

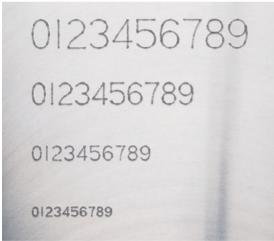


## effectivity

#### **Dot Peen Marking tool for CNC marking**



#### Here are just a few examples...



Character heights shown from 6 mm to 2 mm, using standard engraving software.



Point to point programming for creating characters with defined dot position or 2D Data Matrix codes.

## Tapmatic Is Pleased To Introduce An Exciting New Product.... The TAPMATIC TapWriter.

The TapWriter allows you to mark your work piece while you are machining it without the need for a secondary marking operation. Part numbers, date codes, logos and even decorative patterns and artwork can easily be created with this unique dot marking tool.

It can also be used for controlled, consistent shot peening to improve a parts resistance to fatigue. Using the TapWriter for shot peening allows treating specific areas of a part without the need for masking, and no special cleaning is needed afterwards.

Installs easily on Machining Centers or CNC lathes with Live Tooling.

It utilizes standard engraving software, but unlike engraving, dot-peen marking does not require the use of delicate cutting tools and high speed spindles.

You can mark soft plastics or steel as hard as 55 RC.

The durable carbide stylus is thrown against the work piece which allows the marking of uneven or round surfaces.

The TapWriter is <u>Fast</u>. Up to 80 characters per minute or more just depending on the capabilities of your machine.

Dot peen marking is widely used in the aerospace industry because the cross section of the dot has gentle curves, resulting in no significant stress concentration.

With the TapWriter you have complete control of the mark. The revolutions per minute determines the dots per minute, and the velocity of the carbide stylus when it impacts the work piece. The feed rate controls the distance between dots allowing you to select the apperance of discrete dots or a continuous line.



Mark logos using standard CAD/CAM software for the tool path.

- Eliminates extra operations
- Faster than engraving
- Long tool life with replaceable carbide stylus
- Mark hard or soft materials
- Mark round or uneven surfaces
- Simple to install and program

**TapWriter**®

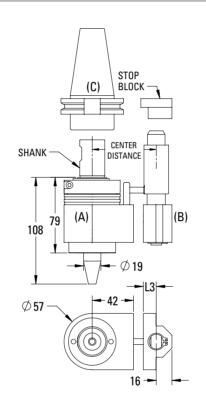




#### **How to Order**

The TapWriter® adapts to machining centers with automatic change, using a locking stop arm, similar to those used with self reversing tapping attachments. Please select the TapWriter® (A), stop arm (B), and CAT, SK, or BT shank (C), to fit your machine. Please order accessories separately.

#### TapWriter® with Stop Arm Bar and **Stop Block Installation**



#### (A) TapWriter® CNC Dot Peen Marking Tool

| ſ | Model     | Order code | Shank | Weight kg |
|---|-----------|------------|-------|-----------|
| 1 | TAPWRITER | 57820      | 20 mm | 1.7       |
|   |           | 57825      | 25 mm |           |
|   |           | 57810      | 1″    |           |

#### (B) Stop Arm Assembly

| Center<br>Distance<br>(42+L3) | Order code | L3 |
|-------------------------------|------------|----|
| 55                            | 3925551    | 13 |
| 65                            | 3925651    | 23 |
| 80                            | 3925801    | 38 |

Special stylus points or extended lengths are available on request.







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## effectivity

## ScribeWriter Force T Marking tool for work piece scribing



## With high pressure internal coolant



#### Mark It While You Make It.

- Scribing tool for CNC machines.
- For marking of different materials up to 62 HRC hardness, and surface variations up to 5mm.
- Fast marking without spindle rotation.
- Simple programming directly at the machine control or from the programmers work station using engraving software.
- Marking force and resulting depth are adjustable by turning the knurled sleeve.
- Easy to read marking force reference scale with high quality magnification lens from Thorlabs.
- Settings 0-7 for gradually increasing force up to setting H for marking the hardest materials. There is no need to change springs.
- With high pressure internal coolant capability for improved stylus lubrication and increased marking force.
- Simple to change, long life, carbide stylus. A 90° and 60° stylus are available.
- New ball point stylus option. The rolling ball creates very smooth lines, but depth is shallower in comparison to scribing points.



#### Setting 0-7 for marking all kinds of materials



#### Setting H for deep marking or for hard materials



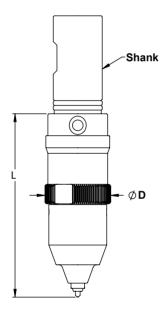
Unique flexure technology for higher marking force without the need to change springs.

