



# **Setting Tools** For POP® Rivets and POPNut® Threaded Inserts



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## POP<sup>®</sup> 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	
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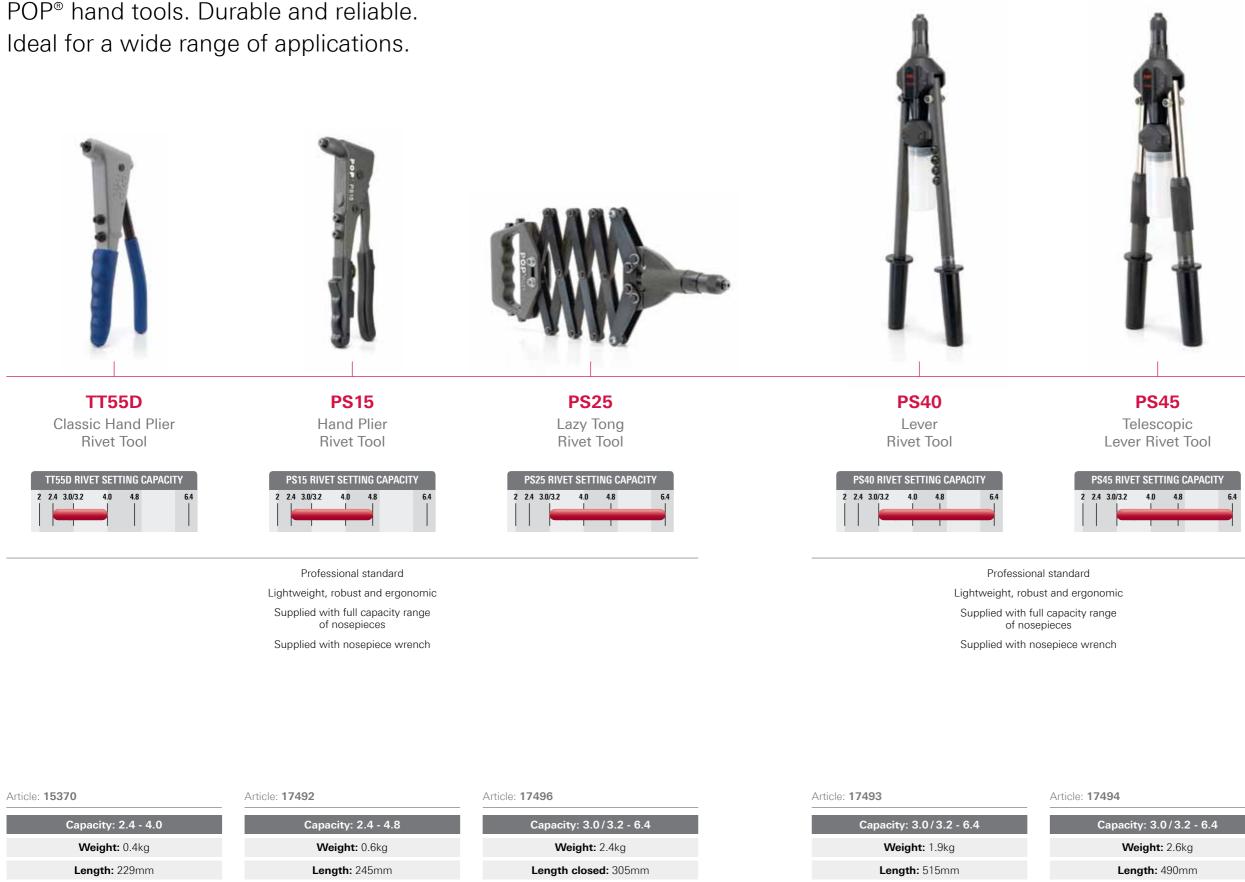
## The POP<sup>®</sup> rivet installation sequence is simple.

