# SPI COATINGS family of PREMIUM FLUID APPLIED INSULATION

## HPC® INTERMEDIATE 350-800°F

HPC® HT 800-1200°F

## HPC® COATING 0-400°F



### **AWARD WINNING: HPC INSULATION COATINGS**

Georgia Pacific (part of Koch Industries–equity value of \$13.21 billion) received a New Technology Award at the ENERGY ENGINEERS CONFERENCE

Georgia-Pacific Receives EPA ENERGY STAR and SmartWay Recognitions for Sustainability Work Insulation material giving 13-18 month ROI established to Save Koch (GP) industries millions

Koch Industries and one of their subsidiaries (Georgia Pacific) did a over two year insulation effectiveness test using a new technology saving hundreds of thousands of dollars on one unit in one year.

Look at a couple of paragraphs from their engineering report submitted to EPA ENERGY STAR award group which did win. This is identifying the new technology they used to win the energy saving award and only some of the results.

"The fully insulated digester reduced heat loss by 49% and saved Naheola an estimated \$332,000 in energy costs annually. It also improved the quality of the cooking process by allowing the digester to better maintain its internal temperature. The HPC also protected the digester from corrosion. The Naheola digester

had already begun to experience corrosion, a common issue for digesters of its age. The HPC hermetically sealed the digester to keep out any new moisture, so when some of the HPC was removed in 2022 to allow for repairs to the digester, there was no evidence of new corrosion.

GP is already using HPC at other mills following the results of this experiment. In addition to the energy savings, HPC's ability to protect manufacturing assets from corrosion could save GP and FHR millions of dollars in equipment replacement costs."

NOTE: This is one unit in one plant saving \$332,000 in one year. In five years the savings would be \$1,460,000 for one unit in only one plant.

#### NOTE: Completely stopped CUI corrosion.

NOTE: Provides Employee burn protection as a side benefit.

Georgia Pacific has 30 or more plants with each having several digester units described in this engineering report including hot piping. If one unit saved \$332,000 after the unit was perhaps losing money, times all the digesters in all 30 plants plus additional pipes and tanks, what would that savings be??? \$20 million dollars plus?

Now take the protection from developing corrosion costing millions per year on repair, tear down and replacement each year, could that be twice the savings cost n loss energy??? Could a couple of million spent on applying a true "insulation coating" save \$40 plus million. The ROI is amazing when you take a couple of seconds to calculate to realize how effective HPC performs.

#### SPI Products Safe-to-Touch Temperatures, DFT's and Time of Contact with Coated Surface Time of Contact by OSHA: 5 Seconds with No Burn

Maximum Temperature		DFT of HPC®		HPC® Safe-to-Touch Temperature		Time of Hand Contact on the HPC <sup>®</sup> Surface			
°F	°C	mm	mils	°F	°C				
400	204.4	2.5	100.0	209	98.3	30 seconds +			
450	232.2	2.5	100.0	231	110.6	15 seconds +			
450	232.2	5.0	200.0	210	98.9	30 seconds +			
482	250	5.0	200.0	220	104.4	20 seconds +			
482	250	10.0	400.0	171	77.2	60 seconds +			
482	250	17.0	680.0	139	59.4	60 seconds ++			

Maximum Temperature		DFT of HPC® HT		HPC <sup>®</sup> HT Safe-to-Touch Temperature		Time of Hand Contact on the HPC <sup>®</sup> HT Surface
°F	°C	mm	mils	°F	°C	
500	260	32	1280.0	126	52.2	60 seconds +
550	288	32	1280.0	145	62.8	60 seconds ++
600	316	32	1280.0	162	72.2	up to 60 seconds
650	343	32	1280.0	174	78.9	up to 45 seconds
700	371	32	1280.0	185	85.0	up to 30 seconds
750	399	32	1280.0	194	90.0	up to 30 seconds
800	427	45	1800.0	152	66.7	60 seconds +
800	427	50	2000.0	126	52.2	60 seconds ++
900	482	57	2280.0	146	63.3	60 seconds ++
1000	538	57	2280.0	165	73.9	up to 60 seconds
1100	593	57	2280.0	185	85.0	up to 30 seconds
1200	649	57	2280.0	196	91.1	up to 30 seconds
1220	660	60	2400.0	192	88.9	up to 30 seconds

\*Summary of the tests conducted in the SPI Laboratory from 8-1-18 to 9-30-18

\*Ambient temperature during the tests from 65°F (18°C) to 82°F (27°C), moderate air movement

