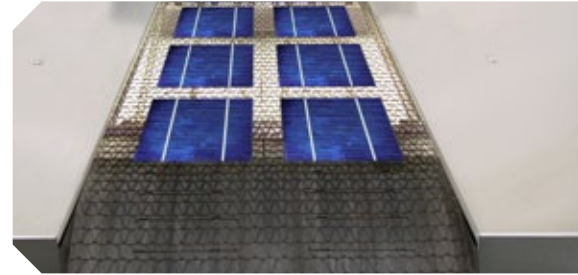


◆ **CF-DL Metallization  
Drying and Firing Furnaces**  
Trust Despatch for dual lane production



Despatch's dual lane CF-DL firing furnace sets the standard for value. This high-volume production tool offers a feature-rich platform with a suite of options to enhance firing performance.

The furnace is now available with SolectFire™ Technology. This critical advancement opens the process window and gives operators independent open and closed loop control of the top and bottom of each firing zone. This innovative decoupling technology provides greater thermal control and sets the stage for next generation pastes.

Despatch CF-Series metallization furnaces are designed for high throughput, ease of maintenance, and consistent process repeatability ensuring consistently high yields and superior product quality. Patented push-button chamber access and optional VOC Thermal Oxidizers make maintenance a snap. The system is easily integrated with every major metallization printer line and provides the lowest cost of ownership while producing highly efficient cells.

**FEATURES AT A GLANCE**

- ◆ Rapid thermal ramping (up to 200°C/sec)
- ◆ Enhanced thermal cooling (up to 200°C/sec)
- ◆ Up to 300 ipm belt speed
- ◆ Uniform, stable and repeatable cavity temperature (+/- 2°C)
- ◆ Exceptional lane-to-lane temperature uniformity +/-3°C with edge heaters
- ◆ Mesh belt with stand-offs
- ◆ Soft start with reduced connected load
- ◆ Enhanced software recipe management
- ◆ Advanced graphical user interface
- ◆ Master production control interface
- ◆ Data logging
- ◆ Redundant over-temperature shutdown
- ◆ Minimized wafer shadowing design
- ◆ 98% uptime with VOC Thermal Oxidizers
- ◆ Safe, simple chamber accessibility
- ◆ Eye-level electronics for easy maintenance
- ◆ Failed element monitor
- ◆ Uninterruptible power supply
- ◆ Integration to wafer automation equipment



*Shown with optional VOC Thermal Oxidizers for virtually maintenance-free elimination of Volatile Organic Compounds in exhaust gasses*

*Patented technology*



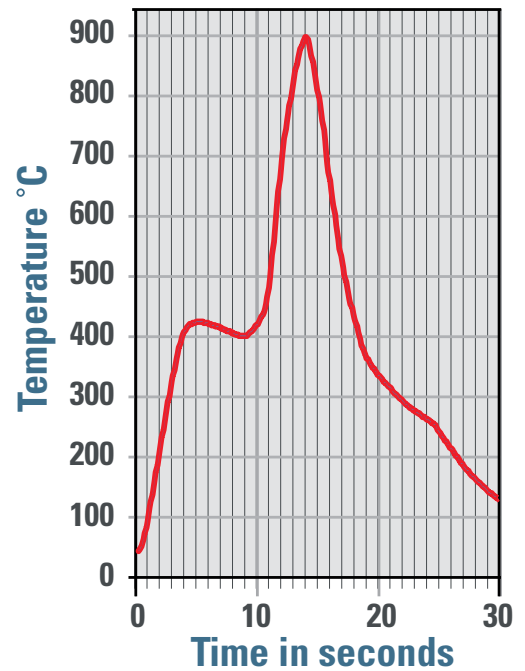
*New advanced thermal control*

	CF-DL FIRING	CDF-DL DRYING/FIRING
<b>PRODUCT CONFIGURATION</b>		
Overall length	733 cm (288.5 in)	1143 cm (450 in)
Overall width	152.4 cm (60 in)	152.4 cm (60 in)
Overall height	164 cm (64.55 in)	164 cm (64.55 in)
Standard entrance/exit table	92 cm (36 in)	92 cm (36 in)
Open inspection area		92 cm (36 in)
Conveyor type	Lightweight balance spiral weave, Nichrome V material, friction drive with stand-offs	
Conveyor height above floor	94 cm (37.5 in ±1.5 in)	94 cm (37.5 in ±1.5 in)
Conveyor width (custom configurations up to 24in/61cm wide available)	45.7 cm (18 in)	45.7 cm (18 in)
Net weight	3,480 kg (7,672lbs)	5,675 kg (12,500 lbs)
Shipping weight	3,910 kg (8,620 lbs)	6,356 kg (14,000 lbs)
<b>ELECTRICAL REQUIREMENTS</b>		
Voltage	380–415V/3 phase/50–60 Hz	
Connected load	125 Amps	171 Amps
Typical operating load	80 Amps	108 Amps
<b>WATER REQUIREMENTS</b>		
Typical flow	11 lpm	11 lpm
Pressure (maximum)	100 psi	100 psi
pH level	7.2–7.6	7.2–7.6
Recommended inlet temperature	16–18°C (59-64°F)	16–18°C (59-64°F)
<b>EXHAUST</b>		
Process exhaust venturi assist <i>*hood required, no direct connection</i>	2 sets	4 sets
Cabinet exhaust	24,070 lpm (58,000 scfh)	47,138 lpm (102,000 scfh)
<b>PROCESS ATMOSPHERE</b>		
Clean dry air (CDA) (Typical)	850 lpm (1,800 scfh)	1,557 lpm (3,800 scfh)
<b>PROCESS CAPABILITIES</b>		
Maximum temperature (Drying/firing)	1000°C	400°C/1,000°C
Conveyor speed range	660–762c m/min (26–300 ipm) all models	
Conveyor speed accuracy	± 0.5%	± 0.5%
Throughput (6x6in/156x156mm wafers)	up to 5,000 wafers per hour (firing furnace)	

Notes: Specifications are subject to change without notice. Contact Despatch Industries for the most updated specification. \* Throughput dependent on belt speed, paste type, solvent load etc.

## OPTIONS

- ◆ SolecFire™ Technology
- ◆ Water-cooled heat exchanger
- ◆ Edge contact belt
- ◆ Profiling systems
- ◆ VOC thermal oxidizer
- ◆ Ultrasonic belt cleaner/dryer
- ◆ Additional dryer zones
- ◆ Lane monitoring thermocouples
- ◆ SECS/GEM
- ◆ CE compliance
- ◆ Reduced exit wafer temp system



Rapid ramp up and cool down capabilities enable you to optimize your firing profiles for high efficiency cell production.

## GLOBAL OFFICES

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