# Tapef@rmers

MANUFACTURING FOR OVER 30 YEARS

## ESSENTIAL TOOL TO LONGITUDINALLY FORM TAPES



ISSUE 9

### RODUCT

#### ESSENTIAL TOOL TO LONGITUDINALLY FORM TAPES

#### Introduction

TapeFormers Ltd is based in the Midlands (UK), in a factory specifically designed for the manufacture of TapeFormers. We have a wide selection of laser cut and pre-machined parts so that on receipt of your order our skilled and experienced team can manufacture a TapeFormer to your specific requirements.

#### Our dedicated team endeavour to manufacture your TapeFormers and have them delivered to you quickly to help you meet deadlines.

You can search through the full selection of standard TapeFormer models we manufacture in this catalogue. We also cater for individual situations should your requirements differ from our standard TapeFormer models.

Remember, TapeFormers Ltd are here to help and advise you whenever possible. For general enquiries you can contact us by telephone or email. For a free quotation please contact us with the information as in the enquiry form on page 27.

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#### **General Information**



Without a TapeFormer, folding and creasing can occur...



With TapeFormer, much less risk of folding and creasing...

#### USED...

To wrap shielding around a cable before final jacketing.

#### CAN...

Insulate all manner of cables including LAN, phone, communication and automotive cable etc.

#### CAN...

Fold almost all varieties of insulating tape.

#### ARE...

Manufactured to individual specifications and can be adapted to almost all cable making machinery.

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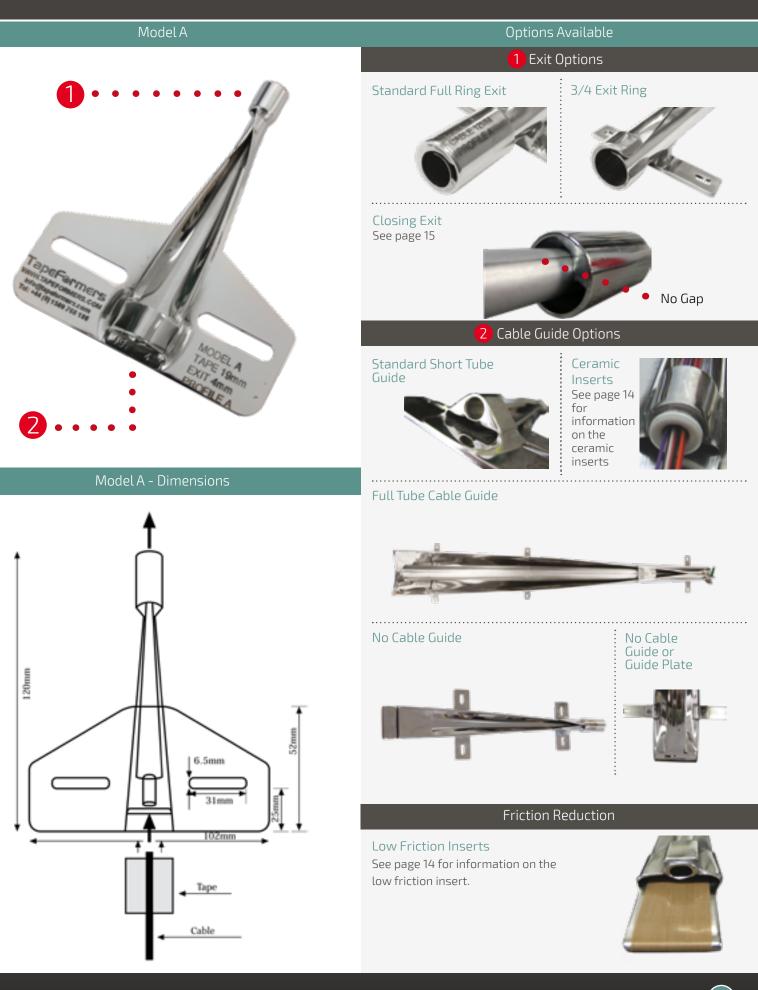
#### Guarantee

All TapeFormers are manufactured on confirmation of order; we do not hold stock of TapeFormers. It is important that you check your specification/s prior to placing the order as we do not issue credit for items incorrectly ordered. All our products are manufactured to a high standard and we are totally dedicated to supplying you our customer the solution to your TapeForming requirements.

For your peace of mind we offer the following six month guarantee. We guarantee that if any TapeFormer we supply does not operate and form just as you require, we will make alterations or replace it to your total satisfaction, giving you the confidence to buy from us.

To view our Terms and Conditions please visit: www.tapeformers.com/terms-and-conditions

## MODELA – **STANDARD RANGE** Tape widths ranging from 5mm (0.197 inch) to 20mm (0.787 inch)



## MODEL XL – EXTRA LONG RANGE Tape widths ranging from 5mm (3/16 inch) +

#### ESSENTIAL TOOL TO LONGITUDINALLY FORM TAPES

#### Model XL - Information

The Extra Long TapeFormer has been developed to bring the exit of the TapeFormer close to the tip inside the extruder head. The reason for having the exit close to the tip inside the extruder is so the tape is not allowed to unfold. The Model XL is manufactured to suit your application.

