



Conducting Value

..... HIGH VALUE CABLES .....





## OUR MARKETS

Our cables are installed in the following countries:

Afghanistan, Algeria, Austria, Bahrein, Bangladesh, Belgium, Brunei, Bulgaria, Chile, China, Congo, Cuba, Cyprus, Czech Republic, Denmark, Egypt, Estonia, Finland, France, Germany, Greece, Holland, Hong Kong, Hungary, India, Indonesia, Iran, Iraq, Ireland, Italy, Japan, Jordan, Kazakhstan, Kuwait, Lebanon, Luxembourg, Malaysia, Maldives, Malta, Mauritius, Morocco, Mozambique, Nigeria, Norway, Oman, Pakistan, Philippines, Poland, Portugal, Qatar, Romania, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sudan, Sweden, Syria, Taiwan, Turkey, United Arab Emirates, United Kingdom, Usa, Venezuela, Vietnam, Yemen.

» **MANY DESTINATIONS,  
BUT ONLY ONE ORIGIN: ITALY**

## TOTAL QUALITY

Quality means different things to different people.

Quality is not only our approved Quality System according to **ISO 9001** by **CSQ** – Italy, **BASEC** – UK and **LPCB** - UK.

Quality is not only our fully equipped test laboratory to certify the required characteristics of cables.

For CAVICEL Quality simply means to satisfy customers not only by supplying them the required products, but by working together in a professional way to create a long lasting successfully relationship.

Our growth and success stem from the quality of our promise and the certainty of delivering on promise.

Quality also means respect for the environment and this is why CAVICEL is certified according to **ISO 14001** by **CSQ** - Italy.

## OUR VALUE

CAVICEL is a cable manufacturer, but we do not only supply cables. We grant the satisfaction of the right solution in cable application. This means to have fully evaluated all customers' requirements, not only in terms of cable performance, but in terms of service, knowledge, reliability in order to assure the best value for our customer. We try to understand our partner's situation and criticality. Then we just create a cable that let's your value flow free.

» **THIS IS CAVICEL:  
Conducting Value.**



CAVICEL is an innovator in the design and manufacturing of copper and fibre optic special cables for various applications. CAVICEL has been producing special cables for over 60 years, with always the same goal: quality and reliability. With its skilled staff and its solid know-how

CAVICEL proposes itself as a useful partner for every problem concerning the transmission of any optical or electrical signal.

Our Mission is to supply cable market with special products that are recognized for **Quality, Performances** and **Innovation**.

## OUR PRODUCTION

### FIRECEL

Fire resistant cables

### INCOCEL

Instrumentation, thermocouple, control and power cables

### OPTICEL

Fibre optic cables

### SPECIAL CABLES

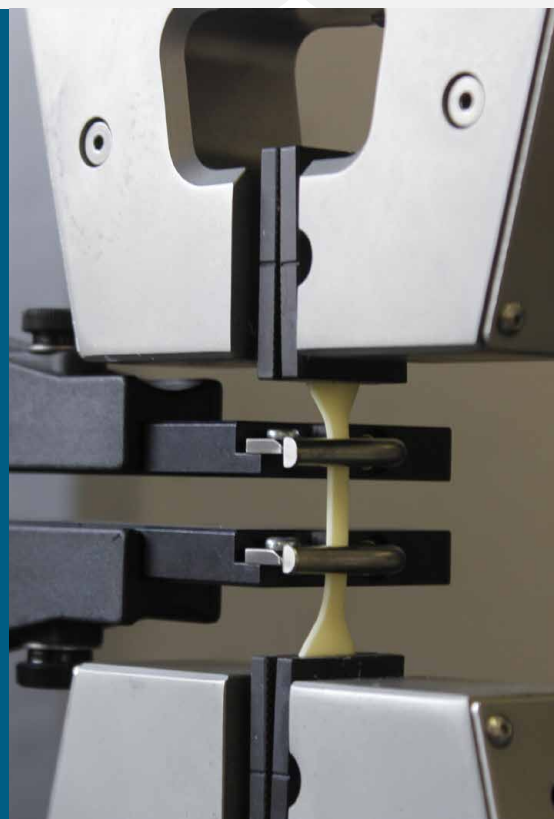
designed and manufactured with different characteristics meeting the specific needs in the most appropriate way.

