-3500 FAX: 888-718-2922**

**EMAIL: SALES@LANDIS-SOLUTIONS.COM**

# *Threading Chasers and Thread Rolls*

## *GEOMETRIC PROJECTION SUPERMETRIC EJ5 & D STYLE*



## *GEOMETRIC PROJECTION GROUND & TAPPED "D & K" STYLE*



## *GEOMETRIC REGULAR & PROJECTION GROUND "S & SJ" STYLE*



## *H & G INSERTS GROUND STYLE*



## *VERS-O-TOOL CIRCULAR GROUND STYLE*



## *ACME-FETTE GROUND STYLE THREAD ROLLS*



***CUSTOMER SERVICE & TECH SUPPORT***

***Tel: 800-358-3500 Fax: 888-718-2922***

***360 S. CHURCH ST. WAYNESBORO PA 17268***



## ***DIE HEAD “TYPES”***

### ***STATIONARY SELF-OPENING***

The Die Head is held stationary in the machine and the part rotates. When the advance of the turret has been stopped, either by hand or by hitting a stop set on the machine, the shank portion of the die head is stopped in its forward travel. The distance that the front portion of the Die Head moves forward to trip is approx. 1/8” or less, causing the Die Head to open or “Pull-off”. Some heads have “Out-side trip”.

### ***The ROTARY SELF-OPENING***

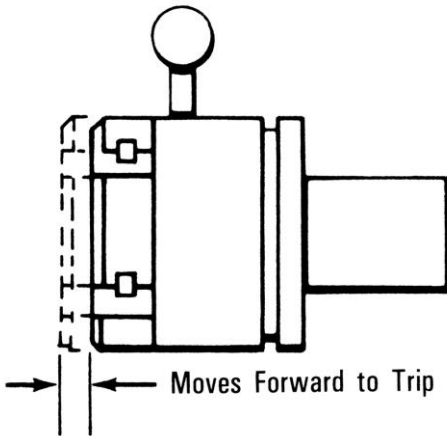
Die Head rotates in the machine spindle and the part is stationary. The head is open and closed by means of a yoke operating in the groove of the trip flange on the die head.

### ***SOLID ADJUSTABLE NON-OPENING:***

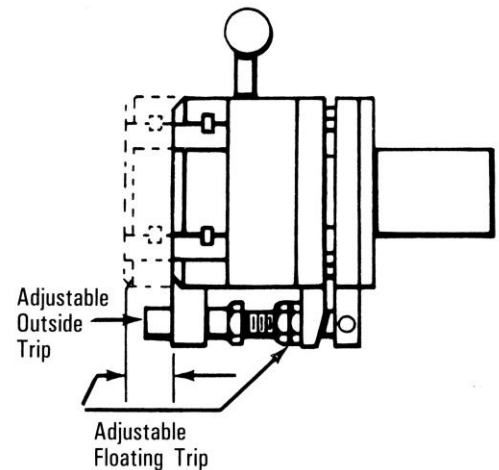
These die heads may be used on stationary or rotating applications. The die head must be reversed to remove them from the work piece



## TYPES OF TRIPS ON DIE HEADS



PULL-OFF TRIP



OUTSIDE TRIP

### **Pull-off Trip**

The forward motion of the back part (or shank) also ceases.

However, the die head is not unlocked at this point and the front part of the die head advances still further, due to the continued cutting action of the chasers, until the locking bolt disengages from the segment in the cam.

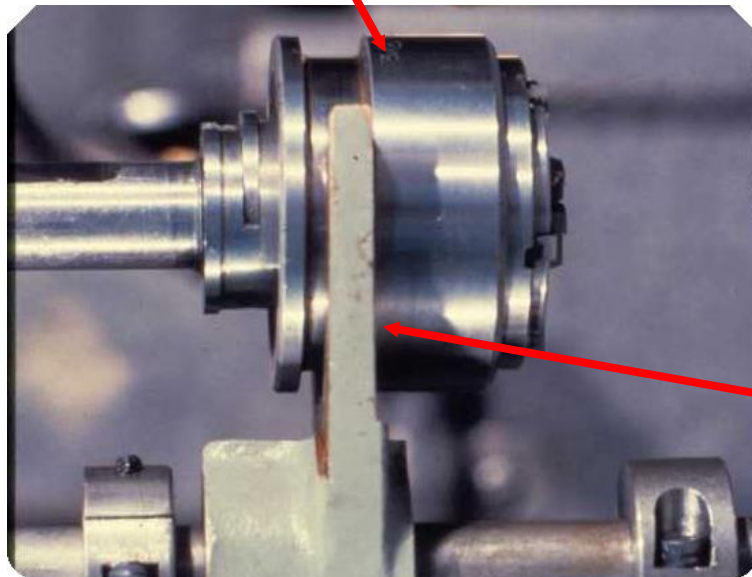
The cam spring, now free to function, causes the cam to rotate, releasing the chasers from the work and thus permitting the tool to be withdrawn Without reversing the cut. The head is reset by a closing handle



