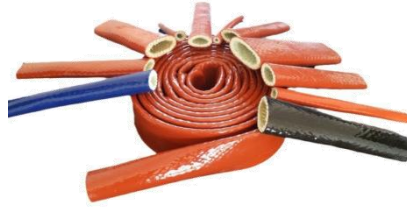
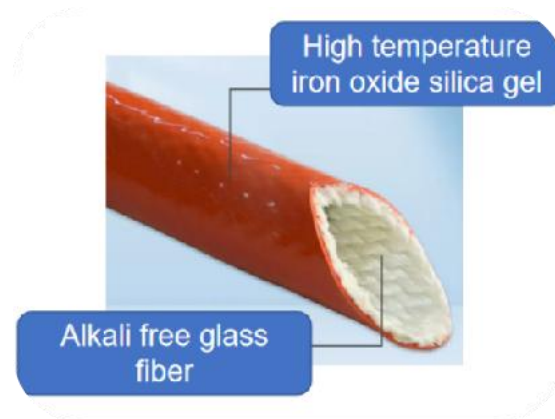


26, **Fire Sleeve Oxide** Silicone coated glass fibre sleeving



Kingwell Fire sleeve is manufactured from high quality Fiberglass yarn knitted to form a sleeve and coated with high-grade silicone elastomer rubber.



Why Kingwell Fire Sleeve ?

The very flexible thermal insulation sleeving designed to protect Wires, Cables, and Hoses from high ambient temperatures.



It will offer continuous protection at an operating temperature of 260°C and can withstand a molten metal splash at 1200°C.

It is highly resistant to most oils, hydraulic fluids, fuels, acids and alkalis.

The high grade rubber forms a protective SiO₂ layer when exposed to flame.

It provides personnel with protection against burns from hot boxes, steam lines etc.

and helps to reduce energy loss by retaining heat within the pipework.

Continuous use temperature	260°C
The maximum temperature that can be withstand in an instant:	1650°C
Resistance to molten steel or other hot liquids	Very remarkable
Fire resistance	Very good
Abrasion resistance	Very good
elasticity	Very good
Oil and water resistant	Good

High temperature bending Test	After heating in 260°C constant temperature furnace for 48 hours, there is no aging fracture or peeling phenomenon on the surface of the coating
Low temperature bending Test	After heating in a constant temperature furnace at -70°C for 1 hour, the surface does not break or the coating surface does not peel off.
Coating Test	No surface peeling or dissolving phenomenon occurred after continuous use test in constant temperature furnace.
Combustion Test	Non-flammable self-extinguishing and no spontaneous combustion (Conform to UL "VW-1" and CSA "HFS" test)
Temperature resistance Test	(2000hr) 260 °C heating test is normal and no difference. (30sec) 1650°C heating test glass fiber intact
Flame retardant test	The combustion speed is not less than 45s/25mm
Penetration resistance voltage	Depending on the wall thickness, the pressure can be reached from 7 KV-25KV

Standard format



Product colors can be customized

inner diameter (mm)	ID tolerance(mm)	Wall thickness and tolerance (mm)	M/roll
Φ5-Φ10	±0.3	2.5±0.2	50mts.
Φ12-Φ18	±0.4	3.0±0.3	50mts.
Φ20-Φ30	±0.8	3.5±0.4	25mts.
Φ35-Φ55	±1.0	3.8±0.5	25mts.
Φ60-Φ100	±1.0	4.0±0.5	20mts.
Φ105-Φ150	±1.0	5.0±0.5	20mts.

Fire Sleeve Style 1: Tube type



Generally suitable for the protection of shorter or more flat pipelines, cable protection, automotive wiring harness, generator set commonly used, reliable after installation, not easy to disassemble, sealing, insulation, heat insulation, moisture-proof effect is better.

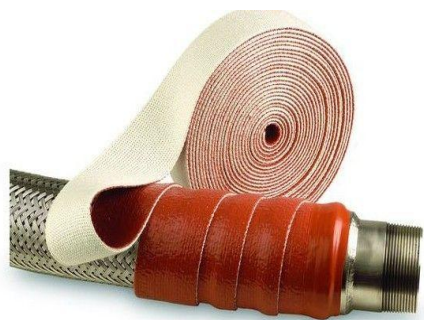
Fire Sleeve Style 2: Dissected type



Its advantages are convenient disassembly, installation does not need to stop the equipment, disassemble the cable, etc., the internal suture with fire-retardant adhesive tape, just the sleeve from the middle bonding can play a sealing and insulation role,

does not affect the production of equipment and save installation time. Commonly used in large smelting equipment, metal high temperature hose is also used

Fire Sleeve Style 3: Enwind



It is mainly used for high temperature protection of irregular protected objects such as valves, curved pipes, convenient winding, and also suitable for outdoor high temperature pipes, such as natural gas pipes, heating pipes, etc., to play a role of thermal insulation and reduce heat loss.

