

FISCHER-TROPSCH COMPLEX
CONCEPTUAL DESIGN/ECONOMIC ANALYSIS

OIL AND SNG PRODUCTION

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CONTENTS

SECTION 1	INTRODUCTION.	1-1
SECTION 2	SUMMARY	2-1
SECTION 3	DESIGN PARAMETERS	3-1
SECTION 4	SUMMARY FACILITY DESCRIPTION.	4-1
SECTION 5	UNIT DESCRIPTIONS	5-1
SECTION 6	PROCESS FLOW DIAGRAMS	6-1
SECTION 7	PRODUCTS: PROJECTED MARKETABILITY AND CHARACTERISTICS.	7-1
SECTION 8	MATERIAL BALANCE.	8-1
SECTION 9	ENERGY BALANCE.	9-1
SECTION 10	UTILITIES	10-1
SECTION 11	ENVIRONMENTAL FACTORS	11-1
SECTION 12	START-UP PROCEDURES	12-1
SECTION 13	MAJOR EQUIPMENT SUMMARIES	13-1
SECTION 14	ECONOMICS	14-1
SECTION 15	EXPERIMENTAL DATA BASE FOR KEY CONVERSION PROCESSES	15-1
	15.1 Fischer-Tropsch Synthesis	15-1
	15.2 Methanation	15-27
	15.3 Shift Conversion.	15-39
SECTION 16	PROJECTED PERFORMANCE	16-1
SECTION 17	POTENTIAL IMPROVEMENTS.	17-1
SECTION 18	PROCESS DESIGN CONSIDERATIONS	18-1
SECTION 19	LITERATURE CITED.	19-1

CONTENTS (Contd)

APPENDIXES

A	Fischer-Tropsch Plant Conceptual 500 mm ³ Btu/Day Commercial Plant Design Basis	A-1
B	Site Conditions	B-1
C	Analysis and Design, Extended Surface Catalytic Reactor/Heat Exchanger.	C-1

FIGURES

4-1	Energy Research & Development Administration (ERDA-FE) U.S.A. Fischer-Tropsch Plant Block Flow Diagram	4-3
4-2	Plant Plot Plan	4-4
4-3	Artist's Conceptual Drawing	4-5
4-4	Model of Conceptual Fischer-Tropsch Plant Design.	4-6
5-1	Sketch of Mine and Working Plan	5-4
5-2	Stockpile Area Plot Plan and Operating Diagram.	5-8
5-3	Sketch: Two-Stage Gasifier	5-12
5-4	Synthesis Reactor	5-16
8-1	Overall Material Balance Process Units.	8-2
9-1	Energy Balance Diagram.	9-2
9-2	Thermal Efficiency.	9-3
10-1	Overall Water Balance	10-3
11-1	Block Flow Diagram, Air Pollution Abatement	11-3
11-2	Block Flow Diagram, Water Treatment and Supply.	11-8
14-1	Project Overall Schedule.	14-44
14-2	Fund Drawdown Schedule.	14-45
14-3	Cumulative Fund Drawdown Schedule	14-46
14-4	Sensitivity of Required Product Selling Price to DCF.	14-47
14-5	Sensitivity Analysis of CDF Possible Annual Revenue of \$670 Million 65% Debt at 9% Interest.	14-48
15.1-1	Sketch: Experimental Equipment Used for Fischer-Tropsch Reaction Runs ⁶	15-19
15.1-2	Plates and Grid Assemblies Used in FSC Fischer-Tropsch Experiments ⁶	15-20
15.1-3	Apparatus Used in Preparing FSC Plates for Fischer-Tropsch Experiments ⁶	15-21
15.1-4	Reactor Sketch: Steel Lathe Turnings Catalyst (SLTC) Experiments ⁸	15-22
15.1-5	Reactor for Testing AMW Iron Catalyst-Coated Tubes ⁹	15-23
15.1-6	Catalyst Sprayed on 3/4-in. Diameter Tube ⁹	15-24
15.1-7	Arrhenius Plots of Space-Time Yield vs Reciprocal of Absolute Temperature at 400 psig.	15-25

CONTENTS (Contd)

FIGURES (Contd)