## **TYPES OF TRIPS ON DIE HEADS**

### **YOKE TRIP**

***TRIP FLANGE***



***YOKE***

**The Die Head is trip open and closed by means of a yoke operating in the groove of the trip flange on the die head.**



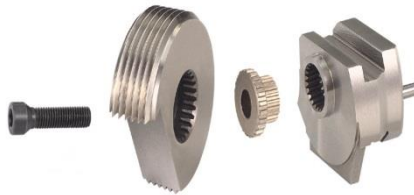
## *Items Required for a Vers-O-Tool initial Die Head set up*

*9/16 DRD Die Head*



*Chasers*

*Blocks*



*CGB 100 Fixture*



*Adapter for CGB*



*Pull Back Wrench*



*Micrometer Gages*

***PLEASE NOTE; ALL ABOVE  
ITEMS REQUIRED FOR A  
NEW INITIAL DIE HEAD  
START UP***

**The Vers-o-Tool Style Die Heads use chaser blocks.**

**Each thread size will require a set of blocks to match the chaser diameter and pitch.**

**The chaser are inserted in the blocks and then into the slots of each head.**

**The initial Die Head package must include the Head, Blocks, Chasers and a complete set of grinding equipment (CB100 Fixture, a micrometer gage, Adapter and Pull Back Wrench for each die head size).**

**The Circular style chasers can be re-grind to a full 270 degree of chaser circumference .**



## *Items Required for a Geometric initial Die Head set up*



*9/16 KD Die Head*



*Chasers*

The Geometric style Die Heads use chasers that are insert directly into the slots of each head.

The initial Die Head package must include the Head and Chasers.

Some customers will want to re-sharpen this type of chaser.

We recommend using a magnetic chuck on a surface grinder for regrinding cutting faces on all Geometric style chasers.





## ***STATIONARY SELF-OPENING DIE HEADS***



**STYLE D**  
Geometric



**STYLE DSA**  
Geometric

## **OUTSTANDING FEATURES**

- ☉ Heavy Duty-Pull-off Trip
- ☉ Positive Locking
- ☉ Cam Controlled Chasers
- ☉ Size Adjustment
- ☉ Ample Chip Space
- ☉ Easy Shoulder Threading
- ☉ Straight or Taper Threads
- ☉ Right or Left Hand Threads
- ☉ Hardened and Ground Attachments
- ☉ Roughing and Finishing
- ☉ Style D die heads 3/4" and large are equipped

### **FLOATING & OUTSIDE TRIP ALIGNING SHANK**

(Similar other Features as on style D)

These die heads were design for use on Brown and Sharpe automatics, and for other small screw machine of either the automatic or hand type.

All sizes are equipped with both an Outside Trip for short length, fine pitch shoulder threading or a Pull-off Trip for threading lengths providing ample chaser engagement for tripping.

Conversion from one trip to another is quick and simple.

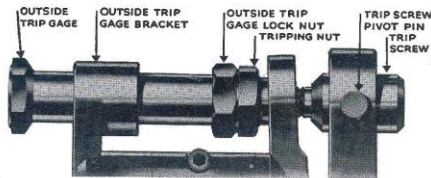




## DSA Die Head Pull off or Outside Trips

**TRIP CONVERSION SIMPLE**—Conversion from pull-off to outside trip and back is simply a matter of changing the position of the trip screw by a quarter turn, adjusting for length of threads, and locking with the nut. With the Style DSA it is not even necessary to remove the head from the machine. The same basic parts are used in each trip set-up, a feature which eliminates the need of extra parts and the danger of damaging parts by constant removal. The Style DSA Die Head can be applied to hand screw machines with either pull-off or outside trips in the same general manner as with automatics.

