

# adelco<sup>smart</sup> PRO-CURE

An advanced textile conveyor dryer that cures both **screen & digitally** printed garments with **four belt width options** to meet your production output requirements.

## Standard Features

- Integral infeed and outfeed exhausts
- Four belt widths available
- Ovens are fully modular enabling dryer length to be chosen to suit all curing requirements (expansions available)
- Automatic belt speed control  
Just enter the time in minutes and seconds to precisely adjust the speed of your belt
- Triple insulation with air curtain for the coolest exterior shell available
- Air intake from both sides of oven giving unrivaled heat distribution
- Split belt model available on PCS150 & PCS180



# New Features

- Ground rubber crowned conveyor rollers, ensures reliable belt tracking, prevent slipping & prolongs conveyor life
- Easy access, removable jet & vacuum plenums enables deep & rapid internal cleaning
- Ergonomically position & fully adjustable HMI control interface
- Rapid dual air filter cleaning
- Rapid infeed and outfeed extraction filter cleaning
- Integrated infeed/outfeed and main blower exhaust with residue trap
- Updated UV flame detection system with easy access
- Built in infeed and outfeed fume extraction system
- On screen temperature mapping
- Curing time and temperature history record
- Gas pressure display
- Fault finding and service instruction videos
- Pit stop internal cleaning
- Quick removable external panels
- Easy clean exhaust drip tray



Optional VOC (Volatile Organic Compounds) exhaust filtration system

The strongest jet airflow on the market with an integrated vacuum utilizes new technology in curing and ink penetration

Recycles clean filtered air

Optional cooling modules and bridges

Small quick release lint filters for simple/fast maintenance, even whilst the dryer is running, no replacement filters required.

Rapid dual air filter cleaning

Sophisticated adjustable touch screen

Easy clean exhaust drip tray

The world's easiest maintainable curing system allows for quick and optimized servicing

## Production Capacities (Based on 3 meter oven length)

Model	PCS100	PCS120	PCS150	PCS180
1 minute (Plastisol Ink)	360/hour	720/hour	720/hour	1080/hour
2 mins (Waterbased/Discharge Ink)	180/hour	360/hour	360/hour	540/hour
3 mins (Kornit Digital no white ink/light coloured fabrics)	120/hour	240/hour	240/hour	360/hour
7 mins (Kornit Digital with white ink/dark coloured fabrics)	52/hour	104/hour	104/hour	156/hour

Based on a 3 M oven length. Production increases 30% for a 4 M oven, 60% for a 5 M oven and 100% for a 6 M oven and decreases by 30% for a 2 M oven. Allowing for one line of garments to be placed every 50cm. One line of products on 75cm and 100cm belts, two lines on 120cm and 150cm and three lines on 180cm. Production rates will alter depending on the product placement and the time/temperature settings chosen for the individual curing requirements. Wash tests should be undertaken to ensure the correct time and temperature combination for specific ink types.

## Gas Dryer Specifications

Description	PCS100G-3	PCS120G-3	PCS150G-3	PCS180G-3
<b>Electrical Supply</b> Voltages confirmed at time of ordering. Other voltages available on request	3Phase, 50/60HZ 200/220V & 380/415V	3Phase, 50/60HZ 200/220V & 380/415V	3Phase, 50/60HZ 200/220V & 380/415V	3Phase, 50/60HZ 200/220V & 380/415V
<b>Natural Gas Pressure</b>	10" W. G/ 25mbar	10" W. G/ 25mbar	10" W. G/ 25mbar	10" W. G/ 25mbar
<b>Natural Gas Connection</b>	3/4" BSP	3/4" BSP	3/4" BSP	3/4" BSP
<b>Propane Gas Pressure</b>	Line Pressure Reduced to 37mb	Line Pressure Reduced to 37mb	Line Pressure Reduced to 37mb	Line Pressure Reduced to 37mb
<b>Propane Gas Connection</b>	1/4" BSP	1/4" BSP	1/4" BSP	1/4" BSP
<b>BTU REQUIRED</b>	150,000	175,000	200,000	225,000
<b>Time From ambient temp to 160 °C</b>	Approximately 8 mins	Approximately 10 mins	Approximately 12 mins	Approximately 15 mins
<b>Maximum Electrical Consumption</b>	4.5Kw	4.5Kw	4.5Kw	4.5Kw
<b>Exhaust Dia</b>	300mm (12 Inch)	300mm (12 Inch)	300mm (12 Inch)	300mm (12 Inch)