15.1-8	Synthesis Reactor Carbon - Phase Diagram ¹⁵	15-26
15.2-1	Sketch: Experimental Equipment Used for Fischer-Tropsch Reactions Runs ⁷	15-36
15.2-2	Methanation Reactor - Carbon Isotherm	15-37
15.3-1	Carbon Phase Diagram - Shift Reactor	15-44
18-1	Single-Stage Entrainment Gasifier Flow Diagram (One of Two Trains)	18-18
18-2	Two-Stage Entrainment Gasifier Flow Diagram (One of Two Trains)	18-18
18-3	Two-Stage Gasifier Design Concept	18-19
18-4	Single-Stage Gasifier Design Concept	18-20
18-5	Reactor	18-21

APPENDIX FIGURES

A-1	Flow Diagram, Fischer-Tropsch Process	A-5
C-1	Typical Finned-Tube Geometrics.	C-16
C-2	Fin of Arbitrary Geometry	C-17
C-3	Section of Generalized Catalytic Heat Exchanger Tube.	C-18
C-4	Temperature Distributions in Heat Exchanger of Example Problem Using a Phase Change Coolant ($\gamma = 0$).	C-19
C-5	Temperature Distributions in Heat Exchanger of Example Problem Using the Parallel Flow Configuration ($\gamma = .03$)	C-20
C-6	Temperature Distributions in Heat Exchanger of Example Problem Using the Counterflow Configuration ($\gamma = -.03$).	C-21

TABLES

4-1	Fischer-Tropsch Products - Projected Quantities and Heating Values.	4-2
7-1	Comparison of Commercial SNG and Projected Fischer-Tropsch SNG Characteristics	7-4
7-2	Comparison of Commercial Butane Specifications with Projected Fischer-Tropsch Butane Characteristics.	7-5
7-3	Comparison of Diesel Fuel and Fuel Oil Specifications with Projected Fischer-Tropsch Diesel Fuel Oil Characteristics	7-6
7-4	Comparison of Fuel Oil and Gas Turbine Fuel Oil Specifications with Projected Fischer-Tropsch Fuel Oil Characteristics.	7-7

CONTENTS (Contd)

TABLES (Contd)

10-1	Utility Summary Total for Two Trains.	10-4
11-1	Combined Gaseous Effluents.	11-4
11-2	Comparison of Gaseous Emissions with Illinois and New Mexico Source Emission Standards.	11-5
11-3	Sulfur Balance (TPD).	11-6
11-4	Comparison of Aqueous Effluents with Federal Petroleum Refinery Standards.	11-9
11-5	Aqueous Effluent Standards, State of Illinois	11-10
11-6	Mean Analytical Values for 82 Coals from the Illinois Basin	11-13
13-1	Major Equipment Summary - Unit 9 - Coal Mine.	13-2
13-2	Major Equipment Summary - Unit 10 - Coal Preparation.	13-4
13-3	Major Equipment Summary - Unit 11 - Coal Storage, Grinding, and Drying	13-8
13-4	Major Equipment Summary - Unit 12 - Process Gasification.	13-11
13-5	Major Equipment Summary - Unit 13 - Heat Recovery and Gas Cleaning.	13-14
13-6	Major Equipment Summary - Unit 14 - Acid Gas Separation Plants.	13-17
13-7	Major Equipment Summary - Unit 15 - Shift Conversion.	13-18
13-8	Major Equipment Summary - Unit 16 - Fischer-Tropsch Synthesis	13-19
13-9	Major Equipment Summary - Unit 17 - Methanation	13-23
13-10	Major Equipment Summary - Unit 18 - Liquid Product Recovery.	13-26
13-11	Major Equipment Summary - Unit 19 - Chemical Recovery	13-35
13-12	Major Equipment Summary - Unit 20 - Oxygen Plant.	13-40
13-13	Major Equipment Summary - Unit 21 - Sulfur Recovery Plant	13-40
13-14	Major Equipment Summary - Unit 22 - Water Reclamation	13-41
13-15	Major Equipment Summary - Unit 26 - Utility Power Generation.	13-45
13-16	Major Equipment Summary - Unit 27 - Potable and Sanitary Water System.	13-51
13-17	Major Equipment Summary - Unit 28 - Raw Water System.	13-52
13-18	Major Equipment Summary - Unit 29 - Flare System.	13-55
13-19	Major Equipment Summary - Unit 30 - Tank Farm	13-56
13-20	Major Equipment Summary - Unit 31 - Effluent Water Treating.	13-60
13-21	Major Equipment Summary - Unit 24 - Buildings and General Facilities.	13-64

