#### **About Dec**

Founded in 1987, **Dec** is a leading global provider of powder handling systems to the pharmaceutical, chemical, food and cosmetic industries. Their turnkey and custom designed solutions have been successfully integrated into complex operations in hundreds of companies worldwide, both multi-nationals and specialists.

**Dec's** versatile and multi-format Jetmills are designed to satisfy the full range of these requirements. Available in open and contained arrangements, with the ability to handle difficult and hard handle products, they are ideal for Pharmaceutical, Chemical and Cosmetic production.

The systems can be provided in sterile, toxic or sterile toxic arrangements in contained or non contained format. They also have the advantage of being are both scalable and achieving any PSD (particle size distribution) profile when looking for a PSD below 20 microns.

With correct optimization product recovery rates of 99% are achievable, with production ranging between 0.2 grams on the smallest system, to better than 150 kgs/hour on the larger systems.

**Powder Handling Excellence** 





# Micronizing Powder Handling Excellence

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Micronizing Powder Handling Excellence

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## Dec – Jetmills

Particle size reduction is a key process in laboratories and small scale manufacturing, right through to full size production. **Dec's** versatile and multi-format **Jetmills** are designed to satisfy the full range of these requirements. Available in open and contained arrangements, with the ability to handle difficult products.



## MC2 Jetmill<sup>®</sup>

The MC2 is ideal for clinical trials and scale-ups, especially when extremely small batches of high value products with very low product loss need micronizing.

Nominal diameter	Estimated capacity	Batch size	Process gas @ 7 bar	Process gas @ 12 bar	Installed power
50 mm (2 inches)	From 35.0 to 200 gr/hr	1.5 gr to 500 gr	0.19 Nm³/min (6.71 CFM)	0.33 Nm³/min (11.65 CFM)	0.05 kW (0.00 HP)

# 95 59

### MC Jetmill<sup>®</sup> 200

The **MC 200** is the next step up the scale from the MC 150 laboratory unit, suitable for micronizing up to 40kg/hr.

Nominal diameter	Estimated capacity	Batch size	Process gas @ 7 bar	Process gas @ 12 bar	Installed power
200 mm (8 inches)	From 1.0 to 40 kg/hr	1 kg to 1000 kg	1.59 Nm³/min (56.36 CFM)	2.738 Nm³/min (96.69 CFM)	1.2 kW (1.6 HP)

## MC Jetmill<sup>®</sup> 300

The **MC 300** is the third step up from the MC 50 laboratory unit, suitable for micronizing up to 50kg/hr.

70	Process gas	Process gas	Installed	

Nominal diameter	Estimated capacity	Batch size	Process gas @ 7 bar	Process gas @ 12 bar	Installed power	
300 mm (12 inches)	From 5.0 to 200 kg/hr	5 kg to 2000 kg	3.89 Nm³/min (137.37 CFM)	6.67 Nm³/min (235.55 CFM)	1.2 kW (1.6 HP)	

## **MCOne**°

The **MCOne** is the perfect tool for Research and Development teams seeking the ability to micronize very small quantities of material (0.2grams), allowing them to carry out many more trials using limited or costly products with very high yields.

Nominal	Estimated	Batch size	Process gas	Process gas	Installed
diameter	capacity		@ 7 bar	@ 12 bar	power
33 mm	From 0.1	From 0.2 gr	0.09 Nm <sup>3</sup> /min	0.18 Nm <sup>3</sup> /min	-
(1.3 inches)	to 50 gr/hr	to 50 gr	(3.18 CFM)	(6.36 CFM)	



MC Jetmill<sup>®</sup> 50

laboratories and small scale manufacturing.

Nominal

diameter

100 mm

(4 inches)

The versatile and compact MC 50

is designed to satisfy the needs of

Estimated

capacity

From 0.05 to

5.0 kg/hr

Batch size

3 g to 20 kg

The **MC 150** is the smallest production fluid Jetmill in the range which allows easy cleaning and high yields.

Nominal	Estimated	Batch size	Process gas	Process gas	Installed
diameter	capacity		@ 7 bar	@ 12 bar	power
150 mm	From 0.5 to	0.2 kg to 100 kg	0.73 Nm³/min	1.24 Nm³/min	0.25 kW
(6 inches)	30 kg/hr		(25.80 CFM)	(48.80 CFM)	(0.33 HP)



Installed

power

0.25 kW

(0.33 HP)

Process gas

@ 12 bar

0.706 Nm3/min

(24.93 CFM)

Process gas

@ 7 bar

0.412 Nm3/mir

(14.55 CFM)

## MC Jetmill<sup>®</sup> 400

The **MC 400** is the fourth step up from the MC 50 laboratory unit, suitable for micronizing up to 300kg/hr.

Nominal diameter	Estimated capacity	Batch size	Process gas @ 7 bar	Process gas @ 12 bar	Installed power
400 mm (16 inches)	From 10 to 300 kg/hr	10 kg to 3000 kg	6.990 Nm³/min (246.85 CFM)	11.980 Nm³/min (423.07 CFM)	1.5 kW (2 HP)