
Processing IP9444 Smoothseal

IP9444 golden Smoothseal is applied through conventional spray equipment, preferably over a lightly peened surface. It is golden and glossy when wet and dries to a gold finish when applied over a polished aluminium substrate such as burnished 350°C cure Ipcote. If applied over Ipcote cured at 560°C unburnished, it appears not dissimilar to Khaki Ipseal.

After spraying, Smoothseal, it should be left for 15 minutes to flash off, then stoved for 30 minutes at 80°C, then the temperature should be raised to 250°C and held for 30 minutes. On no account should Smoothseal be left after the 80°C process, as it can 'green back'. This means that it takes up moisture from air, and becomes wet again, but re-stoving gives an unsatisfactory finish.

Before application, ensure Smoothseal is well dispersed e.g. shake or roll. Apply to titanium or suitably cured, conductive Ipcote IP9183, IP9356, IP9442 or LR848.

Application

Use either latest technology gravity cup guns (eg: DeVilbiss Advance HD) or detail guns (eg: DeVilbiss SRI prolite).

Where low humidity is present within a spray facility the addition of 5% by volume of de-ionised water may be required. To aid flow through the gun and finest atomisation, the IP9444 can be warmed to a temperature of 35-40°C by storing in a water bath.

Apply successive light wet mist coats; up to 4-6 coats can be applied, and allow the coating to flash off between coats, until a deep, uniform gold, glossy coating is attained. An ideal gun pressure is approximately 30 psi (2 bar).

Flash off/ Initial Curing

Flash off **in a warm dry atmosphere for a minimum of 15 minutes**; the sealcoat will give a dry, matt appearance when ready to be stoved. Force dry for 30 minutes at 80°C.

Final Cure

Raise temperature to 250°C and stove for a minimum of 30 minutes.

NB: Care should be taken with Smoothseal type process as it can 'green back'. This means it takes up moisture from the air and becomes wet again. If this happens re-stoving gives an unsatisfactory finish.

Curing at temperatures above the 250°C will result in the clear see through Golden gloss being lost. It will become an opaque white coating. The clear golden colour over burnished Ipcote is designed to appear similar in appearance to 5380 DP

Alternatively refer to Rolls-Royce process Spec (RPS) 666 & 666 / 4 and 666 / 5, or apply for our application instruction sheet IPAS 666.