## OUR KNOW-HOW

We have had a wide experience in designing and manufacturing cables for over 60 years, and we have always worked close to our customers to understand the real needs.

We have developed different production technologies and we are able to offer the most suitable construction for each application.

Our cables, installed in more than 60 countries, say that we have the right knowledge and experience in approaching the market



# FIRECEL

FIRE RESISTANT CABLES

Firecel SR cables are fire resistant cables designed to continuously operate under fire conditions. During the burning stage, the combustion gases have very low opacity, low toxicity and are halogen free, for the safeguard of the human life and for protection of installations.

## FIRECEL SR 114H - SR 114E

These cables are installed for **over 30 years** in **more than 50 countries** for Fire detection and Fire alarm systems for buildings.

These cables comply with the following standards: BS 5839-1/ BS 7629 / BS 6387 cat. CWZ.

**FIRECEL SR 114H:** "standard" fire resistant cables, used for general applications.

**FIRECEL SR 114E:** "enhanced" fire resistant cables, used when the designer or specifier require an improved fire resistance, such as unsprinklered premises or buildings, in which, "enhanced" cables must be used.

## FIRE TEST LABORATORY

CAVICEL has a very well equipped laboratory for the following tests:

**Resistance to fire alone**

(BS 6387 cat. C, IEC 60331)

**Resistance to fire with water spray**

(BS 6387 cat. W)

**Resistance to fire with mechanical shocks** (BS 6387 cat. Z, BS EN 50200)

**Resistance to fire with mechanical shocks and water spray**

(BS EN 50200 + Annex E, BS 8434-2)

**Smoke Density** (BS EN 61034-2)

**Acid gas Emission**

(IEC 60754-1/2)

**Fire and flame propagation**

(BS EN 60332-1, BS EN 60332-3-24)



**Cavicel**  
Conducting Value

## FIRECEL SR: a wide range of fire resistant cables

### CONSTRUCTION:

**Conductor:** Bare or tinned copper, solid or stranded

**Insulation:** Silicone rubber or Mica-silicone or Mica-XLPE

**Cabling:** concentric or twisted pairs

**Screen:** aluminium/polyester tape (optional)

**Jacket:** LSZH

**Armour:** GSWB (galvanized steel wire braid), SWA (steel wire armour) - optional

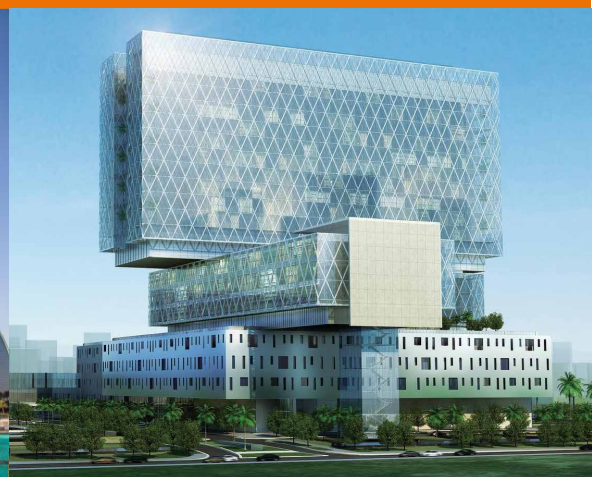
**Insulation grade:** 300/500V, 450/750 V, 600/1000 V.

## APPLICATIONS

Hotels  
Theatres and cinemas  
Museums  
Hospitals  
Shopping centers  
Offices  
Schools  
Airports  
Undergrounds and tunnels  
Railway stations  
High-rise buildings  
Data communication centers  
Public address systems  
Traffic control systems  
Fire fighting systems

## APPROVALS

**Department of Social Services** - Abu Dhabi  
**Civil Defence Directorate** - Abu Dhabi  
**ADWEA** - Abu Dhabi  
**Civil Defence Directorate** - Dubai  
**Civil Defence** - Bahrain  
**Civil Defence Department** - Qatar  
**Fire Service Directorate** - Kuwait  
**Royal Oman Police** - Sultanate of Oman  
**Ministry of Public Works** - UAE  
**Fire Service Dept. (Fire Protection Bureau)** - Hong Kong



Instrumentation, control and power cables are suitable for use in Oil & Gas installations, chemical and petrochemical plants, iron and steel industries, Off-Shore...

