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HYDRO. DEMON. PLANT DIV.

KCBraun
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Corrosion by Cold Catch Pot Products of Bituminous Coal Hydrogenation
Materials Testing Laboratory, Leuna, 14 October 1941

Problem:

To investigate the possibility of intercrystalline corrosion on 2 samples,

A = 5 kg. bit. coal catch pot oil,
B = 5 kg. " " " " water.

Results:

The attached table shows the results of experiments on standard corrosion specimen and block specimen to determine intercrystalline corrosion. The general corrosion is very slight, but the occurrence of intercrystalline cracks is suggested. This occurred during the experiments only in the catch pot water at 60° C. Under other conditions the danger of intercrystalline cracks is very slight.

Corrosion Tests (Reduction mm/ann.	Catch Pot Oil 60°C	Catch Pot Water			in Autoclave 80°C	Remarks
		60°C	40°C	Room. temp.		
1. Week	0.003	0.000	0.001	0.001		
2. "	0.002	0.000	0.000	0.000		
3. "	0.001	0.001	0.000	0.000		
4. "	0.002	0.000	0.000	0.000		
Final Value	0.002	0.001	0.001	0.002		
Lye Brittleness	168,168	21,21				First Shipment
	168,168	21,21				
Test time in days.	112, 98	14,14	147,147		147,140	Shipment fr. Me. 340
Broken specimen are underlined	112, 98	14,14	147,147		140,140	
		28,42				

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