

Bead Probe Technology

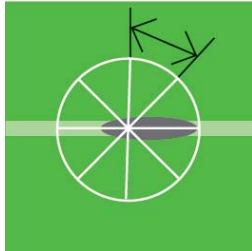
NEW
Tip-Style 79 - Star
 The 1st. Bead Probe Tip-Style
 with self-cleaning function

INGUN Recommendations for Tip-Styles

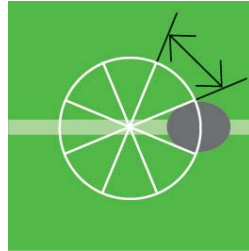
The **Tip-style 79 - Star** - is recommended (due to the self-cleaning, horizontal arrangement of the knife-type edges) for „elongated/small“ and „large“ Beads with flux-deposits, that can stick to the tip. Decisive for the choice of the tip-style # 79 is the matching up of the Bead geometry and the angle of the knife-shaped edges as well as the most suitable contacting area.



Tip Style 79		Series		
		050	075	100
Tip-Ø	Ø 0,50 mm	x		
	Ø 0,64 mm		x	
	Ø 0,90 mm			x



Good matching up of contacting area and length of Bead



Poor matching up of contacting area and angle of knife-edges too large for length of Bead.

Available Tip-Styles GKS-050			
Material	Tip Style	Versions	Plating
3	79	 Ø 0,50 (.020)	A

Available Tip-Styles GKS-075			
Material	Tip Style	Versions	Plating
3	79	 Ø 0,64 (.025)	A

Available Tip-Styles GKS-100			
Material	Tip Style	Versions	Plating
3	79	 Ø 0,90 (.035)	A

INGUN Recommendations for the Spring-Forces

The choice of the ideal Spring-Force in combination with the tip-style, which has already been chosen, is dependant on the composition of the Beads (i.e. contamination / solder hardness) and the intended deformation of the Bead. Spring-forces from 1.0 N to 3.0 N are available - which are chosen depending on the composition of the Beads.

Choice of Spring-Force depending on the type of contamination and flux-deposits:

Recommended Spring Force		Tip Style 79
		Contamination
Spring Forces	1,0 N	1
	1,5 N	1 / 2
	2,0 N	1 / 2
	2,8 N	1 / 2 / 3
	3,0 N	1 / 2 / 3

Examples:

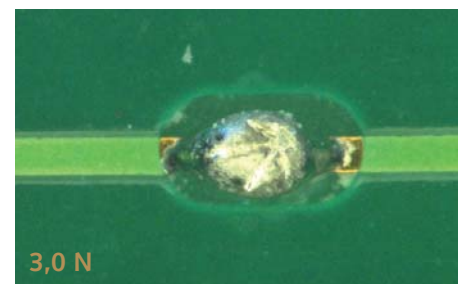
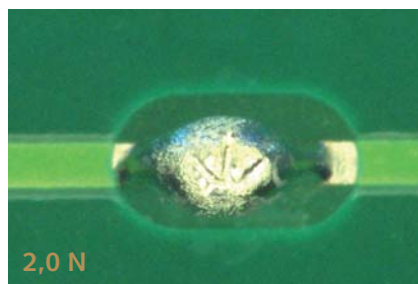
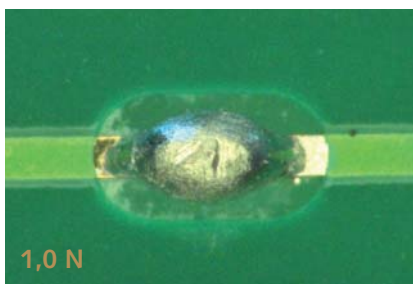
No Contamination / Flux-deposits: Contamination 1 (good)
 Soft, fluid-type Flux-deposits: Contamination 2 (middle)
 Hard, wax-type Flux-deposits: Contamination 3 (bad)

Choice of Spring-Force depending on the hardness of the Solder:

Recommended Spring Force		Tip Style 79
		Solder
Spring Forces	1,0 N	1
	1,5 N	1 / 2
	2,0 N	2 / 3
	2,8 N	3
	3,0 N	3

Examples:

Sn 63 = 12.8 HV: Hardness 1 (soft)
 SAC 305 = 17.7 HV: Hardness 2 (middle)
 Innolot = 33.6 HV: Hardness 3 (hard)



Example: Contacting SAC-Solder with **Tip Style 79** and various Spring-Forces