

INDEX MICROFILM REEL 132
(ORIGINAL DESIGNATION NAVY 5837-1)

LIST OF GERMAN DOCUMENTS ON:
SYNTHESIS GAS PURIFICATION PROCESSES

Item

1. Report dated Dec. 12, 1936 by Dr. Geister of I. G. Farbenindustrie entitled "Entstaubung" (Dust Removal).
2. Report by Dr. Sachsse entitled "Removal of Carbon Black and Dust from Gases with the Oppauer Schachtfilter."
3. M 202-8 - a simplified general flow-sheet showing the operation of the Alkazid process.

Item

4. Report by Drs. Jeltsch, Sommer and Bunger of visit made to the Alkazid Plant in Lutzkendorf, in regard to corrosion.
5. Confidential Reports (2) on the operating and supervision methods for the Alkazid process, entitled:
 - (a) "Betriebserfahrungen und Hinweise zum Alkazidverfahren"
 - (b) "Richtlinien für den Betrieb und die Überwachung von Alkazid-Waschanlagen".
6. M3200-I - Flowsheet - showing an NaOH wash following the Alkazid absorption.
7. Ze 1416-2 - Flowsheet showing Claus process of converting hydrogen sulfide to molten elementary sulfur.
8. F.Z.A.1 b - Flowsheet showing the Claus Ofen.
9. F.Z.A.4 a - Flowsheet showing the Nachverbrennungsofen.
10. "Clausofen Operation", translated data covering complete operation of the Leuna Plant.
11. S-92 - A drawing which shows a schematic diagram of the I.-G. process of hydrogen sulfide removal over carbon.
12. Drawing No. 711496- A flowsheet of a "Grob- und Feinreinigung" sulfur removal unit.
13. Drawing No. 4A34210 - Piping and Equipment arrangement of Claus plant.
14. Several short reports from Sept. 30, 1942 to May 25, 1943 on the subject of dust removal in multi-cyclone units.
15. Reports by Herr Keinke dated Dec. 29, 1931 on "Verbrennen von H₂S zu Schwefel im Claus-Ofen" and by Dr. Hanisch dated Jan. 11, 1933. "Notiz über Versuche zur Gewinnung von elementarem Schwefel aus Gasen mit niedrigerem Schwefelwasserstoffgehalt." Early data on the Claus process.
16. A report by Dr. Braus dated Jan. 21, 1935 on "Berechnung der Verbrennungstemperaturen von Schwefelwasserstoff - Kohlensäuregemischen", giving theoretical data on combustion temperature of H₂S mixtures.

- Item
17. Tables of data dated Nov. 11, 1933 on requirements of Alkacid process for utilities, equipment, solutions, operating personnel, etc.
 18. Analysis results and methods for gas purification catalysts.
 19. Report by Dr. Bahr dated Oct. 2, 1935 on "Weiterentwicklung des Alkacid - und Claus Ofen - Verfahrens," reporting late developments in the Alkacid and Claus processes.
 20. Report by Dr. Orlicek, dated July 11, 1941 on "Untersuchungen über die Lage des chemischen Gleichgewichtes beim Clausprozess", on the calculated and experimental chemical equilibrium in the Claus process.
 21. Drawings A-1030-4 and U 1878-1, flowsheets on carbon monoxide removal.
 22. Folder containing numerous short reports and drawings on the Alkacid process.
 23. Four curves on CO - CO₂ wash costs.
 24. Drawing S IV 3, Flowsheet of a pressure water wash process.
 25. Folder containing report and several drawings concerning the removal of carbon oxy sulfide (COS) from gases.
 26. Report by Dr. Bartholome' dated Nov. 26, 1941 on "Über die Umsetzungsgeschwindigkeit des CO an Braunoxyd-Kontakt bei höheren Drucken" giving data on reaction velocity over "Brown oxide" catalyst for the shift reaction.
 27. Patent announcement dated June 27, 1939 on a process for catalytic recovery of S from gases containing H₂S.
 28. Report by Dr. Kuhbier dated April 24, 1939 on "Entschwefelungs-Verfahren der Sachtleben A.B." covering data on a process reacting H₂S and SO₂ in thiosulfate solution to produce sulfur.
 29. Report on a meeting to exchange information on gas purification processes, dated Nov. 17, 1939.
 30. Drawing 240-8 on layout plan for a Claus unit.

Item

31. Report by Dr. Mengdehl dated August 22, 1938 "Einneues Verfahren zur Trennung von Ammoniak und Kohlensaure bezw. Schwefelwasserstoff" describing a new process for separation of NH_3 - CO_2 - H_2S mixtures.
32. Patentschrift No. 388857 dated 21 January 1924 to Firma Eduard Theisen in Munchen entitled "Stufen-Gas-O. dgl. Wascher", German patent on the Theisen washer for the purification of gases.
33. Patentschrift No. 5123288 dated 25 November 1939 to firma Eduard Theisen in Munchen entitled "Verfahren zum Reingen von Gasen, Lieft, Dampfen U. dgl.", German improvement patent in the design of the blades of the Theisen washer presented in the above patent No. 388857.