

Nozzles for Electromagnetic Encapsulation Units with Ruby



Nisco Engineering AG

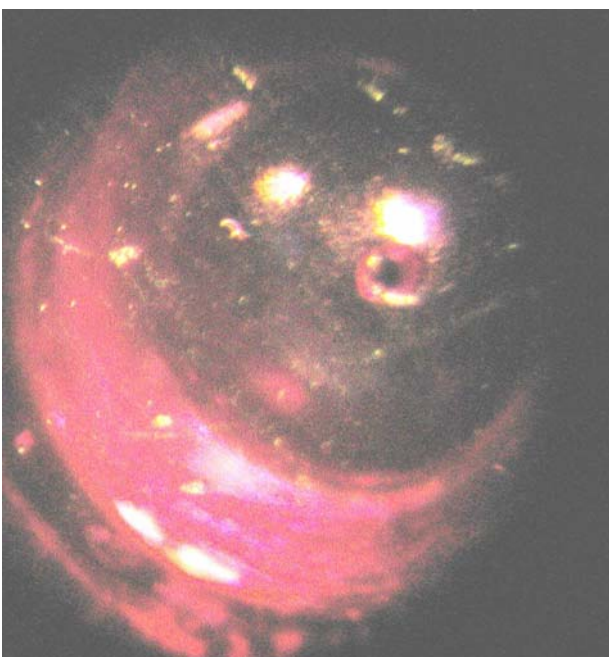
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The new ruby nozzles can be used for beads down to 100 μm .

The nozzle holder is made of stainless steel 1.4435 (AINSI 316L). For the nozzle itself we use a polished ruby. The reason for this you see in the next picture:



The manufacturing of such perfect ruby nozzles is based on the renowned Swiss watch maker tradition, which helps us to reach this perfectly smooth surface, also with very small diameter. This is essential for the generation of an absolutely perfect laminar jet.

| Diameter D (μm) | Hole Surface (μm^2) | Typical flow rate per nozzle (ml/min) * |
|------------------------------|----------------------------------|---|
| 50 | 1960 | 0.31 |
| 80 | 11310 | 0.90 |

(restricted amount on stock)

* Typical for low viscosity alginate (2%)

The nozzles are produced in two different shapes:

- One for the single nozzle Nisco Encapsulation Units VAR A, B and D.
- And another shape for the Nisco multiple nozzle systems such as VAR C and E.

The ruby is mounted without inherent tension. The nozzle can be autoclaved, steam sterilised at 2 barg and is resistant against most chemicals.