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(Original Designation FIAT Reel X-115)
PB 182035

Documents taken from Steinkohlenbergwerk Rheinpreussen, Moers

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- 607-668 Working directions for the synthesis control. Incomplete report dated Moers, Sept. 22, 1942. (P. 48 and figures referred to are missing. Bibliography attached at end of report.)
- 669-670 Gas analysis according to Orsat. No author or date given.
- 671 Short report on the conditions for consideration in carrying out the Orsat analysis. Report signed by P. Krumin, dated April 15, 1942.
- 672-678 The carbon monoxide and hydrogen balance as an aid in synthesis control. Report undated, signature illegible.
- 679-681 Example of calculation for H₂ balance.
- 682-699A Present plan for carrying out a carbon-balance calculation by dividing the synthesis products obtained into the separate hydrocarbon groups formed in the synthesis. Report by Weingaertner, dated Aug. 15, 1940, Braunkohle-Benzin A.G., Schwarzheide. (Five diagrs. and four calculation sheets included with report.)

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- 700-805 Contribution to information on the gasoline synthesis according to Fischer-Tropsch. Dissertation submitted for doctorate degree by Ernst Ruschenburg of the Technische Hochschule, Dresden, dated Aug. 7, 1939.
- 806-900 Series of descriptions of tests used to determine the various properties of fuels and lubricants. Descriptions are preceded by an index of the properties, showing the method of determination used. Descriptions are stamped Zentralbüro für Mineralöl G.m.b.H., and dated Oct. 1, 1943. They contain diags., printed reports, photos, and tables and are concerned with the following properties: exhaust steam residue, aniline point, ash content, lead content, cetan number, steam pressure, dimethyl sulfate number, emulsification tendency, color and external character, filterability, flame point, odors, calorific value, iodine number, resistance to cold, corrosion, resistance to deposition, peroxide number, acidity, boiling behavior, alcohol content, sulfurization number, solidifying point, coke formation, water determination, specific weight, and viscosity.
- 901-908 Analysis of petroleum sulfonates. ASTM Designation D 855 - 45 T. (1945, p. 285). Handwritten report. No author or date.
- 909 Title page
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C. Synthesis gas and purification.
- 910-914 Report on bituminous coal gasification. Experimental installation of the Arbeitsgemeinschaft Bergbauverein-Demag-Ruhrgas. No author or date.
- 915-920 The production of water gas and synthesis gas according to the Thyssen-Galocsy Process. No author or date.
- 921-940 Report on the investigation carried out at the synthesis gas installation of the Treibstoffwerke Rheinpreussen in Meerbeck. Report signed by D. G. Lessing, dated Jan. 20, 1940, Verein für die bergbaulichen Interessen, Essen.
- 941-942 Steam requirements and amount of CO conversion. Two calculation sheets dated Dec. 29, 1943, Treibstoffwerk. Author's signature illegible.
- 943-945 Calculation of the charge of conversion with a CO : H₂ ratio of 1 : 2.00 in the synthesis gas. Report by Dr. Grimme, dated Jan. 3, 1944, Treibstoffwerk. (One graph included with report.)

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- 946-951 Production of synthesis gas from cracked gas plus water gas by air admixture at Rheinpreussen Treibstoffwerk. Calculations report dated Feb. 10, 1944, Heinrich Koppers, Essen. No author.
- 952-953 Calculation, by gas analysis, of the cracked gas fraction present before rough purification. Report signed by Grimme. No date.
- 954 Calculation of the percentage fraction of the rough purification gases which must enter into the conversion in order to obtain the CO : H₂ ratio desired. Report dated Aug. 28, 1945, Treibstoffwerk. Author's signature illegible.
- 955-962 Calculation for setting up the heat flow picture according to operation data at the splitting installation at Rheinpreussen. Report dated Oct. 10, 1945, Essen. No author.
- 963-975 Calculation for setting up the heat flow picture according to operation data at the coke gas splitting installation at Rheinpreussen. Report dated Dec. 13, 1945, Chemische Werke. No author.
- 976-980 Methane splitting in the gas converter plant. Report dated Jan. 13, 1947, Stainkohlenbergwerk Rheinpreussen, Meerbeck. Author's signature illegible. (One diag. included with report.)
- 981-982 Consumption and yield values for March 1942. Report dated Jan. 13, 1947, Stainkohlenbergwerk Rheinpreussen, Meerbeck. Author's signature illegible. (One diag. included with report.)
- 983-992 Result in the use of the so-called fine purification. No author or date.
- 993 Title page:
I. Fischer-Tropsch Synthesis.
D. Cobalt catalysts.
- 994-998 Dependence of the yield in the Fischer plant on the quality, duration and delivery of the catalysts. Report dated July 14, 1937, Amt für deutsche Roh- und Werkstoffe, Berlin.