## ScribeWriter Force \$\Pi\$

### Marking tool for work piece scribing



Example in 4140 pre heat treated material with hardness 28 HRC. Marking at different settings with 1.3 mm compression against the surface.







Example marking a curved surface programmed at constant marking plane. Material is \$7 tool steel heat treated to 60 HRC. Setting 'H' with 2mm compression at closest point on surface.

#### **How to Order**

Please select the ScribeWriter® with shank to fit your application. Please order CAT, SK, or BT shanks separately. The Scribewriter® comes with one standard 90° stylus. A 60° stylus is also available.

| Order code | Shank | L  | ØD |
|------------|-------|----|----|
| 57601      | 1"    | 95 | 32 |
| 57625      | 25 mm | 95 | 32 |
| 57620      | 20 mm | 95 | 32 |
| 57616      | 16 mm | 95 | 32 |

Note: To order the ScribeWriter with 60° stylus, please specify by adding "-60" to the above order codes.

To order the ScribeWriter with a ball point stylus please specify by adding "-B" to the above order codes.

#### **Standard Stylus Options**

| ylus Point |
|------------|
| lo         |
| l°         |
|            |



#### Changing the stylus





The stylus can then be removed and changed.

### **Ball Point Stylus Options**

| Order code | Description                  |
|------------|------------------------------|
| 73602BN4A  | Complete ball point assembly |
| 71735C     | 2mm carbide ball             |





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#### **CNC Marking Heads for use with standard type or custom stamps**



#### **Tapmatic MH Series Marking Heads**

Eliminate the need for expensive secondary marking operations. The Marking Head allows you to mark the work piece during the machining process.

Simple to install on Machining Centers, CNC lathes or even manually controlled conventional machines. Compact in size, they fit easily in the tool magazine or turret without interference.

With the Marking Head, no rotation is required. Simply advance the head against the work piece a short distance to charge the internal impact system and rapid feed away.

The impact force and marking depth can be adjusted by turning the knurled sleeve.

The Marking Heads shock absorbtion system cushions any recoil effect on the machine spindle or turret.

With the Marking Head you can hold standard type or custom made stamps. Mark part numbers, date codes, batch codes, logos or other information.

The marking location and depth are accurate and consistent.

Characters and stamps are securely held and can be changed quickly.

The Marking Head is fast. Stamping the work piece takes less than one second.

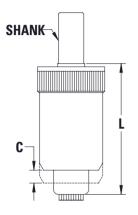




#### **CNC Marking Heads for use with standard type or custom stamps**

#### **How to Order**

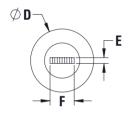
Please select the Marking Head with the shank to fit your application. Please order accessories like standard type or custom stamps separately. Please note the Marking Head accepts standard type directly or you can use one of the separate Type Holders for quick replacement of charcters and fast change over.



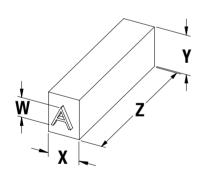
#### **MH Marking Heads**

| Model  | Order code | Shank      | E   | F    | D  | L   | Stroke<br>C | Weight kg |
|--------|------------|------------|-----|------|----|-----|-------------|-----------|
| MH 1/2 | 575020TH   | 20 mm      | 6.4 | 24.5 | 62 | 128 | 12          | 1.6       |
|        | 575025TH   | 25 mm      |     |      |    |     |             |           |
|        | 575075TH   | 3/4"       |     |      |    |     |             |           |
|        | 575010TH   | 1"         |     |      |    |     |             |           |
|        | 575003TH   | No.3 Morse |     |      |    |     |             |           |
| MH 3/4 | 577525TH   | 25mm       | 6.4 | 40   | 86 | 172 | 18          | 3.4       |
|        | 577510TH   | 1"         |     |      |    |     |             |           |

**Note:** The impact force of each marking head may be adjusted by turning its knurled sleeve. For softer materials like plastic we also have the ability to deliver a Marking Head with lighter springs. Please just let us know the details about your specific application for a recommendation.



#### **Standard Type Dimensions**



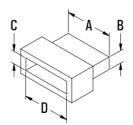
| W   | X   | Υ   | Z    | Order code<br>26 Letters | Order code<br>10 Numbers | Order code<br>Blank Spacer |
|-----|-----|-----|------|--------------------------|--------------------------|----------------------------|
| 1   | 1.6 | 6.4 | 22.2 | 5707111006               | 5707101000               | 5707014002                 |
| 1.5 | 1.6 | 6.4 | 22.2 | 5707112009               | 5707102003               | 5707014002                 |
| 2   | 2   | 6.4 | 22.2 | 5707113001               | 5707103006               | 5707015005                 |
| 2.5 | 2.4 | 6.4 | 22.2 | 5707114004               | 5707104009               | 5707016008                 |
| 3   | 3.2 | 6.4 | 22.2 | 5707115007               | 5707105001               | 5707017000                 |
| 4   | 4   | 6.4 | 22.2 | 5707120001               | 5707118008               | 5707021008                 |
| 5   | 4.8 | 6.4 | 22.2 | 5707117002               | 5707106004               | 5707018003                 |
| 6   | 6.5 | 9.5 | 19   | 5707950 *                | 5707951 *                | 5707952 *                  |

**Note:** To order individual letters or numbers please use the set order code shown above followed by the desired character.

