

# Natgraph

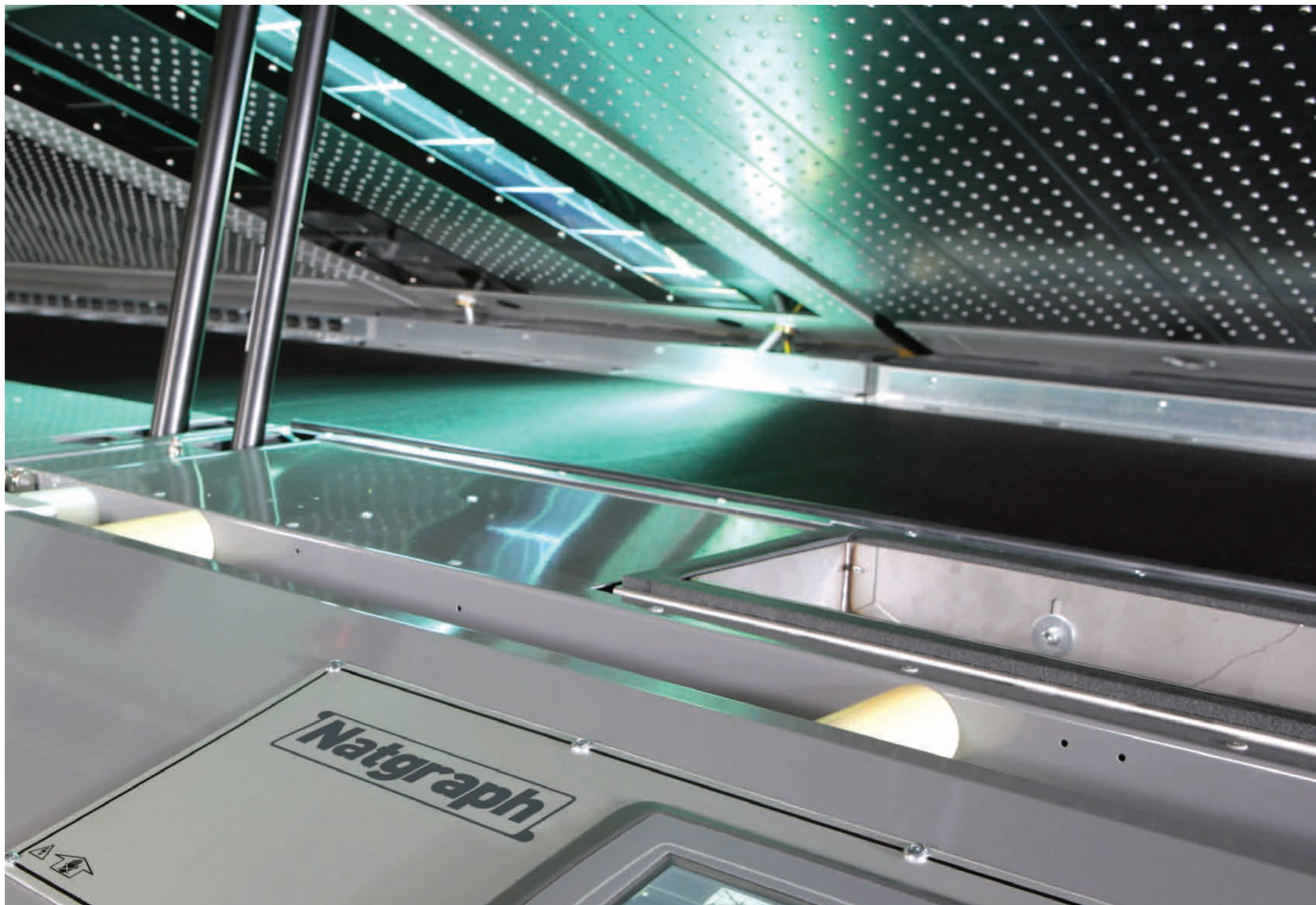


## Freestanding UV & Compact UV Dryers

Natgraph manufacture a range of Freestanding Ultra Violet (UV) Dryers that has been developed from many years of experience gained in the production of over 500 conveyerised UV Dryers, in daily use world-wide. Natgraph UV dryers are widely acknowledged as the coolest and most efficient available.

These dryers have been designed for curing UV surface coatings applied to promotional, electronic, credit card, glass, display and telecommunications products, as well as 3D objects etc. If there is a UV curable ink available for an application, Natgraph will have a solution.

With 8 standard belt widths, Touch Screen PLC Systems, 4 layouts, optional pre IR, Ozone Filters and Intelligent UV Control Systems, this range of dryers is extremely adaptable, versatile and efficient.





## Freestanding UV

The Natgraph range of Freestanding UV Dryers is designed to meet the requirements of sheet fed printing operations and are built to the same modular design as Natgraph's Air Force Dryers. Available in 8 standard curing widths from 70cm through to 260cm so all standard print formats can be processed.

Natgraph's UV technology is acknowledged as the coolest running and most efficient available. This has been achieved with extensive knowledge of discharge lamp requirements for optimum performance and the use of Natgraph's, in-house manufactured transformer systems.

### Freestanding UV Features

- Touch Screen, PLC Control System
- High efficiency fully focused reflectors
- Quartz infra red heat filters
- Inter-lamp cooling zone
- After cure cooling zone
- Inlet vacuum hold-down
- Castors & jacking feet
- Gas filled lifting arms on the hood
- 8 Standard model sizes
- Optional doped lamps
- Optional higher power output
- Optional Electronic UV System
- Optional Intelligent UV System



## Compact UV

The Natgraph range of Compact UV Dryers has been developed to provide a high performance UV Dryer in the minimum of floor space. This has been achieved by combining a Natgraph UV 1m Module and the inlet/outlet from an Air Force Dryer. In applications where space is restricted and the substrate is not temperature sensitive, this dryer is ideal.

