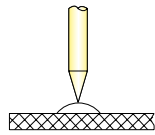
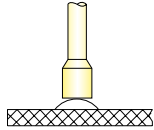


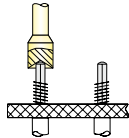
Overview of Tip Styles



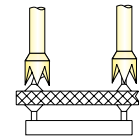
Tip Style 01 (30° tip angle)
Commonly used, less aggressive tip for Testpads.



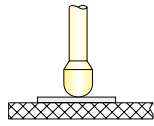
Tip Style 02 (flat)
Very passive tip, for contacting clean test points such as Testpads which shouldn't be punctured, as well as connector and plug-in card terminals.



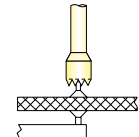
Tip Style 03 (Inverse Cone)
Common tip for contacting connector pins and wire-wrap posts.



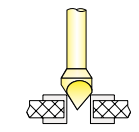
Tip Style 04 (Standard 4-point Crown)
One of the most common tips for contacting component pins. Not to be recommended for unwashed PC-Boards, because tendency to contamination and clogging of solder-resin in the throat of the crown.



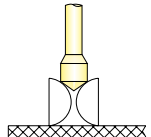
Tip Style 05 (flat or bullet-nosed)
Most popular passive Tip Style, for contacting clean test points such as Testpads and even tracks.



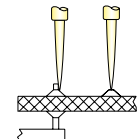
Tip Style 06 (serrated)
Universal Tip Style for contacting practically all types of pins (e.g. connectors, WW-posts, component pins etc.).



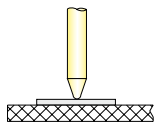
Tip Style 07 (90° tri-hedral or pyramid)
Most common Tip Style for contacting both plated open-vias and Testpads. Replaces more and more the Tip Style 01. Also used as interface probe tip in conjunction with an INGUN contact terminal (see page 70) for the INGUN VIN Test Fixtures.



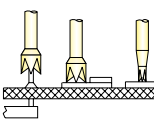
Tip Style 08 (90° conical tip)
Also used for contacting plated open-vias, especially when damage to the contacting area must be avoided. Also suitable for contacting mullet-point and plug-in connectors together with low spring-forces.



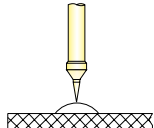
Tip Style 09 (flexi-needle)
Universal Tip Style for contacting practically all types of test points except plated open vias. Offers a high level of stability combined with flexibility. Often chosen for contaminated, unwashed PC Boards.



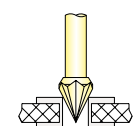
Tip Style 13 (30° tip with bullet-nose)
Rather passive tip, commonly used for Testpads where puncturing must be avoided. Also suitable for contacting tracks.



Tip Style 14 (self-cleaning 4-point Crown)
The most commonly used tip for contacting component pins. The modified 04 crown design prevents clogging of solder-resin in the throat of the crown.



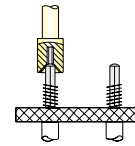
Tip Style 15 (22° pressed-in HSS-tip)
Offers a high level of stability and aggressiveness for special contacting demands as far as resistance to wear is concerned.



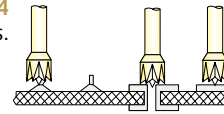
Tip Style 17 (90° hexagonal)
The six knife-shaped edges centre the tip when contacting plated open-vias. Similar characteristics as Tip Style 07, but much more aggressive.

(aggressive inverse cone, self-cleaning) Tip Style 19

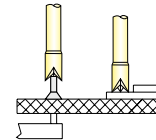
With this modified design of the tip-style 03 an aggressive contacting contour in the centre is created by applying cross grooves. Subsequently, a maximum of contacting reliability is achieved when contacting component pins and wire-wrap posts.

**(6-point Crown with higher set middle point) Tip Style 24**

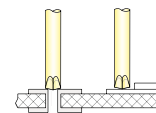
Universal usage for practically all test points.

**(self-cleaning 3-point Crown) Tip Style 33**

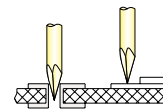
A modified version of the 4-point self-cleaning Crown (Tip Style 14), manufactured with ground flanks and therefore very aggressive. Can be used both for component pins as well as Testpads.

**(Passive Dagger, 150° tip angle) Tip Style 38**

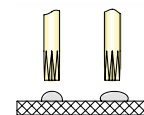
Comparable with Tip Styles 97 and 98, however with even flatter tip angle, for contacting Open Vias and Pads.

**(aggressive tri-hedral tip) Tip Style 77**

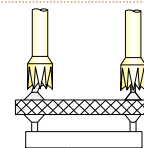
Universal usage for plated open-vias. Similar characteristics as Tip Style 91 (dagger), however with three contacting edges instead of two. More stable tip, but therefore less aggressive.

**(Starshaped tip for contacting Bead Probes) Tip Style 79**

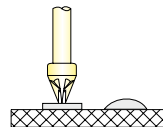
Multiblade tip style with self cleaning function.

**(8-point Crown) Tip Style 88**

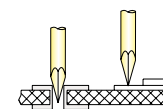
Self-cleaning Crown with good centring features. Suitable for contaminated component pins.

**(self-cleaning 3-point Crown) Tip Style 89**

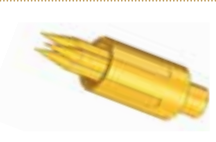
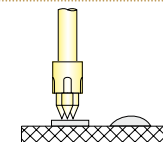
Recommended for unwashed PC Boards. The special shape of the ground steel tips ensures that any contaminating particles are "pushed" back from the contacting zone around the points.

**(Dagger) Tip Style 91**

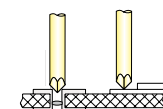
Universal usage, and by far the most popular Tip Style, for not only plated open-vias but also Testpads. Very aggressive, ground flanks.

**(Tri-needle, 22° pressed-in HSS-tip) Tip Style 93**

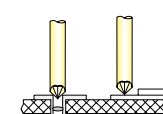
Due to the three very aggressive HSS tips, ideal for contacting unwashed PC Boards and other specific testing demand.

**(Passive Dagger) Tip Style 97**

A modified version of the standard dagger (No. 91), also for universal usage. Designed for plated open-vias which have been closed with sealing lacquer.

**(passive Dagger, 90° tip angle) Tip Style 98**

Comparable with Tip Style 97, for contacting Open Vias, which are closed with sealing lacquer.

**(serrated, with higher-set outer nylon ring) Tip Style 006**

Standard serrated tip with higher-set outer nylon ring, designed for component presence-check. The designation "0" is for nylon material, the designation 06 for the inner Tip Style.