FOR EXAMPLE: "5707111006D" for the letter D character with height of 1mm.

#### Type Holders for fast change over

| <i>,</i> . |            | •  |      |     |    |
|------------|------------|----|------|-----|----|
| Model      | Order code | Α  | В    | С   | D  |
| MH 1/2     | 5750THI    | 24 | 6.35 | 6.4 | 24 |
| MH 3/4     | 5775THI    | 40 | 6.35 | 6.4 | 40 |
| MH 3/4     | 5775THILG  | 40 | 6.35 | 9.6 | 40 |





#### **Custom Stamps Available on Request**

**Note**: Tapmatic can also supply custom stamps to fit the Marking Heads. Please let us know the details of your application and we will be pleased to provide a proposal drawing and quote.

<sup>\*</sup> Only for use with type holder 5775THILG

# effectivity of TAPINIANTIC's tools



# NEW! DeBurr-Z

## CNC Deburring Tool with **Compression and Extension Float**

- Deburr parts quickly and consistently on the CNC machine eliminating the need for tedious hand work.
- The Deburr-Z floats in both compression and extension allowing the cutting tool to follow the top edges or underside edges of the work piece, even when these are not clearly defined like in the case of castings and cross holes.
- Adjust the force to increase or decrease the pressure depending on the type of material and desired edge break.

**Top Edges** 





**Underside Edges** 





Intersecting

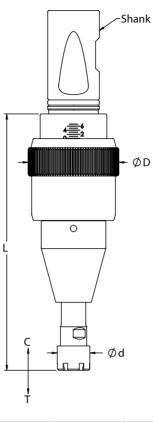


DeBurr-Z www.tapmatic.com



#### CNC tool holder for deburring and chamfering





- for deburring, and chamfering on CNC machines.
- floats in compression and extension for deburring the topside or underside edges of the work piece.
- the floating holder allows the cutting tool to follow the edges of the work piece even when these are not clearly defined like in the case of castings or cross holes.
- improves the life of cutting tools thanks to the adjustable compression force.
- speeds up the process by allowing faster approach feed rates.
- the compression and extension force can be simultaneously and equally adjusted for increasing or decreasing the pressure of the cutting tool against the work piece.
- ER11 collet holds a wide variety of burr cutting tools.
- easy programming and installation on the CNC machine.

#### **How to Order**

Please select the DeBurr-Z (A) and shank (B) to fit your application. Please order ER11 collets and Burrs separately.

| (A) | Model    | Order code | Shank | Collets (Capacity) | Max. RPM | Compression<br>C | Extension<br>T | d  | D  | L   | Weight kg |
|-----|----------|------------|-------|--------------------|----------|------------------|----------------|----|----|-----|-----------|
|     | DeBurr-Z | 57301      | 1"    | ER11 (2.5-6.5)     | 10,000   | 10               | 10             | 16 | 44 | 128 | 0.7       |
|     |          | 57320      | 20 mm |                    |          |                  |                |    |    |     |           |
|     |          | 57325      | 25 mm |                    |          |                  |                |    |    |     |           |

**Note:** Also available is a DeBurr-Z with 20mm cylindrical shank without flats. To order, please use Order Code 57320CY. All dimensions are shown in mm. 25.4mm = 1".

The DeBurr-Z can be used with spherical and angular shaped burrs, made from HSS or Carbide, in a variety of sizes and tooth patterns. These are available from different manufacturers.

Tapmatic offers special carbide burrs, like the examples shown here, for topside and underside edge deburring. They also include a sharp point that can be used for engraving. They can be used for a variety of materials including steel, aluminum and cast iron.

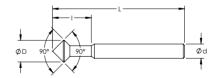


| Order code | d   | D    | 1  | L    |
|------------|-----|------|----|------|
| 52MM20590W | 6.4 | 9.5  | 17 | 58.5 |
| 52MM20591W | 6.4 | 12.7 | 20 | 61.5 |

Spherical burrs are also available.

| Order code | d   | D    | L    |
|------------|-----|------|------|
| 5250BW     | 6.4 | 12.7 | 62.5 |

Note: More sizes are available on request.





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Interchangeable Steep teners

ER11 Collets

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