

**TWEEZER-VAC™ ESD-SAFE VACUUM TWEEZER**  
**Product Numbers: 522 and 522-1**



Figure 1: Tweezer-Vac™ and Included Accessories

**DESCRIPTION**

The Tweezer-Vac™ Vacuum Pick-Up Tool is an ESD and Cleanroom 100 safe vacuum tweezer system. With vacuum of up to 10” Hg at sea level, this system is ideal for handling small, flat and smooth items such as substrates, slides, semiconductors and more. The unit comes with all the items needed for use including hose, vacuum pen and 9 vacuum tips.

**INCLUDED ITEMS**

- Tweezer Vac™ 522 or 522-1
- 5 feet of 1/16” permanently coiled polyurethane static dissipative hose
- A set of nine vacuum tips:
  - Five bent probes in ½” (12.70mm) length with 3/32” (2.38mm) , 1/8” (3.18mm), 3/16”(4.76mm), 1/4” (6.35mm), 3/8” (9.53mm) diameter static dissipative Buna-N Cups
  - Four straight probes in ½” (12.70mm) length with 1/8” (3.18mm), 1/4” (6.35mm), 3/8” (9.53mm), 1/2” (12.70mm) diameter static dissipative Buna-N Cups
- A push button vacuum pen
- Rubber no-skid feet
- ESD ground connection is by three-wire power cord

**SPECIFICATIONS**

**VACUUM:** Up to 10 inches of mercury at sea level.

**DIMENSIONS:**

|                |                |              |
|----------------|----------------|--------------|
| <b>Length</b>  | <b>Height</b>  | <b>Width</b> |
| 7.25" (185 mm) | 2.5" (64 mm)   | 3" (76 mm)   |
| <b>WEIGHT:</b> | 1.7 lb (775 g) |              |

**POWER**

**REQUIREMENTS:**

|                 |         |          |     |
|-----------------|---------|----------|-----|
| Model No. 522   | 110 VAC | 50/60 Hz | 8 W |
| Model No. 522-1 | 220 VAC | 50/60 Hz | 8 W |

**USING THE TWEEZER-VAC™**

1. Connect the small diameter vacuum hose to the vacuum fitting on the front of the Tweezer-Vac™. Be sure to push the hose all the way on.
2. Connect the other end of the vacuum hose to the rear of the vacuum handle. Again, be sure to push the hose all the way on.
3. Select a probe with a vacuum cup that is slightly smaller in diameter than the outline of the parts you want to pick and place. Securely install it on the tapered end of the vacuum handle.

**NOTE: Selecting a vacuum cup that is too large or too small will result in improper operation.**

4. Connect the three-wire Tweezer-Vac™ power cord to input power.
5. Turn the ON/OFF switch to the ON position.
6. To pick and place a part:
  - a. Gently place the vacuum cup on top of the part you wish to pick up. The part should now be firmly held by the vacuum cup.
  - b. Move the part to where you want it.
  - c. To release the part, simply depress the vacuum release button with your finger. The part should now be released.
7. Remember to turn the unit off when you are finished.

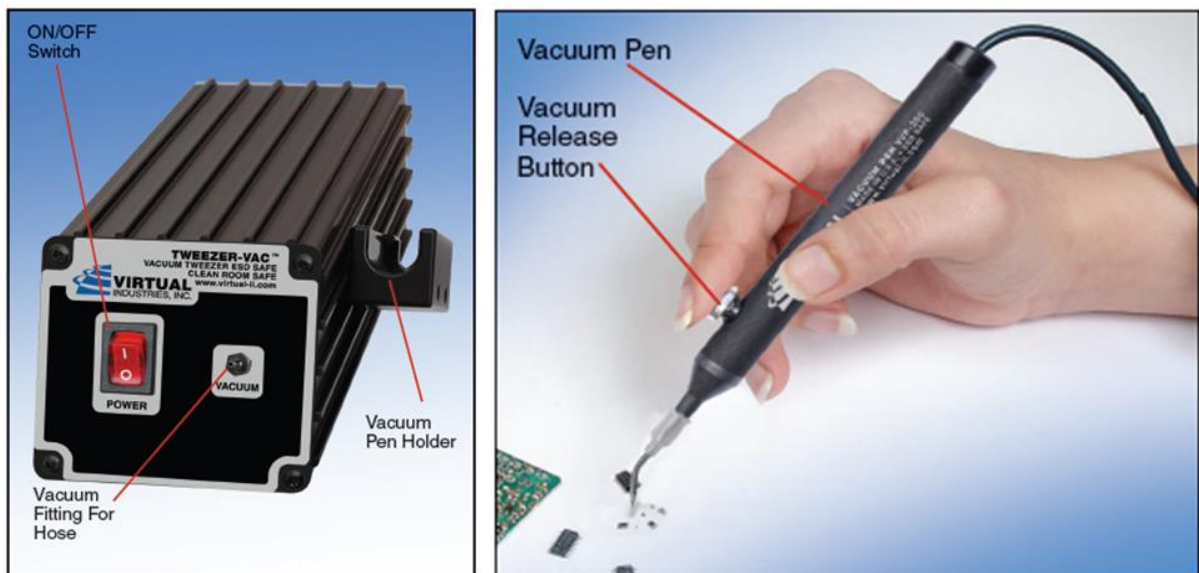


Figure 2: Using the Tweezer-Vac™

### CLEANING AND MAINTENANCE

The Tweezer-Vac™ is maintenance-free. Keep dry and lint-free. If necessary, use a dry, soft cloth to clean. Do not use harsh cleaners.

### SOURCE DOCUMENT

Tweezer-Vac™ TV-1000 Operating Instructions and Specifications, Virtual Industries, 08/10/2022

Virtual Industries, Inc.

2130 Victor Place Colorado Springs, CO 80915 U.S.A.

[www.virtual-ii.com](http://www.virtual-ii.com) [info@virtual-ii.com](mailto:info@virtual-ii.com)

Phone: 719-572-5566

FAX: 719-572-5504