



Parker Tube Fabricating Equipment

Catalog 4190 - TFE



ENGINEERING YOUR SUCCESS.



Tube Fabricating Equipment

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Introduction:

At Parker, we feel that the correct tube selection and installation are key ingredients to building leak-free, reliable systems. Within this catalog is a full compliment of tube cutters, deburring, bending, and assembly equipment for use in installing tubing systems in all types of materials.



Dedication to quality at Parker is second to none. Our resources and vast product line, supported by an ISO 9001 Certified Quality Management System, is available through our worldwide distribution network. For more information regarding our tube fabrication equipment and other products and services, please contact your nearest Parker Sales Office, details found on back page.



WARNING

FAILURE, IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries or its authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met. The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

Offer of Sale

The items described in this document are available for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. Any sale contract entered into by Parker will be governed by the provisions stated in Parker's standard terms and conditions of sale (copy available upon request).



Small Bore Expert training is Parker Instrumentation's training programme for small bore tubing systems.

The course has been developed as an upgrade and replacement to our industry leading Safety at Work Programme. It provides material that is relevant to your sales professionals to enable them to conduct their own training sessions with their customer base.

Some of the advantages over our existing programme are:

- Greater knowledge of small bore tubing systems
- Increased product familiarity
- Improved selling and presentation ability
- Increased skills and confidence in dealing with small bore systems
- Ability to deliver chargeable training

The benefits that your nominated trainer can pass on to your customer base are:

- Increased understanding of their own systems and installation practices
- Improvements in the safety and integrity of their small bore tubing systems
- Overall asset integrity improvement

What does the Trainer get?

Five days of training, including two days of presentation training.

A comprehensive kit including:

- Spanners
- Tube benders
- Tube cutter
- De-burrer
- Vice grips
- Fittings samples
- Promotional clothing
- License fee

The per delegate cost for the course is £1500 and includes all of the aforementioned items.

All ING distributors will need to have at least one certified trainer in their organisation. This will be the only licensed and certified training course that we will allow to be run with our support.

What else do you get?

- Access to the only certified IPDE training course
- A training program we can proudly market to our customers

If you would like further information relating to this training, please contact Parker Instrumentation: +44 (0) 1271 313131

Tube Benders

Heavy-Duty Instrument Tube Bender



Roller dies reduce force and tube flattening.



Clearly visible degree marks for accurate bending.

LOCK/UNLOCK WITH A HALF TURN ROTATION

ROLL DIES FOR REDUCED FORCE

BUILT IN VICE CLAMP

ERGONOMIC CUSHIONED GRIPS

EXTRA LONG 16" (40 CM) HANDLES FOR INCREASED LEVERAGE

Features

- High quality bending performance on stainless steel, and other hard tubing such as steel and titanium.
- Two stage design allows for in-place bending from 90° to 180° without ever crossing handles. Lock/unlock with a half turn rotation of the bending handle.
- Extra long 16" (40 cm) handles increase leverage and roll dies in the bending form reduce force needed.
- Vice clamp built into bending form for extra stability.

Specifications and How to Order

Tube O.D.	Bend Radius	Weight (Kg)	Part Number
Imperial			
1/4"	5/8"	0.76	PTB-4T
5/16"	15/16"	1.84	PTB-5T
3/8"	15/16"	1.84	PTB-6T
1/2"	1 1/2"	2.76	PTB-8T
Metric			
6 mm	16 mm	0.76	PTB-6M
8 mm	24 mm	1.84	PTB-8M
10 mm	24 mm	1.84	PTB-10M
12 mm	38 mm	2.76	PTB-12M

Cutting & Deburring Tools

Screw Feed Tubing Cutter with X-CEL Features



X-CEL KNOB FOR QUICK CUTTING



Features

- A contoured frame allows for easy alignment while adjusting the cutter to make a cut.
- X-CEL Knob for quick and easy cutting.
- Specially designed stainless steel cutter wheel contains bearings in the hub, to decrease drag around the tube for a smoother cut.
- 6 (in PT-C) or 12 (in PT-CL) individual bearings replace traditional rollers. The bearings create a smoother cut, and allow for increased speed around the tube.

Specifications and How to Order

Tube O.D.		Weight (Kg)	Part Number
Imperial	Metric		
1/4" - 1 3/8"	6 - 35 mm	0.40	PT-C
1/4" - 2 5/8"	6 - 67 mm	0.68	PT-CL

Replacement wheel - Part number: PT-CS

Deburrer

A quick twist of the wrist will deburr either the O.D. or the I.D. of the tube end.

Insert the tube into the convexed end of the deburrer for inside deburring and the opposite end for outside deburring. Rotate in either direction.