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- 999-1007 Report on the impurities in the synthesis gas and its influence on the activity and durability of catalysts. Operation results. Report signed by Dr. Weingaertner, dated Jan. 4, 1938, Braunkohle-Benzin A.G., Ruhland. (Report is also reproduced in documents found on T.O.M. Reel 292, Frames 3782-3796, and T.O.M. Reel 297, Frames 7468-7482.)
- 1008-1013 Influence of the synthesis gas and its impurities on the activity and durability of catalysts. (Laboratory investigation.) Report signed by Dr. Steinbrecher, dated Jan. 5, 1938, Braunkohle-Benzin A.G., Ruhland. (Report is also reproduced in documents found on T.O.M. Reel 292, Frames 3782-3796 and T.O.M. Reel 297, Frames 7468-7482.)
- 1014-1031 Influence of the cobalt and kieselguhr content on the activity of the gasoline synthesis catalyst. Kolbel Rept. No. 68, signed by Kolbel and Ackermann, dated March 9, 1938, Steinkohlenbergwerk Rheinpreussen. (Two tables and two graphs included with report.) (Reproduced also on T.O.M. Reel 297, Frames 7454-7467.)
- 1032-1041 The de-waxing of used catalysts. Report signed by Grimme and Hagemann, dated March 15, 1938, Treibstoffwerk. (One table included with report.)
- 1042-1045 Experiments in the catalyst chamber with cold and hot extraction. (Heavy gasoline used as extraction agent.) Report signed by Grimme, dated July 20, 1938.
- 1046-1053 The extraction of cobalt catalysts for regeneration of the catalysts and obtaining paraffin. Rept. No. 85, signed by Dr. Kolbel, dated Aug. 18, 1938, Treibstoffwerk. (Three tables and one page of graphs included with report.)
- 1054 Title page:
I. Fischer-Tropsch Synthesis.
E. Activated carbon plant.
- 1055-1075 The most suitable humidity for the activated carbon in gasol production. Report signed by Dr. Bratzler, dated Feb. 1, 1938. (Four tables, three graphs, and six diags. included with report.)

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- 1076-1078 Experimental activated carbon plant. Communication from Bamag-Meguin A.G. to Steinkohlen-Bergwerk Rheinpreussen, dated March 11, 1938.
- 1079-1085 Report on the results of the separate activated carbon connections behind each synthesis stage. Report signed by Dr. Grimme, dated Dec. 2, 1941. (One table and two diags. included with report.)
- 1086 Title page.
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F. Procedure and products of the synthesis.
- 1087 Flow diagram of the liquefaction and separation installation for gasoline and gasol with side columns. Lurgi Gesellschaft für Wärmetechnik m.b.H.
- 1088-1097A The gasoline synthesis in the second stage. Kölbel Rept. No. 65, signed by Kolbel and Ackermann, dated Feb. 2, 1938. (Two tables and one graph included with report.)
- 1098-1099 Attitude concerning the polymerization of gasol by the gasoline synthesis catalyst. Report signed by Grimme, dated Dec. 1, 1938.
- 1100-1106 Laboratory experiments on the working up and improvement of hard paraffin. Report signed by Grimme and Laymann, dated Jan. 5, 1940, Treibstoffwerk Rheinpreussen.
- 1107-1108 Improvements in the method of operation of a gasoline plant according to Fischer-Tropsch-Ruhrchemie. Report signed by Dr. Lopmann, dated April 17, 1942, Bergkamen.
- 1109-1110 Note concerning the evaluation of the balance analysis in the oven of the second stage. Note signed by Grimme, dated June 19, 1942, Treibstoffwerk.
- 1111-1112 Analysis results and evaporation in Oven 75. Note dated Aug. 6, 1942. Author's signature illegible.
- 1113-1114 Notice concerning the transposition of the synthesis operations. Notice signed by Grimme, dated Oct. 26, 1942, Treibstoffwerk.
- 1115-1123 The retention of synthetic paraffin compared with natural ozocerite. Report dated Jan. 31, 1940, Treibstoffwerk Rheinpreussen, Meerbeck. (Five graphs included with report.) No author.

