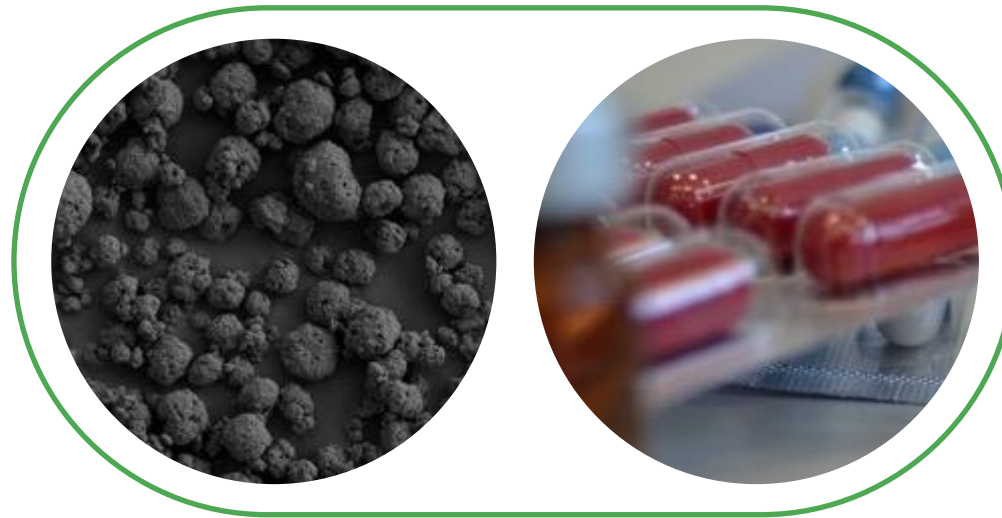


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## Pilot Scale Solutions



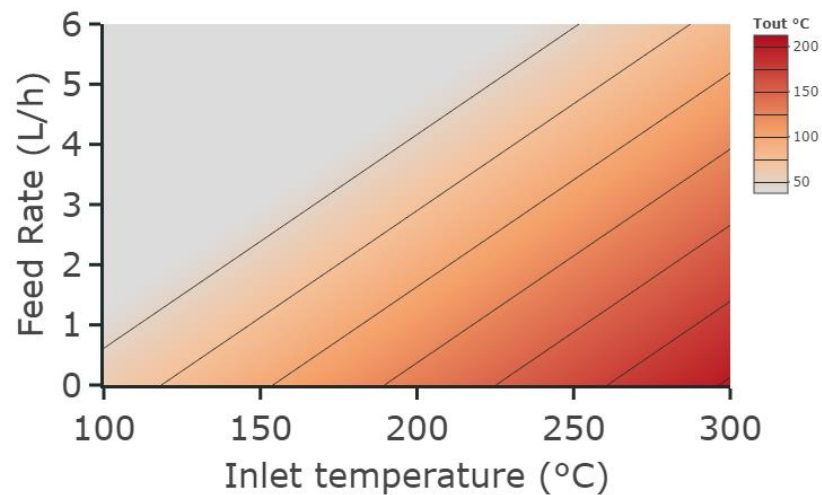
# Our Equipment

## Pilot Scale

APT-5.0



### EVAPORATION RATE APT-5.0



### OPTION

- Closed Loop for organic solvent processing
- Spray Congealing set-up
- CIP (Clean in Place)
- Extra dust filters
- Heavy-duty peristaltic pump
- Flameless Venting Device
- Active flame isolation systems

### Technical Data

|  |   |
|--|---|
| Evaporative Capacity Max.              | 5 kg/h (distilled water)                                    |
| Max. Inlet Temperature                 | 300 °C  |
| Heating Capacity                       | 11 kW   |
| Fan Capacity Max.                      | 80 m <sup>3</sup> /h  |
| Nozzle                                 | Two Fluids (3 different sizes)                              |
| Space requirements                     | 250 x 200 x 250 cm (L x W x H) (depending optional)         |
| Weight                                 | 680 Kg (depending optional)                                 |
| Filter                                 | PTFE  |
| Materials in contact with the feed     | AISI 316 (internal polishing Ra <0.5 micron) – PTFE – Pyrex |
| Materials NOT in contact with the feed | AISI 304 – Acrylic resin                                    |