Features

- 45 cutting edges on interior cone allow for fast, clean, inner reaming and outer deburring/beveling of copper and stainless steel tubing.
- Hardened steel construction.
- Machined outer surface for ease of grip.

Specifications and How to Order

Tube O.D.		Weight (Kg)	Part Number
Imperial	Metric		
1/4" - 1 1/4"	6 - 40 mm	0.34	PT-D
1/2" - 2"	12 - 50 mm	0.56	PT-DL

Parker PT-V Tru-Kut Sawing Vice

Features

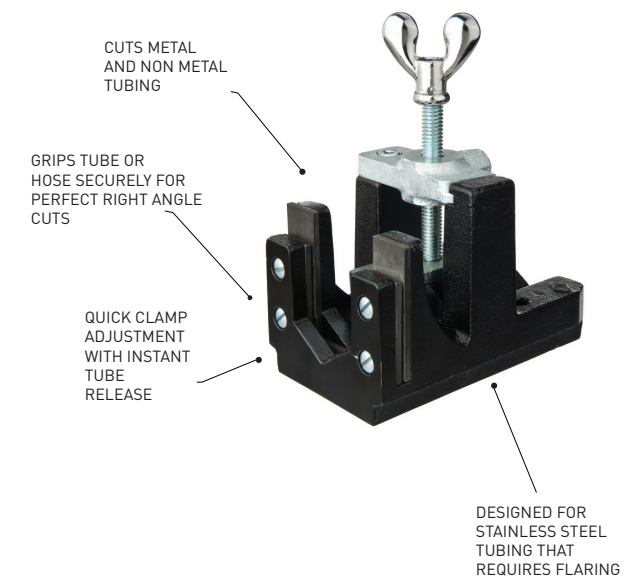
- Hacksaw guide will accommodate tube, pipe and hose from sizes 3 (3/16" O.D.) to 32 (2" O.D.).
- Assures square cut-offs within $\pm 1^\circ$. Use a fine tooth hacksaw blade for smoother cuts.

How To Use

Mount in vice or bolt to bench. Clamp tubing, pipe or hose into the Tru-Kut vice and cut off; guide ensures accurate square cuts.

How to Order

Vice - Part number: PT-V



Sealants

Parker PSL LOCTITE® 567™

A high performance sealant that locks and seals metal, tapered pipe threads and fittings. Ideal for stainless steel, aluminum, galvanized metal and other inert metals, 567™ has excellent solvent resistance and withstands temperatures to 204°C (400°F).



DESIGNED FOR THE LOCKING AND SEALING OF METAL TAPERED THREADS AND FITTINGS

Features

- High lubricating properties of this compound prevent galling on stainless steel, aluminum and all other metal pipe threads and fittings
- Recommended for industrial applications in the chemical processing, petroleum refining, pulp/paper, waste treatment, textile, utilities/power generation, marine, automotive, industrial equipment, gas compression and distribution industries.

How to Order

Size (ml)	Part Number
50	PSL-50
250	PSL-250

PTFE Tape

Polytetrafluoroethylene, or PTFE tape is cut to specified widths for use in sealing pipe threads. The tape is wrapped around the exposed threads of a pipe before it is screwed into place.

The tape is commonly used commercially in pressurised water systems as well as in air compression equipment and thread joints with coarse threads.

One of the defining characteristics of PTFE is how good it is at defeating friction. The use of PTFE tape in tapered pipe threads performs a lubricating function, which more easily allows the threads to be screwed together, to the point of deformation, which is what creates the seal.



How to Order

PTFE Tape - Part Number: PS - PTFE

PHinder Liquid Leak Detector

PHinder provides the user the ability to easily find suspected leaks in industrial gas applications. Simply apply the solution to the fitting, valve or system connection and observe if bubbles form to demonstrate a leak's actual location.

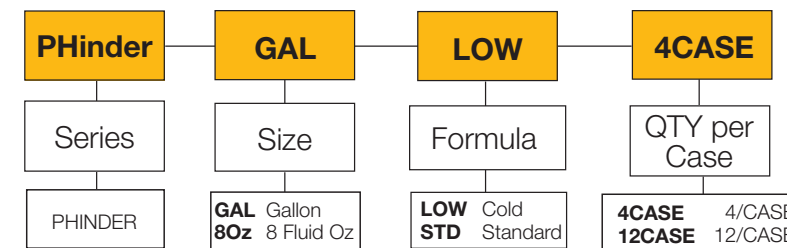
Features

- Excellent bubble action on all surfaces
- Non corrosive, non flammable liquid solution
- Flexible PHinder tube included for hard to reach areas
- Two formulas for applications from -20°F to 200°F in temperature



How to Order

The correct part number is easily derived from the following number sequence. The three product characteristics required are coded as shown.



