

MACHINERY

# Tablet coating



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# SMARTCOATER X•ONE series

Backed by more than 60 years of ACG engineering expertise, the SMARTCOATER X•ONE incorporates everything you need to ensure swift and economical processes – and uphold consistently high standards.

As part of our new X•ONE series, and the next-level upgrade of ACG's premium tablet-coating system, it makes tablet coating extraordinarily fast and fully reassuring, with increased process speed, efficiency and usability.

## Applications

Film coating and sugar coating of tablets, micro-tablet coating and pellet coating

## Features

Features	Benefits
Unique coating system that includes baffles, spray arms and drum	Flexibility to work with 15 – 100%* batch occupancy
High-performing spray-arm design with full external control via infinity handle	Accurate bed coverage for the entire batch size, and can be positioned to match all product requirements  Avoids delays caused by in-process intervention
ACG's X•ONE 2.0 Spray Nozzle developed in collaboration with Düsen-Schlick GmbH, Germany with an Anti-Bearding Cap – now 50% lighter (as light as 800 g)	No product build-up, so far easier to clean and maintain  Easier handling
Modular, automated and integrated design for tablet charging and discharging, with inbuilt discharge baffles	Dust-free, closed-door charging, and 100% tablet discharge until the last tablet
Advanced wash-in-place (WIP) technology featuring the optimum number and arrangement of nozzles	Complete wetting of dead spots for faster, safer and efficient washing of all parts – including hard-to-reach corners
ACG's exclusive X•ONE command process control system	Compliant with ATEX, GAMP 5 and 21 CFR Part 11, our technology allows intuitive, secure monitoring and control



Find this information on our website:  
Machinery > Tablet coating > SMARTCOATER X•ONE series

\* For SMARTCOATER 1000 X•ONE, SMARTCOATER 1400 X•ONE and SMARTCOATER 2000 X•ONE, the batch occupancy is 40 – 100%.

## Technical specifications

Model	Working volume (in litres)	Tablet coating	Micro-tablet coating	Pellet coating
<b>SMARTCOATER 125 X•ONE</b>	<b>Min</b>	13	38	63
	<b>Max</b>	125	100	100
<b>SMARTCOATER 250 X•ONE</b>	<b>Min</b>	25	75	125
	<b>Max</b>	250	200	200
<b>SMARTCOATER 350 X•ONE</b>	<b>Min</b>	35	105	175
	<b>Max</b>	350	280	280
<b>SMARTCOATER 500 X•ONE</b>	<b>Min</b>	50	150	250
	<b>Max</b>	500	400	400
<b>SMARTCOATER 700 X•ONE</b>	<b>Min</b>	70	210	350
	<b>Max</b>	700	560	560
<b>SMARTCOATER 1000 X•ONE*</b>	<b>Min</b>	100	400	500
	<b>Max</b>	1000	800	800
<b>SMARTCOATER 1400 X•ONE*</b>	<b>Min</b>	140	560	700
	<b>Max</b>	1400	1120	1120

\* Only film / sugar coating of tablets is possible.

# SMARTCOATER 2000 X•ONE

The SMARTCOATER 2000 X•ONE is not only our highest-capacity coater yet – it's also our most productive and flexible. It features a larger drum fitted with universal mixing baffles, so there's no need for changeover when between 30 and 100% capacity. A simplified and ergonomic inbuilt manifold for washing is provided in the machine.

## Applications

Film coating and sugar coating of tablets



## Features

Features	Benefits
A shallower coating drum designed to hold XL batch sizes	Faster and effective coating, while minimising the chances of crushing tablets
Ergonomic design of spray arm with three directional settings	Positional settings for all product requirements Accurate bed coverage, thanks to adjustable nozzle and intermediate angle adjustment
Improved door design	Smaller footprint and enhanced ergonomics
ACG's X•ONE 2.0 Spray Nozzle – developed in partnership with Düsen-Schlick GmbH, Germany, with Anti-Bearding Cap – now 50% lighter (as light as 800 g)	No product build-up, so it's far easier to clean and maintain Easier handling
Modular, automated and integrated design for tablet charging and with built-in discharge baffles	Dust-free, closed-door charging and 100% tablet discharge Virtually effortless discharge right up to the last tablet
Advanced wash-in-place (WIP) technology featuring the optimum number and arrangement of nozzles	Complete wetting of dead spots for faster, safer and efficient washing of all parts – including hard-to-reach corners
ACG's exclusive X•ONE command process control system	Compliant with ATEX, GAMP 5 and 21 CFR Part 11, this advanced technology allows intuitive, secure monitoring and control

## Technical specifications

Working volume	Min	800 l
	Max	2,000 l

# MINIQUEST T

Designed especially for R&D and feasibility studies and pilot-scale batches, our QUEST series helps you generate tangible data, so you can establish process parameters quickly and accurately, and be confident scaling up your batches.

A tabletop tablet coating machine for future-ready pharmacists, MINIQUEST T is a direct result of ACG's pledge to bridge the gap between academia and industry expectations. This much-needed plug-and-play equipment gives students a hands-on contextual experience of coating machines, and requires minimal training.

## Applications

Tablet coating



Find this information on our website:  
Machinery > Tablet coating > QUEST series

## Features

## Benefits

Separate Venturi blowers for inlet and exhaust air	Helps to maintain negative pressure in the system, controlling differential pressure (DP) precisely across the drum
Integrated peristaltic pump	Ensures compact housing for optimised footprint
Needle-free Schlick nozzle	Ease of handling and excellent process results
User-friendly control system	Easy scalability
	Simple and intuitive to operate

## Technical specifications

Working volume	Min	0.2 l
	Max	0.7 l

# QUEST TC

This tabletop coating machine features a perforated drum design and comes with three interchangeable drums. Its smart design and exclusive Schlick nozzle ensure reliably excellent process results. QUEST TC can be used for batch sizes as small as 200 g, so it's perfect for R&D and feasibility studies.



