

# Coating Systems

## Product Data







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#### R&D / PILOT SCALE

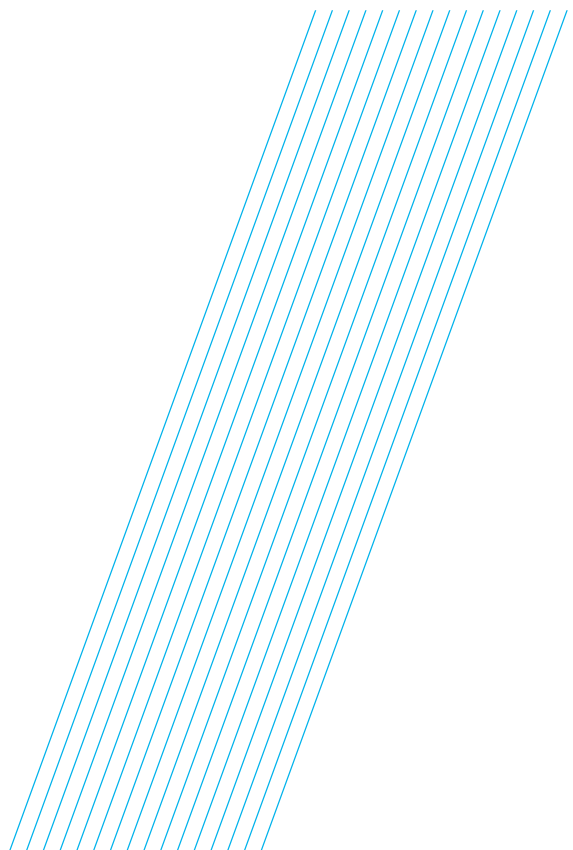
ALPHA **COTA**    5        10        20

#### PRODUCTION SCALE

NOVA **COTA**    75        75C      150      150C

SIGMA **COTA**    350      350C    750      750C

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# ALPHACOTA 5/10/20

## Automatic Tablet Coating System

**R&D / PILOT SCALE  
with interchangeable pans**



### Coating Range Features:

- Siemens S7 Industrial PLC control
- Siemens HMI operator touch screen
- Complete display and control of the coating process
- Data acquisition, downloading and print functions
- Unique 'streamline' guide plate (agitator) design
- Spray systems with self-cleaning
- CIP with PLC controlled washing cycles

AVE offer a complete range of fully automated Tablet Coating Systems including perforated, side-vented, and non-perforated drums from 1-750kg capacity.

Built to comply with cGMP guidelines and CE standards the range combines modern tablet coating technology with high quality construction; designed for easy cleaning with optional **Clean in Place (CIP)** system.

The Clean in Place System (CIP) facility is for the automated cleaning of the internal surfaces, the system includes a hygienic pump, spray balls and solution tank.

- Control via HMI / PLC with recipe wash phases
- All contact parts in stainless steel
- Washing cycle can be tailored to user requirements

### PLC control

The control system is a Siemens Simatic S7 series PLC with Siemens HMI, the system has 3 levels of passwords divided into operator and engineer level for operation and process management, data setting and modification. The interlocks and alarms are designed within the control system with records of historic data, alarms etc. which can be output to a data printer.

An optional data acquisition package is available with additional software functionality, allowing the system to be validated to FDA CFR21 Part 11 (optional)

The HMI interface allows easy input for the operator, allowing display and control of the coating process, such as pan pressure, inlet and exhaust temperature and air velocity along with clean in place (if included).

### Pan construction

- Stainless steel, assembled onto a stainless steel sub frame
- Full penetration welds, ground smooth
- Silicone doors seals
- Large glass opening front access door
- Swing out spray arm
- Direct chain drive, variable speed inverter controlled via HMI
- Drum lamp
- Unique 'streamline' guide plate (agitator) design
- Drum discharge system

### Technical Specification

	ALPHACOTA5	ALPHACOTA10	ALPHACOTA20
Production Capacity	1, 3, 5kg	3, 5, 10kg	10 - 20kg
Pan Diameter	300mm	380mm	700mm
	380mm	480mm	
	480mm	610mm	
Pan Speed	6 to 30 rpm	6 to 30 rpm	2 to 20 rpm
Spray Guns	1pc	1pc	1pc
Working Air Volume	300~500m <sup>3</sup> /h	500~800m <sup>3</sup> /h	600m <sup>3</sup> /h
Air Temperature	ambient to 80°C	ambient to 80°C	ambient to 100°C
Air Inlet Filtration		Hepa	
Steam Heating	N/A	N/A	N/A
Electrical Heating	6kw	10kw	6kw
Pan Contact Parts		SS316L	
Pan Frame		SS304	
Electrics		380V/3Ph/50Hz/30A	
Coater Dimensions	1250 x 900 x 1680mm	970 x 880 x 1800mm	1070x1320x1820mm
Coater Weight	400kgs	450kgs	420kgs