Gaugeability Tools

Parker PTM Tube Marker

This tube marker burnishes a mark on the tube quickly and accurately. This visible mark helps the installer ensure the correct depth of tube is inserted into the fitting body.

The tool can also be used to check the burnish mark position. The Tube Marker is available from 1/8" to 1" SAE sizes and from 6 mm to 25 mm Metric sizes.

Features/Benefits:

- Compact, lightweight design
- Custom sized to tubing used
- Mark is burnished, not scribed on tube surface



How to Order

The correct part number is easily derived from the following number sequence.

The two product characteristics required are coded as shown below.

PTM	4T																												
Series	Size																												
PTM	<table border="1"> <tr> <td>2T</td><td>1/8"</td><td>6M</td><td>6 mm</td> </tr> <tr> <td>4T</td><td>1/4"</td><td>8M</td><td>8 mm</td> </tr> <tr> <td>6T</td><td>3/8"</td><td>10M</td><td>10 mm</td> </tr> <tr> <td>8T</td><td>1/2"</td><td>12M</td><td>12 mm</td> </tr> <tr> <td>10T</td><td>5/8"</td><td>16M</td><td>16 mm</td> </tr> <tr> <td>12T</td><td>3/4"</td><td>20M</td><td>20 mm</td> </tr> <tr> <td>16T</td><td>1"</td><td>25M</td><td>25 mm</td> </tr> </table>	2T	1/8"	6M	6 mm	4T	1/4"	8M	8 mm	6T	3/8"	10M	10 mm	8T	1/2"	12M	12 mm	10T	5/8"	16M	16 mm	12T	3/4"	20M	20 mm	16T	1"	25M	25 mm
2T	1/8"	6M	6 mm																										
4T	1/4"	8M	8 mm																										
6T	3/8"	10M	10 mm																										
8T	1/2"	12M	12 mm																										
10T	5/8"	16M	16 mm																										
12T	3/4"	20M	20 mm																										
16T	1"	25M	25 mm																										

Parker PPT Preassembly Tool

Parker's Preassembly Tool is an easy-to-use manual tool to ensure the correct preassembly of compression tube fittings on instrumentation tubing. This preassembly will assist in proper initial make-up in tight installation spaces. All preassembly tools have a wrench flat on the bottom so they can be easily mounted in a vice.



How to Order

The correct part number is easily derived from the following number sequence.

The two product characteristics required are coded as shown below.

PPT	4T																																																
Series	Size																																																
PPT	<table border="1"> <tr> <td>2T</td><td>1/8"</td><td>3M</td><td>3mm</td> </tr> <tr> <td>3T</td><td>3/16"</td><td>4M</td><td>4mm</td> </tr> <tr> <td>4T</td><td>1/4"</td><td>6M</td><td>6 mm</td> </tr> <tr> <td>5T</td><td>5/16"</td><td>8M</td><td>8 mm</td> </tr> <tr> <td>6T</td><td>3/8"</td><td>10M</td><td>10 mm</td> </tr> <tr> <td>8T</td><td>1/2"</td><td>12M</td><td>12 mm</td> </tr> <tr> <td>10T</td><td>5/8"</td><td>14M</td><td>14mm</td> </tr> <tr> <td>12T</td><td>3/4"</td><td>16M</td><td>16mm</td> </tr> <tr> <td>14T</td><td>7/8"</td><td>18M</td><td>18mm</td> </tr> <tr> <td>16T</td><td>1"</td><td>20M</td><td>20mm</td> </tr> <tr> <td></td><td></td><td>22M</td><td>22mm</td> </tr> <tr> <td></td><td></td><td>25M</td><td>25mm</td> </tr> </table>	2T	1/8"	3M	3mm	3T	3/16"	4M	4mm	4T	1/4"	6M	6 mm	5T	5/16"	8M	8 mm	6T	3/8"	10M	10 mm	8T	1/2"	12M	12 mm	10T	5/8"	14M	14mm	12T	3/4"	16M	16mm	14T	7/8"	18M	18mm	16T	1"	20M	20mm			22M	22mm			25M	25mm
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		25M	25mm																																														

How to Use

Slide nut and ferrule(s) onto tube. Set the tube into presetting tool, and bottom tube against shoulder tool. Finger tighten the nut and then tighten the nut 1 turn with a wrench. Remove tube from tool.

Advance the nut so it is finger-tight in your fitting assembly. Then you advance the nut 1/2 turn. If torque rise is not felt in 1/4 turn, turn the nut to torque rise, loosen the nut to finger-tight, and makeup nut 1/2 turn.