- 1. Place the mandrel of the POP<sup>®</sup> rivet into the nosepiece of the setting tool.
- 2. Insert the POP<sup>®</sup> rivet body through the hole of the materials to be fastened.
- 3. Pull the trigger of the setting tool. The POP<sup>®</sup> 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<sup>®</sup> hand tools. Durable and reliable.



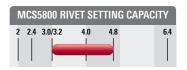
4 POP\* HAND TOOLS emhart.eu

Length extended: 805mm



## **MCS5800**

Li-Ion Battery Tool



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

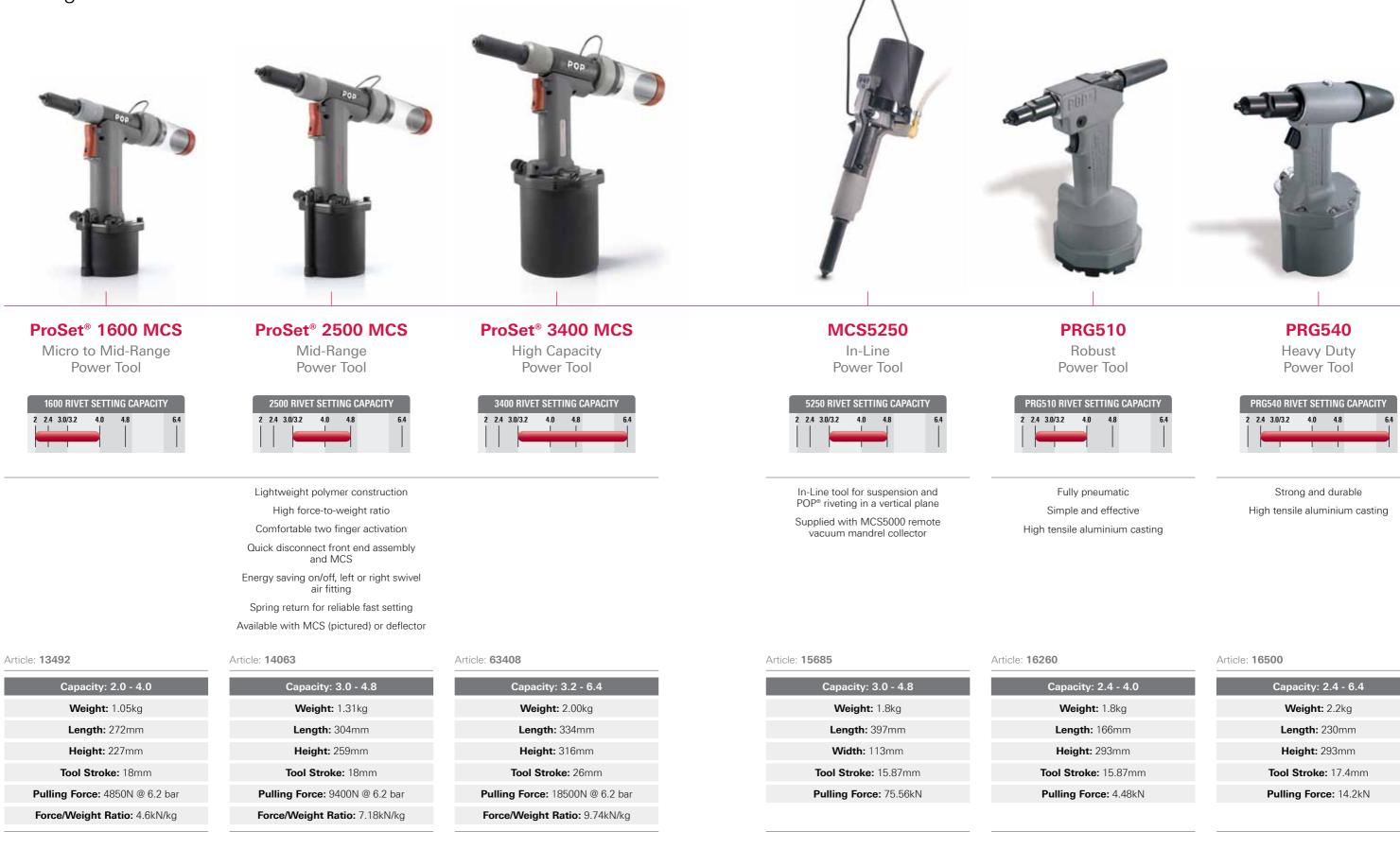
#### Article: 15701

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

Length extended: 665mm

### **Rivet Power Tools**

POP<sup>®</sup> pneumatic power tools. Setting a new standard.



2.4 - 4.0	Capacity: 2.4 - 6.4
<b>::</b> 1.8kg	Weight: 2.2kg
166mm	Length: 230mm
293mm	Height: 293mm
<b>:</b> 15.87mm	Tool Stroke: 17.4mm
rce: 4.48kN	Pulling Force: 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 manoeuvering assembly

High reliability minimises downtime

Integral mandrel collection keeps workspace tidy



SmartSet™ Process Monitoring for Rivet Setting

Monitors the resulting joint or fastening integrity when setting rivets

Monitors each sequential setting and compares to the "ideal" setting

Alerts user to GO or NO GO result Able to detect many setting errors - use

of incorrect rivet, rivet set in air etc



### **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

Weight: 10.4kg

Length: 546mm

Height: 336mm

Width: 222mm

Working Air Pressure: 5.8 bar

Ideal for "white glove" environments