Caviced can offer a wide range of cables, designed, manufactured and tested according to international standards or to meet specific requirements.

### CONSTRUCTION

**Conductor:** Bare or tinned copper, solid or stranded

Special alloy for thermocouple cables

**Insulation:** PVC

PE

XLPE

**Cabling:** concentric or twisted pairs or triples

**Screen:** individual or collective aluminium/polyester tape or copper tape or braid

**Jacket:** LSZH, PVC

**Armour:** SWA, GSTA, GSWB, GSFA

**Insulation grade:** 300/500V, 600/1000 V.

### APPLICATIONS

Refineries & Gas Plants

Chemical and pharmaceutical plants

Offshore platforms

Power station

Steelworks

Desalinization plants



### APPROVALS

**ADNOC - GASCO - ADCO** - UAE

**ENI-AGIP** - Italy

**HELLENIC PETROLEUM** - Greece

**KNPC** - Kuwait

**MOBIL OIL**

**NAOC** - Nigeria

**PDO** - Oman

**PETROBEL** - Egypt

**QATAR PETROLEUM** - Qatar

**SHELL** - Netherlands

**TOTAL** - France-Indonesia

**SONATRACH** - Algeria

### SPECIAL DESIGN

**Cables can be supplied with:**

- Moisture and corrosion barrier
- Lead sheath
- Oil, solvent and hydrocarbon resistant jacket
- Mud resistant jacket
- Hi Pack: protection against corrosion and humidity as alternative to lead sheath

**Incocele** can be designed and manufactured to assure fire resistance (BS 6387, EN 50200, IEC 60331) when required.

### SCREENS

**IS** Individual Aluminium/Polyester Screen



**CWB** Copper Wire Braid  
**TCWB** Tinned Copper Wire Braid



**OS** Overall Aluminium/Polyester Screen



**BCT** Bare Copper Tape



### ARMOURS

**SWA** Steel Wire Armour



**GSTA** Steel Tape Armour



**GSWB** Steel Wire Braid



**GSFA** Steel Flat Armour



# OPTICEL

FIBRE OPTIC CABLES

For more than 25 years, Cavicel has been internationally recognized for the quality of OPTICEL fiber optic cables. Our experience now permits us to offer fibre solutions to a wide range of applications, such as telecommunication, broadcasting and video communication, military and defence, railway applications, industrial harsh environment and various specialty market.

## CONSTRUCTION

**Types of Fibres:** SM 9/125 OS1/OS2  
 NZDSF  
 MM 50/125 OM2/OM3/OM4  
 MM 62.5/125 OM1  
 MM 200/230

Special fibres available on request.

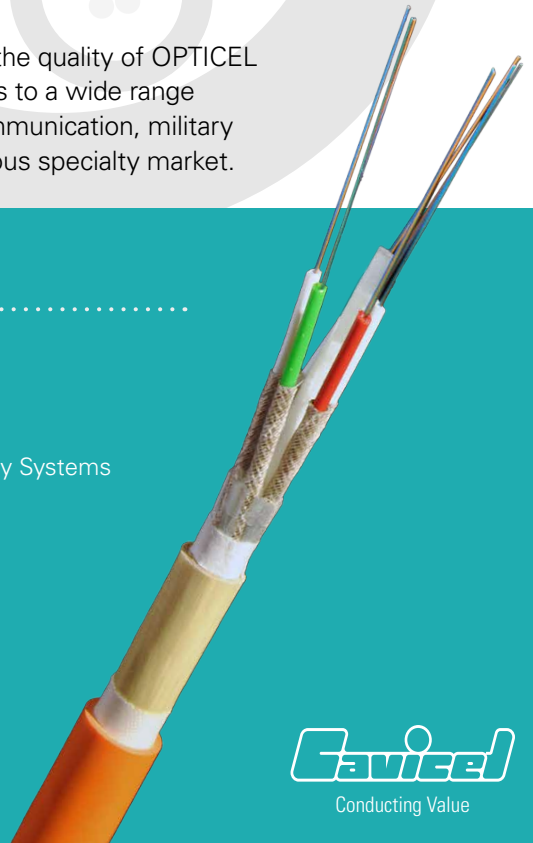
**Fibre coating:** Tight  
 Semi-tight  
 Single-fibre loose tube  
 Multi-fibre loose tube  
 Micro-bundle

