

Solid Dosage Processing

### **UltimaPro**<sup>™</sup>-FZ

Collette<sup>™</sup> Single Pot Processing



# Efficient Processing of Effervescent formulations

- Suitable for all production methods of effervescents: 2-step and 1-step using solvents, 1-step using water;
- More stable effervescent products thanks to water-based granulation;
- Fast and efficient drying of both water-based and solvent-based formulations;
- Process experience and proven track record;
- Very efficient vacuum system capable of reaching <3 mbar absolute pressure.

Collette™

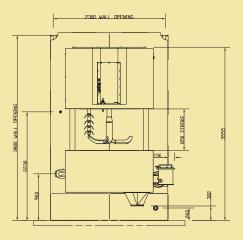
## Solid Dosage Processing

#### **UltimaPro**<sup>™</sup>-FZ

# Collette™ Single Pot Processing for effervescent production

#### **Typical Dimensional drawing**

UltimaPro™ 600



#### Main benefits of UltimaPro<sup>™</sup>-FZ

- The flexibility of a Single Pot Processor makes it suitable for all production methods of effervescents: 2-step and 1-step using solvents, 1-step using water.
- For effervescent processes using water, excellent control of the reaction
  process and more stable formulations can be achieved through fast onset
  of drying using vacuum (optionally assisted by microwaves for even
  faster drying times), leak-tight operation and a specially designed,
  balanced vaccum system.
- The use of vacuum for drying, combined with an inertization system
  using minimal amounts of nitrogen, allows the use of solvents for
  processing. The ingenious vacuum system with condenser allows for easy
  recovery of the solvent, thus minimising solvent emission and reducing
  waste.
- Single Pot Processing offers extreme flexibility for processing thanks to the different drying options available (vacuum, gas-assisted vacuum and microwaves).
- More than 30 years of process experience, starting with the introduction of the TOPO Processor.
- GEA Pharma Systems is also experienced at integrating PAT solutions for online monitoring of the process using its Lighthouse Probe™ technology.

#### Suggested configuration for UltimaPro<sup>™</sup>-FZ

The UltimaPro<sup>TM</sup>-FZ is a Single Pot Processor equipped with a very efficient vacuum system, with a special balanced design for water-based effervescents. The bowl is leak-tight to enable a vacuum level of <3 mbar to be achieved. Recipes can be integrated for standard effervescent formulations. Vacuum drying is the basic drying technology with the option of adding microwaves for even faster processing times, higher yield and more stable end product.

#### Available sizes

10 l, 25 l, 75 l, 150 l, 300 l, 400 l, 600 l, 900 l and 1200 l.

#### **Test Opportunities**

The Single Pot Processing technology can be tested at the GEA Pharma Systems Process Development Center in Wommelgem.

#### References

GSK, Cipla, Intas, Konimex, Amriya, Polfa Lodz, Hemofarm ...

www.geapharmasystems.com



GEA Pharma Systems - Collette™

Keerbaan 70, B-2160 Wommelgem, Belgium Tel +32 3 350 12 11, Fax +32 3 353 20 55 collette@geagroup.com