adelco DUAL smart

The world's highest production and most energy efficient dual conveyor dryer for curing screen & digital ink systems.

Adjustable touch screen control panel Independent temperature control for both levels Automatic self-tensioning conveyors

> Two Dryers, One Footprint.

The Adelco Dual Smart has a unique built in extraction system on the infeed and outfeed for a cleaner working environment together with independent exhaust extraction from each conveyor to maximize the curing efficiency for heavily water laden prints in both digital and conventional printing requirements.



- The Dual Smart dryer from Adelco takes high production curing to a new level, with independent burners and temperature control for each conveyor
- The Dual Smart is now modular & can be extended with a dual deck drone to 4 metres
- Ergonomically positioned & fully adjustable HMI control interface
- On screen gas pressure display
- New Non Slip Conveyor belts
- Self-tensioning, self-aligning conveyor belts
- Ground rubber crowned conveyor rollers ensure reliable belt tracking, prevents slipping & prolongs conveyor life
- Easy access, removable jet & vacuum plenums enables deep & rapid internal cleaning

- Easy access air filter cleaning
- Easy access infeed and outfeed extraction filter cleaning
- Exhaust residue trap
- Independent burners and airflow for each belt
- Updated quick access UV flame detection system
- Built in infeed/outfeed fume extraction system
- Curing time and temperature history report
- On screen temperature mapping (via optional temp
- mapping device)
- On screen fault finding and service instruction videos
- Pit stop internal cleaning
- Easy to remove, tool free external panels



Throughput Analysis And Supply Requirements

Description	DS-180G-3	DS-180G-4	DS-180E-3 & 4	
Gas Pressure Input Natural	10"W.G/25mbar/each supply	10"W.G/25mbar/each supply	/	
Gas Pressure Input Propane	Line Pressure (reduced to 37mbar)/each	Line Pressure (reduced to 37mbar)/each	/	
Gas Connection Natural	3/4"BSP/each	3/4"BSP/each	/	
Gas Connection Propane	1/4"BSP/each	1/4"BSP/each	/	
Electrical Supply	3 Phase 220V/380V/415V	3 Phase 220V/380V/415V	3 Phase 220V/380V/415V	
Max Electrical Consumption	7KW	7KW	79 KW	
Time from ambient temp to 160°C (320°F)	Approximately 15 minutes	Approximately 20 minutes	/	
Exhaust Diameter	(12"BSP)300m	(12"BSP)300m	(12"BSP)300m	
Maximum BTU Required	250,000 btu / 7 meters cubed per hour (the heat capacity of our burners exceed the maximum supply used to ensure the most efficient and effective utilisation of heat) 250,000 btu / 7 meters cubed per hour (the heat capacity of our burners exceed the maximum supply used to ensure the most efficient and effective utilisation of heat)		Average Electrical Consumption at 180°C: DS180E-3 - 60 KW/H DS180E-4 - 68 KW/H	
Average BTU Consumption	117,000 btu / 3.3 meters cubed per hour (calculated with a full belt of printed shirts, in production)	156,000 btu / 4.4 meters cubed per hour (calculated with a full belt of printed shirts, in production)	No & KW of electric elements: 24 off 3.5 KW	

Time	Digital Print (Black Shirts)	Screen Print
1 Minute	/	2160 per hour
2 Minutes	1	1080 per hour
5 Minutes	430 per hour	
6 Minutes	360 per hour	
8 Minutes	270 per hour	
10 Minutes	216 per hour	

Based on three lines of adult size garments across each belt width. Allowing for one product placed every 50cm. Production rates will alter depending on product placement and time/temperature settings chosen for individual curing requirements.

Dual Smart Airflow

	Main Fan	Pulley Ratio			RPM		
Model	Specification	Upper Level 50HZ 60HZ	Lower Level 50HZ 60HZ	Upper	Lower	Air Speed	Max Airflow
DS180-3	400*400 x 2	100:118 100:132	100:100 100:118	1180	1400	26 m/s	6,000 CFM
DS180-4	400*400 x 2	100:118 100:132	100:100 100:118	1180	1400	26 m/s	6,000 CFM

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

The Adelco Dual Smart dryer gets its name from its unique design. The Dual Smart dryer is a double belt conveyor dryer with separate heat chambers, airflow and exhaust systems for the top and bottom conveyor belts.

Experience the benefits of two dryers in one footprint with the Adelco Dual Smart dryer range. With dual tunnels, the Dual dryer increases the high throughput capabilities in both digital and conventional textile print requirements, without increasing the size of the dryer.

With independent burners, time and temperature controls for each conveyor level, the Dual Smart cures digital and screen-printing inks in high volumes with such a small footprint.

All Adelco drying machines, including the Dual Smart, and the range of Pro-Cure Smart dryers, are fitted with internal exhaust hoods over the feed and exit sections of the oven. This provides a cleaner working environment without having to add optional extraction hoods and exhaust connections.



"Mark and Leigh Smith have been in the industry a long time and are the only owner-owned manufacturer/distributors in the industry. They'll look at what you need and will then create a solution for you, rather than trying to find a product to fit you. That makes a huge difference. We've got six Ecotexes now and three Duals. The Dual is amazing, you can get a huge volume of digital through a very small area. And Steve, who's their main engineer, he's just brilliant, he really knows these machines."

- Andy, T Shirt & Sons. UK