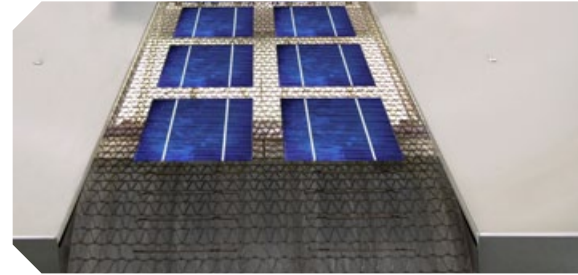


◆ **CF-DL Metallization
Drying and Firing Furnaces**
Trust Despatch for dual lane production



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*



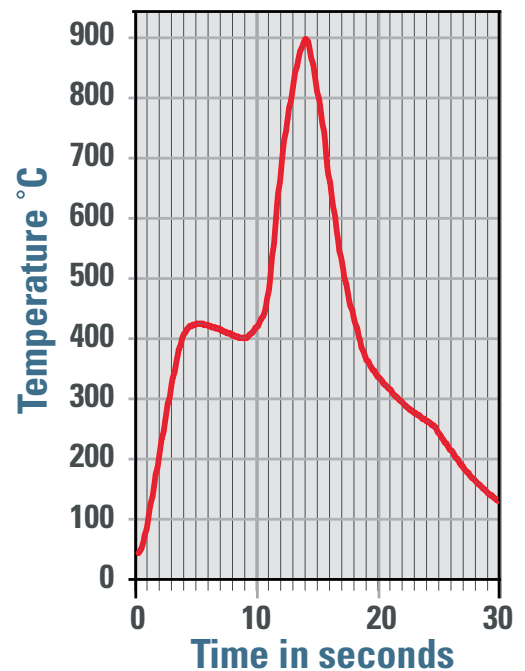
New advanced thermal control

	CF-DL FIRING	CDF-DL DRYING/FIRING
PRODUCT CONFIGURATION		
Overall length	736 cm (290 in)	1143 cm (450 in)
Overall width	156 cm (61.5 in)	156 cm (61.5 in)
Overall height	164 cm (64.55 in)	164 cm (64.55 in)
Standard entrance/exit table	93.5 cm (36.8 in)	93.5 cm (36.8 in)
Open inspection area	NA	92 cm (36 in)
Conveyor type	Lightweight balance spiral weave, Nichrome V material, friction drive with stand-offs	
Conveyor height above floor	92 - 99 cm (36-39 in)	92 - 99 cm (36-39 in)
Conveyor width (custom configurations up to 24in/61cm wide available)	45.7 cm (18 in)	45.7 cm (18 in)
Net weight	3,400 kg (7,500 lbs)	5,675 kg (12,500 lbs)
ELECTRICAL REQUIREMENTS		
Voltage	380-415V/3 phase/50-60 Hz	
Connected load	85 Amps	171 Amps
Typical operating load	65 Amps	108 Amps
WATER REQUIREMENTS		
Typical flow	11 lpm	11 lpm
Pressure (maximum)	4 Bar (60 psi)	4 Bar (60 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)
EXHAUST		
Process exhaust venturi assist <i>*hood required, no direct connection</i>	2 sets	4 sets
Cabinet exhaust	850 M ³ /hr (500 scfm)	1700M ³ /hr (1000 scfm)
PROCESS ATMOSPHERE		
Clean dry air (CDA) (Typical)	34 M ³ /hr (22 scfm)	87 M ³ /hr (34 scfm)
PROCESS CAPABILITIES		
Maximum temperature (Drying/firing)	1000°C	400°C/1,000°C
Conveyor speed range	66-762cm/min (26-300 ipm)	
Conveyor speed accuracy	± 0.5%	± 0.5%
Throughput (6x6in/156x156mm wafers *	up to 5,000 wafers/hour	up to 3,400 wafers/hour

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

- ◆ SolectFire™ 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

Germany: +49 30 629 073 410 / europe@despatch.com
China: +86-21-62365868 / shanghai@despatch.com
Taiwan: +886-3-6588484 / taiwan@despatch.com

USA HEADQUARTERS

Phone: 1-952-469-5424
toll free usa: 1-888-337-7282
fax: 1-952-469-4513

sales@despatch.com
 service@despatch.com

www.despatch.com

8860 207th Street West
 Minneapolis, MN 55044 USA

Despatch
INDUSTRIES