



Process Engineering  
Division

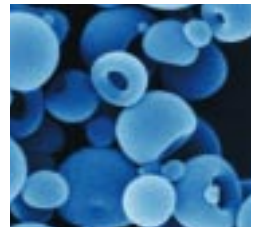
Niro Pharma Systems

AEROMATIC  
BUCK  
COLLETTE  
COURTOY  
FIELDER  
NICA  
NIRO

# Collette MICROGRAL™

Lab-Scale Formulation Excellence

- Table-Top unit
- Batch capacity : 100 to 700 g
- Granulation and Pelletization
- Excellent Process Control
  - Torque measurement
  - Temperature measurement
- Data logging



The Collette MICROGRAL™ is the ideal laboratory batch unit for high shear granulation and pelletization process development. The MICROGRAL™ is a must have piece of equipment for formulation, re-formulation and application development in both industrial as well as academic/educational settings. No other high shear granulator and pelletizer feature the same degree of process consistency backed by data logging capabilities ensuring a traceable process for formulation assurance.

2 versions of the MICROGRAL™ are available — the BASIC version and the PLUS version:

### BASIC

- Manual setting of variable mixer / chopper speed
- Digital read-out of mixer torque

### PLUS

- LCD panel with real time graphs
- Data logging
- Batch report in Excel or Memory card
- Liquid dosing system with syringe pump\*
- Product temperature measurement\*

\* Optional features

### Technical Specifications

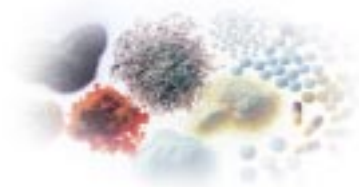
|                     |                |                |
|---------------------|----------------|----------------|
| Vessel Size         | 1000 ml        | 4000 ml        |
| Impeller Speed      | 50 - 2000 rpm  | 50 - 1350 rpm  |
| Impeller Torque     | 1600 mNm       | 6000 mNm       |
| Chopper Speed       | 300 - 5000 rpm | 300 - 5000 rpm |
| Temperature Sensor* | 20 - 100 °C    | 20 - 100 °C    |
| Dosing speed*       | 0 - 100 ml/min | 0 - 100 ml/min |

\* Only available on the MICROGRAL™ PLUS

## Niro Pharma Systems

AEROMATIC  
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*Niro Pharma Systems is world leader in providing advanced processing solutions for solid dosage forms to the pharmaceutical industry. Based on a dedication to research and durable quality, Niro Pharma Systems offers a wide range of solutions, from individual pieces of equipment to complete integrated plants, by uniting the state-of-the-art technologies of Aeromatic, Buck, Collette, Courtoy, Fielder, Nica and Niro.*



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