

## Halo Matrix (Multi Needle)

Spray system for the high production of nano particle or nano fibres

The “Halo Matrix” is designed for the fabrication of nano-structured fibres and particles in high volume.

With the “Halo Matrix” system up to 8 needles can be employed. This in turn improves the productivity of nano particle and/or nano fibres.

The “Halo Matrix” system utilizes one power supply with a multiple high voltage power distribution “Spyder” and multiple needles. The “Halo Matrix” system keeps all needles at the same voltage and current levels, therefore ensuring uniform production. The HV “Spyder” is available direct from Genvolt. [www.genvolt.co.uk](http://www.genvolt.co.uk)

Genvolt also manufactures a “Halo Matrix” holder that is simple and easy to set up and assemble and provides the “Halo Matrix” system with a stable working platform.

### Specifications

Materials:

Dimensions: 220mm

Thickness: 2mm

Needle size: 8, 11, and 20 gauge

Needle(s) shaft:

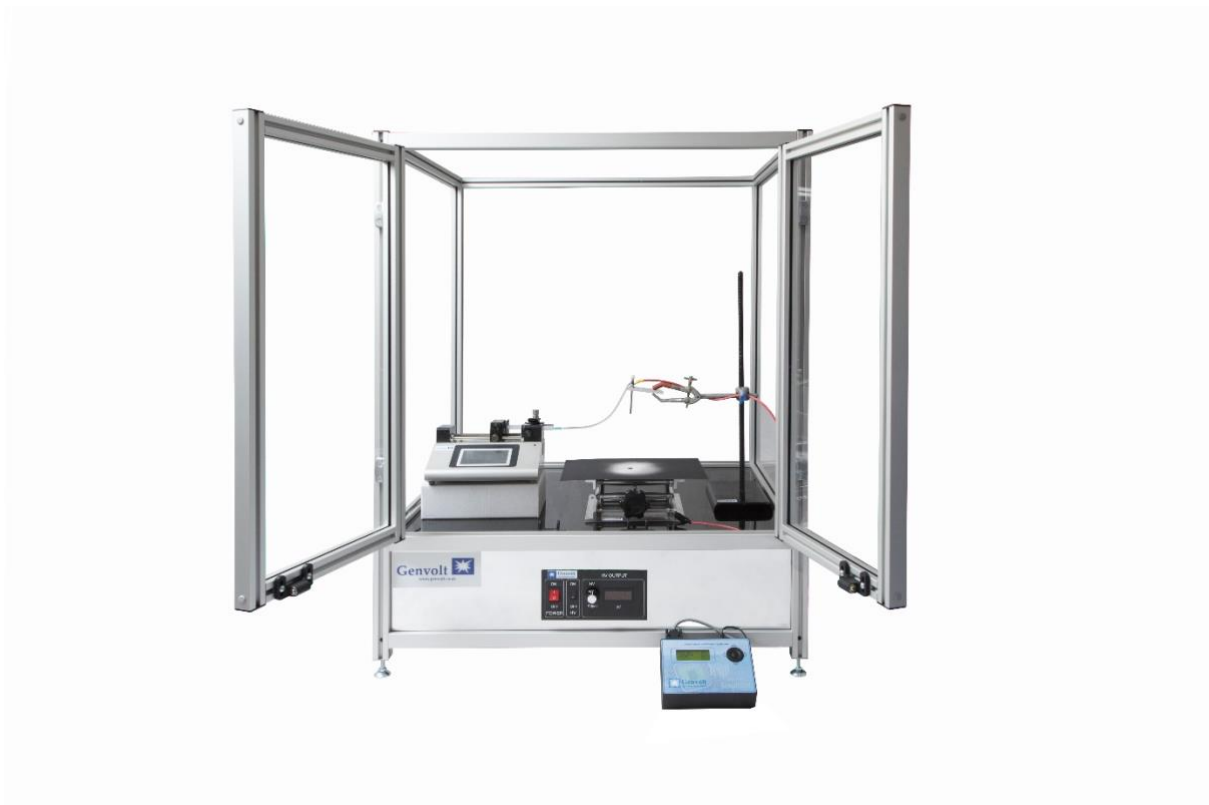
### Needle(s) Chart

Gauge	Needle diameter (mm)	Halo shaft size (mm)
20	0.9	
11	3	
8	4	

## The “Halo Matrix” Multi needle System



## The Genvolt Environmental Electrospinning/Electrospraying Chamber



## **Halo Matrix needle system holder**

The Genvolt “Halo Matrix” holder is comprised of four arms, each arm comprises of two sections. The upper part which is secured to a rigid circle compartment that can be fixed into the ceiling of the chamber, or any ancillary devices. The “Halo Matrix” needle(s) system or individual needle system can be locked into bottom part of the “Halo Matrix” holder.

The upper part has a pin for locking the arm when the system is in use, the bottom section has a 90-degree backwards movement for releasing the “Halo Matrix” system. The screw on the interlock from the bottom section secures the “Halo Matrix” system. It is easy and simple, and all arms must be locked into the “Halo Matrix” system.

Furthermore, the arms can be used individually for different systems and applications. With just one pin, the arms can move 90-degree toward the ceiling of the chamber, and out of the way.

### **Advantages.**

High quality materials

Easy to clean.

Maximum use of space

Can be used for many different systems.

Arms can be used individually.

Innovative fast lock and unlock.

### **Specifications**

Materials: Compressed Cast Acrylic

Dimensions: H x W (20x5cm)

Thickness: As per drawing

