

INTER-OFFICE MEMO **TENNECO CHEMICALS, INC.**

TO	J. W. Poarch	AT Burlington	DATE	March 1, 1977
FROM	S. A. Edenbaum	AT Burlington	COPY TO	D. Coldiron L. Medeiros R. Richards G. I. Rozand J. P. Sandstedt ✓ P. R. Scarito A. C. Siegel
SUBJECT	B. F. GOODRICH CLEAN REACTOR TECHNOLOGY PROJECT WEEKLY STATUS REPORT WEEKS of FEB. 13-19 and FEB. 20-26			

NOTE:

The copolymer plant was shut down the week of Feb. 13 due to repairs to a number of reactors.

Summary - Production

Upon start up of the copolymer plant on Feb. 21, reactor one was charged with its 18th batch since a manual cleaning. Nine additional batches were completed, including in all, six batches of 390 and two batches each of 391 and 392. A concentration of 1% active solids in the coating solution is being continued. At the time of this writing 31 batches have been produced since the initial cleaning.

Fouling Results

Copolymer reactor number one has now proceeded 2.5 times the average number of batches requiring a manual cleaning. Due to the high proportion of type 390-batches, we saw more buildup than in the past. We were able to once again see the effect of the self-cleaning gelatin type batches. The batch data sheet has been attached to this report for review by the reader. Note how the second 391 batch after a 390 campaign has a shorter reaction time, and how the second or third 390 batch in a campaign tends to run longer. Visual inspection of the reactor after these self cleaning runs shows less buildup. It appears from this "self cleaning cycle" that has been established between 390 methocel types and the other gelatin copolymer, that the reactor has a good chance of producing 50 or more batches before needing a manual cleaning. Buildup at this point is limited to some exposed metal surfaces (the heaviest), the back of the baffle, the agitator shaft (this has been reducing with additional runs), and very light buildup on some glassed surfaces. The dome is extremely clean as is the bottom/discharge valve area.

Product Quality

Some additional samples of these latter batches will be submitted for color studies. Past studies resulted in no color deviation from standard material.

Operator Training

By the middle of this week all four shifts of baggers/cleaners will have been trained in the art of spraying the reactors thanks to the assistance of Lou Medeiros. This will enable us to startup additional reactors on the tech. at this time. We also have mounted a 55-gallon drum of coating solution in the copolymer area for the convenience of the baggers/cleaners. P. E. has been making up the solution.

Equipment

We are planning to request an order for an air operated piston pump to be used for future spraying during this test. The pump will be mounted on a small floor truck for easier spraying when the other reactors are started up. This will eliminate the use of the small spray can.

Program

March 3rd-clean homopolymer #14 and start coating thereafter.
Patch #14 for cement evaluations during shutdown for cleaning.



S. A. Edenbaum

SAE/ib
Attachment

FORM 2616-79
(390)

TIME = HRS. FROM TIME @ TEMP
+ DISCH. PRESS.
T_i = JACKET TEMP AFTER 1 HOUR
T_{MIN} = 2 MIN. TEMP COOLING H₂O

FORM 2623-49
(391)

FORM
2620-203
(315)

FORM 2620-11
(385)

FORM 2626
(392)

BATCH NUM.	SEQ NUM.	TIME HRS	T _i /T _{MIN}	BATCH NUM.	SEQ NUM.	TIME HRS	T _i /T _{MIN}	BATCH NUM.	SEQ NUM.	TIME HRS	T _i /T _{MIN}	BATCH NUM.	SEQ NUM.	TIME HRS	T _i /T _{MIN}
538	5	8.50	108/80	492	1	6.75	108/98	518	3	7.50	108/95	528	4	6.5	108/90
547	6	8.50	110/85	504	2	7.00	110/100	575	9	6.50	105/90	677	19	6.75	—
598	11	8.25	105/80	556	7			589	10	7.25	105/85	687	20	6.75	100/90
627	14	8.25	105/70	567	8							706	28	6.75	100/90
638	15	8.25	105/75	608	12	7.00	105/95					775	29	6.75	—/90
647	16	8.25	105/75	618	13	6.75	105/90								
669	18	8.50	108/80	657	17	7.00	108/95								
696	21	7.25	—	717	23	7.25	105/10								
706	22	8.25	102/70	726	24	6.75	105/10								
737	25	8.75	105/85												
747	26	8.50	105/80												
756	27	8.75	98/75												

COLORITE 018209