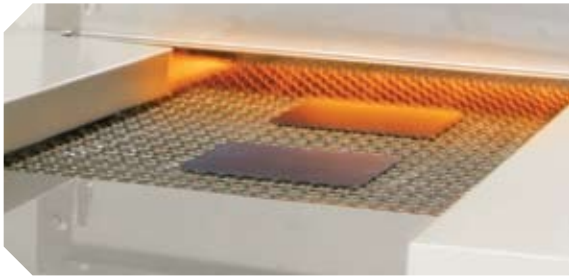
THRIVING ON INNOVATION

Despatch INDUSTRIES

CF and CDF Series Infrared Firing and Drying/Firing Furnaces

Maximizing your solar cell efficiencies

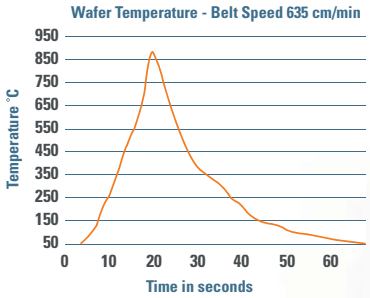


Despatch CF and CDF Series infrared furnaces are designed for high throughput, ease of maintenance and consistent process repeatability ensuring consistently high yields and superior product quality.

In addition to these exceptional performance capabilities, all models feature an enhanced graphical user interface, eye-level electronics access, and the first of its kind push-button chamber access. These innovations make the CF and CDF easy to use, maximize performance and up time and allow you to continually improve your results.

FEATURES AT A GLANCE

- Rapid thermal ramping (≥80°C/sec)
- Enhanced thermal (>70°C/sec
- Closed loop temperature controls
- Enhanced software recipe management
- Advanced graphical user interface
- Master production control interface
- Data logging
- Redundant over-temperature shutdown
- Minimized wafer shadowing design
- Safe, simple chamber accessibility
- Eye-level electronics for easy maintainability



OPTIONS

- Water-cooled heat exchanger
- Failed element monitor
- Profiling systems
- Water-cooled volatile organic compound (VOC) condenser
- Ultrasonic belt cleaner/dryer
- Uninterruptible power supply
- Custom belt widths
- Mesh belt with stand-off (dimple) supports
- Conveyor table extensions
- Integration to wafer automation equipment
- CE compliance

		CF-7210 FIRING CDF-7210 DRYING/FIRING	CF-7214 FIRING CDF-7214 DRYING/FIRING
PRODUCT CONFIGURATION			
Overall length	CF CDF	733 cm (288.5 in) 1143 cm (450 in)	733 cm (288.5 in) 1143 cm (450 in)
Overall width		117 cm (46 in)	117 cm (46 in)
Overall height		165 cm (65 in)	165 cm (65 in)
Standard entrance table	CF CDF	92 cm (36 in) 92 cm (36 in)	92 cm (36 in) 92 cm (36 in)
Open inspection area		46 cm (18 in)	46 cm (18 in)
Standard exit table	CF CDF (drying/firing)	92 cm (36 in) 92 cm (36 in)	92 cm (36 in) 92 cm (36 in)
Conveyor type		Lightweight balance spiral weave, Nichrome V material, friction drive (all models)	
Conveyor height above floor		94 cm (37.5 in ±1.5 in) all models	
Conveyor width (custom configurations up to 24" are available)		25.4 cm (10 in)	35.5 cm (14 in)
Net weight	CF CDF	1,751 kg (3,860 lbs) 2,840 kg 6,260 lbs)	2,014 kg (4,439 lbs) 3,266 kg (7,199 lbs)
Shipping weight	CF CDF	1,932 kg (4,260 lbs) 3,202 kg (7,060 lbs)	2,222 kg (4,899 lbs) 3,682 kg (8,119 lbs)
ELECTRICAL REQUIREMENTS			
Voltage		208–480V/3 phase/50–60 Hz	208–480V/3 phase/50–60 Hz
Connected load	CF CDF	~69.5 kVA ~80.5 kVA	~90.5 kVA ~105 kVA
Typical operating load	CF CDF	33 kVA 43 kVA	45 kVA 59 kVA
WATER REQUIREMENTS			
Typical flow		20 lpm	20 lpm
Pressure (maximum)		100 psi	100 psi
pH level		7.2–7.6	7.2–7.6
Recommended inlet temperature		16–20°C	16–20°C
EXHAUST			
Process exhaust venturi assist **hood required, no direct connection*	CF CDF	2 4	2 4
Cabinet exhaust	CF CDF	12,742 lpm (27,000 scfh) 25,484 lpm (54,000 scfh)	12,742 lpm (27,000 scfh) 25,484 lpm (54,000 scfh)
PROCESS ATMOSPHERE			
Clean dry air (CDA)	CF CDF	500 lpm (1,064 scfh) 920 lpm (1,957 scfh)	709 lpm (1,509 scfh) 1,305 lpm (2,777 scfh)
PROCESS CAPABILITIES			
Maximum temperature	CF CDF (drying/firing)	1000°C 400°C/1,000°C	1000°C 400°C/1,000°C
Conveyor speed range		64–635 cm/min (25–250 ipm) all models	
Conveyor speed accuracy		± 0.5%	± 0.5%
Conveyor speed control		Closed loop feedback	Closed loop feedback

SERVICE AND TECHNICAL SUPPORT

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international service/main: 1-952-469-8230
service fax: 1-952-469-8193

service@despatch.com

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