

Products

# Functional Materials

## Electro-conductive Materials ET·FT·SN·FS Series

- Characteristics
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- IR-shielding ability

### Characteristics of ISK's electro-conductive materials

ISK's electro-conductive materials consist of antimony-doped tin oxide (ATO), which is an electron conductor. The materials show excellent conductivity and absorption of near infrared rays (heat rays).

The following four types of products are available.

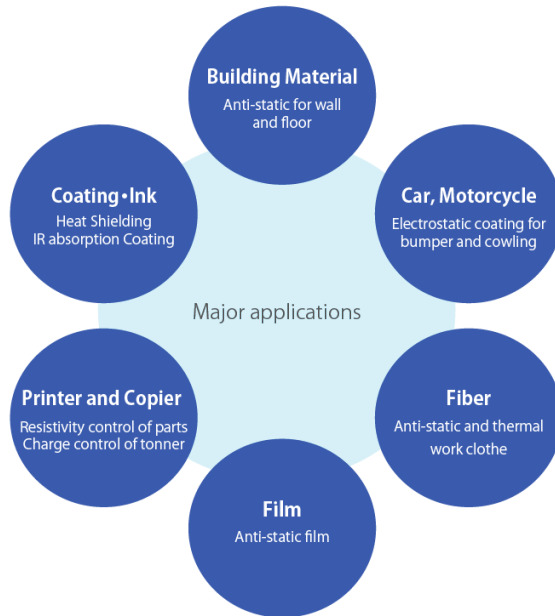
**ET series** : White electro-conductive titanium dioxide, spherical type

**FT series** : White electro-conductive titanium dioxide, acicular type

**SN series** : Transparent electro-conductive materials, spherical type

**FS series** : Transparent electro-conductive materials, acicular type

Major applications: [Conductive primer for electrostatic coating](#), [Anti-static coating](#) (building material, floor, film), [Anti-static ink](#), [Anti-static resin and fiber](#), [Heat shielding coating \(film\)](#), [Thermal fiber](#)

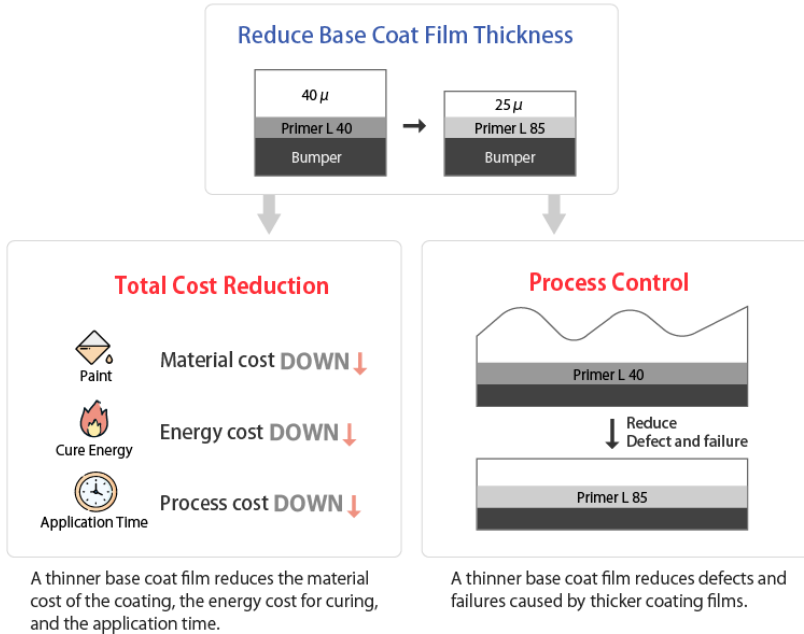
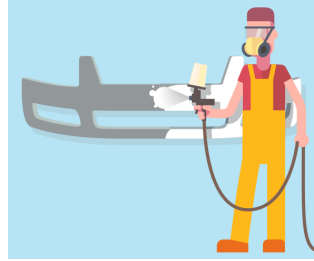


### Application

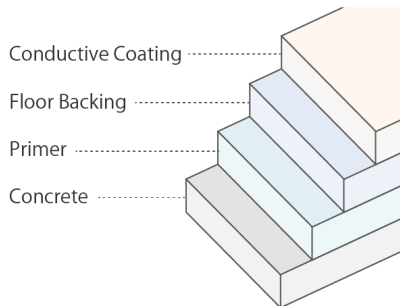
## Electro-conductive primer for electrostatic coating

An electrostatic coating on a plastic bumper needs an electro-conductive primer.

Even though a grey electro-conductive primer with carbon black is usually applied as an electro-conductive primer, a white electro-conductive primer with our white electro-conductive titanium dioxide works better for making a thinner white base coat film with enough opacity.



## Anti-static coating



Example :

PCM coating, floor coating

Properties :

Excellent storage stability, chemical resistance, low humidity dependence, and color matching.

## IR-shielding ability of SN-100P

Bellow graph shows transmittance curve of SN-100P coating.

Infrared rays are absorbed due to the plasmon absorption of free electrons of SN-100P.