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- 1124-1152 The enrichment of olefins in gasoline of the Fischer-Tropsch Synthesis. Part I. Report signed by Dr. G. Campen, dated May 1941, Treibstoffwerk, Meerbeck. (Tables, diags., and graphs included in report.)
- 1153-1180 The enrichment of olefins in gasoline of the Fischer-Tropsch Synthesis. Part II. Report signed by G. Campen and J. Wöllner, dated March 1943, Treibstoffwerk, Meerbeck. (Tables, diags., and graphs included in report.)
- 1181 Title page.
I. Fischer-Tropsch Synthesis.
G. Work on iron catalysts.
- 1182-1196 Gasoline synthesis with iron catalysts. Part I. Kölbel Rept. No. 74, signed by Kölbel and Ackermann, dated April 23, 1938. (One graph included with report.)
- 1197-1205 Gasoline synthesis with iron catalysts under pressure. Part II. Results of endurance experiments in the laboratory. Kölbel Rept. No. 79, by Dr. Kölbel, dated June 11, 1938. (Two graphs included with report.)
- 1206-1222 Gasoline synthesis with iron catalysts under pressure. Part III. Preliminary Kölbel Rept. No. 92, by Dr. Kölbel, dated Sept. 28, 1938, appears on Frames 1206-1208. Final report, dated Jan. 15, 1939, is signed by Kölbel and Ackermann and appears on Frames 1209-1222. (Three graphs attached.)
- 1223-1240 Kölbel Rept. No. 95, dated Jan. 15, 1939, which is duplicate of immediately preceding report.
- 1241-1245 Gasoline synthesis with iron catalysts. Part IV. Preliminary results of the pressure synthesis with semi-technical experimental apparatus. Kölbel Rept. No. 106, signed by Ackermann, dated May 13, 1939. (One table included with report.)
- 1246-1261 Gasoline synthesis with iron catalysts. Part V. Results of the middle pressure synthesis in the endurance operations of the first four months. Kölbel Rept. No. 112, dated Dec. 15, 1939. (Two tables and one graph included with report.)
- 1262-1307 Gasoline synthesis with iron catalysts. Part VI. Results of laboratory experiments since Jan. 1939. Kölbel Rept. No. 16, II b₁, dated June 14, 1940, Treibstoffwerk.

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- 1308-1328 Gasoline synthesis with iron catalysts. Part VII. Investigation of the causes of carbon deposition and tube obstruction when using iron catalysts in the gas phase. Kölbel Rept. No. 19, II b₁, dated May 17, 1941, Treibstoffwerk. (Pages 5, 11, and 12 are missing.) (Three tables included in report.)
- 1329-1387 Gasoline synthesis with iron catalysts. Part VIII. The development of iron catalysts on carriers for the synthesis of gasoline and paraffin. Kölbel Rept. No. 20, II b₁, signed by Dr. Herbert Kölbel and Dr. Ernst Ruschenburg, dated June 1941, Treibstoffwerk. (Eight tables included in report.)
- 1388-1447 Gasoline synthesis with iron catalysts. Part IX. Synthesis in a liquid medium. Kölbel Rept. No. 21, II b₁, signed by Kölbel and Ackermann, dated July 1, 1941, Treibstoffwerk. (Fifteen tables included in report.)
- 1448-1509 Gasoline synthesis with iron catalysts. Part X. Kölbel Rept. No. 27, II b₁, signed by Kölbel and Ackermann, dated July 20, 1942, Treibstoffwerk. (Twenty tables included in report.)
- 1510-1592 Gasoline synthesis with iron catalysts. Part XI. The development of iron catalysts on carriers for the synthesis of gasoline and paraffin. Kölbel Rept. No. 28, II b₁, signed by Dr. Herbert Kölbel and Dr. Ernst Ruschenburg, dated Sept. 1, 1942, Treibstoffwerk. (Two graphs and numerous tables included with report.)