

# POP<sup>®</sup>



## Setting Tools

For POP<sup>®</sup> Rivets and POPNut<sup>®</sup> Threaded Inserts

# POP®

## POP® Rivet Setting Tools

From professional hand pliers to high capacity power tools, POP® rivet tools are reliable and lightweight, with a high force-to-weight ratio. They have been ergonomically designed and are easy to maintain.



Rivet Hand Tools	4
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The POP® rivet installation sequence is simple.

1. Place the mandrel of the POP® rivet into the nosepiece of the setting tool.
2. Insert the POP® rivet body through the hole of the materials to be fastened.
3. Pull the trigger of the setting tool. The POP® Rivet body clamps the materials together and expands to form a secondary head on the blind side of the joint. The mandrel breaks at a pre-determined force.
4. The materials are now fastened together.



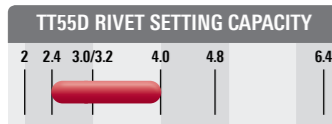
## Rivet Hand and Battery Tools

POP® hand tools. Durable and reliable.  
Ideal for a wide range of applications.



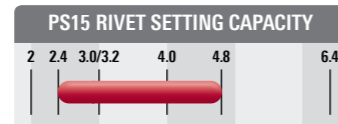
### TT55D

Classic Hand Plier  
Rivet Tool



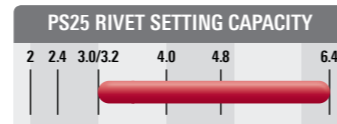
### PS15

Hand Plier  
Rivet Tool



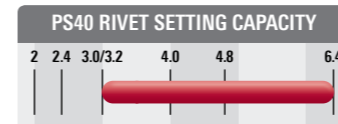
### PS25

Lazy Tong  
Rivet Tool



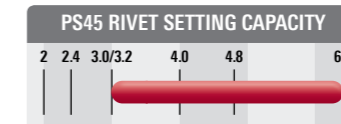
### PS40

Lever  
Rivet Tool



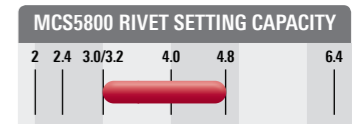
### PS45

Telescopic  
Lever Rivet Tool



### MCS5800

Li-Ion  
Battery Tool



Professional standard  
Lightweight, robust and ergonomic  
Supplied with full capacity range  
of nosepieces  
Supplied with nosepiece wrench

Professional standard  
Lightweight, robust and ergonomic  
Supplied with full capacity range  
of nosepieces  
Supplied with nosepiece wrench

Versatile, cordless tool for indoor  
or outdoor applications  
High setting speed  
Well balanced with optimum  
center of gravity  
Supplied with full capacity range  
of nosepieces  
Supplied with nosepiece wrench

Article: 15370

Capacity: 2.4 - 4.0
Weight: 0.4kg
Length: 229mm

Article: 17492

Capacity: 2.4 - 4.8
Weight: 0.6kg
Length: 245mm

Article: 17496

Capacity: 3.0/3.2 - 6.4
Weight: 2.4kg
Length closed: 305mm
Length extended: 805mm

Article: 17493

Capacity: 3.0/3.2 - 6.4
Weight: 1.9kg
Length: 515mm

Article: 17494

Capacity: 3.0/3.2 - 6.4
Weight: 2.6kg
Length: 490mm
Length extended: 665mm

Article: 15701

Capacity: 3.0/3.2 - 4.8
Weight: 2.2kg
Length: 265mm
Height: 300mm
Tool Stroke: 20mm

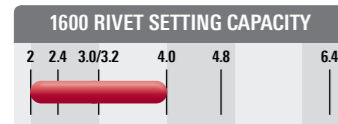
## Rivet Power Tools

POP® pneumatic power tools.  
Setting a new standard.



