



NeedleTEC

Corona Treatment of Needle Hubs

Corona surface treatment can be the answer to the bonding and leakage problems of needle hubs. The purpose of surface treatment is to increase surface wettability and adhesion through electrical discharge. In practice corona pre-treatment has become one of the most common processes used for surface refinement. This method increases the surface energy of plastics and improves wettability and adhesion. The final effect achieved by the treatment depends on various parameters, including electrode efficiency, duration of the corona discharge, the type of material being treated, the temperature and moisture, any contamination, the surface morphology and similar factors.

Tantec developed its first customised corona station for the treatment of needle hubs in the 1990's. continuous product development has led to the new high technology NeedleTEC corona treating systems for needle hubs. NeedleTEC's ability to treat difficult to reach recesses makes this simple to use system a safe treatment solution for needle hubs. The result of improved wettability is that the adhesive will spread evenly on the hub that connects to a stainless-steel cannula and thereby prevents fluids from leaking. The result of the strong bonding between adhesive and hub will ensure that the cannula will not move or release from the hub during use.

NeedleTEC is a compact, self con-

tained table top corona treating system that includes an integrated generator, transformer, electrode assembly and ozone filter. This system is microprocessor controlled. The NeedleTEC process is an in line process, different sizes and shapes can be treated without set up changes.

Advantages:

- Flexible
- Easy to use
- Usable for a number of different applications
- Fully integrateable in new or existing in-line process
- Indexing or continuous production process possible
- Promotes high strength joining
- Prevents leakage