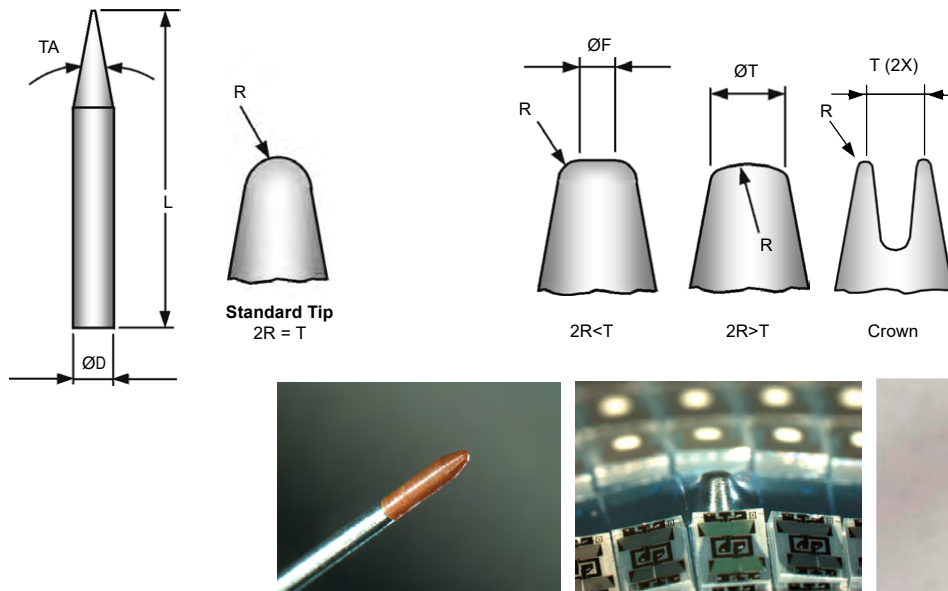


## PUN : PUSH-UP NEEDLES

Die Push-Up needles or Die Ejector Pins are used in automatic die bonding machines. The Push-Up Needles push up the die through the expanding PVC adhesive film allowing a collet or pick-up tool to seize the die. The smooth, highly polished taper and small angle allow gentle penetration in the film with little movement of the film. Depending on the size of the die, 1 or more needles are required where reproducibility from needle to needle is critical.



Standard Push-Up Needle

Tool Style	Ø D mm	L mm	Taper Angle	R µm	Fits Die Bonder	Tool Style	Ø D inch	L inch	Taper Angle	R inch
PUN	0.70	10.0	10/15°	25		PUN	.0275	.394	10/15°	.001
PUN	0.70	12.0	10/15°	25	Esec	PUN	.0275	.472	10/15°	.001
PUN	0.70	14.3	10/15°	25	AMI	PUN	.0275	.562	10/15°	.001
PUN	0.70	15.0	10/15°	25	Kaijo	PUN	.0275	.590	10/15°	.001
PUN	0.70	17.0	10/15°	25	ASM. Delvotec. Foton. Muehlbauer Datacon	PUN	.0275	.669	10/15°	.001
PUN	0.70	18.0	10/15°	25	Esec	PUN	.0275	.709	10/15°	.001
PUN	0.70	19.0	10/15°	25	Alphasem . AMI	PUN	.0275	.750	10/15°	.001
PUN	0.66	14.0	10/15°	25	Shinkawa	PUN	.026	.551	10/15°	.001
PUN	0.66	18.0	10/15°	25		PUN	.026	.709	10/15°	.001
PUN	0.66	18.0	15°	12		PUN	.026	.709	15°	.0005

How To Order

Tool Style	Mat'l	Ø D	L	TA	R	Option Crown - T
EXAMPLE:	PUN	- 0.70mm	- 17mm	- 10DG	- 25MIC	-
	PUN	- HSS	- 0.70mm	- 18mm	- 15DG	- 25MIC - F= 25MIC
	PUN	-	- 0.70mm	- 17mm	- 10DG	- 300MIC - T=80-100MIC
	PUN	- W	- 0.70mm	- 17mm	- 10DG	- 25MIC - Crown - 0.46mm
	PUN	- TOR	- 0.70mm	- 18mm	- 15DG	- 150MIC -

- Standard and default material is W (No need to specify)
- Optional HSS ( High Speed Steel) is also available to address tip fragility issue.
- Optional Plastic Tip to minimize the risk of back die cracking.