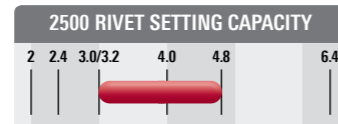
### ProSet® 1600 MCS

Micro to Mid-Range  
Power Tool



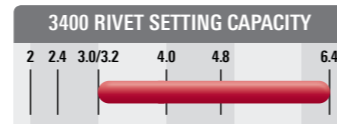
### ProSet® 2500 MCS

Mid-Range  
Power Tool



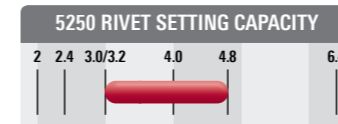
### ProSet® 3400 MCS

High Capacity  
Power Tool



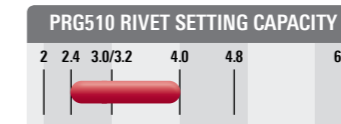
### MCS5250

In-Line  
Power Tool



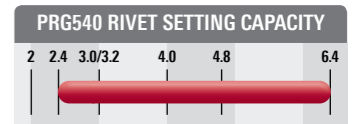
### PRG510

Robust  
Power Tool



### PRG540

Heavy Duty  
Power Tool



- Lightweight polymer construction
- High force-to-weight ratio
- Comfortable two finger activation
- Quick disconnect front end assembly and MCS
- Energy saving on/off, left or right swivel air fitting
- Spring return for reliable fast setting
- Available with MCS (pictured) or deflector

- In-Line tool for suspension and POP® riveting in a vertical plane
- Supplied with MCS5000 remote vacuum mandrel collector

- Fully pneumatic
- Simple and effective
- High tensile aluminium casting

- Strong and durable
- High tensile aluminium casting

Article: 13492

<b>Capacity:</b> 2.0 - 4.0
<b>Weight:</b> 1.05kg
<b>Length:</b> 272mm
<b>Height:</b> 227mm
<b>Tool Stroke:</b> 18mm
<b>Pulling Force:</b> 4850N @ 6.2 bar
<b>Force/Weight Ratio:</b> 4.6kN/kg

Article: 14063

<b>Capacity:</b> 3.0 - 4.8
<b>Weight:</b> 1.31kg
<b>Length:</b> 304mm
<b>Height:</b> 259mm
<b>Tool Stroke:</b> 18mm
<b>Pulling Force:</b> 9400N @ 6.2 bar
<b>Force/Weight Ratio:</b> 7.18kN/kg

Article: 63408

<b>Capacity:</b> 3.2 - 6.4
<b>Weight:</b> 2.00kg
<b>Length:</b> 334mm
<b>Height:</b> 316mm
<b>Tool Stroke:</b> 26mm
<b>Pulling Force:</b> 18500N @ 6.2 bar
<b>Force/Weight Ratio:</b> 9.74kN/kg

Article: 15685

<b>Capacity:</b> 3.0 - 4.8
<b>Weight:</b> 1.8kg
<b>Length:</b> 397mm
<b>Width:</b> 113mm
<b>Tool Stroke:</b> 15.87mm
<b>Pulling Force:</b> 7.56kN

Article: 16260

<b>Capacity:</b> 2.4 - 4.0
<b>Weight:</b> 1.8kg
<b>Length:</b> 166mm
<b>Height:</b> 293mm
<b>Tool Stroke:</b> 15.87mm
<b>Pulling Force:</b> 4.48kN

Article: 16500

<b>Capacity:</b> 2.4 - 6.4
<b>Weight:</b> 2.2kg
<b>Length:</b> 230mm
<b>Height:</b> 293mm
<b>Tool Stroke:</b> 17.4mm
<b>Pulling Force:</b> 14.2kN

## Riveting Systems

POP® rivet setting systems. Increase the efficiency of your production line.



### Multi-Head

#### Multiple Rivet Setting Workstations

- Purpose built with multiple setting heads
- Designed for individual customer needs
- Simultaneous rivet setting saves time
- Foot operated trigger frees both hands for rivet loading and manoeuvring assembly
- High reliability minimises downtime
- Integral mandrel collection keeps workspace tidy

### Rivet Presenter

#### Rotary Bowl Rivet Feeding System

- Facilitates single handed, high speed riveting and setting
- To be used in conjunction with any ProSet® Rivet Power tool (MCS Version)
- Feeder bowl has capacity for up to 1000 rivets
- Rivet is automatically loaded into the front of the tool when the tool is inserted into the receptacle at the front of the Rivet Presenter
- Easy to refill
- Ideal for "white glove" environments

### Point&Set®

#### Automatic Riveting System

- Portable auto-feed riveting
- High speed and operator controlled
- Suitable for high volume POP® riveting where freedom of movement is required
- Feeder capacity 2500 rivets
- Can be integrated into a fully automated robotic rivet setting cell
- Operator interface module for programming and self diagnostics
- Contact Emhart for information on rivet compatibility

