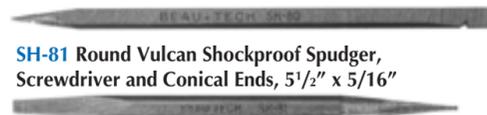


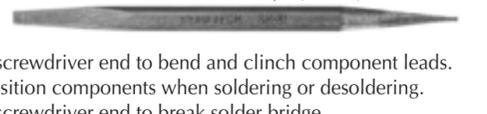
SOLDERING AIDS

Shockproof Vulcan Spudgers/Wiring Aids

SH-80 Flat Shockproof Vulcan Spudger, Double Beveled and Conical Ends, 6" x 1/4"



SH-81 Round Vulcan Shockproof Spudger, Screwdriver and Conical Ends, 5 1/2" x 5/16"



Benefits

- Use the beveled or screwdriver end to bend and clinch component leads.
- Use both ends to position components when soldering or desoldering.
- Use the beveled or screwdriver end to break solder bridge.
- Use the beveled or screwdriver end as screw driver where metallic drivers may hurt the board or components.
- Use the conical end to guide wire in tight places on the board.
- Use the conical end to remove components when desoldering.

The unique Beau Tech spudgers are made of special vulcanized fibre which has the most desirable mechanical, electrical, and thermal properties for applications on printed circuit boards. Beau Tech spudgers have many advantages compared with nylon/fiberglass spudgers:

Beau Tech Shockproof Vulcan Spudgers	vs.	Nylon/Fiberglass Spudgers
Strong and long lasting		Weak and short lived
Static free		Generate and retain static charge
Will not melt with solder		Melts easily with solder iron

Why risk valuable boards and components by choosing nylon/fiberglass spudgers?

Orange Sticks

SH-83 "Orange" Sticks, Double Beveled Ends, 7" x 5/32"

- Use to position and hold Through-Hole and Surface Mount components for soldering and desoldering.
- Use to bend component leads.
- Use to guide wire on the board.
- Use to break solder bridges.
- Use to probe for loose components.



Package of 100

The Beau Tech orange sticks are made of high quality non-resin wood which will not contaminate solder and component leads. Natural wood is among the best material that does not generate static charge, thus is safe to use in any ESD sensitive area. They are effective, yet inexpensive tools coming in packages of 100.

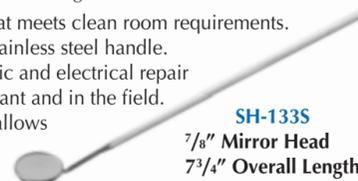


ESD SAFE

Inspection Mirror

The new inspection mirror meets clean room requirements yet is sufficiently economical for non-clean room applications. A quality tool for the technician but inexpensive enough to meet the budgetary requirement of modern manufacturing.

- Medical quality mirror that meets clean room requirements.
- Comfortable hex shape stainless steel handle.
- Indispensable for electronic and electrical repair and rework both in the plant and in the field.
- 45° mirror-handle angle allows inspection of hard-to-see places.



SH-133S
7/8" Mirror Head
7 3/4" Overall Length

Stainless Steel Brushes



SH-60 2 5/16"

SH-61 3 1/2"

Made of over 300 long, fine, stainless steel bristles. Use to clean flux from solder joints, clean flux and adhesive from solder pad, and for general cleaning purposes. Available in Standard and Miniature sizes. (Please see previous page for brush dimensions.)

NASA Style Lead Cleaner



SH-66 Lead Cleaner

Use this quality tool to remove oxides, scale, grease, and dirt from leads. The tinned copper braided shielding, backed by a stainless steel spring, ensures a fast and easy job. The lead cleaner meets NASA specification NPC-200-4 and ensures the best wetting resoldered leads.

Spring Hooks

SH-150 Push Version Spring Hook 9 3/4"



SH-152 Pull Version Spring Hook 9 3/4"



Use these convenient tools to insert, remove, and adjust fine springs and other small parts in hard to reach places. Made of quality polished tool steel and hardened to withstand high tension without breaking or bending. The fine diamond knurled handle gives the hand a firm grip and easy maneuvering.

SOLDERING AID KITS

The following kits contain the most popular Beau Tech tools. The vinyl cases keep the tools clean, handy, and safe from damage. The clear vinyl front allows easy selection of the tool to be used.

The kits will also keep your work bench more organized. Selection of a kit denotes a true craftsman and seeker of value. Please see specific pages for details of each tool contained in the kits.

