Fig. 1

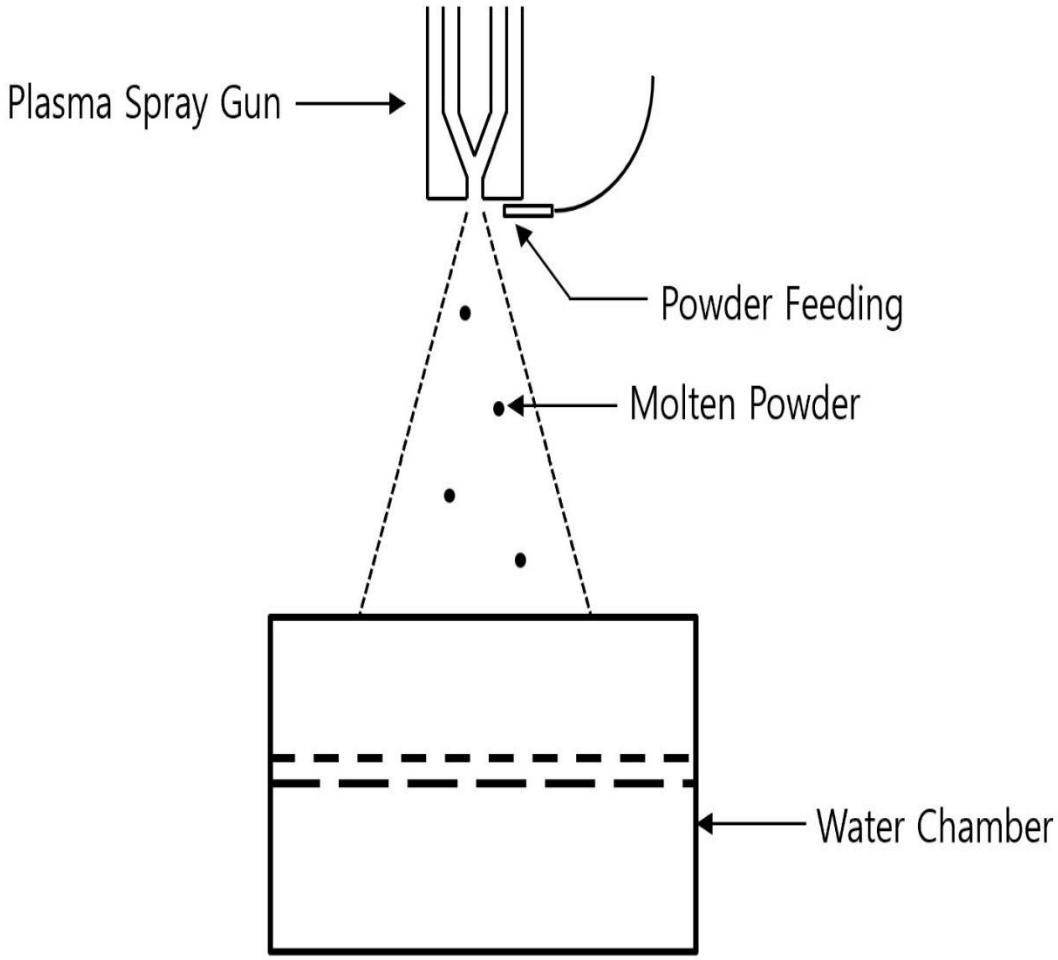

Plasma Spray Gun
Powder Feeding
Molten Powder
Water Chamber

Fig. 2

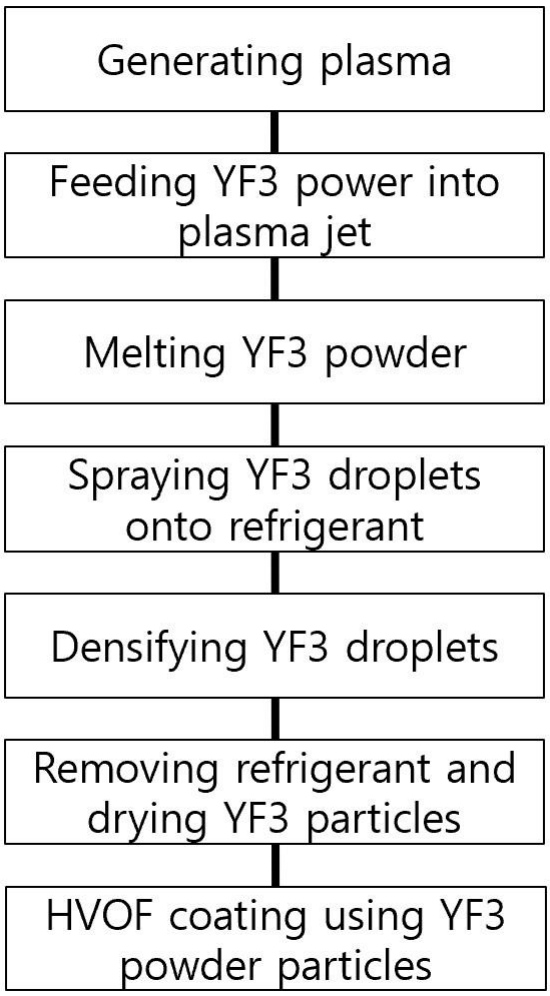

Generating plasma
Feeding YF3 power into plasma jet
Melting YF3 powder
Spraying YF3 droplets onto refrigerant
Densifying YF3 droplets
Removing refrigerant and drying YF3 particles
HVOF coating using YF3 powder particles