## Electric Dryer Specifications

Description	PCS100E-3	PCS120E-3	PCS150E-3	PCS180E-3
<b>Electrical Supply</b> Voltages confirmed at time of ordering. Other voltages available on request	3Phase, 50/60HZ 200/220V & 380/415V	3Phase, 50/60HZ 200/220V & 380/415V	3Phase, 50/60HZ 200/220V & 380/415V	3Phase, 50/60HZ 200/220V & 380/415V
<b>Maximum Electrical Consumption</b>	40Kw/h	40Kw/h	59Kw/h	59Kw/h
<b>Average Electrical Consumption at 180 °C</b>	28Kw/h	30Kw/h	40Kw/h	40Kw/h
<b>No &amp; KW of Elements</b>	12x3Kw (36Kw)	12x3Kw (36Kw)	15x3Kw (45Kw)	15x3Kw (45Kw)
<b>Exhaust Dia</b>	300mm (12 Inch)	300mm (12 Inch)	300mm (12 Inch)	300mm (12 Inch)

The Adelco Pro-cure Industrial dryer is a highly efficient and economical dryer suitable for virtually all types of screen-printing and digital inks including water based, solvent based and enamel inks and in other screen- printing and industrial applications, including mug and ceramic curing.



The new Adelco Pro-Cure Smart conveyor dryer range is available in four belt widths and five oven lengths, so you can customize your dryer to suit your individual curing requirements, for all digital and conventional textile ink systems. The Pro-Cure Smart is modular in design, making it the perfect option to add additional ovens to the dryer as your business grows.

Designed and specified for advanced textile curing, the Pro-Cure Smart tunnel dryer has an efficient airflow and exhaust system, incorporating oven feed and exit extraction hoods to provide a cleaner working environment. As well as incorporating many of the popular features found in the Adelco Dual Dryer and our other drying systems.

The Adelco Pro-Cure Smart is a feature rich conveyor dryer that uses dual lint filters to prevent the build-up of lint in the dryer and helps to reduce cleaning and maintenance dramatically. Filters can be easily cleaned in seconds while the dryer is still running. With many features included as standard, there are also some optional extras available to enhance your Pro-Cure Smart dryer further.

The Pro-Cure Smart is available as a gas or electric conveyor dryer and uses a sophisticated touch-screen control panel so you can easily set, manage and control the automatic belt speed that is precise and repeatable every time.

The Pro-Cure Smart conveyor dryer offers a split-belt model (only available on PCS150 & PCS180) with two burners, two speeds and two directions, enabling the dryer to cure two independent ink systems at the same time. The Adelco Pro-Cure Smart dryer comes with the strongest, toughest and longest lasting conveyor belts on the market.

### PRO-CURE Smart gas dryer consumption analysis

Belt Width	Oven Length	Average Gas Consumption kg/hr	Average Gas Consumption kwh	Average Electric Consumption kwh
180cm	3 Meter	2.8	24.5	3.3
	4 Meter	3.3	29	3.5
	5 Meter	3.5	31	3.7
	6 Meter	5.5	48.5	6.5
150cm	3 Meter	2.6	23	3.2
	4 Meter	3	26.5	3.4
	5 Meter	3.2	28	3.6
	6 Meter	5	44	5.8
120cm	3 Meter	2.4	21	2.8
	4 Meter	2.7	24	3
	5 Meter	2.9	25.5	3.2
	6 Meter	4.6	40.5	5.0
100cm	2 Meter	2	18	2
	3 Meter	2.2	19.5	2.2
	4 Meter	2.4	21	2.3
	5 Meter	2.5	22	2.4
	6 Meter	4.2	37	4.0

Adelco figures taken from consumption tests, averaged per hour at 160 degrees, with exhaust closed. Consumption figures can change according to local environment, production throughput, ink and product types. Adelco reserve the right to revise or review these figures as required.

### PRO-CURE Smart Airflow

Figures shown are hot air oven (curing air volume) only and do not include integral exhaust hoods.

Model	Main Fan Specification	Pulley Ratio	RPM	Air Speed	Max Airflow
PCS100-3	400*400	100:132	1100	25 m/s	5,800 CFM
PCS100-4	400*400	100:118	1230	28 m/s	6,500 CFM
PCS100-5	400*400	118:118	1450	30 m/s	7,000 CFM
PCS100-6	400*400	118:118	1450	30 m/s	7,000 CFM
PCS120-3	400*400	100:132	1100	25 m/s	5,800 CFM
PCS120-4	400*400	100:118	1230	28 m/s	6,500 CFM
PCS120-5	400*400	118:118	1540	30 m/s	7,000 CFM
PCS120-6	400*400	118:118	1450	30 m/s	7,000 CFM
PCS150-3	400*400	100:118	1230	28 m/s	6,500 CFM
PCS150-4	400*400	118:125	1370	29 m/s	6,750 CFM
PCS150-5	400*400	118:118	1450	30 m/s	7,000 CFM
PCS150-6	400*400	118:118	1450	30 m/s	7,000 CFM
PCS180-3	400*400	100:118	1230	28 m/s	6,500 CFM
PCS180-4	400*400	118:125	1370	29 m/s	6,750 CFM
PCS180-5	400*400	118:118	1450	30 m/s	7,000 CFM
PCS180-6	400*400	118:118	1450	30 m/s	7,000 CFM