SH-222 Two-Piece Fine Pitch RoCHARD 10 MILPROBE KIT

Contains:

- SH-241 10 MilProbe
- SH-216 10 MilProbe
- Teflon Tip Protectors
- Vinyl Case



SH-125 Four-Piece TH/SMT RoCHARD 25 MILPROBE KIT

Contains:

- SH-116 25 MilProbe
- SH-117 25 MilProbe
- SH-123 25 MilProbe
- SH-141 25 MilProbe
- Vinyl Case



SH-121 Four-Piece Miniature SOLDERING AID KIT

Contains:

- SH-20C Reamer/Fork
- SH-20D Angled Reamer/Fork
- SH-20G Brush/Scrapers
- SH-80 Spudger
- Vinyl Case



SH-122 Four-Piece Standard SOLDERING AID KIT

Contains:

- SH-20A Reamer/Fork
- SH-20B Angled Reamer/Fork
- SH-20K Brush/Scrapers
- SH-81 Spudger
- Vinyl Case



SH-120 Six-Piece Standard/Miniature SOLDERING AID KIT

Contains:

- | | |
|---------------------------|---------------------------|
| Standard Aids | Miniature Aids |
| SH-20A Reamer/Fork | SH-20C Reamer/Fork |
| SH-20B Angled Reamer/Fork | SH-20D Angled Reamer/Fork |
| SH-20K Brush/Scrapers | SH-20G Brush/Scrapers |
| Vinyl Case | |



SH-322 Two-Piece Fine Pitch RoCHARD 1 MILPROBE KIT

Contains:

- SH-316 10 MilProbe
- SH-341 10 MilProbe
- Teflon Tip Protectors
- Vinyl Case



THE BEAU TECH MISSION

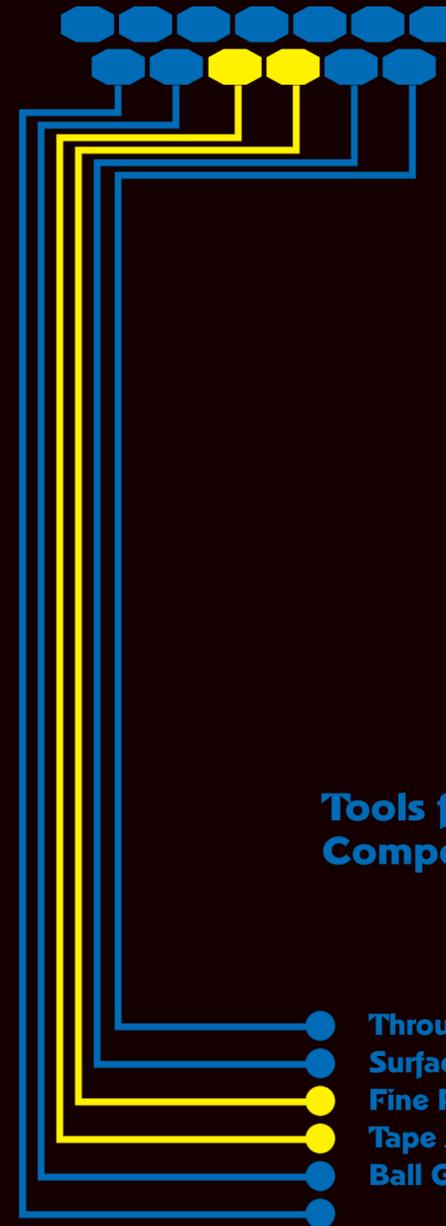
As a U.S. manufacturer, our fundamental mission is to provide quality tools and services for those of you who are engaged in the repair, rework, R & D, testing, and assembly of electronic components and printed circuit boards. In collaboration with you and our distributors we work to design, manufacture, and deliver the correct tools you require, as we seek to balance the cost of a quality tool with the budgetary requirement of modern manufacturing. We strive to keep pace with the latest developments in component and assembly technologies; to meet your most demanding needs for tools; to do business your way. Please call us with your comments. Thank you for your business.

For more information on products and distributors, please contact Beau Tech @:
 BEAU TECH, Inc. • 98 Elm Street • Portland, Maine 04101, U.S.A.
 Tel: 1-207-775-6139 • Fax: 1-207-775-7710
 e-mail: info@beautech.com • Internet: http://www.beautech.com



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BEAU TECH™



Tools for the Latest Developments in Component and Assembly Technologies

- Through Hole
- Surface Mount
- Fine Pitch
- Tape Automated Bonding
- Ball Grid Array

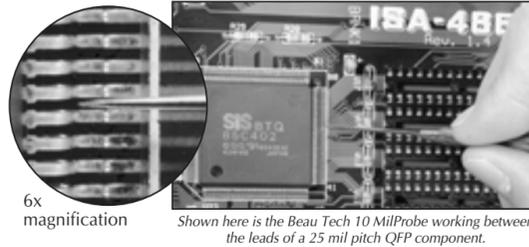
SOLDERING AIDS

SOLDERING AIDS

These Made in America, Beau Tech RocHard MilProbes are the only complete line of probes available to meet the full spectrum of circuit repair, rework and assembly needs from Through Hole to 2 mil pitch Surface Mount. They are designed to save the replacement costs of inferior tools and to avoid the inefficiency and damage caused by worn tools.