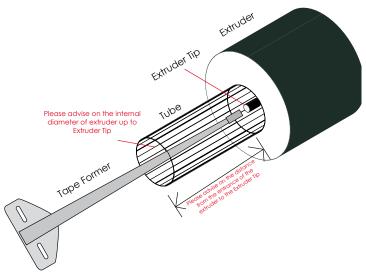
When ordering the Model XL please specify:

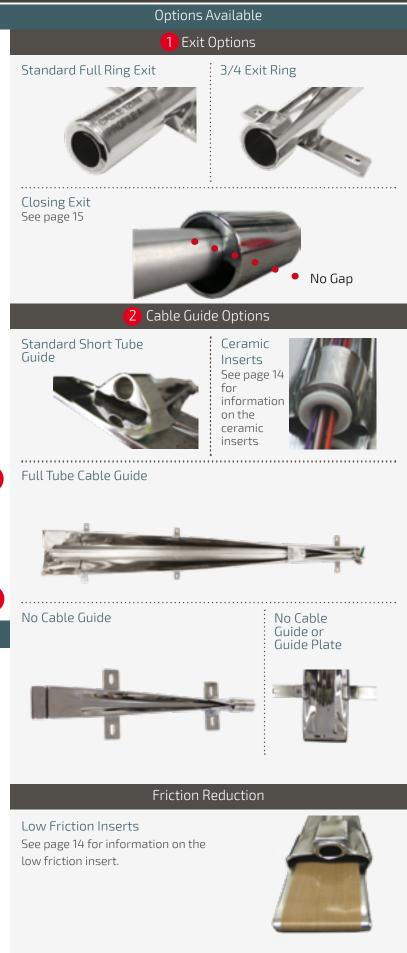
- Internal diameter of the extruder tube leading to the tip. .
- The length of the tube from the entrance of the extruder . to the tip.
- The distance from the TapeFormer mounting screw centres to the entrance of the extruder.

Our engineers can give you specific advice and guidance should you require.



#### Model A XL - Example Diagram





#### MODEL B – **STANDARD RANGE** Tape widths ranging from 21mm (0.827 inch) to 35mm (1.378 inch)

Options Available Model B 1 Exit Options Standard Full Ring Exit 3/4 Exit Ring **Closing Exit** See page 15 No Gap 2 Cable Guide Options Standard Short Tube Ceramic Guide Inserts See page 14 for information on the ceramic inserts Model B - Dimensions Full Tube Cable Guide No Cable Guide No Cable 125mm Guide or Guide Plate 6.5mm 31mm **Friction Reduction** 60mm Low Friction Inserts See page 14 for information on the low friction insert.

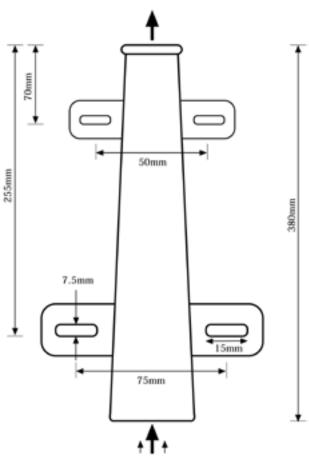
#### MODEL C – **STANDARD RANGE** Tape widths ranging from 36mm (1,417 inch) to 50mm (1.969 inch)