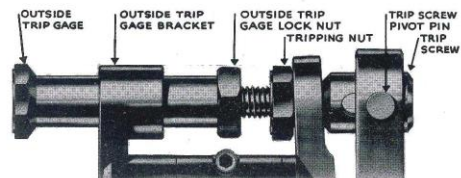
### PULL-OFF TRIP SET-UP



To arrange the Style DSA or DS Die Head with a pull-off trip—

1. Assemble the trip screw pivot pin in the *plain hole* in the trip screw.
2. Adjust the tripping nut on the trip screw to suit the length of thread being cut.
3. Lock the tripping nut in proper position by advancing outside trip nut to meet it. Locking one against the other prevents the outside trip gage from working loose and spoiling the thread length adjustment while head is in operation.
4. Should the outside trip gage or bracket cause interference, both parts may be removed from die head. Care should be exercised in this case not to exceed the normal adjustment of the tripping nut (see specification on front page), as this might cause head to operate improperly.

### OUTSIDE TRIP SET-UP



To arrange the DSA or DS die head with an outside trip—

1. Assemble the trip screw pivot pin in the *elongated slot* in the trip screw.
2. Lock the tripping nut against the shoulder of the trip screw.
3. Adjust for length of thread by moving outside trip gage to proper position.
4. Lock with outside trip gage lock nut.
5. For certain applications it may be advantageous to reverse the position of the outside trip gage. This is done by removing the outside trip gage bracket and reversing the position of the outside trip gage.
6. To facilitate added extension for special applications, the outside trip gage is tapped at both ends. It is also possible to shorten the length of the outside trip gage by grinding if desired.
7. To contact the outside gage for outside trip applications on hand machines, it may be necessary to install a stop on the machine.



***ROTARY TYPE SELF-OPENING (YOKE) DIE HEADS***  
**VERS-O-TOOL DIE HEAD**

**OUTSTANDING FEATURES**

- ☉ **Hardened and Ground**
- ☉ **Uses Circular with Blocks or Insert Chasers with Insert Blocks**
- ☉ **Easy to remove Blocks & Chasers.**
- ☉ **DR use 4 or 5 Chasers**
- ☉ **Straight or Taper**
- ☉ **Right or Left Hand**
- ☉ **Close to Shoulder**
- ☉ **Positive Adjustment**
- ☉ **DRD for Davenport Applications**



**DRD STYLE 4 per set**



**DRF STYLE 5 per set**



**DR STYLE 4 per set**



***ROTARY TYPE SELF-OPENING (YOKE) DIE HEADS***  
**GEOMETRIC STYLE KD**



**OUTSTANDING FEATURES**

- ☯ **Rotary Self-Opening Die Head (by means of yoke)**
- ☯ **Rugged ,Simple and compact**
- ☯ **Positive Tripping and Resetting**
- ☯ **Positive Locking**
- ☯ **Front Plate Removable**
- ☯ **Rigid Chaser Support**
- ☯ **Threads Close to Shoulder**
- ☯ **Right or Left Hand Threads**



## ***SOLID ADJUSTABLE NON-OPENING ROTARY OR STATIONARY HEADS***

**Geometric**



**DJ STYLE**

**H&G**



**SAMN STYLE**

### **OUTSTANDING FEATURES**

- ☉ **Inexpensive**
- ☉ **Compact**
- ☉ **Simple to Operate**
- ☉ **Will swing in a small space.**
- ☉ **Close to Shoulder Threading**
- ☉ **Positive size adjustment**
- ☉ **Positive Locking**
- ☉ **Easy to remove chasers**
- ☉ **Right or Left Hand Threads**
- ☉ **Non-opening similar to Geometric style DJ & EJ5.**
- ☉ **Designed for lead screw controlled machine & CNC**
- ☉ **Used insert type chasers (00 & 100 Series) mounted directly into the body.(no carriers required)**
- ☉ **Simple to operate**
- ☉ **Low cost**
- ☉ **Straight or taper threads**
- ☉ **Standard tools cut right hand threads only, can be made to cut left hand**
- ☉ **SAMAN (designed to replace acorn die holder) Can be simply screwed on to the existing standard acorn holder (Sizes #1 to #4)**



## ***GEOMETRIC INTERNAL THREADING TAPS***



**STYLE "S"**

Universal Stationary or Rotating Self-Opening Collapsing Taps.

Long a favorite for practically any threading job 1-5/16 diameter or larger, the Style S Tap provides greater chip space, a full flow of coolant to chasers, and better trip bar binding for closed, positive adjustment. A popular feature of the Style S Tap is its universal application to most standard machines without purchase of additional parts



**STYLE "SJ"**

Solid Adjustable Taps

These Taps must be reversed to remove them from the work piece.

