

EKatech SP protection tubes



Typical application



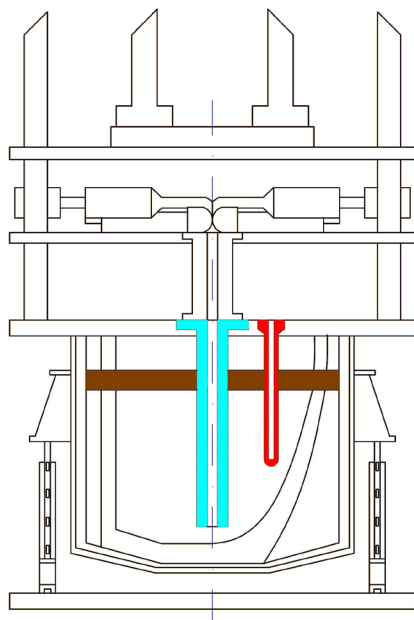
Aluminium foundry



Non-ferrous metals industry (Cu, Zn, brass)



Dust ducts in conventional power plants



- EKatech SP protection tube
- EKatech SP stalk riser tube
- EKatech SP heating tube

The EKatech SP shielding technology guarantees high mechanical resistance, long service life and very good thermal conductivity, which ensures accurate and reliable temperature measurement in many demanding applications.

In the standard version, the covers are available with a groove, which allows for easy installation of the cover at the measurement point in foundries of aluminum and other non-ferrous metals.

Key features:

- Abrasion resistance
- Gas tightness
- Corrosion resistant
- Very good thermal conductivity
- High resistance to thermal shock
- Does not require pre-heating during operation at temperatures up to +900°C
- High electrical insulation
- High working temperature up to +1350°C (in air)

EKatech SP protection tubes are also supplied together with temperature sensors at which they are permanently and tightly connected to the metal parts. The tubes are used for both straight and angle sensors.

The tubes are also supplied as stand alone products for installation in furnaces and other industrial application.

Versions with metal adapters enable their quick, safe and durable assembly.

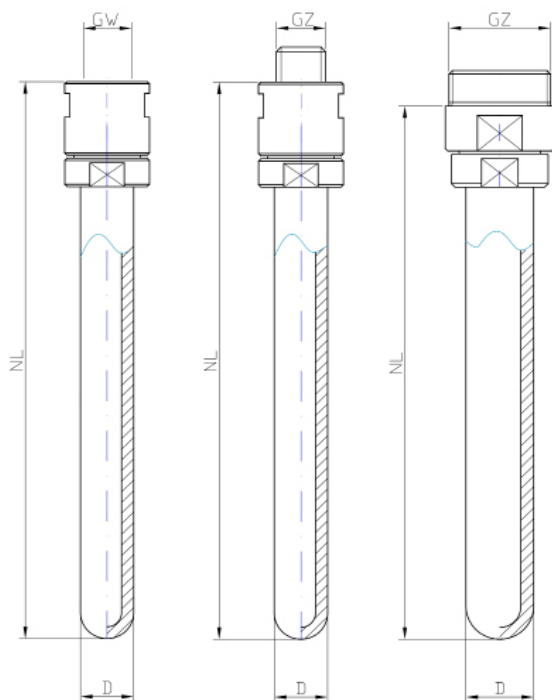
EKatech SP tubes are available in different lengths, adapted to the measurement and installation conditions.

We offer other products made of the same material, e.g. stalk riser tubes and heater tubes used in aluminum foundries.

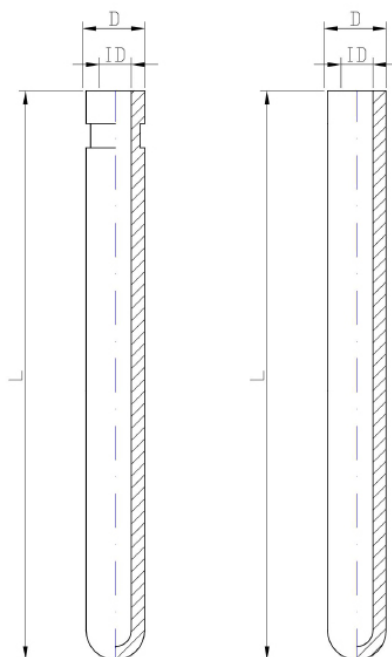
All products of EKatech SP series are made of SIN components.

Please feel free to contact us !

**Protection tubes with adapters
with internal (GW) or external (GZ) thread.**



Protection tube with groove Straight protection tube



Dimensions

Outer diameter	Internal diameter	Length max.
10 mm	5 mm	400 mm
16 mm	8 mm	750 mm
22 mm	12 mm	900 mm
28 mm	16 mm	1500 mm

Material properties

Density	> 3.2 g/cm ³
Compressive strength	> 1500 Mpa
Flexural strength	> 750 Mpa
Tracture toughness	> 6.2 /MPam ^{1/2}
Resistivity	>10 ¹⁴ Ω
Linear expansion coefficient (10 ⁻⁶ K ⁻¹)	3.2
Poisson's ratio	0.25
Heat shock resistance	900°C
Thermal conductivity	22-24 W/mK
Max working temperature (in air)	1350°C
Hardness (HRA)	> 92

EKatech SP covers are available as stand-alone fittings or as part of a complete thermocouple (e. g. straight or angled on request). Further information on thermocouples can be found in the data sheets. For the covers with the mounting groove shown above, we also offer different mounting adapters.