#### ESSENTIAL TOOL TO LONGITUDINALLY FORM TAPES

Model C



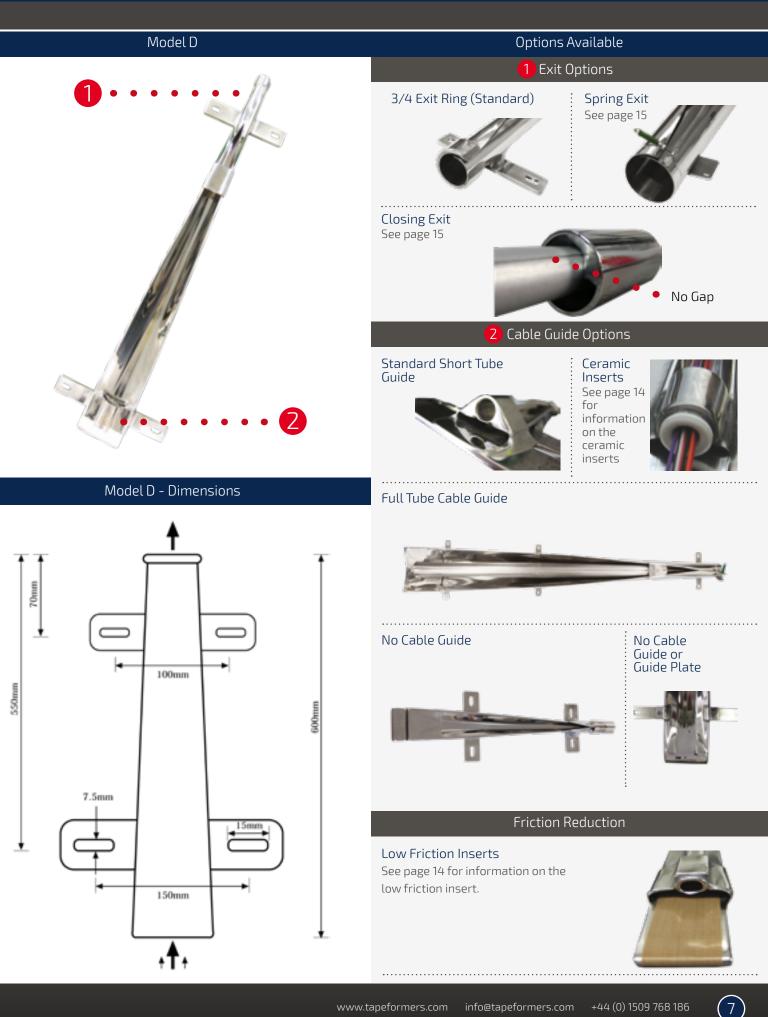
#### Model C - Dimensions



### **Options Available** 1 Exit Options Standard Full Ring Exit 3/4 Exit Ring **Closing Exit** See page 15 No Gap 2 Cable Guide Options Standard Short Tube Ceramic Guide Inserts See page 14 for information on the ceramic inserts Full Tube Cable Guide No Cable Guide No Cable Guide or **Guide Plate Friction Reduction** Low Friction Inserts See page 14 for information on the low Friction insert.

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## MODEL D – **STANDARD RANGE** Tape widths ranging from 51mm (2 inch) to 75mm (2.953 inch)

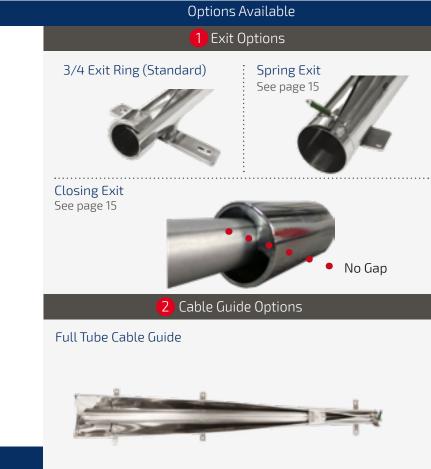


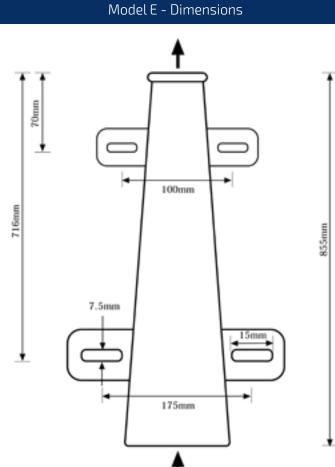
#### MODEL E – **STANDARD RANGE** Tape widths ranging from 76mm (3 inch) to 99mm (3.898 inch)

#### ESSENTIAL TOOL TO LONGITUDINALLY FORM TAPES

Model E







No Cable Guide (Standard)

No Cable Guide or Guide Plate



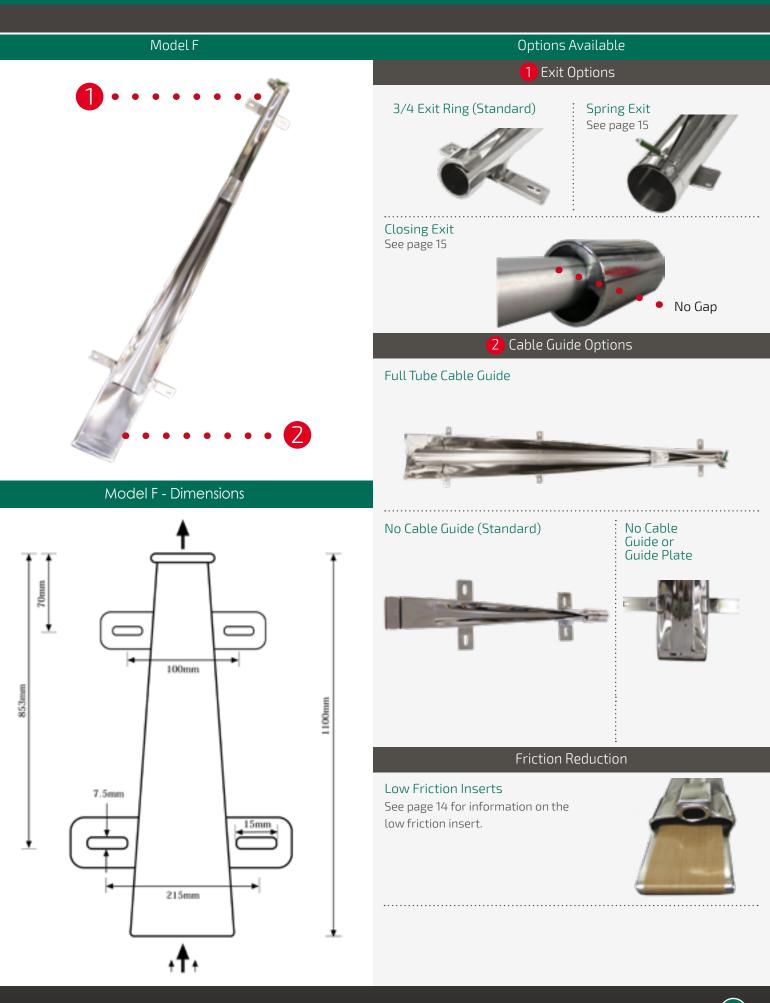
**Friction Reduction** 

Low Friction Inserts See page 14 for information on the low friction insert.



