

ZONSKY
SINCE 2000



WIRES & CABLES

Electric and Power Cables
Control and Communication Cables
Optical Fibre Cables

PRODUCT CATALOGUE

WIRES & CABLES | ELECTRICAL INDUSTRY

*Electric and Power Cables, Control and Communication Cables,
Optical Fibre Cables*

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ZY6014B

Vertical Flame Propagation Test Apparatus for Single Insulated Cables

IEC 60332-1-2

*Tests on electric and optical fibre cables under fire conditions -
Part 1-2: Test for vertical flame propagation for a single insulated wire or cable -
Procedure for 1 kW pre-mixed flame*

SCOPE: Per as decribed in IEC 60332-1-1, this test apparatus is for testing the resistance to vertical flame propagation for a single vertical electric insulated conductor or cable, or optical fiber cable, under fire conditions using a 1 kW pre-mixed flame.



ZY6014D

Vertical Flame Spread Test Apparatus for Bunched Cables

IEC 60332-3-24

*Tests on electric and optical fibre cables under fire conditions -
Part 3-24: Test for vertical flame spread of vertically-mounted bunched wires or cables - Category C*

SCOPE: Intended for type approval testing, this test apparatus covers category C for methods of test for the assessment of vertical flame spread of vertically mounted bunched wires or cables, electrical or optical, under defined conditions.



ZY6166-PC

3 Metre Cube Smoke Density Test Apparatus

IEC 61034-2

*Measurement of smoke density of cables burning under defined conditions -
Part 2: Test procedure and requirements*

SCOPE: Per as decribed in IEC 61034-1, this test apparatus is to be used for measuring smoke emission when electric or optical fibre cables are burnt under defined conditions, for example, a few cables burnt horizontally. The light transmittance (It) under flaming combustion and smouldering conditions can be used as a means of comparing different cables or complying with specific requirements.



ZY6192-ZN

Halogen Acid Gas Content Test Apparatus

IEC 60754 - 1

*Test on gases evolved during combustion of materials from cables -
Part 1: Determination of the halogen acid gas content*

IEC 60754 - 2

*Test on gases evolved during combustion of materials from cables -
Part 2: Determination of acidity (by pH measurement) and conductivity*

SCOPE: Intended for the testing of individual components used in a cable construction, this test apparatus is for the determination of the amount of halogen acid gas, other than hydrofluoric acid, evolved during the combustion of compounds based on halogenated polymers and compounds containing halogenated additives taken from electric or optical fibre cable constructions.

It is also for the determination of the potential corrosivity of gases evolved during the combustion of materials taken from electric or optical fibre cable constructions by measuring the acidity (pH) and conductivity of an aqueous solution resulting from the gases evolved during the combustion.



ZY6200

Fluorine Analyzer

IEC 60684-2

Flexible insulating sleeving - Part 2: Methods of test

SCOPE: A reliable test system for Fluorine Content Analysis Test in accordance with IEC 60684-2 and to determine the fluorine content in insulating materials, specifically for flexible insulating sleeving cables.



ZY6065

Thermogravimetric Analyzer, TGA

IEC 60811-605

*Electric and optical fibre cables - Test methods for non-metallic materials -
Part 605: Physical tests - Measurement of carbon black and/or mineral filler
in polyethylene compounds*

SCOPE: Not suitable for halogenated compounds, this test apparatus is for measuring the content of carbon black added for UV stabilization of polyethylene and polyolefin compounds. It adopts Method B - Thermogravimetric analysis of the carbon black content in polyolefin compounds.



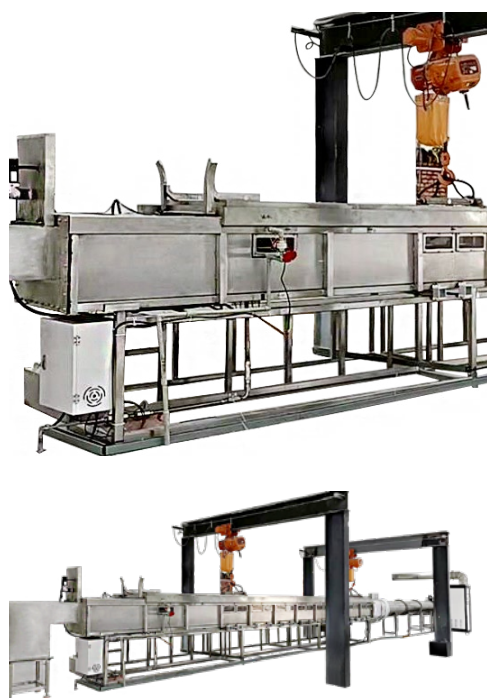
ZY6014J-BS-PC

Circuit Integrity Under Fire Conditions Apparatus

BS 6387

*Cables required to maintain circuit integrity under fire conditions
- Test method for fire resistance of cables*

SCOPE: This test apparatus is for resistance to fire of cables required to maintain circuit integrity under fire conditions. It is applicable to cables of rated voltage not exceeding 600/1000 V and not applicable to cables having one insulated conductor but no other metallic element.