Fig. 3

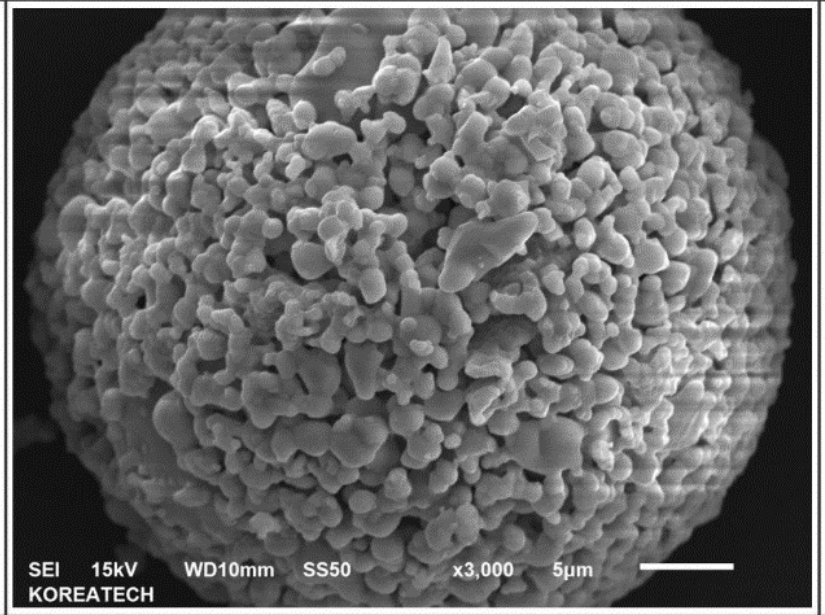
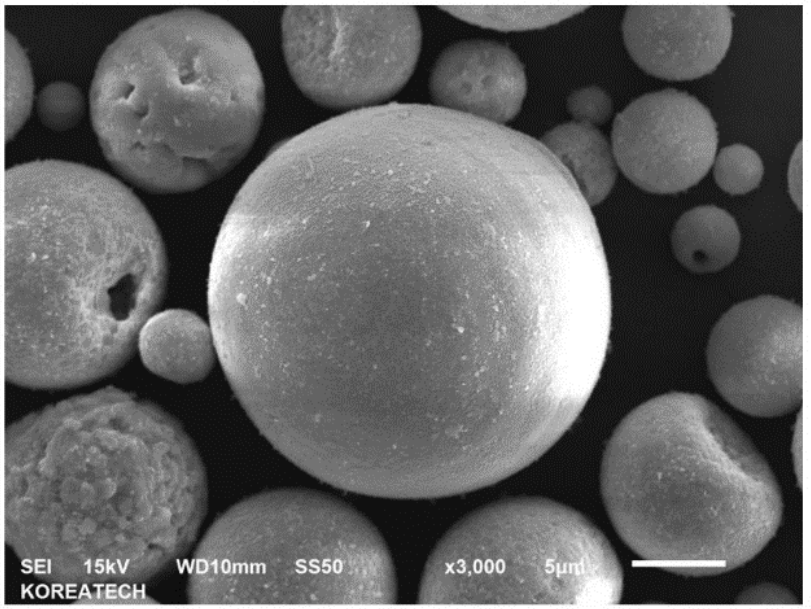
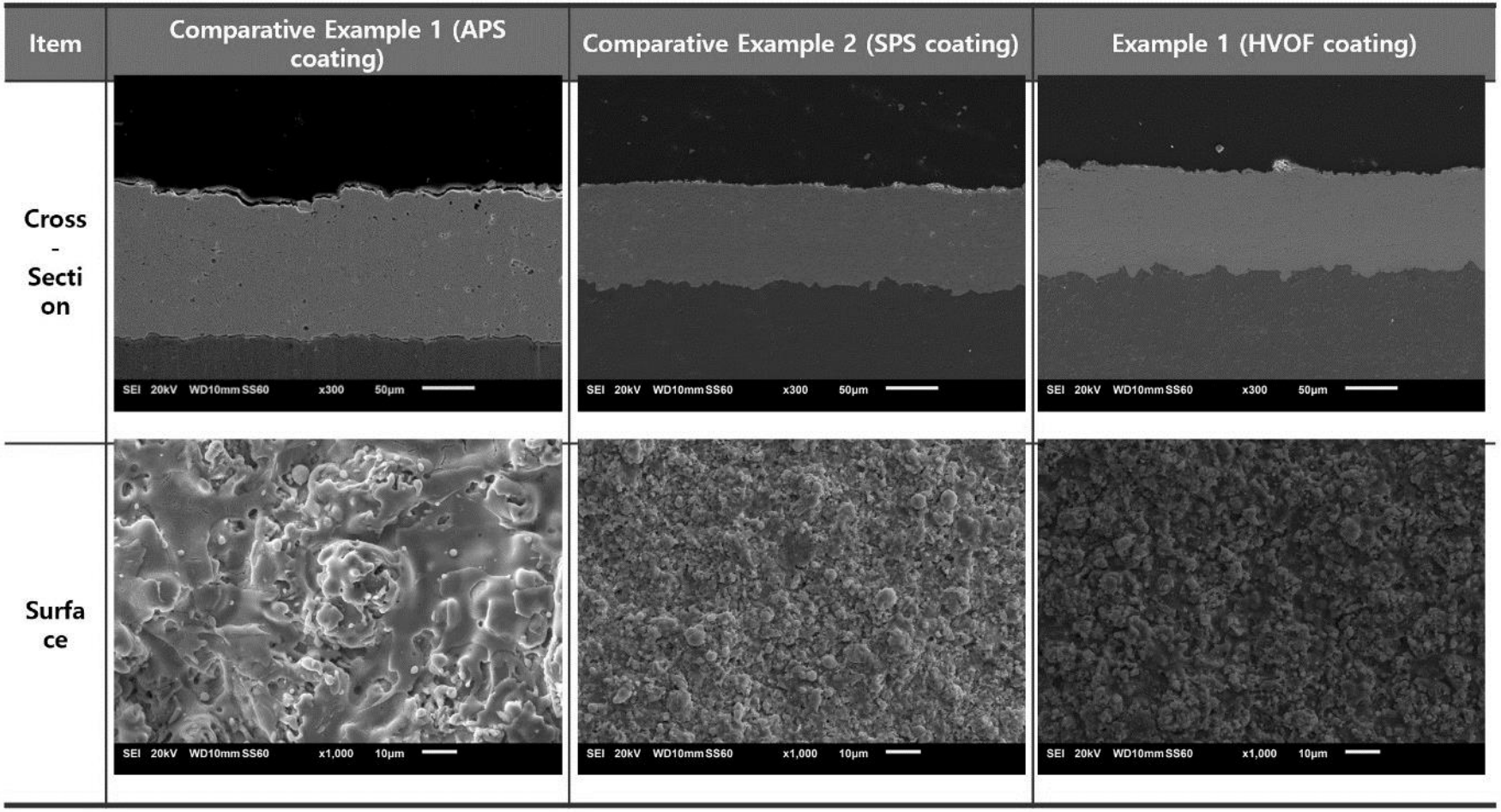
Item	Before spheroidizing	After spheroidizing
SEM		
D50	34.6μm	26.4μm

Fig. 4


Item
Comparative Example 1 (APS coating)
Comparative Example 2 (SPS coating)
Example 1 (HVOF coating)
Cross - Section
Surface
SEI 20kV WD10mm SS60 x300 50μm
SEI 20kV WD10mm SS60 x1,000 10μm