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## MODEL F – **STANDARD RANGE** Tape widths ranging from 100mm (3.937 inch) to 130mm (5.118 inch)



## MODEL G – **STANDARD RANGE** Tape widths ranging from 131mm (5.157 inch) to 180mm (7 inch) **flat entrance**. See page 13

Or from 181mm (7.1 inch) to 210mm (8.268 inch) curved entrance. See page 13

500mm

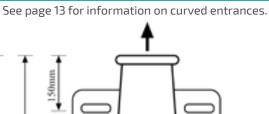
#### ESSENTIAL TOOL TO LONGITUDINALLY FORM TAPES

Model G

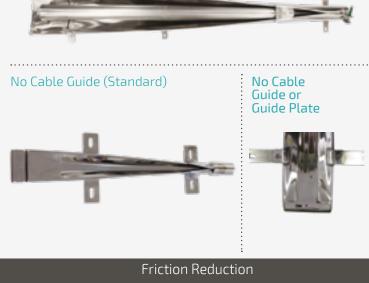




2 Cable Guide Options



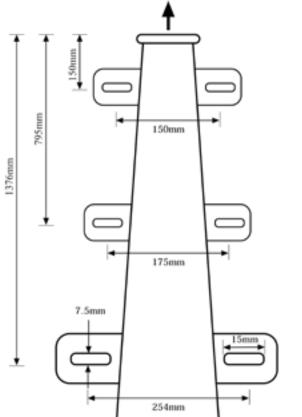
Model G - Dimensions



Low Friction Inserts See page 14 for information on the low friction insert.

