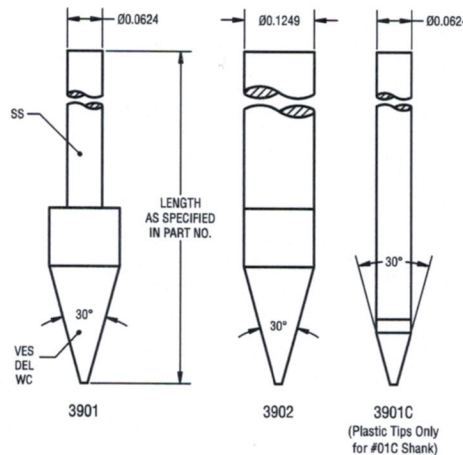
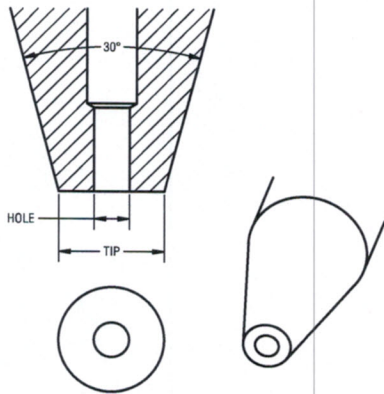


Conical vacuum pickup tools are typically used for die pick-and-place into epoxy. The plastic materials are most commonly specified as opposed to metal as they are less likely to damage die or sensitive devices.

The lowest cost material is Delrin®. Delrin® has a limited temperature service range and can hold a static charge. Vespel® has a higher service temperature and is "anti-static". Gaiser's ESD01 material is truly static dissipative. Other useful physical properties are shown on the adjacent table.

| | Delrin | Vespel | ESD01 |
|--|--------------------------|---|--|
| Continuous Service Temp (°F) | 180 | 300 (ideal) 500 (max NR) | 420 |
| Max Temp (°F) (Excursions/Brief Peaks) | 250 | 900 | N/A |
| Melting Temp (°F) | 327-335 | Does not melt (decomposes at >500 in O ₂) | Approximately 584 |
| Rockwell Hardness (M) | 94 | 69-79 | 87 |
| Electric Property | Insulator Non-conductive | Insulator Non-conductive "Anti-Static" | ESD Rated Static Dissipative 10 ⁶ -10 ⁹ Volume Resistivity |

3900 Series - Conical, Flat Face Tip



| TYPICAL TIP CONFIGURATIONS | |
|----------------------------|-------------------------|
| HOLE DIAMETER in. / μ | TIP DIAMETER in. / μ |
| 0.005 / 127 | 0.010 / 254 |
| 0.006 / 152 | 0.012 / 305 |
| 0.008 / 203 | 0.016 / 406 |
| 0.008 / 203 | 0.020 / 508 |
| 0.010 / 254 | 0.020 / 508 |
| 0.010 / 254 | 0.025 / 635 |
| 0.015 / 381 | 0.030 / 762 |
| 0.020 / 508 | 0.040 / 1016 |
| Other = Specify | |

Specify:
Series/Shank Style - Hole Size - Tip Size - *Shank Length - Material

Example:
3901-006-012-625-DEL
*Specify length for 01, 02, & 60 shanks only
VES, DEL, ESD01, or WC material. Polish face standard for WC material

3800 Series - Square/Rectangle, Flat Face Tip

Specify:
Series/Shank Style - Hole - Tip Length - Tip Width - *Length - Material

Example:
3802-010-025-035-750-VES
*Specify length for 01, 02, & 60 shanks only
VES or WC only. Polish face standard for WC material