# APT-5.0+ Rotary Nozzle



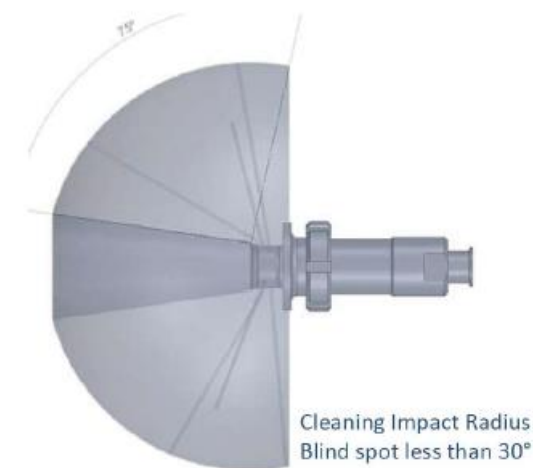
- Direct drive atomizer with High-Speed Motor air compressed cooled
- Power rate 0.7Kw
- Wheel diam. 50mm
- Speed range from 10.000 to 60.000 rpm, adjustable by frequency converter
- Equipped with state of the art sealed hybrid ceramic bearings
- Oil free. No oil lubrication required for bearings
- Totally manufactured in stainless steel AISI316L
- Sanitary execution
- Atomizer spindle in special high resistant steel
- Many wheels design available for abrasive, non-abrasive and corrosive feed applications
- Weight approx. 5 kg
- Noise level < 60 db(A)

## CIP (Clean In Place Nozzle)

Nozzle CIP (Clean in Place)- retractable Nozzles in the drying tower

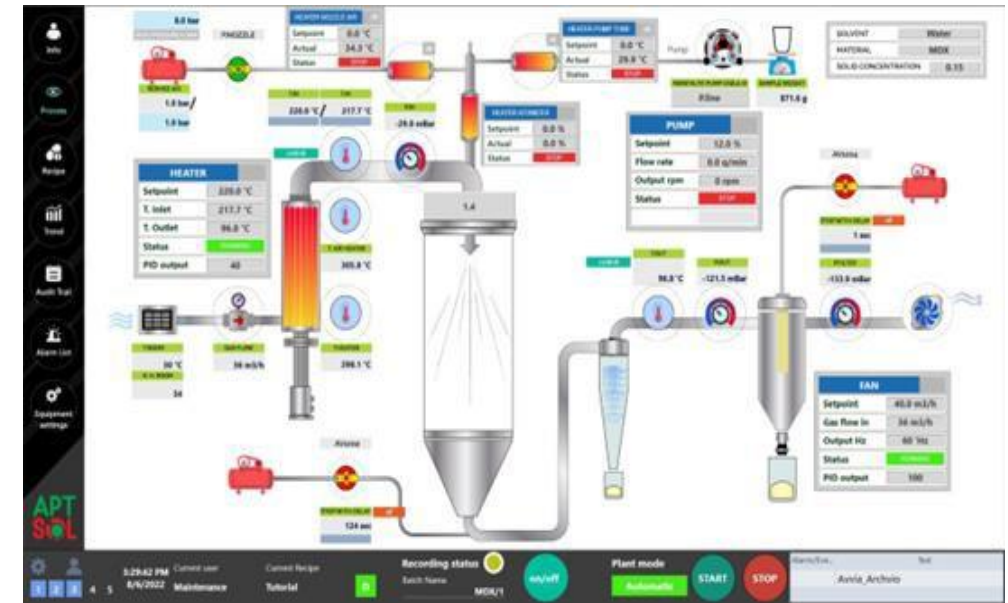


- Open and close by the liquid pressure
- Self lubricant with cleaning media
- High Active impact radius
- Blind spot less than 30°
- AISI 316
- Weld directly into the tower, filter or piping