Full Tube Cable Guide

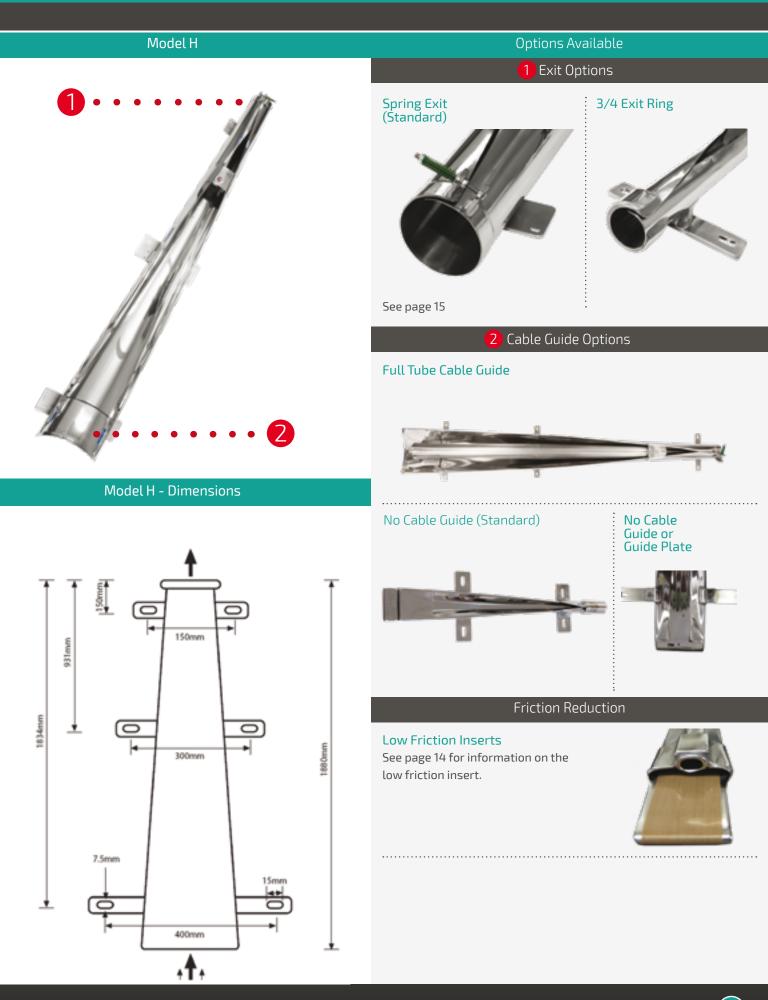




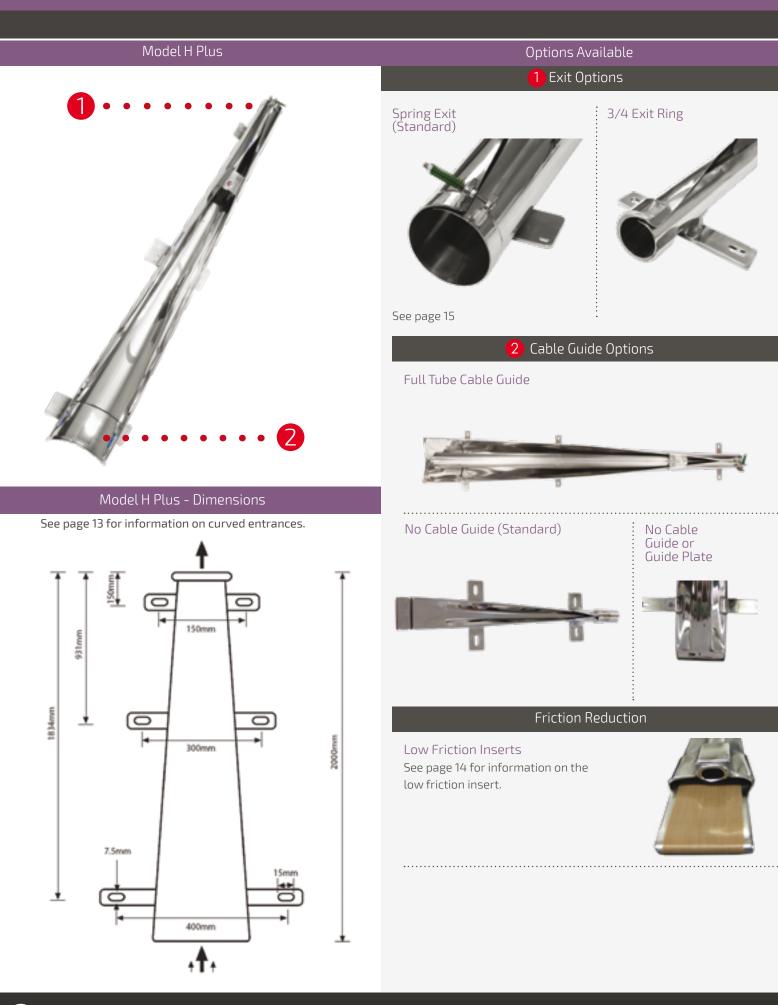
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## MODEL H – STANDARD RANGE Tape widths ranging from 181mm (7.1 inch) to 250mm (9.84 inch) flat entrance. See page 13

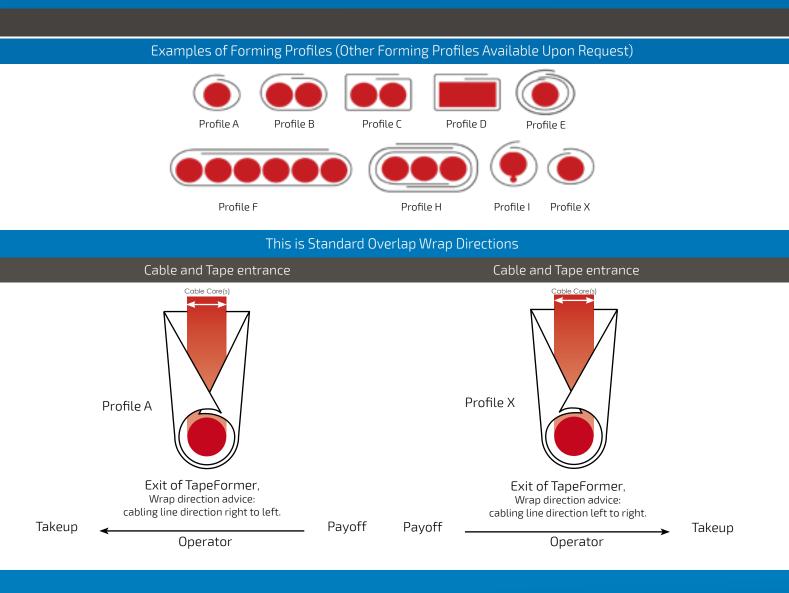


## MODEL H PLUS – **STANDARD RANGE** Tape widths ranging from 251mm (9.84 inch) to 480mm (18.898 inch) **curved entrance**. See page 13



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FORMING **PROFILES** TapeForming Profiles to suit any application



### APEFORMER WITH CURVED ENTRANCE

TapeForming Profiles to suit any application

Flat entrance TapeFormer

The standard flat entrance TapeFormer takes the tape from flat all the way to the formed shape.

Curved entrance TapeFormer



When it is not possible or desirable to make the TapeFormer long enough to start from the tape being flat, we can use a TapeFormer with a curved entrance. This means the initial forming of the tape is done in the air between the payoffs and the entrance of the TapeFormer. This initial forming can be aided by a pre former if necessary. It is important that there is enough space given so the tape is allowed to form in its natural length as forcing it to form in a shorter length will cause problems.

Example of the setup for a curved entrance TapeFor



## REPLACEABLE LOW FRICTION INSERT

#### ESSENTIAL TOOL TO LONGITUDINALLY FORM TAPES

#### How it Works

- The low friction insert provides a very low friction . barrier between the tape passing through the TapeFormer and the stainless steel.
- Available on all TapeFormers as they are . manufactured with more clearance to accept the low friction insert.
- Most effective on tape thickness 0.2mm and thicker. .
- Useful when the tape is used metal facing . outwards.

#### Benefits include:

- Greatly reduced friction of the tape passing through . the TapeFormer.
- When using metalised tape scoring is prevented . because there is no longer a metal to metal contact.
- Low friction insert is replaceable once worn.
- Reduced breakages of the tape due to friction.



CERAMIC INSERT Reducing wear on the cable guide - Extending Life and Reliability

#### How it Works

- The purpose of the ceramic insert is to reduce wear . of the initial cable guide.
- Useful when the cable is bare metal or covered with a . braiding.
- Available on models A to D.

#### **Benefits include:**

Longer cable guide life.





#### Low Friction Insert

### SPRING EXIT OPTION

#### How it Works

• The Spring exit option is available on Model D, E, F, G, H, H Plus.

#### Spring exit features:

- Ability to adjust the exit diameter of the TapeFormer by small amounts.
- Adjustment of the spring pressure.