### Point&Set<sup>®</sup> 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

Weight: 61.2kg

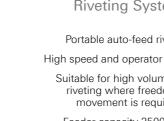
Height: 762mm

Width: 342mm

Depth: 711mm

Max. Mandrel Length: 50mm

8 **POP**<sup>®</sup> RIVETING SYSTEMS emhart.eu





### **MCS5000**

Remote Mandrel Collector

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

Weight: 2.2kg

Height: 414mm

Diameter: 527mm

Air Consumption: 317litres/min

Max. Tube Length: 4.5m

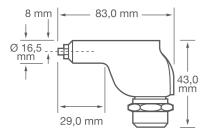
Max. Rise: 1.8m

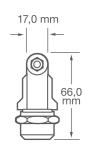
### **Rivet Tool Accessories**

Corner heads and front end kits. For restricted access.



**PRH830** 





Adaptor Kit: 18731

Adaptor Kit: 19490

Adaptor Kit: 19488

For use with: ProSet® 2500 PRG510

PRG540





Weight: 0.31kg



15,9 mm

30,2 mm

20,6 mm

For use with:

ProSet<sup>®</sup> 2500

ProSet<sup>®</sup> 3400

PRG510

PRG540

Article: 19024

- 101,6 mm

Adaptor Kit: 18737

Adaptor Kit: 18750

Adaptor Kit: 19153

Adaptor Kit: 19145

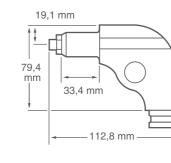
Capacity: up to 4.8mm

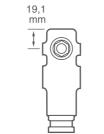
Weight: 0.5kg

**PRH840** 



**PRH850** 





For use with: ProSet® 3400 PRG540

Adaptor Kit: 18869 Adaptor Kit: 19254

Article: 19240

Capacity: up to 6.4mm Weight: 0.76kg



### **Front End Kits**

#### **ProSet® 1600**

Extended front end for deep applications Capacity: 2.4 - 4.0mm Article: 13495

#### ProSet<sup>®</sup> 2500

Extended front end for deep applications Capacity: 3.0 - 4.8mm Article: 13163

### ProSet<sup>®</sup> 2500

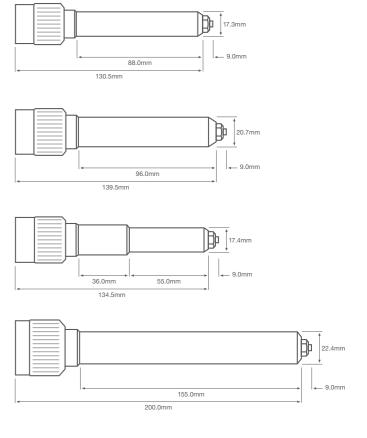
Reduced diameter extended front end for narrow applications

