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JOHNS-MANVILLE
Quality Control Department

Pipe DIVISION

Denison PLANT

Report No. D-Rem-386

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Date 11/16/73

Subject: Permastran Core Bell Dimensions

Requested by: A. M. Curry

Identification: 4" Permastran Core Pipe were run at different head cycle at the bell former to check the expansion and shrinkage of PVC core. The core pipe was measured after belling and placed in an oven at 140°F overnight and dimensions were then checked again for any shrinkage

The following results summarizes the test run on 4" Permastran Core.

Data:

Description of Core	Wall Thickness at D5 after belling	Temperature after pre-heating	Temp. after bell forming	After belling D5	After belling D6	After belling D8	After overnight Cure at 140°F D5	After overnight Cure at 140°F D6	After overnight Cure at 140°F D8
				4.530 – 4.570	5.245 – 5.255	4.530 – 4.570	4.530 – 4.570	5.245 – 5.285	4.530 – 4.570
1. Heated at 400°F	.081	195°F	—	4.550	5.230	4.510	4.540	5.270	4.540
50 sec 4" deep	.088			4.540	5.275	4.570	4.555	5.250	4.570
into heater				4.520	5.225	4.520	4.560	5.260	4.530
				avg 4.537	avg 5.243	avg 4.533	avg 4.552	avg 5.260	avg 4.547
2. 400°F at 50 secs	.086	—	—	4.560	5.220	4.550	4.540	5.230	4.545
4" deep into heater	.084			4.570	5.250	4.540	4.530	5.240	4.535
				4.540	5.270	4.550	4.550	5.255	4.530
				avg 4.557	avg 5.247	avg 4.547	avg 4.540	avg 5.242	avg 4.537
3. 400°F for 50 secs	.080	—	—	4.565	5.220	4.515	4.540	5.260	4.530
5" deep into heater	.086			4.535	5.265	4.540	4.535	5.245	4.535
				4.540	5.260	4.535	4.545	5.250	4.540
				avg 4.547	avg 5.248	avg 4.530	avg 4.540	avg 5.252	avg 4.542

PLAINTIFF'S EXHIBIT tabbies JM 689

MTC 010487

Approved

Report by

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