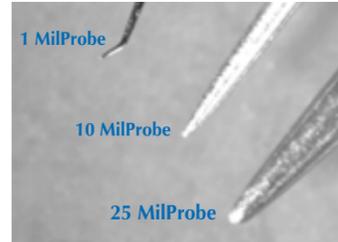
Other Features and Benefits of All RocHard MilProbes

- The different tip configurations allow access to every possible position that needs repair or rework.
- The hex-shaped handle guarantees easy grip and control when operating under a microscope.
- The stainless steel probe sheds solder and allows effective use while soldering or desoldering.
- The stainless handle provides static free operation.
- Available in kits in vinyl pouches (see back cover).



6x magnification

Shown here is the Beau Tech 10 MilProbe working between the leads of a 25 mil pitch QFP component.



Relative size comparison at 20X magnification

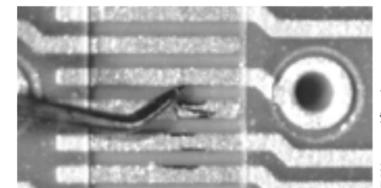
MilProbe Selection Guide

A = 1MilProbes B = 10 MilProbes C = 25 MilProbes

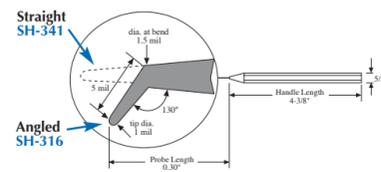
Pitch Size	2-10 mil	10-15 mil	15-25 mil	25-30 mil	30+ mil	Through-Hole
Testing Solder Joint & Wire Bonding Strength	A	A&B	B	B&C	C	C
Straightening Leads & Wires	A	A&B	B	B&C	C	C
Cleaning Leads & Traces	A	A	B	B	C	C
Applying Epoxy	A	A	B	B	C	C

Ultra Fine Pitch 1 MilProbes

These unique tools are made of a special, high-tech alloy to provide the strength needed to repair and rework ultra-fine pitch leads and pads from 2 to 10 mil. Suitable for working BGA, Flip Chip, TAB, COB, Chip & Wire, Wire Bonding, etc.



1 MilProbe cleaning 3 mil pitch TAB substrate.



1 MilProbes MODEL NUMBERS

SH-316 – Angled 1 MilProbe

SH-341 – Straight 1 MilProbe

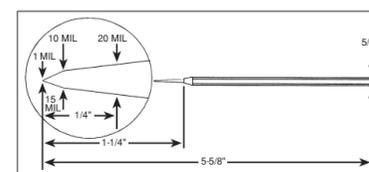
SH-322 – Kit containing one each of 1 MilProbes

Fine Pitch 10 MilProbes

These are the only tools available that can reach between fine pitch leads from 10 to 25 mil with adequate strength for lead repair and rework. Suitable for working QFP and other SMT components and boards.



10 MilProbe straightening leads of 20 mil pitch QFP.



10 MilProbes MODEL NUMBERS

SH-216 – Angled 10 MilProbe

SH-241 – Straight 10 MilProbe

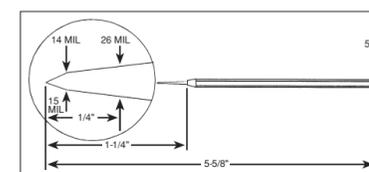
SH-222 – Kit containing one each of 10 MilProbes

SMT/TH 25 MilProbes

These are the most versatile tools for TH and SMT for pitch sizes above 25 mil. These MilProbes have a useful life that has been proven to be more than three times that of other domestic or imported brands.



25 MilProbe used to test solder joint of 30 mil pitch QFP.



25 MilProbes MODEL NUMBERS

SH-116 – Angled

SH-117 – Double Angled

SH-125 – Kit containing one each of 25 MilProbes

SH-141 – Straight

SH-123 – Curved

Available in Miniature (5 1/2" overall length) or Standard (8" overall length) sizes— see facing page for details of miniature and standard tool ends.

