



Amorphous alloy technology

Amorphous alloy features high corrosion resistance, high wear resistance and high magnetostrictive performance. USUI's new technology is a unique thermal spray with an ultra-rapid cooling method that works well with thin metal plate and row metal material.

Amorphous alloy technology



Features

<Anti-corrosion ability>

- As formation of passivated film, amorphous alloys have high anti-corrosion ability.

<Wear resistance ability>

- With no grain boundary and high hardness, amorphous alloys have high wear resistance ability.

<Soft magnetic ability>

- As less of magnetic anisotropy, amorphous alloys have fine soft magnetic ability.

<Magnetostrictive ability>

- Using superior magnetostrictive ability, non-contact high sensitivity sensors are produced to detect strain.

<Production technology>

- More than 300 μm thick coils are produced.
(Conventional amorphous alloy thickness is 50 μm)

Application

- Torque sensor (Superior Magnetostrictive ability)
- Anti-corrosion coating films (High anti-corrosion ability)
- Chemical pump sleeve (High anti-corrosion ability and high hardness)
- Hydrogen fuel cell parts (High anti-corrosion ability and High strength)