Huntington Specialty Materials

Application Guide

HS-980HT (1 part) Nano-Ceramic High Temperature Coating

The HS-980HT is a high performance, voc exempt, ambient cure and/or oven cure product
The HS-980HT coating is designed for uses where thermal migration control may be needed to help protect the surrounding environment & near by components or improve performance & protection of equipment.

Used when radiated heat needs to be greatly reduced
Example: 1600°F inside / 186°F radiated temperature 1" away from the outer surface.

HS-980HT High Temperature coating resin was designed for simple application and high temperature uses where radiated heat needs to be reduced and substrate protection is needed.
Note! Surface cleanliness is of utmost importance, free from oils and other containments.
Application on; Ferrous and Non-Ferrous Metal Alloys, (such as; "Titanium), composites, semi-ridgid and flexible plastic alloys as well as many other substrate types.

- It is always best to create a blast profile by a 120 grit aluminum oxide, garnet or equal, on all of the surfaces that will be coated, if possible.
- **(Do not use Glass or natural Sand as this will impede the adhesion of the coating to the surface).**
- **(Do not handle blasted parts with bare hands, as salts/acids will contaminate the surface and possibly cause a loss of adhesion in those areas once the part sees extreme heat).**

➢ Mix contents well before applying to ensure that no solids are in the bottom of the container.
➢ With clean dry air blow off any dust from the surfaces, preventing contaminating the coating.
➢ **Interior coating**: (being narrow diameters that cannot be sprayed)
  ✓ Plug all of the openings at both ends of the tubular part.
  ✓ Remove one plug, to allow a modest amount of coating to be poured into the part.
  ✓ Replace this plug and gently rotate the part to ensure that all surfaces are coated.
  ✓ Now remove the plug and pour out any excess coating* into a container
  ✓ Now hang the part so that it allows for continued draining of excess coating and ease of spraying the exterior surfaces.
➢ **Exterior coating:**
  ✓ **With a HLVP or similar spray gun fitted with a fine tip (i.e. 0.08);**
    - A finer spray mist is better, enabling the product to flow out easier and help control the products thickness.
  ✓ **Now start to spray all of the hardest areas to coat first;**
    - then start to spray the remaining areas until the entire surface is coated with an approximate dry film thickness of .5 to 1 mil.
  ✓ **It is very important not to build the coating to thick; (more is not better),**
  ✓ **as "to thick" will allow the coating delaminate during thermal cycles – it must be a thin coating to work as designed.**

1121 N. Bethlehem Pike • Suite 60-204 • Spring House • PA 19477-1102