

General Description of Vacuum Pick-Up Tools

Vacuum pick-up tools are ideal for picking up lightweight and flat items without touching them by hand or with sharp tools. Delicate items or surfaces won't be scratched. Can be used for coverslips, Si substrates, quartz substrates, small components, parts and samples.

The lifting capacity of the vacuum pick-up tools depends on:

- the vacuum generated in the vacuum pick-up tool
- the material surface
- the size of the pick-up cup; see lifting capacity table.

The lifting capacity and lifting time both increase when surfaces are flat and smooth (polished). Vacuum pick-up pens will not work on porous surfaces. The components of the vacuum pick-up tools generally are a body to generate vacuum, interchangeable vacuum needle tips and vacuum cups which fit on the needles to increase lifting capacity.

Estimated lifting capacity table

Needle/ Cup size diameter in mm	Estimated lifting capacity in grammes
1.3mm tip (18 gauge) only	< 1
1.9mm tip (16 gauge) only	1
3mm vacuum cup	7
4mm vacuum cup	12
5mm vacuum cup	18
6mm vacuum cup	25
7mm vacuum cup	35
9mm vacuum cup	55
10mm vacuum cup	70

Both pick-up tools offered are ESD safe to avoid static discharge