# NOVACOTA 75/75C/150/150C

## Automatic Tablet Coating System

### PRODUCTION SCALE

#### Coating Range Features:

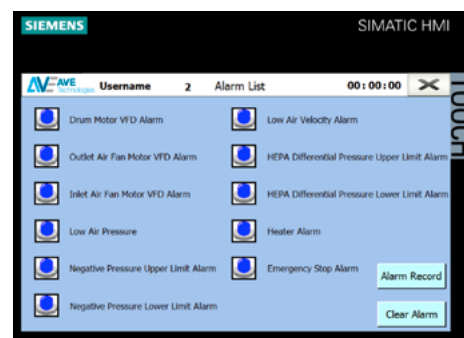
- Siemens S7 Industrial PLC control
- Siemens HMI operator touch screen
- Complete display and control of the coating process
- Data acquisition, downloading and print functions
- Unique 'streamline' guide plate (agitator) design
- Spray systems with self-cleaning
- CIP with PLC controlled washing cycles



#### Technical Specification

	NOVACOTA75/75C	NOVACOTA150/150C
Production Capacity	75 kg	150 kg
Pan Diameter	950mm	1200mm
Pan Speed	4 to 19 rpm	2 to 15rpm
Spray Guns	2pcs	3pcs
Working Air Volume	1500~2000m <sup>3</sup> /h	2500~3000m <sup>3</sup> /h
Air Temperature	ambient to 80°C	
Air Inlet Filtration	Hepa	
Steam Heating	≤80kg	≤150kg/h
Electrical Heating	Optional	Optional
Pan Contact Parts	SS316L	
Pan Frame	SS304	
Electrics	380V/3Ph/50Hz/40A	380V/3Ph/50Hz/50A
Coater Dimensions	1350 x 1010 x 1630mm	1570 x 1260 x 2000mm
Coater Weight	550kgs	900kgs

All AVE Technologies Coating System machines are built to comply with cGMP guidelines and CE standards – the range combines modern tablet coating technology with high quality construction; designed for easy cleaning.



HMI Screen

# SIGMA**COTA** 350/350C/750/750C

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## Automatic Tablet Coating System



### Ancillary Equipment



### Technical Specification

	SIGMA <b>COTA</b> 350/350C	SIGMA <b>COTA</b> 750/750C
Production Capacity	350 kg	750 kg
Pan Diameter	1580mm	1580mm
Pan Speed	2 to 11 rpm	2 to 10rpm
Spray Guns	4pcs	6pcs
Working Air Volume	3500~4000m <sup>3</sup> /h	5500~6000m <sup>3</sup> /h
Air Temperature	ambient to 80°C	
Air Inlet Filtration	Hepa	
Steam Heating	≤200kg	≤400kg/h
Electrical Heating	Optional	Optional
Pan Contact Parts	SS316L	
Pan Frame	SS304	
Electrics	380V/3Ph/50Hz/80A	380V/3Ph/50Hz/100A
Coater Dimensions	2000 x 1560 x 2300mm	2000 x 2240 x 2330mm
Coater Weight	1,650kgs	2,500kgs

**AVE Technologies Ltd.**  
**T:** +44(0)1342 458 248 **E:** info@avetechnologies.co.uk

**AVE**  
 Technologies





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## **AVE Technologies also offer:**

Tablet Compression Solutions

Encapsulation Solutions

SoftGel Systems

Cartoners

Blister Packers

Counting Line

The quality of our products is our first consideration from conceptual design to final commissioning. All activities in the manufacture process are in accordance with the company's Quality Assurance Manual and International Standards Directive BS EN ISO 9001:2008. The production site where the products are made has been assessed and given ISO 9001:2008 approval.

All equipment is manufactured to allow it to be CE marked in accordance with 98/37/EC Machinery Directive, inclusive of but not necessary limited to the following standards:

- EC Machines Directive 98/37/EEC
- EC Low Voltage directive 73/23/EEC
- Electromagnetic Compatibility Directive 89/336/EEC
- Safety of Machinery BS EN 12100:2010
- General Requirements Electrical Equipment of Machines EN60204-1
- Safety of Machinery fluid Power Systems and their components BS FN 4414:2010
- Cleanroom and Contained Enclosures Standards ISO14644 Pt 1 - 7
- Validation of Automated Systems in Pharmaceutical Manufacture ISPE GAMP
- Pressure Equipment Directive 97/23/FC (where applicable)

All images are for illustrative purposes.  
Specifications are subject to regular updating. Please contact AVE Technologies for latest product details.

**AVE Technologies** Ltd.  
**T:** +44(0)1342 458 248 **E:** [info@avetechnologies.co.uk](mailto:info@avetechnologies.co.uk)  
[www.avetechnologies.co.uk](http://www.avetechnologies.co.uk)