### MCS5000

#### Remote Mandrel Collector

- Holds up to 8500 spent mandrels
- Promotes easy removal and recycling of scrap mandrels

**Weight:** 10.4kg

**Length:** 546mm

**Height:** 336mm

**Width:** 222mm

**Working Air Pressure:** 5.8 bar

**Weight:** 61.2kg

**Height:** 762mm

**Width:** 342mm

**Depth:** 711mm

**Weight:** 2.2kg

**Height:** 414mm

**Diameter:** 527mm

**Air Consumption:** 317litres/min

**Max. Tube Length:** 4.5m

**Max. Rise:** 1.8m

**Max. Mandrel Length:** 50mm

## Rivet Tool Accessories

Corner heads and front end kits.  
For restricted access.

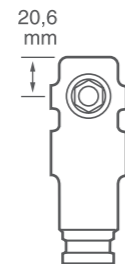
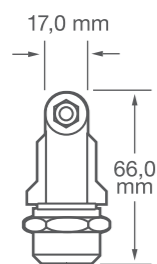
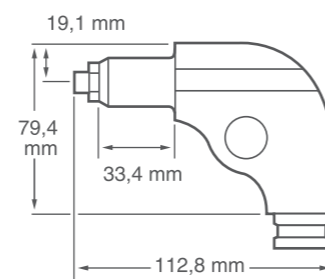
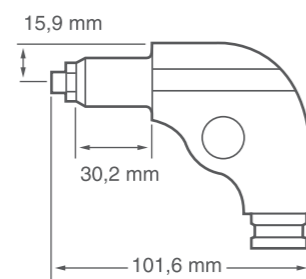
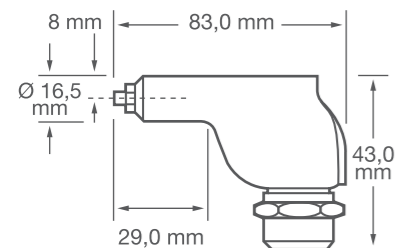


**PRH830**

**PRH840**

**PRH850**

**Front End Kits**



**For use with:**  
ProSet® 2500 Adaptor Kit: 18731  
PRG510 Adaptor Kit: 19490  
PRG540 Adaptor Kit: 19488

**For use with:**  
ProSet® 2500 Adaptor Kit: 18737  
ProSet® 3400 Adaptor Kit: 18750  
PRG510 Adaptor Kit: 19153  
PRG540 Adaptor Kit: 19145