#### Benefits include:

- A constant pressure is applied to the cable maintaining a tight wrap.
- The Spring allows for small changes in the cable diameter while maintaining a good tape wrap.

### CLOSING EXIT OPTION

#### How it Works

• The top overlap is closed down resulting in no gap.

#### Benefits include:

- Tightly wrapped tape.
- Less likely to require closing dies.
- Possibility to use narrower tapes.



#### Showing the difference - This is the Standard Exit



Gap





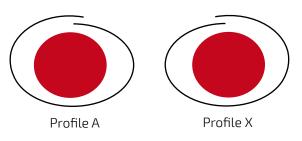
Closed Exit

### SHORT TAPEFORMERS

#### ESSENTIAL TOOL TO LONGITUDINALLY FORM TAPES

#### How it Works

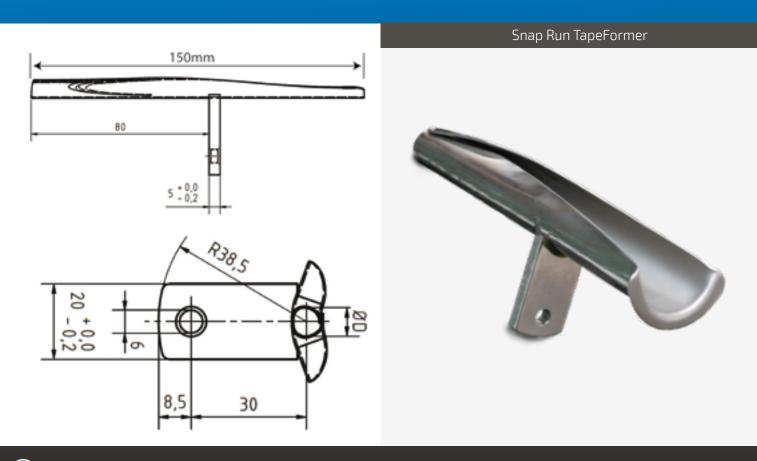
- For large tape widths, recommended 400mm +.
- Exit options are 3/4 ring exit or spring exit.
- Possible profiles are A or X.
- Curved entrance see page 13.
- Various mounting bracket designs are possible.





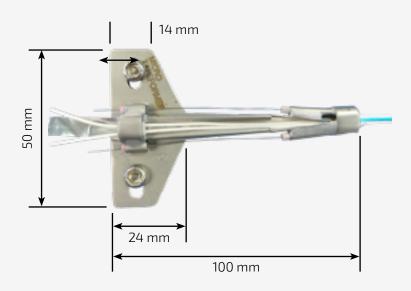
Short TapeFormer

### SNAP RUN TAPEFORMERS



#### How it Works

MINIMUM Tape width 4.5mm (0.177 inch) Cable diameters 0.6mm up to 3mm MINIMUM Cable size 1.2mm x 0.6mm



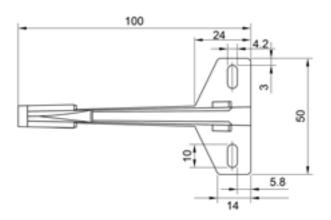
Micro Tapeformers recommended Tape width for 2 x cores		
Individual core diameter mm	Tape width mm	
2 x 0.60	4.5	
2 x 0.70	5.0	
2 × 0.80	6.0	
2 x 0.90	7.0	
2 x 1.00	8.0	
2 x 1.10	8.5 / 9	
2 x 1.20	9.0	
2 x 1.30	10.0	
1.35	10.0	
2 x 1.36	11.0	
2 x 1.4 /1.42	11/11.5/12	
2 x 1.50	11.5/12	

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ESSENTIAL TOOL TO LONGITUDINALLY FORM TAPES

Bracket Types

#### **Bracket Type A**



#### 

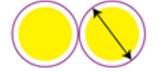
Bracket Type B

Entrance Cable Guide Design

#### **Option 1**:

Cable Design 1:

#### Seperate insulated cables



Diameter of each insulated cable

If a centrial guide is required normally it is two seperate stainless steel tubes:

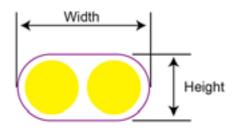


Single insulated cable entrance

#### **Option 2**:

Cable Design 2:

#### Bonded insulated cables



If a centrial guide is required it is an oval stainless steel tube:

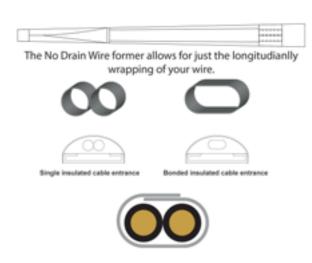


Bonded insulated cable entrance

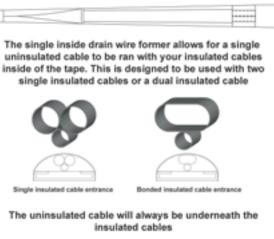
(18)

