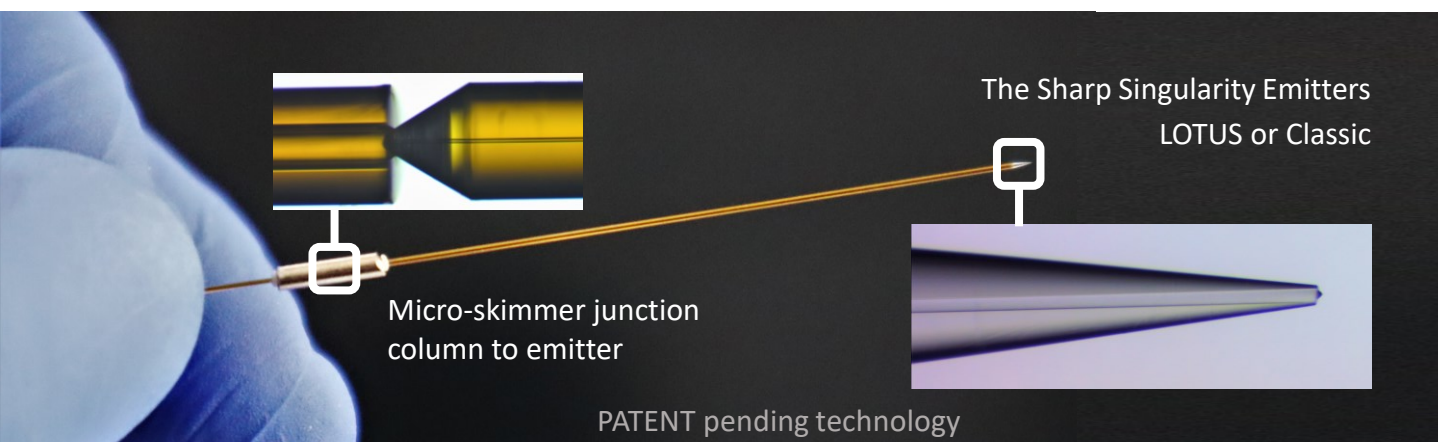


# Dragonfly Columns

## Sharp Singularity™



## Microscopic Precision to Handle Complexity of Life



*To improve robustness and reproducibility, we have re-engineered the way nano-columns and emitters are made, eliminating sources of variability and weak points.“*

- Welded column and emitter form a monolithic assembly: eliminate handling variability.
- The column micro-skimmer column to emitter junction: self-aligning, eliminates the need for a frit.
- Sharp singularity emitter (LOTUS or Classic): optimized electrospray performance.
- A ZDV inlet permanently welded to the column: seamlessly integrate the Dragonfly columns in your set-up.

**Optimized, highly reproducible column and emitter geometry.**

self-pack options available. Contact us to ask for IDs and lengths

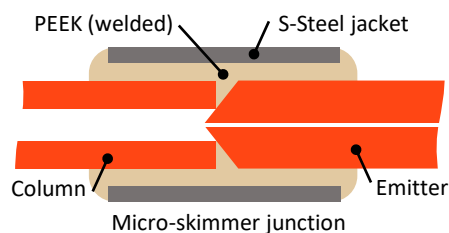


# Dragonfly Columns Sharp Singularity™



## Micro-skimmer junction column-emitter:

- **Self-centering geometry:** high geometric reproducibility, thanks to the conical column-emitter interface.
- **Mechanically strong:** welded in vacuum.
- **Frit-less:** No frit required, the conical skimmer keeps the chromatographic beads in the column. Only the liquid flows to the emitter (tested with 1.9  $\mu\text{m}$  beads, in a 75 $\mu\text{m}$  to 10  $\mu\text{m}$  junction).



### Robust:

- The welded junction is extremely strong. It can handle very high pressures and pulling forces, as if the column-emitter was made in one piece.
- There is no frit. Frit problems are just eliminated.
- Less prone to clogging, thanks to the constant ID of the emitter

### Reproducible:

- The column to emitter geometry is reproducible, with micrometric precision.
- The effective length of the column is no longer affected by the frit or the pulling process.
- The column and the emitter stay perfectly aligned always.
- Column and emitter built in one piece, no handling variability.

### Sharp Singularity emitters integrated:

High performance, high precision emitters, designed to produce the best possible electrospray, LOTUS or Classic.



### Built-in ZDV inlet:

(VICI cheminert nano-volume™ Stainless Steel fitting welded to the column permanently)