**For use with:**  
ProSet® 3400 Adaptor Kit: 18869  
PRG540 Adaptor Kit: 19254

Article: **19480**

Capacity: up to 3.2mm

Weight: 0.31kg

Article: **19024**

Capacity: up to 4.8mm

Weight: 0.5kg

Article: **19240**

Capacity: up to 6.4mm

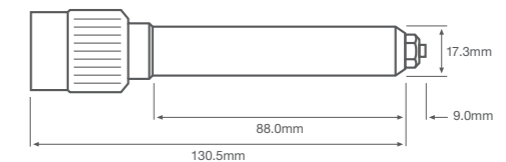
Weight: 0.76kg

### ProSet® 1600

Extended front end for deep applications

Capacity: 2.4 - 4.0mm

Article: **13495**

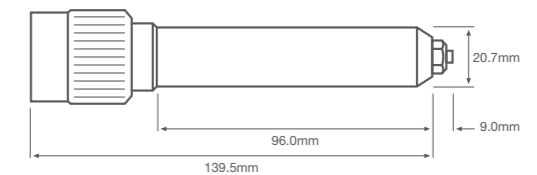


### ProSet® 2500

Extended front end for deep applications

Capacity: 3.0 - 4.8mm

Article: **13163**

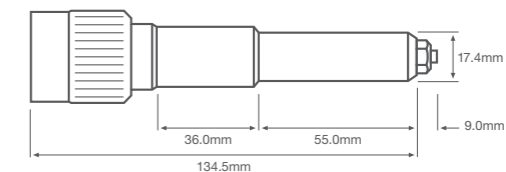


### ProSet® 2500

Reduced diameter extended front end for narrow applications

Capacity: 3.0 - 4.0mm

Article: **13164**

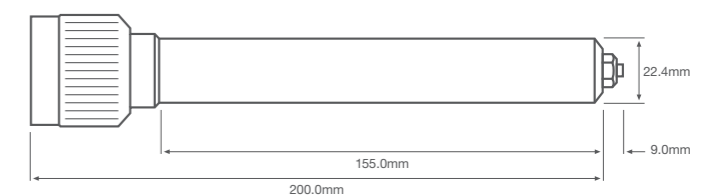


### ProSet® 3400

Extended front end for deep applications

Capacity: 3.2 - 6.4mm

Article: **13172**



## POP® Rivet Range

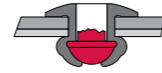
All from one source.

POP® Rivet and Tools – the perfect combination.



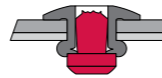
### Break Stem Open

General purpose open rivet available in wide range of materials and head styles. Suitable for applications with normal load bearing requirements.



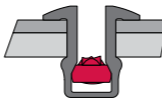
### Vgrip™

High performance, Multi-Grip rivet with excellent claim properties and a wide blind side spread. Also features a positively retained mandrel head and grooved stem for optimum tool jaw life.



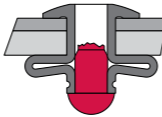
### Closed End

Designed with a completely closed body, this rivet is ideal for applications that need to be water/pressure tight or where mandrel retention is paramount.



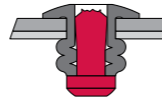
### LSR (Load Spreading Rivet)

Load spreading characteristics make this rivet ideal for use in vulnerable, friable and the softest of materials.



### MGR (Multi-Grip Rivet)

The Multi-Grip rivet is designed to accommodate a wider grip range than other rivets allowing for lower inventory levels. Also provides good, rattle free, joint construction even in irregular holes.



### FSR (Flush Setting Rivet)

Open rivet that sets flush on both sides of the application when set into a double countersunk hole. This space saving rivet offers near zero protrusion and eliminates loose mandrels.



### Peel

Ideal for joining softer and more brittle materials such as plastics, rubber, wood, GFRP or laminates.



### TVD

This unique closed end stainless steel range provides additional support to assemblies where weak or thin blind side materials are present.



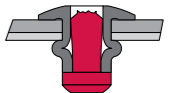
### T-Rivet

The T-Rivet offers all the features of a peel rivet with the added benefit of pull-up. Improved shear strength is also achieved due to mandrel head retention after setting.



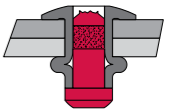
### F Series

F series provides excellent hole fill for superior vibration resistance combined with a locked, rattle free mandrel that results in great joint construction.



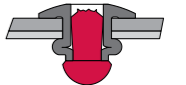
### HS (High Strength)

The POP® rivet with the strength of an M6 Bolt also provides excellent claim properties, a positively retained mandrel head and wide blind side expansion.



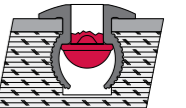
### HR (High Retention)

Exceptional pull-up capability and increased blind side expansion give the perfect combination for overcoming air gaps whilst spreading the load during setting. Excellent mandrel retention and rattle resistance after setting.



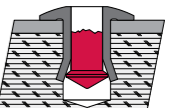
### Grooved

Aluminium rivet for fixing into wood and other soft/fibrous base materials. Suitable for use in blind non-through holes.



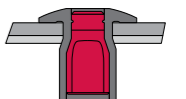
### STR

This steel rivet has a peeling body ideal for use in wood and providing high resistance to pull out loads and mandrel head retention.



### Ultra-Grip

Ultra-Grip (UG) Structural POP® Rivets offer high shear strength across wide grip ranges. The product also features excellent pull-up capability, provides hole filling and the resultant set product is rattle free.