Straight Flat Reamer/Straight Fork Tip

SH-20C 5 1/2"

SH-20A 8"



Angled Flat Reamer/Straight Fork Tip

SH-20D 5 1/2"

SH-20B 8"



Straight Flat Reamer/Beveled Scraper Blade

SH-20E 5 1/2"

SH-20L 8"



Stainless Steel Brush/Beveled Scraper Blade

SH-20G 5 1/2"

SH-20K 8"



Stainless Steel Brush/Straight Fork Tip

SH-20GF 5 1/2"

SH-20KF 8"



Hook/Straight Fork Tip

SH-20I 5 1/2"

SH-20H 8"



APPLICATIONS

The applications and drawing of each tool end are provided on the adjoining page. The success of these tools has been based on the following quality features:

HARDENED TOOL STEEL ENDS

The tool ends are made of high quality Swedish Hardened Tool Steel, carefully heat treated and tempered to provide a tough, long lasting working edge that resists wear.

HARD SATIN CHROME FINISH

The hard satin chrome finish repels solder even when in contact with flux. The tough qualities of our satin finish resists wear, thus adding to the long tool life. The satin finish also eliminates reflection ("Hot Spot") and resultant eye strain.

SOLID ROCK MAPLE WOODEN HANDLES

Only top quality maple, finished with a special burn resistant varnish is used for our handles. The "Natural Feel" of wood is superior to any plastic. In addition to the comfort it provides to the hand, the wood handle is non-generative of static charges unlike other handle materials such as plastic and nylon. The wood handle serves as an excellent insulator between the two tool ends. The hex shaped handle provides a firm grip and won't roll off the bench.

TWO SIZES TO CHOOSE FROM

These tools are available in both Standard (8") and Mini (5 1/2") sizes as shown. While the standard size works well with most through-hole soldering, the mini size is proven popular in surface mount soldering and smaller through-hole application.

THE CONVENIENCE OF DOUBLE ENDED TOOLS

Combinations of any two tool ends are available to guarantee maximum utility by the user.

ESD SAFE

All Beau Tech tools are engineered with the requirements of the ESD environment in mind.



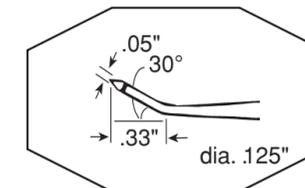
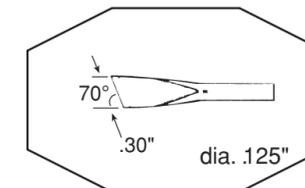
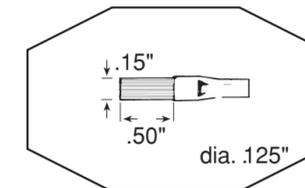
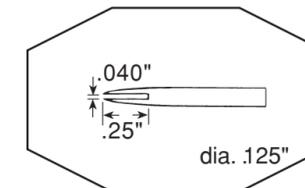
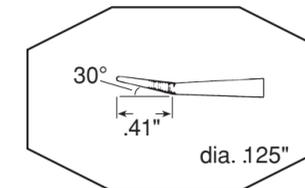
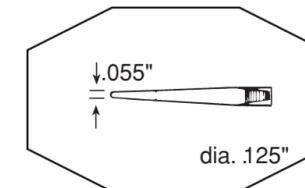
HIGH STANDARDS

Beau Tech tools meet MIL-SPECS and federal stock number requirements.

BEAU TECH KITS

See back cover for our "quick draw" kits of the most popular tools.

Miniature Tool Ends



Choose the best size between Standard and Mini

The Beau Tech Choice: We have the right tools for the job. Our soldering aids are truly aids; they are designed to help you work faster and more efficiently. **Beau Tech** is made by professionals for professionals.

Straight Flat Reamers

- Use to clean and remove solder from holes.
- Use to clean boards.
- Use as wire harness tool.
- Use to extract PLCCs from socket.
- Use to remove ICs when desoldering.

Angled Flat Reamers

- Same as straight flat reamers but the 30° bend at the tip allows access to more difficult areas.

Fork Tip

- Use to hold wire for soldering.
- Use to twist wire for winding and unwinding.
- Use to bend and straighten leads.
- Use to tune potentiometers and other devices.

Stainless Steel Brush

- Over 300 long, fine, stainless steel bristles.
- Use to clean flux from solder joint.
- Use to clean flux and adhesive from solder pad.
- Use for general cleaning purposes.
- Available as brush alone (see next page).

Scraper

- Use the hand ground edge for cutting away solder bridges.
- Use to clean pad surfaces before soldering.
- Use to cut and remove traces.

Hook

- Use the strong and sharp point for punching and cleaning holes.
- Use as a scratch awl.
- Use to remove PLCCs and other ICs from board when desoldering.

Standard Tool Ends