Functions:

1. Safety protection to protect the health of workers

Alkali-free glass fiber itself has a strong tensile force, will not crumble, vulcanization resistance, smokeless halogen-free non-toxic, pure oxygen non-combustible, good insulation characteristics, and then after curing by organic silicone, more to strengthen its safety and environmental protection performance, effectively protect the health of workers, reduce the incidence of occupational diseases. Unlike asbestos products and other harmful to the human body and the environment.

2. Excellent high temperature resistance

The silicone structure on the surface of the fireproof sleeve (belt) contains both "organic groups" and "inorganic structure", and this special composition and molecular structure makes it integrate the characteristics of organic matter and the function of inorganic matter in one. Compared with other polymer materials, its most prominent is the high temperature resistance. The silicon-oxygen (Si-O) bond is the main chain structure, the bond energy of C-C bond is 82.6 kcal/gram molecule, and the bond energy of Si-O bond is 121 kcal/gram molecule in silicone, so its thermal stability is high, and the chemical bond of the molecule is not broken and not decomposed at high temperature (or radiation irradiation). Silicone is not only resistant to high temperature, but also low temperature, and can be used in a wide temperature range. Both chemical properties and physical and mechanical properties change little with temperature.

3. Anti-splash, multiple protection

In the smelting industry, the temperature of the medium in the electric furnace is extremely high, which is easy to form high temperature spatter (the welding industry

is also the same), and the slag is formed on the pipeline or cable after cooling and solidification, which will make the rubber of the outer layer of the pipeline or cable harden and eventually embrittlement break. Further damage to unprotected equipment and cables, through the multi-channel silicone coated fireproof sleeve, can achieve multiple safety protection, the maximum temperature can be up to 1300 degrees Celsius, can effectively prevent molten iron, molten copper, molten aluminum and other high-temperature molten material splash, to prevent the surrounding cable and equipment is damaged.

4. Thermal insulation, energy saving, radiation resistance

In high temperature workshops, many pipes, valves or equipment, the internal temperature is very high, if not covered with protective materials, easy to cause personnel burns or heat loss. The fireproof sleeve has better thermal stability and radiation resistance and heat insulation than other polymer materials, to prevent accidents, reduce energy consumption, but also to prevent the heat of the medium in the pipeline directly transferred to the surrounding environment and make the temperature of the workshop too high, saving the cost of cooling.

5. Moisture-proof, oil-proof, anti-aging, anti-pollution, prolong the service life of the equipment

Fireproof sleeve (belt) has strong chemical stability, silicone in the oil and water, acid and alkali substances are not reactive, within 260 ° C, can be used for a long time and not aging, natural environment service life of up to several decades, can maximize the protection of these occasions in the pipeline, cable and equipment, greatly extend its service life.

6. Ozone resistance, voltage resistance, arc resistance, corona resistance

Because the surface is coated with organic silicone, its main chain is -SI-O -, no double bonds exist, so it is not easy to be decomposed by ultraviolet light and ozone. Fireproof bushing has good electrical insulation performance, its dielectric loss, voltage resistance, arc resistance, corona resistance, volume resistivity and surface resistivity are among the best insulating materials, and their electrical performance is little affected by temperature and frequency. Therefore, they are a stable electrical insulation material and are widely used in the electronic and electrical industry.

7. Flame retardant, reduce the incidence of fire and spread speed

If the pipeline is transported in flammable media or toxic media, leakage is easy to cause fire or casualties; Cables also often burn due to local high temperatures; Kingwell fireproof bushings are braided with extremely high temperature resistant glass fiber, and special raw materials such as appropriate flame retardants are added to the surface silica gel to make it have excellent flame retardancy. Even if the fire occurs, it can prevent the spread of the fire, still protect the integrity of the internal pipeline for a long time, and provide possible and sufficient time for the rescue of important information such as data and data.

APPLICATIONS:



Iron and steel
smelting



shipbuilding



Chemical
production



Harness
machine



Automotive field



Power plant
cable protection



Automobile
production



Industrial
building



Transformers,
circuit field



Various site areas



High pressure
hose protection



High pressure
hose protection



Injection molding
machine protection



Equipment
protection



Automatic equipment
protection

High temperature areas, heating area cables, fluid pipelines, rolling mill cables, tubing, sawing perimeter cables, generator sets, electrical voltage equipment, large buildings, hydraulic systems, automotive wiring harnesses and exhaust pipes in other industries such as steel, smelting, shipbuilding, automobiles, aerospace, aviation, military and chemical industries. Kingwell high temperature fireproof sleeve can provide long-term and reliable insulation protection in the high temperature environment of 300°C, anti-radiation, anti-heat wave, short-term resistance to $\leq 1650^{\circ}\text{C}$ high temperature molten steel or hot liquid impact.