# POP Nut<sup>®</sup>

## Threaded Insert Setting Tools

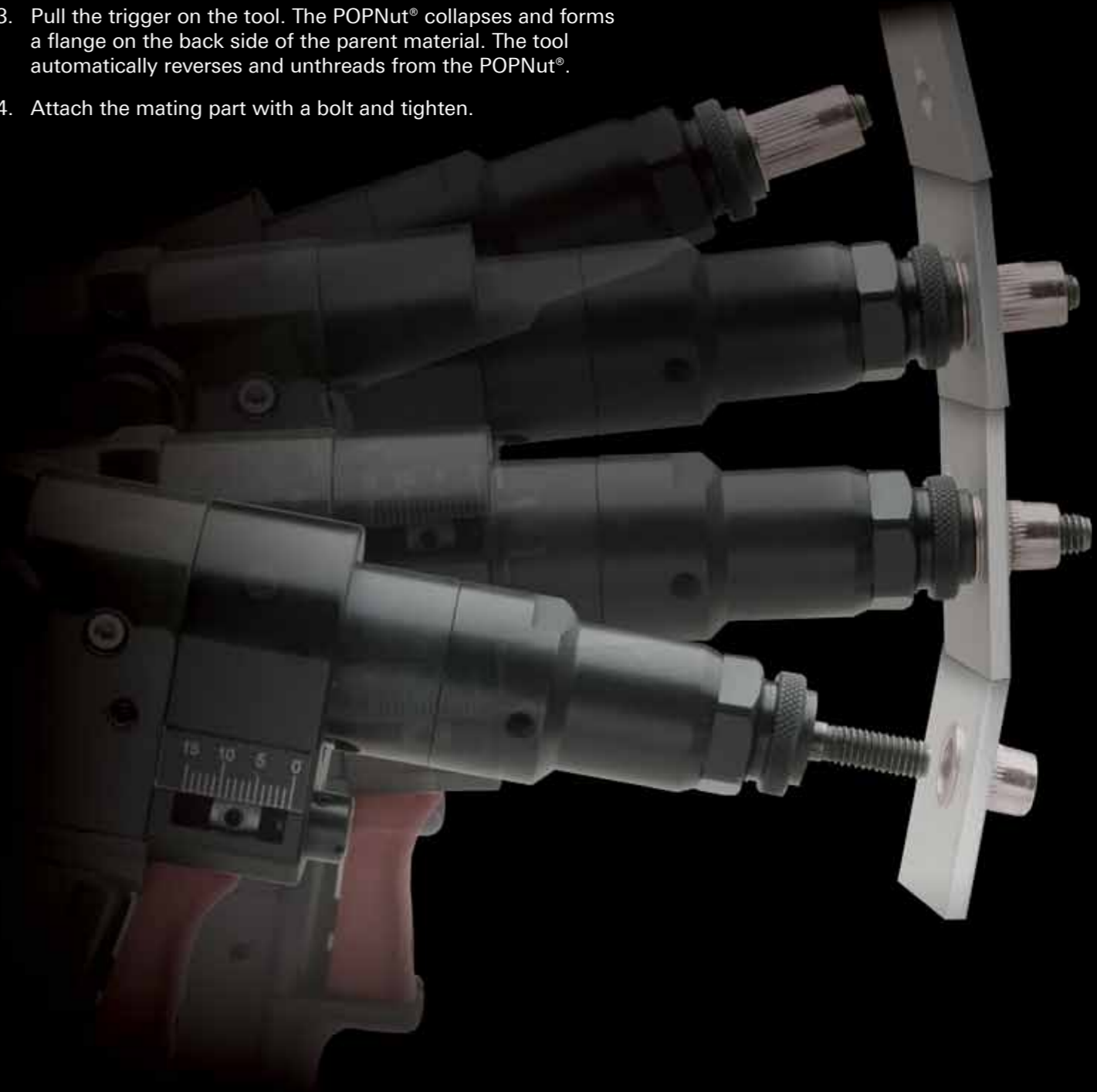
POPNut<sup>®</sup> setting tools give you the most up-to-date features to provide you with excellent setting performance. Compact and lightweight, reliable and easy to use, our tools offer optimum performance, whatever your application.



Threaded Insert Hand Tools	16
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The POPNut<sup>®</sup> installation sequence is simple.

1. Push the POPNut<sup>®</sup> on the tool mandrel and it automatically spins on.
2. Place the POPNut<sup>®</sup> in the hole in the parent material.
3. Pull the trigger on the tool. The POPNut<sup>®</sup> collapses and forms a flange on the back side of the parent material. The tool automatically reverses and unthreads from the POPNut<sup>®</sup>.
4. Attach the mating part with a bolt and tighten.





## Threaded Insert Hand Tools

POPNut® hand tools. Ideal for light engineering work, maintenance and repair.



