Complete In-house expertise & facilities to provide the entire range of High Temperature Insulations

## **High Temperature Cables**

High temperature cables are used in areas where both working temperatures and ambient temperatures are too high. They are made with a wide range of conductors, insulating materials and screening materials depending on the temperatures and conditions under which the cable has to perform.

Single Core high temperature hook-up wires & Multi Core / Multi Pair, Screened & Unscreened and Armoured & Unarmoured Cables

**Construction** : Single Core or Multi Core / Pairs

Voltage Grade : 250 V AC, 600 V AC & 1000 V AC (Rating as per MIL-16878, VDE, DIN, ANSI)

**Conductors** : Annealed bare and / or tinned copper conductor (up to 120° C)

Annealed silver plated copper conductor (up to 200° C)

Nickel plated conductors (up to 260° C)

## Insulation

Insulation Material	Temperature Range	Characteristics
PTFE	- 200° C to 260° C	Excellent chemical resistance. High temperature stability
FEP	- 200° C to 200° C	Good chemical resistance Thin wall insulation due to good electrical properties
PFA	- 200° C to 250° C	Good chemical resistance, Thin wall insulation due to good electrical properties. Good flexibility
PTFE	- 150° C to 150° C	Mechanically tough
XL ETFE	- 150° C to 250° C	Good electric insulation, radiation resistance, ARC tracking and cold flow
PEEK	- 160° C to 250° C	Mechanically very tough High temperature and radiation resistance
Kapton Tape	- 250° C to 300° C	Very thin wall insulation. High temperature resistance
Silicon Rubber	- 40° C to 180° C	Flexible and abrasion resistance
Ceramic Yarn / Quartz Yarn Braiding	600° C	Chemically stable and higher thermal resistance

**Screening**: Individual and / or overall with following options

Aluminum Mylar / Copper Tape with Tinned Copper Drain WireBraided with Bare or Tinned or Nickel Plated or Silver Plated Copper

**Armouring**: Steel galvanized wire, stainless steel wire, high strength steel wire braiding

**Standards** : JSS-51034, JSS-51038, UL-1581

**Industry & Applications** 

Steel : Cables for blast furnace, electric arc furnace, hot & cold rolling

mills, steel refining facilities etc.

Communication : High frequency co-axial cables for VHF, UHF and XHF transmission

Marine : Engine proximity wiring for good resistance to high temperatures,

fuel oils, chemicals, saline air/water etc.

Petrochemical : Instrumentation & control, temperature sensing, fire warning etc.

Power : In proximity to the turbines, boilers, ash handling etc.