# Our Software

Available for all equipment sizes



## DATA PROCESSING

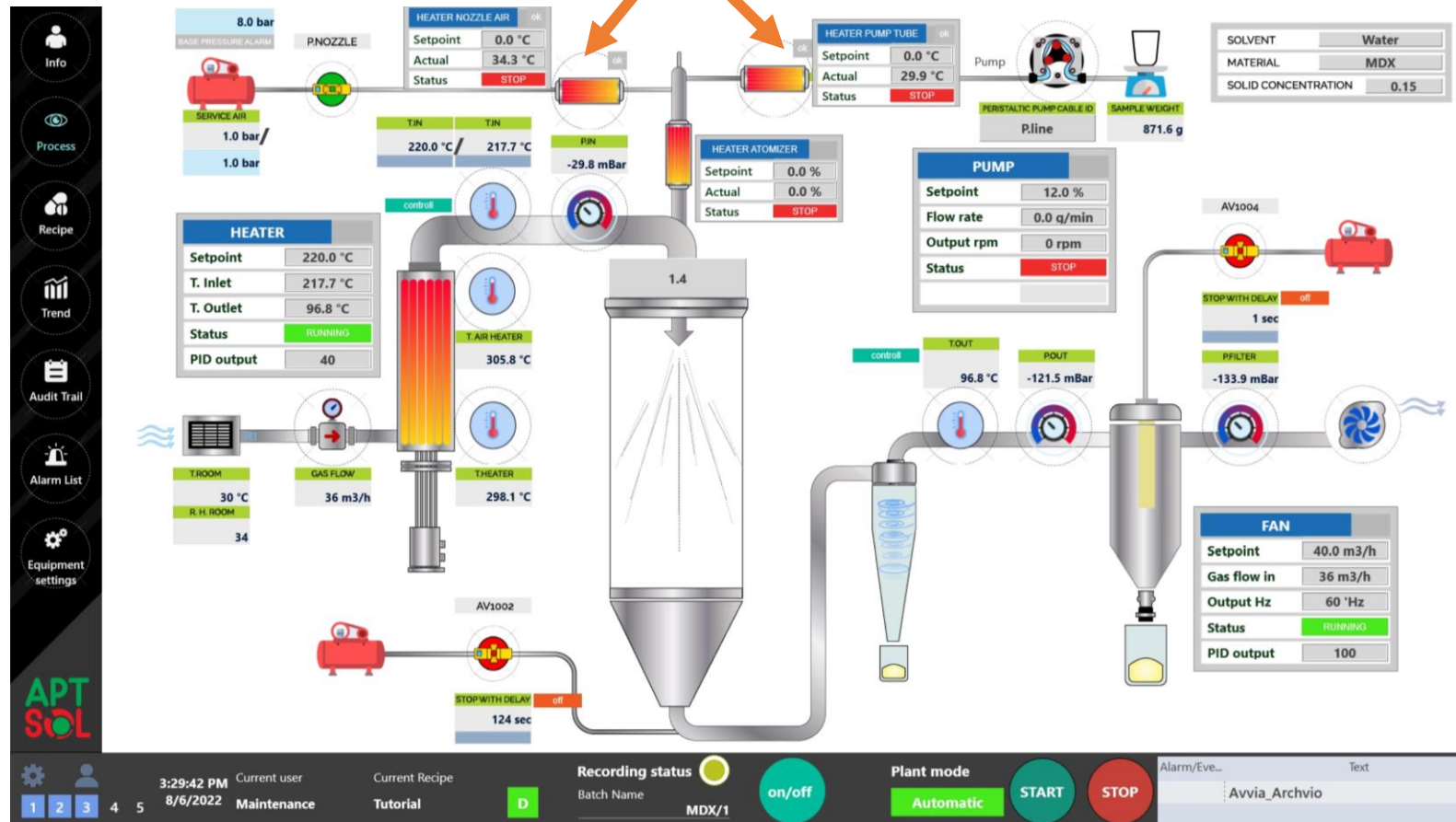
- Up to 15 data recorded
- USB, LAN and Wi-Fi connections
- Easy download in a sheet all the process recorded (PDF or Excel)
- Two different user level access (R&D and Production)
- Optional CFR 21 PART 11 compliance



# Spray Congealing Option

Electrically heated nozzle

Control of all heated lines



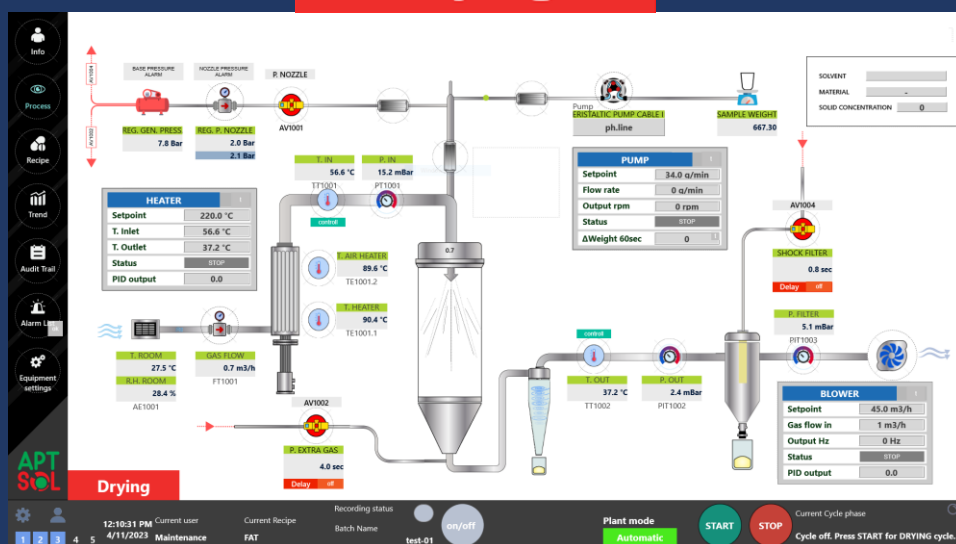
# Smart and User-friendly HMI

High-performance Spray Dryer and Spray Congealing for lab, pilot, and industrial production activities with advanced PLC functions and a high level of control of process parameters.