### PNT110

Hand Plier Tool

### PNT210

Ratchet Tool

### PNT310

Spindle Lever Tool

### PNT410

Lever Tool

#### PNT110 SETTING CAPACITY

ALUMINIUM	M3 - M6
STEEL	M3 - M5
STAINLESS STEEL	M3 - M5

#### PNT210 SETTING CAPACITY

ALUMINIUM	M4 - M12
STEEL	M4 - M12
STAINLESS STEEL	M4 - M12

#### PNT310 SETTING CAPACITY

ALUMINIUM	M4 - M12
STEEL	M4 - M10
STAINLESS STEEL	M4 - M8

#### PNT410 SETTING CAPACITY

ALUMINIUM	M5 - M12
STEEL	M5 - M12
STAINLESS STEEL	M5 - M10

Professional standard  
 Lightweight, strong design  
 Adjustable mandrel protrusion  
 Quick change mandrel and nosepiece  
 Supplied with full capacity range of mandrels and nosepieces

Professional standard  
 Lightweight, strong design  
 Adjustable mandrel protrusion  
 Quick change mandrel and nosepiece  
 Supplied with full capacity range of mandrels and nosepieces

Article: 43111

**Weight:** 0.8kg

**Length:** 240mm

Article: 43112

**Weight:** 1.3kg

**Length:** 210mm

Article: 43113

**Weight:** 2.4kg

**Length:** 555mm

Article: 43114

**Weight:** 2.1kg

**Length:** 580mm

## Threaded Insert Power Tools and Systems

POPNut® power tools. Stroke or pneumatic control to suit your production environment.



### PNT800L-PC

Pneumatic Control Tool

#### PNT800L-PC SETTING CAPACITY

ALUMINIUM	M6 - M10
STEEL	M4 - M10
STAINLESS STEEL	M4 - M10



### PNT1000L-PC

Pneumatic Control Tool

#### PNT1000L-PC SETTING CAPACITY

ALUMINIUM	M6 - M12
STEEL	M6 - M12
STAINLESS STEEL	M6 - M12

- Pneumatic control (PC) function automatically selects optimum stroke
- Fast cycle time as optimum stroke always delivered
- Automatic mandrel spin on for fast insert loading
- Quick change mandrel and nosepiece
- Lightweight, compact structure
- Single trigger pull for setting and reverse

Article: 42709

<b>Weight:</b> 1.81kg
<b>Length:</b> 287mm
<b>Height:</b> 268mm
<b>Tool Stroke:</b> 1.3 - 6.5mm
<b>Working Air Pressure:</b> 4.9 - 5.9 bar

Article: 42708

<b>Weight:</b> 2.77kg
<b>Length:</b> 315mm
<b>Height:</b> 295mm
<b>Tool Stroke:</b> 1.3 - 10.5mm
<b>Working Air Pressure:</b> 4.9 - 5.9 bar



### PNT800A

Pneumatic-Hydraulic Stroke Tool

#### PNT800A SETTING CAPACITY

ALUMINIUM	M3 - M10
STEEL	M3 - M10
STAINLESS STEEL	M3 - M8

- Spin-pull pneumatic hydraulic tool
- Automatic mandrel spin on for fast insert loading
- Quick change mandrel and nosepiece
- Simple stroke adjustment gauge
- Lightweight, compact structure
- Single trigger pull for setting and reverse

Article: 42825

<b>Weight:</b> 1.68kg
<b>Length:</b> 288mm
<b>Height:</b> 263mm
<b>Tool Stroke:</b> 1.3 - 6.5mm
<b>Working Air Pressure:</b> 4.9 - 5.9 bar



### POP® Counter System

Simple-to-use Batch Counter

- Simple "key set" display
- Counts each tool trigger pull
- Batch complete indicator
- Automatic air cut-off at batch complete point
- Assists operator accuracy
- Supports the quality assurance of the assembly process
- Helps ensure the correct number of threaded inserts has been set

<b>Weight:</b> 5kg
<b>Height:</b> 200mm
<b>Width:</b> 200mm
<b>Depth:</b> 120mm
<b>Max. Batch Quantity:</b> 999

## POPNut® Range

All from one source. POPNut® Threaded Inserts and Tools – the perfect combination.

