

# CDS-5 Cytogenetic Drying Chamber



- Developed in cooperation with the Mayo Clinic's Cytogenetics Laboratory
- Facilitates accurate and repeatable chromosome spreading results
- Enhances test results for both in situ and non-in situ situations
- Useful for Hemostasis, Amniocentesis, Bone Marrow and Tissue Sample tests
- Door design provides easy access to workspace, maximum maneuverability and visibility
- Temperature and humidity uniformly controlled throughout chamber
- Quickly reaches test condition, minimizing stabilization time
- Baffling minimizes the effects of airflow in the slide preparation area
- Ergonomic configuration for more comfortable working environment

## THERMOTRON®

### Developed in Cooperation with Mayo Clinic

Designed specifically for conducting Cytogenetic slide drying tests during harvest of in situ and non-in situ grown cultures, the Thermotron Model CDS-5 provides the optimum controlled temperature and humidity environment for achieving ideal chromosome spreading results. As evidenced in research conducted by the Cytogenetics Laboratory at the Mayo Clinic, the CDS-5 facilitates reliable and repeatable chromosome spreading. Through Mayo's research it is demonstrated that optimum metaphase areas can be achieved at various controlled combinations of temperature and humidity. The use of an environmentally controlled drying chamber is a practical and cost effective way of achieving ideal chromosome spreading in a routine and highly consistent manner. Favorable chromosome spreading results can be obtained for both in situ and non-in situ cultures including PHA stimulated lymphocytes, bone marrow, amniocytes and fibroblast.

### Specifically Designed for the Cytogenetic Technologist

Developed in cooperation with the Mayo Clinic's Cytogenetics Laboratory, the Thermotron CDS-5 incorporates many beneficial features that make the chamber very easy to work with. Specially designed arm ports provide maximum maneuverability inside the workspace of the chamber. A full view polycarbonate door allows complete visibility of the entire workspace, making routine slide processing practices very convenient. An interior light brightens the inside of the chamber making precise tasks easier to accomplish. The door lip acts as a handy, out-of-the-way storage spot for supplies used in the slide preparation process.

THERMOTRON INDUSTRIES  
291 Kollen Park Drive  
Holland, Michigan, USA 49423  
Marketing: (616) 393-4580  
Main: (616) 392-1491  
Fax: (616) 392-5643  
E-mail: [info@thermotron.com](mailto:info@thermotron.com)

European Operations  
THERMOTRON INDUSTRIES,  
U.K.  
3 Heard Way  
Eurolink Industrial Estate  
Sittingbourne, Kent  
ME 10 3 SA England  
Phone: 01795 436333  
Fax: 01795 436777  
E-mail: [info@thermotron.co.uk](mailto:info@thermotron.co.uk)

Visit us on the Internet  
<http://www.thermotron.com>

# Cytogenetic Drying Chamber

## Adapts Nicely to Laboratory Surroundings

Our Cytogenetic Slide Drying System operates very quietly, and rejects a minimal amount of heat to the surrounding area. Equipment layout optimizes the width of the workspace, while limiting the overall exterior dimensions to accommodate movement into and through the laboratory. The chamber is self supported by a base that provides a comfortable work station, ergonomically designed to invite technologists to prepare slides in the standing or sitting position. Casters are incorporated for mobility, allowing the chamber to be easily moved about the laboratory.

## Optimum Environmental Performance and Control

The CDS-5 reaches the desired slide

drying condition in a minimal amount of time. Temperature, humidity, and airflow systems are designed to optimize control and consistency. A relatively wide range of temperature and humidity conditions (20°C to 40°C and 25% RH to 75% RH) lend to the chamber's versatility. Baffling is provided in the top and bottom of the chamber to limit the effect of airflow over the slides and to provide uniform gradient specs throughout the workspace. Annoying fixative fumes are readily eliminated from the workspace via an exhaust port.

## Intelligent Instrumentation

The Programmer/Controller is a microprocessor-based instrument that provides accurate control of the drying environment. It is capable of storing several temperature/humidity profiles, and features non-volatile battery back-up. A high precision solid state humidity sensor eliminates the maintenance associated with wet bulb/dry bulb sensing devices.

## Useful Accessories Enhance Productivity

To efficiently use the full depth of the workspace, half depth shelving can be provided, allowing trays of prepared slides to be set out of the way. A flask holder can be supplied to secure an aspiration flask to the outside of the chamber and free-up additional workspace area. Several other optional accessories can also be added to the chamber including refrigeration gauges, circular chart recorder, computer interface, vacuum pump with flask, and an exhaust fan to connect to a secondary (or building) vent system.

## Cytogenetic Drying Chamber Specifications

Temperature Range	20°C to 40°C (68°F to 104°F)
Temperature Control	+/- 0.3°C (+/-0.5°F)
Temperature Uniformity	+/- 0.7°C (+/-1.25°F)
Humidity Range	25% RH to 75% RH Limited by a 5°C (41°F) dewpoint
Dewpoint Range	5°C to 23°C (41°F to 73°F)
Humidity Control	+/-1% RH
Humidity Uniformity	+/-3% RH
Interior Dimensions	28"W x 18"D x 19"H (71 cm x 46 cm x 48 cm)
Internal Workspace Volume	5.5 Cubic Feet (156 liters)
Viewing Area	32"W x 23"H (81 cm x 58 cm) Polycarbonate viewing window provides full frontal visibility into the workspace
Exterior Dimensions	43"W x 28"D x 56"H (109 cm x 71 cm x 141 cm)
Refrigeration Compressor	1/4 Hp single stage, air-cooled, HFC refrigerant
Chamber Heater	1,000 Watts
Humidity Heater	1,000 Watts
Electrical Requirements	115 Volt (+/-5%) / 1 Phase / 60 Hz, 20 Amp service
	10' long power cord with plug is included with the chamber also available in 50 Hz configuration
Shipping Weight	Approximately 450 pounds (204 kg)
Materials of Construction	Stainless Steel Interior Epoxy painted sheet metal exterior Polycarbonate door