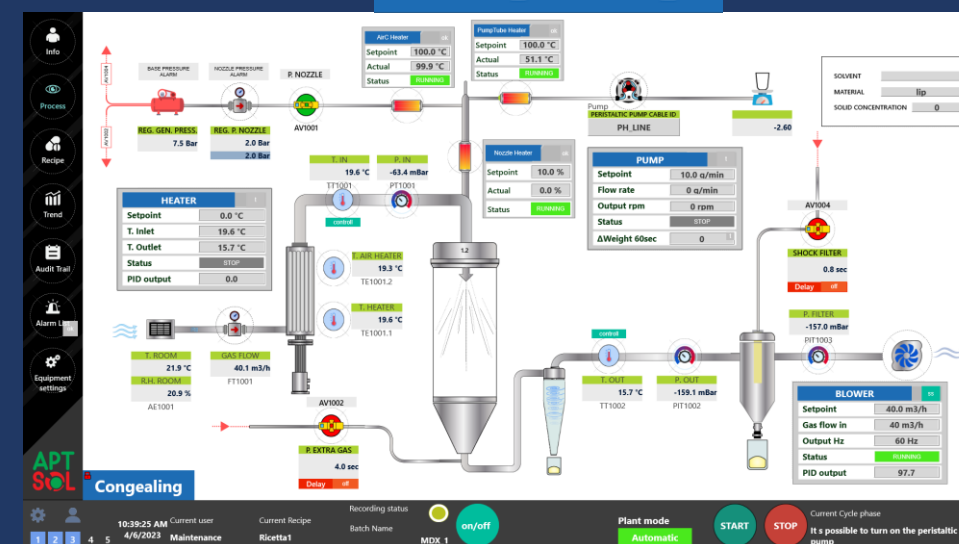
APT Pilot ONE software offers a brilliant 19" touchscreen Display with advanced graphic functions and an intuitive navigation menu, with the possibility to control multiple units simultaneously.

## From Spray Drying to Congealing in one touch

### Drying



### Congealing

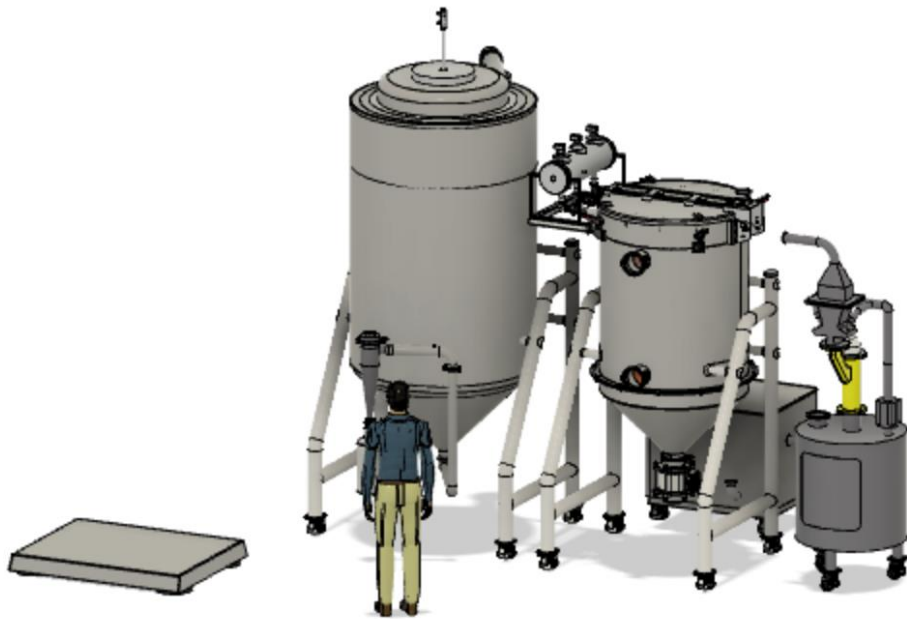




# Our Equipment

## Production Scale

APT-30.0



### Technical Data

|  |   |
|--|---|
| Evaporative Capacity Max.              | 30 kg/h (distilled water)                                   |
| Max. Inlet Temperature                 | 330 °C  |
| Heating Capacity                       | 40.5 kW   |
| Fan Capacity Max.                      | 360 m <sup>3</sup> /h                                       |
| Nozzle                                 | Two Fluids or Rotary  |
| Space requirements                     | 4.9 × 2.5 × 3.3 m (L x W x H) (depending optional)          |
| Filter                                 | Cartridges or Bags  |
| Materials in contact with the feed     | AISI 316 (internal polishing Ra <0.5 micron) – PTFE – Pyrex |
| Materials NOT in contact with the feed | AISI 304 – Acrylic resin                                    |

