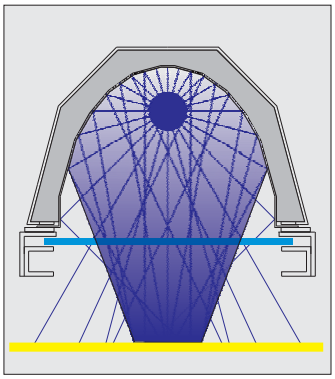
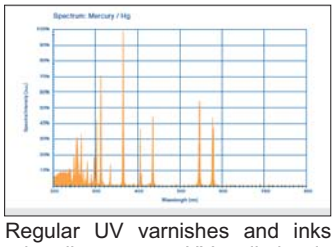
SPS® SUV+C

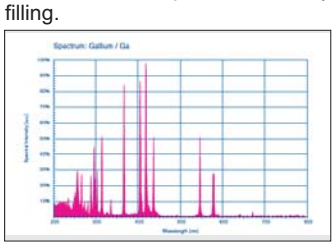
UV Curing Unit with Integrated Substrate Cooling



SPS® SUV+C curing units are all equipped to cope with the high output of SPS® cylinder presses. Multi-facet reflectors provide optimum UV dose (mJ/cm²) and intensity (mW/cm²). Quartz glass shields under the reflectors serve as IR filters, minimizing the emitted heat radiation. They also protect the lamps from dust and the running substrate from contact to the UV source.



Regular UV varnishes and inks primarily react on UV radiation in the spectral area of 365 nm. This is covered by the characteristics of standard UV lamps with Mercury filling.



SPS® SUV+C dryers can be equipped with a radiator combination for broad-band emission, adding a Gallium doped lamp to the system - for uniform cure within the layer.

Separated from the UV radiator cooling that keeps the ambient temperature around the lamp on a constant level, integrated power air flow segments immediately cool down the passing sheet, exposing it to guided high speed air.
This way, the temperature build-up is minimized. The reduced thermal influence, connected with optimum UV energy output, leads to best fit and registration between print runs.

SPS® SUV+C

All specifications given in this brochure are subject to possible alteration.

EQUIPMENT	Standard ■ Option ○	SUV+C1/2
2 UV modules, electronically continuously adjustable to max. 2 * 160 W/cm (EPC / EBU)	■	■
broad band UV emission: combination of Hg- und doped Ga-radiators	○	○
high UV intensity (Wattage) by optimized mirror reflectors in Al extrusion housings	■	■
reflectors with quartz shields as IR, contact, and dust protection	■	■
UV smart: UV power auto-adjustment in function of conveyor belt speed	○	○
SPS® ***synchroline***: sheet pass control and functional chain in line with the printing press	○	○
vacuum infeed, extended standard length 2 m (6' 7"), with adjustable sheet hold-down	■	■
additional infeed extension (module length 1 m / 3' 3")	○	○
vacuum fold-down belt at infeed: free passage between printing press and dryer (length 0,7 m / 2' 4")	○	○
UV- and heat-resistant PTFE conveyor belt, guided traction	■	■
SPS® **IR TOP**: IR module on the extended infeed; variable power for improved varnish flow-out	○	○
integrated high-flow air guide segments to cool down the passing sheet	■	■
enforced system cooling (acting on belt and reflector assemblies) for curing of thermally sensitive substrates	○	○
water / air heat exchanger (SPS® **FRIGOPACK**) for local cold water supply (chiller)	○	○
thermal insulation and sound protection in the section housing	■	■
conveyor outlet with adjustable belt drive (length 0.8 m / 2' 7")	■	■
side hinged hood assembly, hood lift opening to A side, gas-strut supported	■	■
hood opening in pneumatic version	○	○
air lead connections on right-hand side (A side)	■	■
touch-screen operator panel with all main functions in central B side position (HMI)	■	■
programmable memory for production set-up values	■	■
equipment for on-line service data transfer	■	■

TECHNICAL DATA			SUV+C 1	SUV+C 2
Max. Curing Width		mm	850	1100
		in.	33	43
Max. nominal UV power		W/cm	160	160
		W/in.	160	160
Length[1]	L	mm / ft. in.	5500 / 18'	5500 / 18'
Width	W	mm / ft. in.	1750 / 5' 9"	2150 / 7' 1"
Height[2]	H	mm / ft. in.	1350 / 4' 5"	1350 / 4' 5"

[1] with 2 m (6' 7") standard infeed length

[2] with 920 mm (3') standard conveyor belt height

Advanced HMI technology with touch-screen setup functions

For high-gloss UV varnishing applications, a perfect flow-out of the medium, prior to curing, is a must. The extended vacuum infeed of the SPS® SUV+C (not shown in picture) provides the space to fit an infra-red bridge for employment on-demand - SPS® **IR TOP**.
The controlled exposure of the varnish layer to thermal treatment loweres the medium viscosity and leads to a perfectly glassy surface.

SPS® PrintingSystems

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