Capacity: 3.0 - 4.0mm Article: 13164

### **ProSet® 3400**

Extended front end for deep applications Capacity: 3.2 - 6.4mm Article: 13172

10 **POP**<sup>®</sup> RIVET TOOL ACCESSORIES emhart.eu



## **POP<sup>®</sup> 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.

High performance, Multi-Grip rivet with excellent claim properties





#### **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 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.



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.





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 pullup capability, provides hole filling and the resultant set product is rattle free.



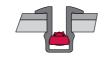
and a wide blind side spread. Also features a positively retained mandrel head and grooved stem for optimum tool jaw life.

Varip™



### **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.



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### **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.



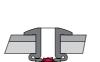
### Peel

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

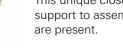




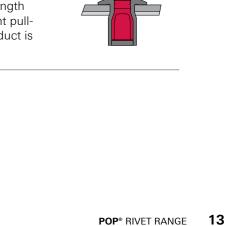
This unique closed end stainless steel range provides additional support to assemblies where weak or thin blind side materials are present.

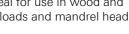






















# **POP Nut**<sup>®</sup>

## Threaded Insert Setting Tools

POPNut<sup>®</sup> setting tools give you the most up-todate 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
Threaded Insert Power Tools	18
Range Guide	20

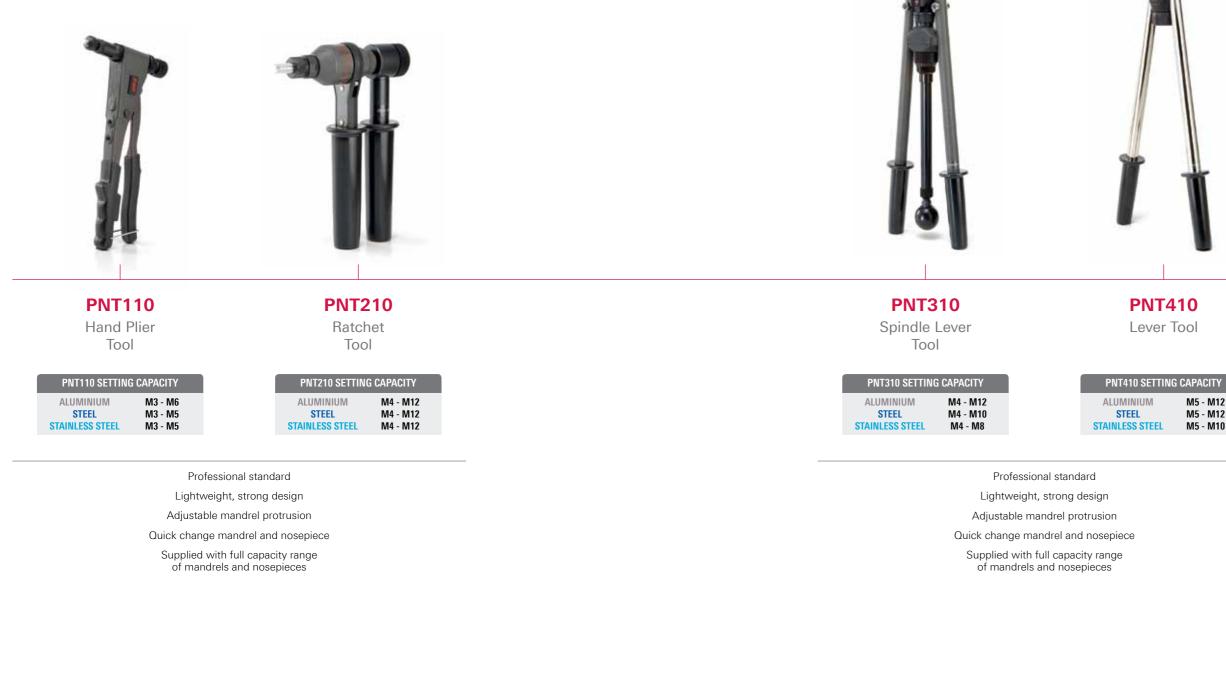
## The POPNut<sup>®</sup> installation sequence is simple.