ZY6113

Plenum Cable Steiner Tunnel Furnace

UL 910

UL Standard for Safety Test for Flame-Propagation and Smoke-Density Values for Electrical and Optical-Fiber Cables Used in Spaces Transporting Environmental Air

NFPA 262

Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces

SCOPE: This test furnace is for measurement flame travel distance and optical density of smoke for insulated, jacketed, or both, electrical wires and cables and optical fiber cables that are to be installed in plenums and other spaces used to transport environmental air without being enclosed in race ways. Cables passing this test are rated CMP (Plenum), ensuring low toxicity and low flame spread in critical areas.



ZY6112

Riser Cable Riser Flame Test Apparatus

UL 1666

STANDARD FOR SAFETY

Test for Flame Propagation Height of Electrical and Optical-Fiber Cables Installed Vertically in Shafts

SCOPE: This test apparatus is for determining values of flame propagation height for electrical and optical-fiber cables that are for installation vertically in shafts or in vertical runs that penetrate one or more floors. The test purpose is to determine whether the flame propagation characteristics of these "riser" cables are in accordance with the National Electrical Code (NEC).



ZY6111

Vertical-Tray Fire-Propagation and Smoke-Release Test Apparatus

UL 1685

STANDARD FOR SAFETY

Vertical-Tray Fire-Propagation and Smoke-Release Test for Electrical and Optical-Fiber Cables

SCOPE: The UL flame exposure is a vertical-tray fire test for determining values of cable damage height and smoke release from electrical and optical-fiber cables when the cables are subjected to a flaming ignition source. The test purpose is to determine flame propagation and smoke characteristics of these cables to qualify the cables for the limited smoke marking.



ZY6014A

Vertical/Horizontal Wire Flame Test Apparatus

UL 1581

STANDARD FOR SAFETY

Reference Standard for Electrical Wires, Cables, and Flexible Cords

SCOPE: This test apparatus is for evaluating fire safety for electric cables. It also conforms to UL 2556 for Burning Characteristics Tests. It is supplied as a complete system incorporating all the features necessary for ease of use and safety.



ZY6192-ZN

Halogen Acid Gas Content Test Apparatus

UL 2556

9.10 Halogen acid gas emission

9.11 Acid gas emission

SCOPE: Intended for the testing of individual components used in a cable construction, this test apparatus is for the determination of the amount of halogen acid gas, other than hydrofluoric acid, evolved during the combustion of compounds based on halogenated polymers and compounds containing halogenated additives taken from electric or optical fibre cable constructions.

It is also for the determination of the potential corrosivity of gases evolved during the combustion of materials taken from electric or optical fibre cable constructions by measuring the acidity (pH) and conductivity of an aqueous solution resulting from the gases evolved during the combustion.





ZY6166D-PC

NBS Smoke Density Test Chamber

UL 2556

9.8 Fire propagation/RPI

9.9 Smoke emission

SCOPE: This test apparatus is for the determination of specific optical density of smoke generated from solid materials exposed to a radiant heat source within a closed cabinet with or without the application of a pilot flame.



ZY6111

Vertical-Tray Fire-Propagation and Smoke-Release Test Apparatus

UL 2556

9.6 Vertical tray flame tests (Method 1 - Vertical tray and Method 2 - FT4)

9.7 ST1 limited smoke

SCOPE: This test apparatus is for measuring the vertical-tray fire-propagation and smoke-release of electrical and optical-fiber cables. It determines the fire resistance and smoke emission characteristics of bundled cables to ensure they do not propagate fire upwards.



ZY6014A

Vertical/Horizontal Wire Flame Test Apparatus

UL 2556

9.1 FT2/FH/Horizontal flame

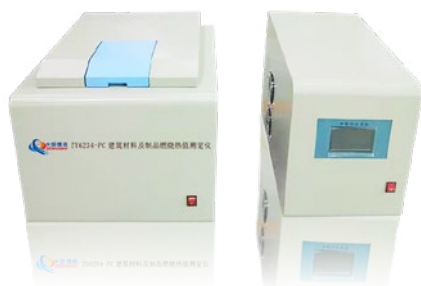
9.2 Burning particles (dropping)

9.3 FT1

9.4 FV-2/VW-1

9.5 FV-1/Vertical flame

SCOPE: This test apparatus is for evaluating fire safety for electric cables. It also conforms to UL 2556 for Burning Characteristics Tests. It is supplied as a complete system incorporating all the features necessary for ease of use and safety.



ZY6234-PC

Oxygen Bomb Calorimeter

EN ISO 1716

Reaction to fire tests for products -

Determination of the gross heat of combustion (calorific value)

SCOPE: Intended to be applied to solid products, this test apparatus is for the determination of the gross heat of combustion (Q_{pcs}) of products at constant volume in a bomb calorimeter.