**Armouring and protection:**  
 Aramid yarns  
 Glass yarns  
 Corrugated steel tapes  
 Galvanized steel wires  
 Steel wire braid

**Jacket:** LSZH, PVC, PE/ HDPE

## APPLICATIONS

Telecommunication  
 Data Transmission  
 Video Application  
 Local Area Network  
 Surveillance and Safety Systems  
 Railway Application  
 Process Control



## SPECIAL DESIGN

Fibre optic cables can be designed and manufactured with materials and structures that allow high performances, such as:

- Resistance to continuous bending (for mobile applications)
- Resistance to high temperature
- Resistance in harsh environment (Mud resistant jacket)
- Fire resistance, assuring performances even during a fire (standard IEC 60331-25)

## PROTECTIONS

**A1** Galvanized Steel Wire Braid



**A5** Glass Yarns



**A2** Aramid Yarns



**A7** Galvanized Steel Wire Armour



**A3** Corrugated Steel Tape



**A8** Copolymer Coated Aluminium Tape



**A4** Special Rodent Resistant Extruded Polyamide Jacket



**A9** Hi Pack - Special Multilayer Protection (Aluminium/HDPE/PA)



# SPECIAL CABLES

The continuous technological evolution led to an increase of the demand of customized products fulfilling specific requests. This is why Cavicel keeps on developing thousands of new cables, year after year.

In case you are looking for a cable that is not available on the market, or if your project needs a high performance cable or you are looking for a customized preliminary study and custom cable manufacturing, Cavicel Technical Office can offer you the right resources and the proper know-how necessary for satisfying your new demand.

Clients that rely on CAVICEL know that they can count on a company that deeply knows cable problems and works hard, day by day, to understand customer's need. A Company that proposes new solutions, more sophisticated or endowed with the best Quality for the right price. That's the reason why CAVICEL has a global answer for every country, every standard, every need.



## MATERIALS

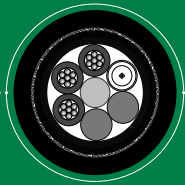
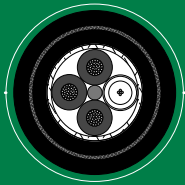
In order to offer the best solution to every enquiry, CAVICEL can process following materials:

- PVC
- Polyethylene
- HDPE
- XLPE
- Nylon
- Polyurethane
- TPE
- LSZH

- Silicone rubber
- Fluoropolymer FEP
- Fluoropolymer PFA
- Fluoropolymer PTFE
- Fluoropolymer MFA
- Fluoropolymer ETFE
- Fluoropolymer ECTFE
- Hytrel®
- Peek®
- Kapton®

## APPLICATIONS

- Power station
- Public transport
- Engineering
- Industrial plant
- Oil & Gas
- Off-Shore
- Plant monitoring and supervision systems
- Naval application
- Safety and Defense
- Fire-fighting systems
- Railways
- Underground





Conducting Value

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**MADE IN ITALY**

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**DUBAI BRANCH OFFICE**



ISO 9001:2008  
Certificate No. CS1-249



Assessed to ISO 9001:2008  
Cert/LPCB ref. 217



**ТехноПрогресс**

GOST ISO 9001-2011  
(ISO 9001:2008)  
certification N СДС.ТII.СМ.04293-14



ISO 9001:2008  
n. 9125.CAVL



ISO 14001:2004  
n. 9191.CVCL



**CORPORATE VIDEO**



Cavicel firmly believes in the importance of the quality of its products and it undertakes itself to produce them using clean technologies for the respect and the protection of the environment.

All information contained in this brochure is believed to be accurate. Specifications can change at any time, according to technical developments and market changes.

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