- 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®.
- 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.



Weight: 0.8kg Weight: 1.3kg Weight: 2.4kg   Length: 240mm Length: 210mm Length: 555mm	43111	Article: <b>43112</b>
Length: 240mm Length: 210mm Length: 555mm	Weight: 0.8kg	Weight: 1.3kg
	Length: 240mm	Length: 210mm

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M5 - M12 M5 - M12 M5 - M10

**:** 2.1kg

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 SETT	ING CAPACITY
ALUMINIUM	M6 - M10
STEEL STAINLESS STEEL	M4 - M10 M4 - M10



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

Article: 42708

Weight: 1.81kg	Weight: 2.77kg
Length: 287mm	Length: 315mm
Height: 268mm	Height: 295mm
Tool Stroke: 1.3 - 6.5mm	Tool Stroke: 1.3 - 10.5mm
Working Air Pressure: 4.9 - 5.9 bar	Working Air Pressure: 4.9 - 5.9 bar





# **PNT800A**

Pneumatic-Hydraulic Stroke Tool

PNT800A SETTIN	G CAPACITY
ALUMINIUM	M3 - M10
STEEL STAINLESS STEEL	M3 - M10 M3 - M8
STAINELSS STELL	1413 - 1410

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 Simple "key set" display

Assists operator accuracy

Supports the quality assurance of the assembly process

Article: 42825

Weight: 1.68kg	Weight:
Length: 288mm	Height: 20
Height: 263mm	Width: 200
Tool Stroke: 1.3 - 6.5mm	Depth: 120
Working Air Pressure: 4.9 - 5.9 bar	Max. Batch Qua

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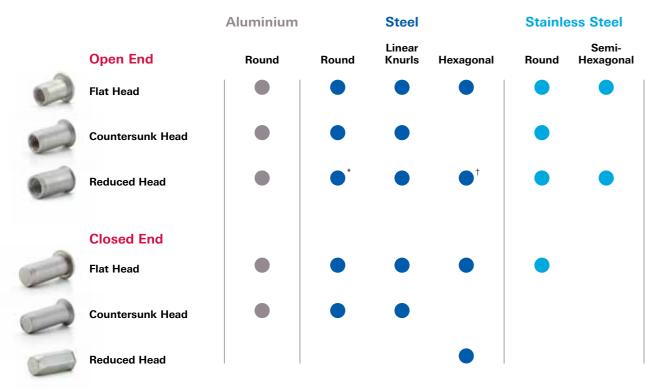
## **POP<sup>®</sup> Counter System**

Simple-to-use **Batch Counter** 

- Counts each tool trigger pull
- Batch complete indicator
- Automatic air cut-off at batch complete point
- Helps ensure the correct number of threaded inserts has been set
  - : 5kg
  - 00mm
  - 00mm
  - 20mm
  - uantity: 999

## **POPNut®** Range

All from one source. POPNut<sup>®</sup> Threaded Inserts and Tools – the perfect combination.



\* 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 Sevice Centre visit 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<sup>®</sup> and POPNut<sup>®</sup> tools.



The POP<sup>®</sup> 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.

### **Common Parts Listed**

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

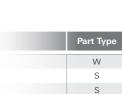
### **Emhart Media Library**

Visit the Emhart Media Library, **emhartmedia.com**, to download:

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







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#### **Expertise in fastening solutions**

#### 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.