Manufactured in the standard Natgraph curing widths (except models 70 and 260), these units are available with 1 or 2 lamps, running at 120 watts/cm. These dryers have vacuum hold-down, digital readout of belt speed, quartz infra red filters etc., all in a length of only 2.5m. The transformers, extraction fan and control system are all located in the base module, whilst the Natgraph Touch Screen PLC Control System and safety systems are the same as for a Natgraph Freestanding UV Dryer.

### Compact UV Features

- Touch Screen, PLC Control System
- High efficiency fully focused reflectors
- Quartz infra red heat filters
- Vacuum hold-down under lamps
- Castors & jacking feet
- Gas filled lifting arms on the hood
- 7 Standard model sizes
- Optional Electronic UV System
- Optional Intelligent UV System



Touch Screen PLC Control



Optional drop down inlet



Compact UV Dryer - Proofing



Quartz heat filters

## Options

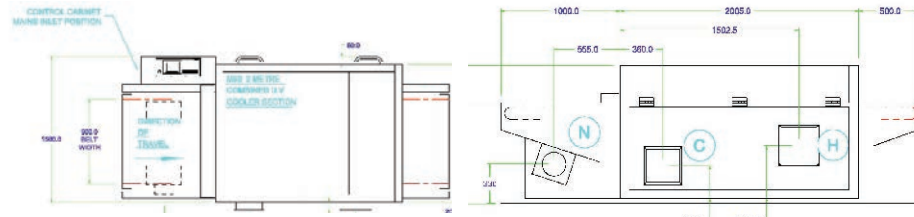
### Drop Down Inlet

A drop down inlet module has been developed by Natgraph for use when a dryer is in production with a cylinder press. This consists of a stainless steel table fitted with a vacuum system and transport belts. The table can be lowered to allow the operator easy access to the screen frame for cleaning etc. The table is moved by pneumatic cylinders, this is operated by one of 2 safety key switches (1 located on either side of the dryer). This module is available for all sizes of Natgraph Air Force Dryers and adds 500mm to the length of the dryer. These modules require a compressed air supply.

### Ozone Filters

Natgraph have designed ozone filter assemblies to operate with their range of UV Dryers. Ozone gases are produced by UV lamps and must be extracted from the dryer efficiently. The ozone is normally extracted from the dryer through ducting to the outside of the building. All of Natgraph's UV Dryers have an efficient and fully sealed extraction system to ensure that all the ozone produced is removed.

If there is no easy route to the outside of the factory, or there are environmental reasons that gases or noise should not be emitted from the factory, then the ozone must be removed by a filter system. Natgraph's Ozone Filter does this and also allows the heat generated by the UV dryer to be re-used within the factory, thus saving on heating costs. There is a replaceable pre-filter that removes any airborne particles within the unit. If this filter is regularly replaced, then the charcoal filters within the unit will never need to be changed. These units are designed to function without reducing the efficiency of the UV Dryer.



## Specifications: Freestanding UV & Compact UV Dryers

### The following specifications are common to all Freestanding UV Dryers

<b>Module Type</b>	1m entry, 2m UV/Cooler, 0.5m exit. (1m exit on model 260)								
<b>Belt Height</b>	79cm - 90cm (31" - 37") Adjustable by the feet, higher options available								
<b>Belt Speed</b>	3-50m per minute (10' - 166') Slower speeds are available to order								
<b>Height</b>	114cm - 129cm (45" - 51") Adjustable by the dryer's feet								
<b>Module Length</b>	All standard models are 3.5m (140") long, except model 260 which is 4m (160") long								
<b>Voltage</b>	Three Phase 230V 50Hz.AC								
<b>Electrical</b>	These figures apply to individual model sizes.								
<b>Model No.</b>	<b>70</b>	<b>90</b>	<b>110</b>	<b>130</b>	<b>155</b>	<b>170</b>	<b>185</b>	<b>215</b>	<b>260</b>
<b>Belt / Drying / Curing Width</b>	70cm (28")	90cm (36")	110cm (43")	130cm (51")	155cm (61")	170cm (67")	185cm (73")	215cm (84")	260 (102")
<b>Module Width</b>	138cm (54")	158cm (62")	178cm (70")	198cm (78")	223cm (88")	238cm (94")	253cm (100")	283cm (112")	370cm (145")
<b>Weight (kgs.)</b>	720kgs.	910kgs.	1130kgs.	1320kgs.	1510kgs.	1700kgs.	1870kgs.	2010kgs.	3000kgs.
<b>Weight (lbs.)</b>	1584lbs.	2006lbs.	2486lbs.	2910lbs.	3322lbs.	3740lbs.	4114lbs.	4422lbs.	6600lbs.
	The following power figures are for 2 lamps at full power, 120 watts/cm (300 watts/inch)								
<b>Power</b>	20kW	27kW	34kW	40kW	47kW	51kW	57kW	67kW	83kW
<b>Current</b>	45	55	67	80	95	105	119	136	115
	The following air volumes are in 1,000m <sup>3</sup> /hour								
<b>Air</b>	The following air volumes are in 1,000m <sup>3</sup> /hour								
<b>Air Intake</b>	2.2	2.8	3.2	3.8	4	4.3	4.8	5.6	6
<b>Extracted</b>	2.3	2.9	3.4	4	4.2	4.6	5	5.8	6

NOTE: Compact Dryers specifications are similar and can be confirmed upon request.

The manufacturer's policy is one of continuous improvement and the manufacturer therefore reserves the right to change or modify the design without prior notice. The technical specifications given are therefore for information only.

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