ZY6260-PC

Heat Release and Smoke Production Test Apparatus

EN 50399

Common test methods for cables under fire conditions -

Heat release and smoke production measurement on cables during flame spread test - Test apparatus, procedures, results

SCOPE: This test apparatus is for the assessment of vertical flame spread, heat release, smoke production and occurrence of flaming droplets/particles of vertically mounted electric cables under defined conditions to enable classification under the Construction Products Regulation (CPR) [1, 2] to be achieved.



ZY6014B

Vertical Flame Propagation Test Apparatus for Single Insulated Cables

EN 60332-1-2

Tests on electric and optical fibre cables under fire conditions

Part 1-2: Test for vertical flame propagation for a single insulated wire or cable - Procedure for 1 kW pre-mixed flame

SCOPE: Given in EN 60332-1-1, this test apparatus is for testing the resistance to vertical flame propagation for a single vertical electrical insulated conductor or cable, or optical fibre cable, under fire conditions.



ZY6166-PC

3 Metre Cube Smoke Density Test Apparatus

EN 61034-2

*Measurement of smoke density of cables burning under defined conditions
Part 2: Test procedure and requirements*

SCOPE: Per as decribed in EN 61034-1, this test apparatus is to be used for measuring smoke emission when electric or optical fibre cables are burnt under defined conditions, for example, a few cables burnt horizontally. The light transmittance (It) under flaming combustion and smouldering conditions can be used as a means of comparing different cables or complying with specific requirements.

ZY6192-ZN

Halogen Acid Gas Content Test Apparatus

EN 60754-2

*Test on gases evolved during combustion of materials from cables -
Part 2: Determination of acidity (by pH measurement) and conductivity*



SCOPE: Intended for the testing of individual components used in a cable construction, this test apparatus is for the determination of the potential corrosivity of gases evolved during the combustion of materials taken from electric or optical fibre cable constructions by measuring the acidity (pH) and conductivity of an aqueous solution resulting from gases evolved during the combustion.

ZY6017D-PC

Non-combustibility Test Apparatus

EN ISO 1182

Reaction to fire tests for products - Non-combustibility test

SCOPE: This test apparatus is for determining the non-combustibility performance, under specified conditions, of homogeneous products and substantial components of non-homogeneous products, especially for building materials.





ZY6234-PC

Oxygen Bomb Calorimeter

EN ISO 1716

Reaction to fire tests for products -

Determination of the gross heat of combustion (calorific value)

SCOPE: Intended to be applied to solid products, this test apparatus is for the determination of the gross heat of combustion (Q_{PCS}) of products at constant volume in a bomb calorimeter.



ZY6242

Single Burning Item Test Apparatus, SBI

EN 13823

Reaction to fire tests for building products -

Building products excluding floorings exposed to the thermal attack by a single burning item

SCOPE: This test apparatus is for determining the reaction to fire performance of construction products excluding floorings, and excluding products which are indicated in Delegated Regulation (EU) 2016/364, when exposed to thermal attack by a single burning item (SBI).



ZY6017F

Single Flame Source Test Apparatus

EN ISO 11925-2

Reaction to fire tests - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test

SCOPE: This test apparatus is for determining the ignitability of building products by direct small flame impingement (single-flame source test) under zero impressed irradiance using vertically oriented test specimens.



ZY6235-PC

Flooring Radiant Panel Test Apparatus

EN ISO 9239-1

*Reaction to fire tests for floorings -
Part 1: Determination of the burning behaviour using a radiant heat source*

SCOPE: This test apparatus is for assessing the wind-opposed burning behaviour and spread of flame of horizontally mounted floorings exposed to a heat flux radiant gradient, when ignited with pilot flames. It is applicable to all types of floorings, e.g. textile carpet, cork, wood, rubber and plastics coverings as well as coatings.

PROJECT CASES

A comprehensive range of fire testing equipment for lab-scale, pilot-scale, and industrial-scale applications.



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Founded on Nov. 1, 2000, ZONSKY INSTRUMENT (GUANGDONG) CO., LTD. is committed to developing cutting-edge fire testing technology that enhances safety, precision and efficiency across various industries. We specialize in the manufacture, supply and maintenance of Reaction to Fire and Fire Resistance testing instruments, ensuring they meet your tailored test requirements and standards.

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ZONSKY offers a comprehensive range of fire testing equipment for lab-scale, pilot-scale, and industrial-scale applications. Our fire testing systems are widely utilized in Building and Construction, Wires & Cables, Plastics, Electronics, Automotive, Aviation, Railway, Battery sectors, and comply with IEC, ISO, IMO, FAR, UL, ASTM, NFPA, CSA, EN, NF, BS, DIN, JIS, GB, AS, and more.

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