### **•For Rotating and Stationary Applications**

•These Taps can cut more than one size or pitch by the use of interchangeable chasers.

•Compactness, SJ are ideal for machine demanding a short, stubby tap.

•Easy size adjustment and can be use for threading, deburring, reaming operations.

•SJ Taps can cut through or blind holes. Bottoming Cap and Projection chasers are required for blind hole tapping.

•The SJ Taps can be lengthened or design with special Pilots ahead or in back of the chasers.



**OUTSTANDING FEATURES**

**Readily Converted to Four Types of Trips**

**Stationary Type,  
Plate Trip**



For use on a hand screw machine or turret lathe. Tripped by a trip plate. Reset by conveniently place handle

**Rotary Type,  
Plate Trip**



For use on a drill press or rotary spindle machine. Tripped by a trip plate. Reset by an easily arranged yoke or fork in contact with back end of closing sleeve.

**Rotary Type,  
Sleeve Trip**



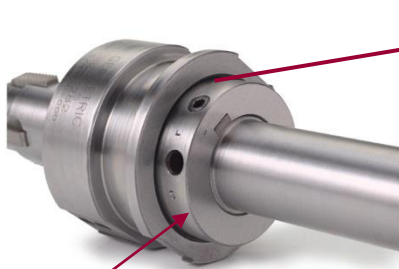
For use on automatic screw machines, chucking machines, threading machines, etc. Both tripped and reset by means of a yoke riding in the closing sleeve.

**Stationary Type,  
Hand or Lever Trip**



Whenever it is necessary or advisable to trip and reset by hand, such as for short runs, sizing, or because of unusual construction of the part, the Style S Tap can be quickly arranged for easy hand operation.

**Simple, Accurate Adjustment**



Adjusting Ring

Adjusting Ring Binding Screw

Quick and positive size adjustment without removing tap from the machine may be made through an adjusting ring at the rear of the tap body. Desired size is secured by loosening a screw and turning adjusting ring to proper setting. Once locked, the S Tap will hold its adjustment positively.

**Bottom Tapping**

When tapping a blind bottom, the Geometric Style S Tap can be easily equipped with a bottoming cap and projection chasers as shown.



**Regular Style Chasers**



**Bottoming Style Chasers**





## ***ACME-FETTE THREAD ROLLING DIE HEADS***

**N STYLE**



**NY STYLE**



**Style N Heads may be used for either Stationary or Rotating Applications a**

**They are regularly furnished for Right Hand. Left Hand Heads available on request.**

**When use on rotating spindles, the handle is removed from the back of the head and resetting is accomplished by a yoke mechanism.**

**For non-rotating spindles, resetting is done manually by a handle or automatically by replacing the ball on the handle with a roll,**

**for use with a cam. Can be used with semi-automatic or automatic machines.**

**The NY Style Heads may be used for either Rotating or Stationary applications,**

**and may be rotated in either Right- or Left –Hand directions for Right –Hand threads.**

**The opening and closing of the head is controlled by a yoke mechanism.**

**These heads are ideally suited for use on applications where the head must rotate or when a yoke must be used for operation.**

**Regularly furnished for Right Hand. Left Hand Heads available on request.**





## ***SOLID CARBIDE THREADING CHASERS***



- ***SUBMICROGRAIN 10% COBALT CARBIDE MATERIAL***
- ***SUPERIOR THREAD FINISH***
- ***WEAR RESISTANCE – CHIP RESISTANCE***
  - ***FASTER RPM***
  - ***REDUCE CYCLE TIME***
  - ***LONGER TOOL LIFE***
  - ***LESS DOWN TIME***
- ***GREAT FOR LIGHTS OUT OPERATION***

**Solid carbide “S” chasers are available for 1” to 3-1/2 ” S & SJ Geometric Taps both Regular and Bottoming styles.**

**Solid carbide insert chasers can be use in all H&G Die Heads using 100 series insert chasers and Vers-O-Tool die heads 9/16 and larger styles DR,DRD,DS,DRF using insert chaser blocks.**

**Ideal for Threading : Cast Iron , Brass and Stainless Steel**



**DIE HEADS, CHASERS  
& THREAD ROLLS**



*Acme-***FETTE™**

**VERS-O-TOOL®**



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*Complete Metalworking Solutions*  
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