#### Insulated Cable and Drain Wire Guide Design

#### **Option 1: No Drain Wire**

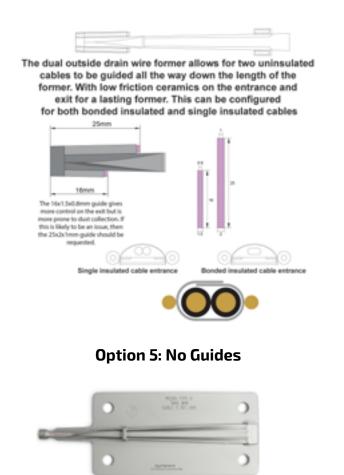


#### **Option 2: Single Inside Drain Wire**





#### **Option 3: Dual Outside Drain Wires**



#### **Option 4: Single Inside and Dual Outside**



We can do a combination of a dual and single uninsulated cable former. This allows the former to be used in either configuration



#### **Option 6: Dual Outside Drain Wires, No Guides**



No Cable guide entrance



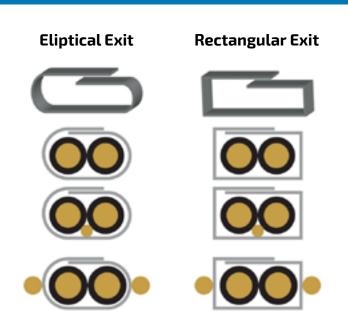
ESSENTIAL TOOL TO LONGITUDINALLY FORM TAPES

#### Exit Option

All Microformers are designed and manufactured in Profile A only (cable and line direction right to left).

We offer two exit types, Eliptical and Rectangular.

If you are unsure which you would like to use, our engineerswould suggest eliptical as this has proven to give a more reliable and better wrap.



#### Low Friction Inserts

In addition to standard formers, we have some features that can be added to the formers.

A low friction insert strip can be included. This is a user replaceable consumable.





### PROFILE E DOUBLEWRAP **TAPEFORMER**

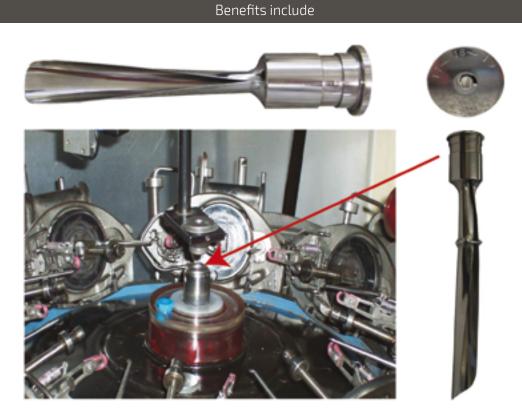
#### How it Works

Profile E Applies two tapes in one process. If required, a drain wire can be introduced between the tapes. Profile E is possible with tape widths from 5mm up • to 280mm. Please enquire about larger tape widths. Tape Profiles Profile E Profile E Entrance Profile E(1) Profile E(2) Profile E(1) Profile E(2) With drain wire With drain wire (Drain wire can only be positioned in (Drain wire can only be positioned in the 9 o'clock or 3 o'clock position) the 9 o'clock or 3 o'clock position) Profile E Options Ceramic Inserts See page 14 for further information on the ceramic inserts. Without drain wire Without drain wire

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## BRAIDING MACHINE TAPEFORMERS

#### ESSENTIAL TOOL TO LONGITUDINALLY FORM TAPES



How it Works

- Very accurate forming of the tape. .
- Quick load times. .
- Reduced tape breakages. •
- Almost no tension is required on the tape. .









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### FLEECE TAPE TAPEFORMERS

#### This TapeFormer has been designed for delicate tapes for example fleece.

- Pre TapeFormer tape guide / tensioner. .
- Top low friction insert to keep the tape in . shape throughout the TapeFormer.
- Longer TapeFormer length for more gentle . tape forming.
- Samples of cable and tape are required to manufacture this TapeFormer.

### LAN TWIST TAPEFORMERS

#### How it Works

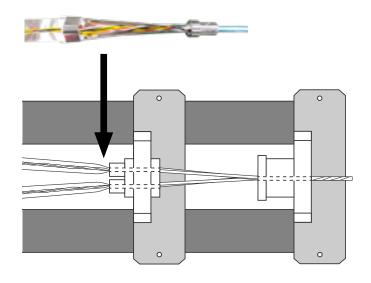
TapeFormer designed to be mounted in a holder. . Uses the closing exit to make a tight wrap of the tape around the individual bunches prior to twisting.

#### Benefits include:

- Guaranteed tape overlap direction.
- Better tape control. .
- Tight tape form around the cable. .
- Greatly reduced friction. .

#### Tape wrap direction advice:

- Cable Z Lay = Profile A
- Cable S Lay = Profile X









### USA BUILDING WIRE **TAPEFORMER**



Designed specially for forming paper tapes around the ground wire and then the cores and ground wire in a single TapeFormer.

#### How it Works

Based upon our TapeFormers Model C and D dimensions, allowing complete longitudinal paper tape wrapping during the manufacture of building wire.

The design consists of two TapeFormers fitted together with a ceramic guide to accommodate the copper ground wire insertion.

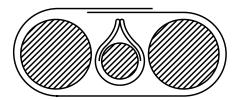
A version is available to form tape around just the ground wire and can include guides for the insulated cores.

