SURFACE PREPARATION
Surface must be clean from all residues and degreasers.

1) If heavy rust needs to be removed prior to application, unit should be shut off and power washed at ambient temperature. Clean by removing paint rust, loose dirt and rust using a wire brush or mechanical tool. Remove mil-scale by grit blast, power tool or hammer gun.

NOTE: The internal temperature of a pipe, valve, or tank cannot be determined using an IR-gun by taking the exterior surface temperature where heat is released into the atmosphere. Surface temperatures will rise to match the temperature of the fluid or gas contained once the surface is coated and the heat is held back. Make sure that all valves, parts and release valves are rated for the actual interior temperature that will increase once it is coated.

MIXING
NOTE: While mixing and applying HPC®-HT, you should wear a point respirator at all times.

1) HPC®-HT is made up of two parts: Part A is a white water-based resin blend; Part B is a dense, brownish solvent blended system to keep components loose. When you open Part A you will see a collection of solid material—do not worry. Using a 6” diameter dispersion blade, simply move your blade through the top crust of cemmites and blend well at a low to medium speed (it takes about 30 seconds). Be sure to blend A and B together away from open flame due to the flammability of Part B. Once combined, there is no hazard.

2) When you add Part B into Part A, it is heavy and will fall to the bottom of the pail of Part A. While stirring, lift and drop the blade in the solution with a swift up-and-down until you feel the mixture loosen and blend together the white mixture with the brown. Blend for 3-5 minutes until you achieve a smooth texture, and the color becomes a uniform shade of tan with fibers. Then move blade in a circle from bottom to top to finish.

For best adhesion between PRIMER and first coat of HPC-HT, apply the PRIMER first (can use a small airless but remove gun filters, or hopper with small tip), and while it is steaming (5-10 minutes), apply the first coat of HPC-HT. If there is a long delay, there is no problem. After the first coat of HPC-HT is applied, additional coats can be sprayed any time—even the next day without a problem.

SPRAYING BLENDED PRODUCT: NOTE: Apply ONLY while in operation so that surface is hot. Throw down drop cloths under the pipe and to block other areas from overspray. The resin system must put a thin layer of slick residue on floor and under equipment next to spray area, so cover. A tremendous amount of steam will come off because this is water-based. First coat will seem liquid and can only be applied very thinly and may have some drops. After it dries, the second and following coats are easier and able to be applied heavier or thicker without sag or drips. As you apply remaining coats, do not apply more than 5mm (200 mils) and make sure that the coat is dry before applying the next coat. If you see the coat or layer move, then stop applying and allow it to dry.

NOTE: For start & stop (lunch), clean equipment with soap and water/Heptane mixture 50/50 anytime a stop time of 1 hour or more will take place.

Place gun and tip in water/Heptane solution to keep tip from clogging if laying it down for one hour or more.

APPLICATION
NOTE: The calculated thickness of HPC®-HT should be applied in multi-coats. Several 3mm coats may be required to reach the total thickness. These coats are applied very quickly, back to back, as the applicator moves along the substrate being coated. Stop-and-start action is not required between coats, unless application area is very small.

1) HPC®-HT Coating must be applied by spray. Use a hopper gun for larger thickeners, use a fluid gun for smaller thickeners.

2) Use a Graco GTX 2000EX with the flat head gun or hopper gun using a 6-8 mm nozzle. See the SPI Application Equipment sheet to reference suggested machines. For specialty applications, contact SPI.

3) For operating temperature below 250°C (482°F), use standard HPC®; if above 250°C (482°F) use HT PRIMER first.

4) If operating temperature is less than 300°C, the dry time between coats could extend to 20-40 minutes because of the silicone resins.

5) Applied HPC®-HT Coating should never be over coated with any coating until moisture content is 5% or less.

6) Hot Surface Applications: First, apply HT PRIMER. Then, apply a thin priming coat of HPC®-HT Coating at 30 mils wet (0.75mm). Coating will appear to ‘bounce off’ but this can be counteracted by increasing distance from surface and using high air pressure and quick movement until coating ‘bits’ onto the surface. Allow coating to cure down and moisture to steam off (approx. 5 minutes). Once steaming has stopped, apply second coat of HPC®-HT Coating at 3mm wet per coat. Subsequent coats can be built with normal procedures as the ‘bounce off’ action will not occur. Allow coating to completely steam off between coats before applying additional product. With each coat of HPC®-HT the thickness of each coat can increase until proper thickness is achieved. Allow HPC®-HT to fully dry and cure before top coating. If bubbles appear, you are applying too thick.

NOTE: Bubbles can be punctured to release trapped air and pressed down to allow bubble to adhere after initial coats; avoid causing bubbles. If bubbles appear after one pass, wait until the surface dries to touch and put the bubbles down flat before next pass.

NOTE: Check paint every 10-15 minutes to see if white film forms on top; if so, stir for one minute.

7) Pot Life: After A&B are mixed together, you have 6 hours to use before it thickens too much to spray.

SAFETY NOTES
1) Wear a full-face (PPE) Respirator with carbon filter must be used when spraying by anyone in the area.

2) The steam release from the water-blended resins has a slight odor and is initially irritating to the eyes and respiratory. The steam vapor must be properly ventilated, using fans to exit it out of the building or structure while HPC-HT is being applied.

CAUTION: Do not expose Part A to open flame as solvent is used to allow silicone to blend faster. After Parts A & B are blended together, product is non-flammable for use in spraying direct hot surfaces reaching 600°C.

CLEAN-UP EQUIPMENT
During breaks, spray systems should be flushed with heptane/water followed with soap and water, and waste product disposed of properly.

Storage of Product: Store separate components of HPC®-HT Coating between 40°F (5°C) and 120°F (49°C) according to the related safety hazardous indicated on the SDS for each part (A&B).