

RIFERIMENTO PER L'ITALIA

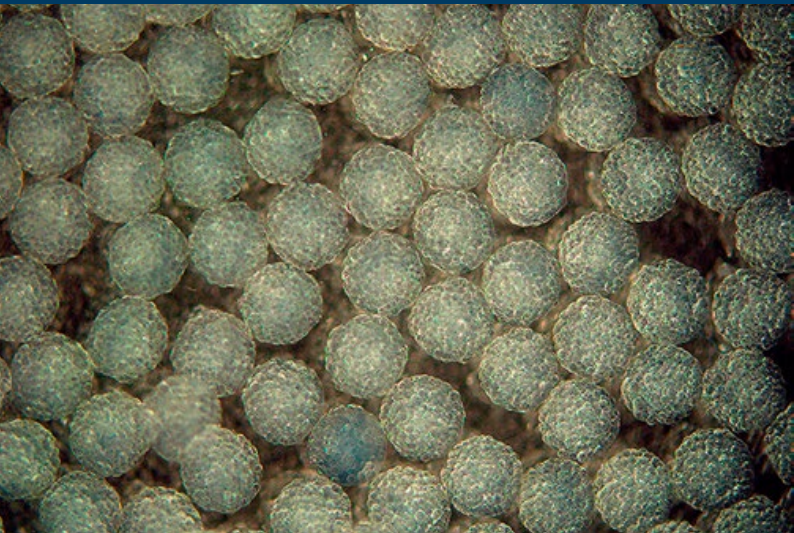


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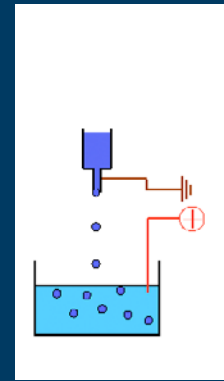
Whatever kind of beads you  
want to produce tomorrow...



Your Nisco Encapsulation System  
will be a reliable key to success!

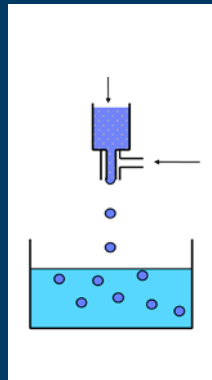
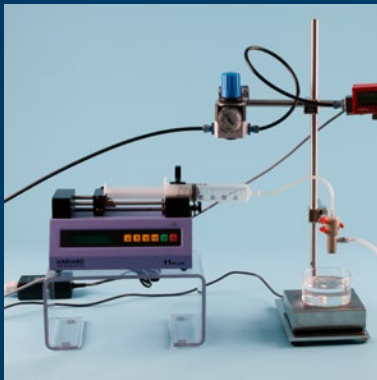
# Our Technologies

Nisco's Encapsulators are designed modularly, which allows adapting equipment to your changing needs and combining the Nisco's Units with devices from your lab.



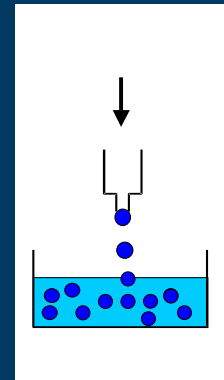
## Electrostatically Assisted Spraying

The voltage forces pull droplets from a needle tip into a gelling bath and pull them off the needle before they have grown to the point where they fall off due to their own weight.



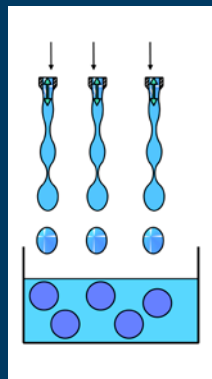
## Coaxial Airflow Induced Dripping

The coaxial air stream blows droplets from a needle tip into a gelling bath before they fall due to gravity.



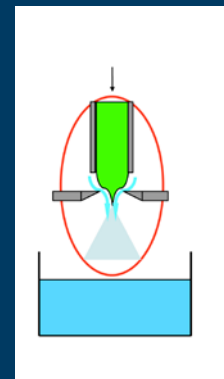
## Gravity Assisted Dripping

The drop grows on the needle tip until it falls off the needle into the hardening solution by its own weight.



## Laminar Jet Break-up

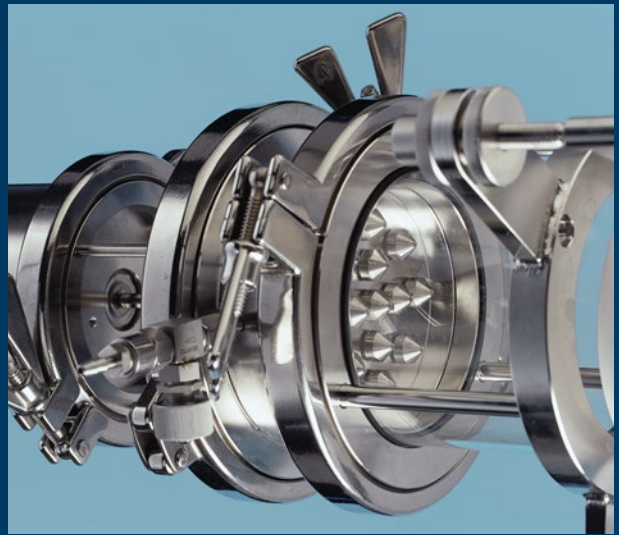
A laminar jet of a liquid flows through a nozzle and produces a bead chain of equally sized droplets by means of a mechanical vibration. The minimum drop size is approximately double the nozzle diameter.



## Aerodynamically Assisted Jetting

The liquid jet passes the Pressure Chamber which reduces its diameter before forming into drops. The drops will be smaller than the diameter of the Nozzle.

# Multi Nozzles Systems



Nisco provides you not only with Single Nozzle Units, but also with a variety of Multi-Nozzle Units up to 300 Nozzles.



With Multi-Nozzles Systems you can scale up your process without altering the physics since all Nozzles work in parallel.



# What kind of microencapsulation are you involved in?

Biotechnology e.g. encapsulation of microorganism

Tissue engineering e.g. immune system hiding

Food technology e.g. taste hiding

Environment e. g. treatment of contaminated soil

Drug formulation e.g. control drug release

Cosmetics e.g. slow perception of flavours

Agriculture e.g. artificial seed production

# Nisco is keen on enabling you with the equipment tailored to your need!

Nisco's encapsulation units allow to produce following bead size range:

Nisco's Units	Bead Size Range (mm)
Var. J30	0.005 up to 0.15
Var. V1	0.15 up to 1.5
Vibrating Units (e.g. B, D)	0.15 up to 1.5
Var. J1	0.5 up to 1.4
Var. W1/W10	1.5 up to 4