	Aluminium		Steel		Stainless Steel	
	Round	Round	Linear Knurls	Hexagonal	Round	Semi-Hexagonal
<b>Open End</b>						
Flat Head	●	●	●	●	●	●
Countersunk Head	●	●	●		●	
Reduced Head	●	●*	●	●†	●	●
<b>Closed End</b>						
Flat Head	●	●	●	●	●	
Countersunk Head	●	●	●			
Reduced Head				●		

\* Metric and Imperial ranges available  
† Semi-Hexagonal also available



## POP® Tool Service Centres

Expert service and repair available from a network of approved service centres across Europe.



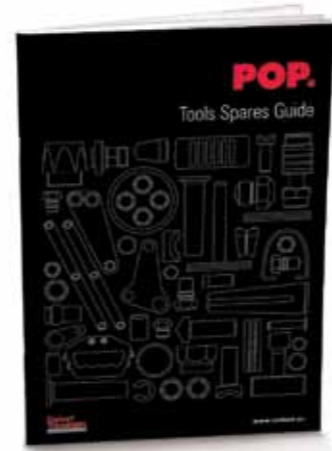
If you have invested in a POP® Tool then be assured that there is a network of highly experienced and competent POP® Tool Service Centres around Europe to support you.

To find your local Service Centre visit [emhart.eu](http://emhart.eu) and select 'POP® Tool Service Centre' as your product line in the 'Find your distributor' page.



## Tools Spares Guide

The complete range of spare parts.  
Available for POP® and POPNut® tools.

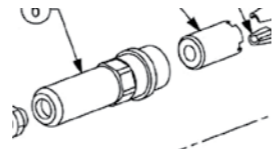


**The POP® Tools Spares Guide is a users and buyers manual which assists in the identification of required spare parts.**

Throughout the guide you will find:-

### Exploded Views

Each tool listed is accompanied by an annotated exploded diagram to assist in the easy identification of the required spare part.



### Front End Selection Guidance

On every tool page the first table groups together the essential components to construct the correct front end, to set the required size of rivet or threaded insert.



### Wear and Spare Parts Identified

In each tool table, wear and spare parts are identified in the part type column. This feature will aid you in choosing the correct stock profile.

	Part Type
	W
	S
	S
	S
	W

### Common Parts Listed

A table is provided which highlights spare parts that are shared by more than one tool. This will prevent unnecessary replication of parts within your inventory.

### Emhart Media Library

Visit the Emhart Media Library, [emhartmedia.com](http://emhartmedia.com), to download:

- Tool Maintenance Manuals
- Tool Catalogues and Information
- Tool Images



**Experience in manufacture – over 100 years**

With over 100 years experience in the design and manufacture of assembly technology, Emhart remains a company infused with the spirit and culture of quality and innovation.

**Multiple customers served in many diverse sectors**

Emhart serves customers in many different sectors who have vastly different manufacturing environments; from repair and maintenance, site work, medium production lines and then to highly sophisticated automated production lines. Our fastening systems offer the perfect assembly solutions for them all.

**Extensive product portfolio**

Emhart's wide portfolio of fasteners includes POP® Rivets, POPNut® Threaded Inserts, hand and power setting tools and semi-automation systems, plus Tucker® Stud Welding and plastics. We are constantly reviewing and improving our products to offer the best assembly features in the market today.

**Design and engineering in partnership**

From design...to prototype...to manufacture. Where a specialist solution is required our experienced design team are on hand to work in partnership with your engineers to develop bespoke assembly solutions.

**Technical expertise**

Emhart offers full customer support by providing extensive technical training for our setting tools and Stud Welding systems. We can also perform a full review of your assembly line techniques to help your facility to optimum production output.

**Marketing support for our distributors**

We support our network of experienced distributors by providing quality products, technical training and marketing support items.

**Quality Accreditations**

Maintaining a high level of quality is an absolute priority for Emhart. From the control of incoming goods to intermediate tests within manufacturing to the final quality tests and delivery to the customer, quality management is the central theme. Emhart is accredited to TS16949, ISO9001, ISO14001.

Visit our new website **emhart.eu** for the latest news, literature, application advice, online interactive product catalogues and much more.



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Quality systems approvals from the world's household names in manufacturing serve to reinforce accreditation to ISO14001 / ISO9001 / TS16949.

As a result of our continuous design improvement, Emhart products are subject to modification. The latest technical data and drawings are available for any specific products on request.