## Applications

Tablet coating, minitablet coating

## Features

## Benefits

Three interchangeable drums – 0.8 l, 1.6 l and 2.5 l	Process a wide range of batch sizes with the same equipment
Minitablet coating capability	Process tablets as small as 2mm in diameter with the same equipment
Adjustable 'gun-to-bed' distance and angle	Flexibility to cover maximum area across the tablet bed irrespective of batch size
	Use coating solutions (aqueous or solvent-based) with varying drying times
	Ensures efficient coating
Smart design enables easy access	Faster and safer in-line handling and cleaning during the coating process
A weighing scale integrated with the Programmable Logic Controller (PLC)	Simplified process and parameter
Touchscreen human-machine interface (HMI) and PLC-based control system	Intuitive, user-friendly controls

## Technical specifications

	Drum sizes	0.8 l	1.6 l	2.5 l
Working volume	Min	0.45 l	0.9 l	1.4 l
	Max	0.8 l	1.6 l	2.5 l

## QUEST TC III

An R&D-to-pilot-scale machine to support easy scale-up, QUEST TC III features a perforated-drum tablet-coating system with four interchangeable drums for different batch-processing needs. Designed at our Design Centre in Mülheim, Germany, the machine deftly handles a wide variety of coating applications and batch sizes.

**Applications**

Tablet coating, minitablet coating

**Features****Benefits**

Interchangeable and fully perforated drums (2, 9, 24 and 56 l) with optimised horizontal airflow	Well-defined spray and drying zones within the coating drum ensure reduced coating solution consumption, as well as less coating residue in the drum, process chamber, and ductwork
Split-design X•ONE nozzle developed exclusively with Düsen-Schlick GmbH, Germany	Separate dock and nozzle mean less re-alignment
Wash-in-place (WIP) system with built-in washing nozzles	Makes it far easier to wash the system
ACG's exclusive X•ONE Command Process Control system with large interface screen	Compliant with GAMP 5 and 21 CFR Part 11, this advanced technology allows intuitive and secure monitoring and control

**Technical specifications**

	Drum sizes	2 l	9 l	24 l	56 l
Working volume	Min	1.2 l	5 l	13.5 l	31.5 l
	Max	2 l	9 l	24 l	56 l

# SECURECOAT series

The SECURECOAT series includes containment tablet coaters designed with operator safety front of mind, for use with highly potent active pharmaceutical ingredients (HPAPIs) that require occupational exposure band (OEB) 4 compliance.

## Applications

Containment film coating, sugar coating and drug coating of tablets, and micro-tablet and pellet coating



## Features

Features	Benefits
Contained product charging and discharging system, using bins and split valves	Complete containment of the product, ensuring operator safety
Vacuum-based sampling mechanism	Contained sampling throughout operation
Uniquely designed baffles for effective tablet rolling	Matches the mixing and coating efficiency of SMARTCOATER X•ONE baffles.
	Easy to clean
Strategically positioned washing nozzles for inaccessible areas, with a wash-in-place (WIP) rack	Far simpler washing
ACG's exclusive X•ONE command and control system	Compliant with ATEX, GAMP 5 and 21 CFR Part 11, this advanced technology allows intuitive, secure monitoring and control of the system

## Technical specifications

Model	Working volume (in litres)	Tablet coating	Micro-tablet coating	Pellet coating
SECURECOAT 125	Min	38	38	63
	Max	125	100	100
SECURECOAT 250	Min	53	53	88
	Max	250	200	200
SECURECOAT 350	Min	105	105	175
	Max	350	280	280

## SECURECOAT TC III

The SECURECOAT TC III is a small-scale containment machine ideal for coating tablets containing oncological, cytotoxic, biopharmaceutical, hormonal, and other high-potency drugs.

**Applications**

Containment film coating, seal coating, sugar coating and drug coating of tablets, and micro-tablet and pellet coating

**Features****Benefits**

Contained product charging and discharging system	Complete containment of the product, ensuring operator safety
Vacuum-based sampling mechanism	Contained sampling throughout operation
Uniquely designed baffles for effective tablet rolling	Matches the mixing and coating efficiency of SMARTCOATER X•ONE baffles.
	Easy to clean
Strategically positioned washing nozzles for hard-to-access areas, with a wash-in-place (WIP) rack	Far simpler washing
ACG's exclusive X•ONE command and control system	Compliant with ATEX, GAMP 5 and 21 CFR Part 11, this advanced technology allows intuitive, secure monitoring and control of the system

**Technical specifications**

	Drum sizes	9 l	24 l	56 l
Working volume	Min	5 l	13.5 l	31.5 l
	Max	9 l	24 l	56 l

# Aftermarket. Not afterthought.

At ACG, we understand that when you get a new piece of factory equipment, you're buying far more than a machine; you're also investing in a relationship that will last its lifetime.

That's why we take our aftermarket service so seriously.

Whether you need advice or training, are preparing to make your factories 'smarter', or simply need a machine fixed fast, know that ACG will always go above and beyond to offer excellent service and value. As far as we're concerned, we're in this together – for life.



# Let's talk.

Get in touch to find out more about our range of products and services. If you have specific equipment needs, we can even collaborate on delivering a purpose-made solution. We look forward to chatting.

## Email us

[sales.engineering@acg-world.com](mailto:sales.engineering@acg-world.com)

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**Make it better.**

**ACG Engineering headquarters**  
127 Kandivali Industrial Estate,  
Kandivali West, Mumbai 400 067,  
India

+91 22 3078 0701 / 02

[www.acg-world.com](http://www.acg-world.com)