



TORONTECH

CONVEYOR BELT VERTICAL BURNING TEST CHAMBER



Conveyor Belt Vertical Burning Test Chamber - ToronFT™ CB-FFP

ToronFT™ CB-FFP Conveyor Belt Vertical Burning Test Chamber is a specialized laboratory instrument designed for determining the flammability and flame propagation characteristics of conveyor belts under standardized test conditions. Conveyor belt flammability is a critical safety concern in underground mining, material handling, and industrial production environments — where a conveyor belt fire can rapidly propagate along the belt length, leading to catastrophic consequences.

The ToronFT™ CB-FFP provides precise temperature control up to a maximum flame temperature of 1000°C, an integrated temperature verification device, and a programmable burning timing and flame propagation timing system for accurate and reproducible conveyor belt flammability and flame propagation testing. It complies with AS 1334.10, the primary international standard for conveyor belt flammability and flame propagation testing.

APPLICATIONS

Conveyor Belt Vertical Burning Test Chamber - ToronFT™ CB-FFP

Applications

The ToronFT™ CB-FFP is applicable for flammability and flame propagation testing of:

- Rubber conveyor belts for underground mining applications requiring flammability and flame propagation certification
- PVC and multi-ply conveyor belts for industrial material handling systems requiring flammability compliance
- Steel cord conveyor belts and fabric-reinforced conveyor belts for flammability and flame propagation characterization
- Fire-retardant conveyor belt compounds and constructions during product development and flammability optimization
- Quality assurance and production batch testing of conveyor belts for flammability and flame propagation consistency

- Type testing and certification of conveyor belts for flammability and flame propagation compliance with AS 1334.10 and equivalent international mining and industrial safety standards



Standards

The ToronFT™ CB-FFP is designed to comply with the following international standards for conveyor belt flammability and flame propagation testing:

- AS 1334.10: Methods of testing conveyor belting: Determination of the flammability and flame propagation characteristics of conveyor belting
- ISO 340: Conveyor belts: Laboratory scale flammability characteristics — Requirements and test method
- EN ISO 340: Conveyor belts: Laboratory scale flammability characteristics — Requirements and test method
- MSHA 30 CFR Part 18: Equipment approval requirements for underground coal mines (conveyor belt flammability)

FEATURES

Conveyor Belt Vertical Burning Test Chamber - ToronFT™ CB-FFP Key Features

- Maximum flame temperature of 1000°C provides the high-intensity, standardized ignition source required for accurate conveyor belt flammability and flame propagation testing per AS 1334.10 and ISO 340
- Integrated temperature verification device confirms that the flame reaches the required 1000°C test temperature before and during conveyor belt flammability exposure — ensuring test validity and result traceability
- Temperature error controlled within $\pm 50^{\circ}\text{C}$ throughout the test sequence ensures consistent and reproducible flammability and flame propagation test conditions for all conveyor belt specimen types
- Gas source of 295% internal alkane gas delivers a stable, calibrated flame for repeatable conveyor belt flammability and flame propagation testing
- Arbitrarily programmable burning timing from 0 to 99.99 s/m enables precise control of flame application duration for compliance with different conveyor belt flammability test protocol requirements

- Arbitrarily programmable flame propagation timing from 0 to 99.99 s/m enables precise measurement and recording of post-ignition flammability and flame propagation duration beyond the ignition zone
- Complies with AS 1334.10 and ISO 340, providing internationally recognized conveyor belt flammability and flame propagation test results accepted by mining safety authorities and certification bodies in North America and globally

THEORY & METHOD

Theory and Method

Conveyor belt flammability and flame propagation testing evaluates whether a conveyor belt specimen can sustain combustion and propagate a flame beyond a defined distance from the ignition source when exposed to a standardized gas flame at a specified temperature. Conveyor belts that self-extinguish promptly and do not propagate flame beyond the specified limit are classified as meeting the flammability and flame propagation requirements of the applicable standard.

In the ToronFT™ CB-FFP, the conveyor belt specimen is positioned in the test chamber and exposed to the calibrated gas flame source at a maximum temperature of 1000°C. The gas source is 295% internal alkane gas, providing a controlled, reproducible flame for flammability and flame propagation testing. The temperature verification device confirms that the flame reaches and maintains the required 1000°C test temperature before and during specimen exposure — ensuring test validity. Burning timing (0 to 99.99 s/m, arbitrarily settable) controls the flame application duration, and flame propagation timing (0 to 99.99 s/m) records the duration of any sustained flammability and flame propagation after ignition source removal. Temperature error is maintained within $\pm 50^{\circ}\text{C}$ to ensure consistent and compliant test conditions throughout all flammability and flame propagation test sequences

TECHNICAL SPECIFICATIONS

Conveyor Belt Vertical Burning Test Chamber - ToronFT™ CB-FFP

Technical Specifications

Parameter	Specification
Product Name	Conveyor Belt Vertical Burning Test Chamber — ToronFT™ CB-FFP
Maximum Flame Temperature	1000°C
Temperature Verification Device	Integrated
Temperature Error	±50°C
Gas Source	295% internal alkane gas
Burning Timing Range	0 to 99.99 s/m (arbitrarily settable)
Flame Propagation Timing Range	0 to 99.99 s/m (arbitrarily settable)
Compliance Standards	AS 1334.10; ISO 340; EN ISO 340

For more information, pricing, or to request a quotation, please contact ToronFT. Specifications are subject to change without prior notice.



Torontech Inc.

251 Consumers Road, Suite 1200
Toronto, Ontario, M2J 4R3, Canada 

Phone: +1 416 368 2721 | Fax: +1 416 981 7652
Email: info@torontech.com

Torontech, LLC

601 Brickell Key Drive, Suite 700
Miami, FL 33131, USA 

Toll-Free: 1-866-383-7919
Email: sales@torontech.com

Torontech ME FZE

Meydan Grandstand, 6th Floor,
Meydan Road, Nad Al Sheba,
Dubai-261440, UAE 

Phone: +971 488 19252
Email: me@torontech.com