Parker PT Inspection Gauges

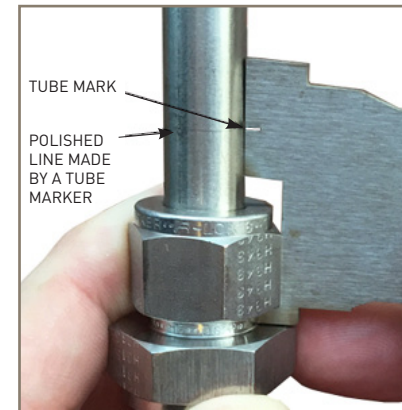
PT Combination Gauge

Using this unique Parker combination gauge together with the tube marker will guarantee precise and accurate tubing connections.

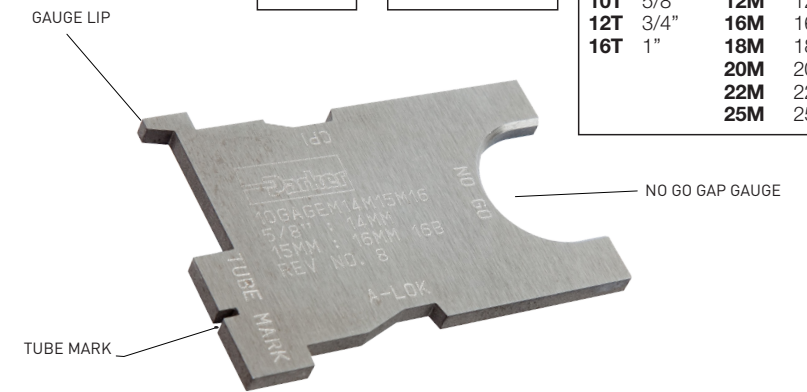
Use the No Go gap gauge to ensure that correct turns from finger tight have been achieved.

How to Use

Insert the gauge lip under the nut - the tube mark should be in line with the polished line on the tubing made by a marker. This proves that the tubing has remained fully bottomed through the installation process.



Correct verification of tube bottoming.



How to Order

The correct part number is easily derived from the following number sequence. The three product characteristics required are coded as shown below.

PT	CG	4T																																				
Series	Type	Size																																				
PT	Combination Gauge	<table border="1"> <tr> <td>4T</td><td>1/4"</td><td>6M</td><td>6 mm</td> </tr> <tr> <td>6T</td><td>3/8"</td><td>8M</td><td>8 mm</td> </tr> <tr> <td>8T</td><td>1/2"</td><td>10M</td><td>10 mm</td> </tr> <tr> <td>10T</td><td>5/8"</td><td>12M</td><td>12 mm</td> </tr> <tr> <td>12T</td><td>3/4"</td><td>16M</td><td>16 mm</td> </tr> <tr> <td>16T</td><td>1"</td><td>18M</td><td>18 mm</td> </tr> <tr> <td></td><td></td><td>20M</td><td>20 mm</td> </tr> <tr> <td></td><td></td><td>22M</td><td>22 mm</td> </tr> <tr> <td></td><td></td><td>25M</td><td>25 mm</td> </tr> </table>	4T	1/4"	6M	6 mm	6T	3/8"	8M	8 mm	8T	1/2"	10M	10 mm	10T	5/8"	12M	12 mm	12T	3/4"	16M	16 mm	16T	1"	18M	18 mm			20M	20 mm			22M	22 mm			25M	25 mm
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16T	1"	18M	18 mm																																			
		20M	20 mm																																			
		22M	22 mm																																			
		25M	25 mm																																			

PT Gap Gauge

This compact C-Ring gap gauge is for imperial and metric sizes. It effectively checks the gap dimensions for correct initial make-up. All sizes can be combined on a key ring for easy handling.



How to Order

The correct part number is easily derived from the following number sequence. The three product characteristics required are coded as shown below.

PT	GG	4										
Series	Type	Size										
PT	Gap Gauge	<table border="1"> <tr> <td>4</td><td>1/4" & 6MM</td> </tr> <tr> <td>6</td><td>3/8" & 10MM</td> </tr> <tr> <td>8</td><td>1/2" & 12MM</td> </tr> <tr> <td>12</td><td>3/4" & 18MM</td> </tr> <tr> <td>16</td><td>1" & 25MM</td> </tr> </table>	4	1/4" & 6MM	6	3/8" & 10MM	8	1/2" & 12MM	12	3/4" & 18MM	16	1" & 25MM
4	1/4" & 6MM											
6	3/8" & 10MM											
8	1/2" & 12MM											
12	3/4" & 18MM											
16	1" & 25MM											

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