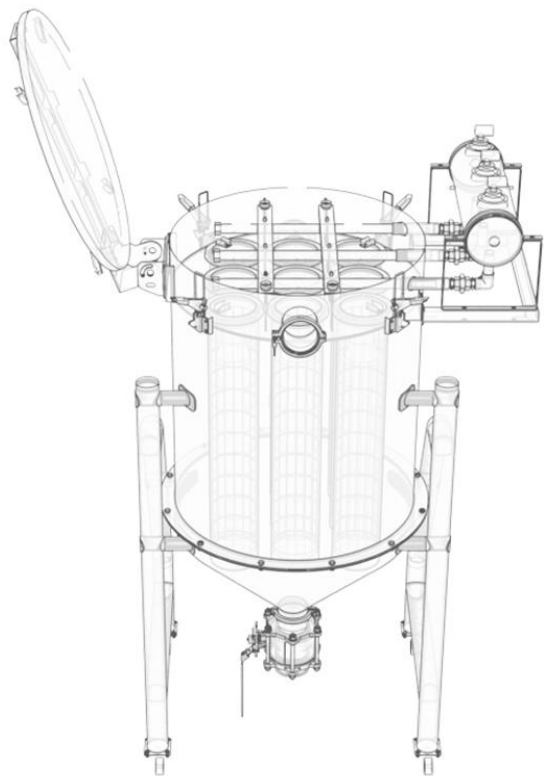
### DATA PROCESSING

- Up to 15 data recorded
- USB, LAN
- Easy download in a sheet all the process recorded (PDF or Excel)
- Two different user level access (R&D and Production)
- Optional CFR 21 PART 11 compliance

### OPTION

- Spray Congealing set-up
- CIP (Clean in Place)
- Extra dust filters

# APT Additional filter module

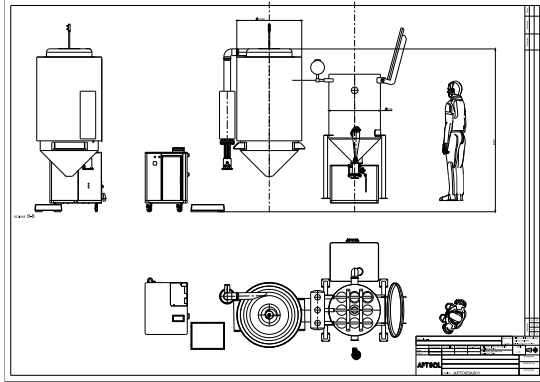


Through the bag filter (PES) mounted inside, it is used to recover the ultra fine particles not selected by the cyclone separator. The filter is equipped with an automatic back-cleaning system, controlled by the PLC. The PLC continuously monitors the pressure inside the cyclone. This filter status active monitoring of the delta pressure before and after the filter ensures that performance is constant and activates the reverse jet filter cleaning.

| Available Set-ups |                                |
|-------------------|--------------------------------|
| Filter type       | Filter bag<br>Cartridge filter |

| Technical data      |   |
|---------------------|---|
| Material            | AISI316L  |
| Filter bag material | PES - antistatic polyester<br>needlefelt microporous PTFE |

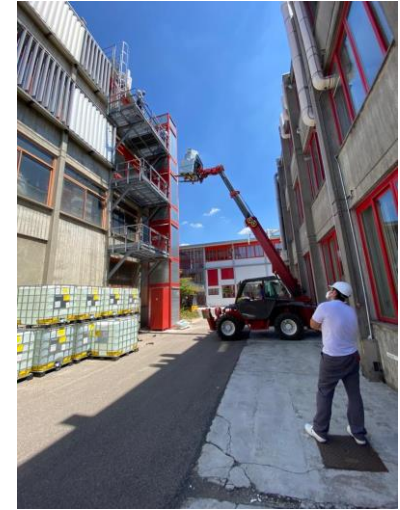
# Taylor made Equipment



APTSol can provide equipment specially designed for clients needs



from P&I to installation



Thank you!

## Contacts

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