

TEST YOUR ENERGY CLOCK



// The **energy prices** are decreasing your **profits?**

// There is an alternative solution for drying. Compare hot-air and IR drying.



Information under
www.duo-technik.de

DUO-TECHNIK GmbH

Phone: +49(0)6641/9695-0

Fax: +49(0)6641/9695-40

E-Mail: info@duo-technik.de

Comparison Air drying / IR drying working width 2800mm / 110"

Number of printing units:	6
Average working width in mm:	1900
Average number of printing units:	4
Average hours of dryer usage per year:	1500
Price in US\$ for electrical source in kW/h:	0,08

Price in US\$ for steam in kg/h:	0,02
Price in US\$ for gas per therm:	0,30
Electrical connection for 1 IR interim dryer (normal) in kW:	55,0
Electrical connection for 1 IR interim dryer (strengthened) in kW:	90,0
Electrical connection for 1 IR final dryer in kW:	110,0

	Duo-Technik type VII steam heated	Duo-Technik type VII gas burner	IR Dryer normal	IR Dryer strengthened
Power Connections:				
Final Dryer in kW:	45	45	110	110
Interim Dryer in kW:	45	45	330	540
Electrical connection in kW:	90	90	440	650
Average consumption in kW/h with all on with the average working width & average number of printing units:	63	63	299	425
Usage of steam for heating register (2x400 kg/steam/h, 8 bar, average usage 60%)	480 kg/h	-	-	-
Usage of gas (2x230 kW, average usage 60%)	-	276 kW	-	-
Yearly energy cost in US\$:	25.200	15.039	35.829	51.029
Yearly spare parts need:	-	-	change of the lamps after 1000 working hours about 30-35 tUS\$ per year according to the use of the system	change of the lamps after 1000 working hours about 30-35 tUS\$ per year according to the use of the system
Maintenance needs:	monthly cleaning the filter; 20 h per year	monthly cleaning the filter; 20 h per year	cleaning and checking the system 20 h per year	cleaning and checking the system 20 h per year
Investment in fire protection:	-	-	45-55 tUS\$	45-55 tUS\$
Production speeds (sheets/h):				
Speed White Top:	10000	10000	10000	10000
Speed Semicoated Paper**:	7500 - 9500	7500 - 9500	5000-6000	7500 - 9500
Speed Fullcoated Paper***:	6500 - 8500	6500 - 8500	6500 - 8500	6500 - 8500

* Inline varnishing maximal ink volume 8,0 g/m, varnish volume 11 g/m; 150 % ink overlapping

** Inline varnishing maximal ink volume 6,0 g/m, varnish volume 9 g/m; 150 % ink overlapping

This excel spread sheet you can get for your own calculation.
Please contact us.