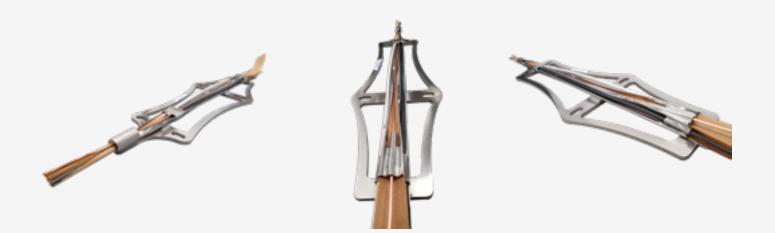
Information required for manufacture

- Insulated core diameter each core.
- Ground wire diameter.
- Tape width ground wire: Normally 0.875" (22mm) for all ground wire diameters.
- Tape width assembly please visit our dedicated USA Building Wire TapeFormer pages on our website.
- Tape thickness.

Tape Profile







### USA BUILDING WIRE TAPEFORMER

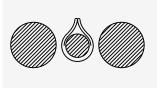


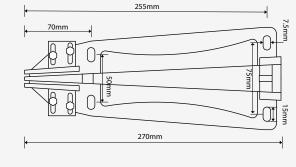
Designed specially for forming paper tapes around the ground wire and then the cores and ground wire in a single TapeFormer.



Profile



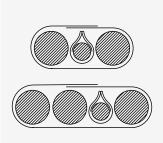


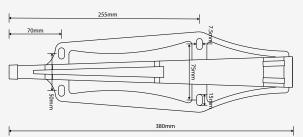


Model C Building wire TapeFormer: Outer tape widths up to 45mm (1.77")

Profile

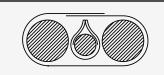






#### Model D Building wire TapeFormer: Outer tape widths 45mm + (1.77"+)



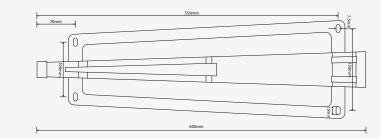




Popular Profiles

2 insulated cores 1 ground wire

3 insulated cores 1 ground wire





#### SPECIAL TAPEFORMER Creating a TapeFormer to your Specific Requirements

#### ESSENTIAL TOOL TO LONGITUDINALLY FORM TAPES

If you have an application that will require a special design of a TapeFormer, we can develop this or replicate your existing TapeFormer design. Please contact us for more information.

Due to the nature of special TapeFormers we cannot guarantee perfect success. Any alterations or reworks will be charged for on a case by case basis.

Please email us info@tapeformers.com



### ADJUSTABLE TAPEFORMER MOUNTING BENCH

Small TapeFormer Mounting Bench Suitable for Models A, B, C and D

The top of the mounting bench slides backwards to allow loading of the TapeFormer and forwards to allow the TapeFormer exit to be close to the extruder head.



### TAPEFORMER TOLERANCE

A TapeFormer exit is a fixed dimension and it is designed to be used with the cable diameter, tape width and tape thickness it has been manufactured for.

A jam will occur if a TapeFormer is used with a larger cable diameter, tape width and tape thickness than it was manufactured for, so this is not possible.

In some cases, it is possible to use a TapeFormer with a smaller cable diameter, tape width and tape thickness when used with a tape closing device e.g. a die. We cannot give guidance on how much smaller the cable and tape can be, tests need to be made to decide what is acceptable. The pictures on the right give an idea of what happens when a TapeFormer is being used with the correct size cable and tape, and a smaller cable and tape. We cannot guarantee the performance of a TapeFormer that is being used with a smaller cable and tape that it was manufactured for.

Being used with correct cable and tape. Cable TapeFormer Tape Being used with smaller cable and tape. Cable



### TAPEFORMER ENQUIRY FORM

#### Key Information for TapeFormer Models

- TapeFormers are manufactured as fixed sizes so each cable and tape combination will require a separate TapeFormer.
- The size of the TapeFormer is decided by the tape width and is shown as Models in our range.
- Tape width is decided by the cable circumference plus the required overlap.

In order to make a quotation we require the following information for each TapeFormer, please visit our website to complete a Product Enquiry Form

#### 1. Tape Width:



#### 2. Tape Thickness:



**3.** Is there a splice (joint) made in the tape that is to pass though the TapeFormer? If yes what is its thickness at this point?

#### 4. Cable diameter before tape application? or exit diameter?

Cable diameter before tape application.

TapeFormer exit diameter.





Exit diameter.

Please specify which dimension you are giving us.

or

#### 5. Profile.

If not shown on our profiles page or website please send a picture or make a drawing.

#### 6. TapeFormer type:

Standard Model Model Extra Long Short TapeFormers Snap Run TapeFormer Micro TapeFormer – please see our website Profile E Double wrap TapeFormer Braiding Machine TapeFormer Fleece TapeFormer LAN Twist TapeFormer USA Building Wire TapeFormer Special TapeFormer

#### 7. Cable Guide options:

Ceramic Insert Models A to D Short Tube Guide Models A to D Full Tube Guide No Cable Guide No Cable Guide or Plate

#### 8. Exit Options:

Closing Exit Spring Exit Model D to H Plus Version ¾ Ring Exit Full Exit Ring

#### 9. Friction Reduction insert.

#### 10. Customer Details:

Name: Position: Company: Telephone: Email:

**FAQ:** www.tapeformers.com/faq **Terms and conditions:** www.tapeformers.com/terms-and-conditions

# TapeF@rmers

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#### info@tapeformers.com



Visit our website



Download our brochure