CONTENTS (Contd)

TABLES (Contd)

14-1	Estimated Fixed Capital Investment.	14-11
14-2	Major Equipment Costs (\$000).	14-12
14-3	Total Initial Capital Requirements (\$ million).	14-13
14-4	Fixed Capital Investment by Cost Centers (\$ million).	14-14
14-5	Process Plant Catalyst and Chemical Requirements.	14-15
14-6	Startup Costs (\$ million)	14-16
14-7	Estimate of Working Capital Requirement (\$ million)	14-17
14-8	Coal Mine Equipment Operating Costs and Replacement Schedule.	14-18
14-9	Annual Operating Cost Summary (\$ million/year).	14-19
14-10	Manpower Summary.	14-20
14-11	Annual Maintenance Cost Summary (\$ million)	14-21
14-12	Coal Mine Operating Labor and Supervision	14-22
14-13	Coal Mine Maintenance Labor and Supervision	14-23
14-14	Coal Preparation Labor.	14-24
14-15	Process Plant Labor	14-25
14-16	Power Plant Labor	14-26
14-17	Offsites Chemical Requirements.	14-27
14-18	Offsites Labor.	14-28
14-19	Contribution of Cost Centers to Required Annual Revenue (RAR)	14-29
14-20	Cash Flow Case Evaluation, Total Complex, 100% Equity (\$ millions).	14-30
14-21	Cash Flow Case Evaluation, Total Complex Financed 65/35 D/E Ratio, 9% Interest (\$ millions)	14-33
14-22	Cash Flow Case Evaluation, Total Complex, 100% Equity (\$ millions).	14-36
14-23	Possible Annual Sales Value	14-39
14-24	Possible Required Product Selling Prices.	14-40
14-25	Cash Flow Case Evaluation, Total Complex Financed 65/35 D/E Ratio, 9% Interest (\$ millions)	14-41
15.1-1	Example Experimental Results - Flame Sprayed Catalyst (FSC) Fischer-Tropsch Runs ⁶	15-12
15.1-2	Example Experimental Results - Steel Lathe Turnings Catalyst (SLTC) Fischer-Tropsch Runs ⁷	15-13
15.1-3	Example Experimental Results - Flame Sprayed Catalyst on Tube Wall Reactor (TWR) Fischer-Tropsch Runs ⁹	15-15
15.1-4	Comparison of Example FSC, SLTC, and TWR Fischer-Tropsch Experimental Results.	15-16
15.1-5	Catalyst Activity (A _S) and "J" Factor Comparisons	15-17
15.1-6	Conceptual Fischer-Tropsch Reactor Design Compared with PERC Experimental Data.	15-18

CONTENTS (Contd)

TABLES (Contd)

15.2-1	Example Experimental Data Methanation Runs - Experiment HGR 15 ¹⁷	15-32
15.2-2	Experimental Data Methanation Experiment 23 C ⁷	15-33
15.2-3	Comparison of Granular and Spray Coated Plate Catalyst Systems	15-35
15.3.1	Process Performance Comparison Sour-Shift Conversions	15-43
18-1	Comparison of Entrainment Gasifier with Lurgi and Fluidized Bed Types (One Train)	18-14
18-2	Economic Comparison - Fischer-Tropsch Entrainment Gasifiers - 2 Stage vs. 1 Stage - Two Trains, Capacity = 500 Billion Btu/Da.	18-15
18-3	Fischer-Tropsch Catalytic Reactor Types Comparison - 500 MMM Btu/Day Plant 2 Trains - Capital Costs.	18-16
18-4	Fischer-Tropsch Catalytic Reactor Types Comparison - Operating Costs (Equivalent Uniform Annual Costs)	18-17

FLOW DIAGRAMS (Section 6)

R-10-FS-1	Unit 10	Coal Preparation
R-11-FS-1	Unit 11	Coal Storage, Grinding and Drying
R-12/13/14-FS-1	Unit 12, 13, 14	Process Gasification, Heat Recovery and Gas Cleaning, Acid Gas Removal
R-15-FS-1	Unit 15	Shift Conversion
R-16-FS-1	Unit 16	Fischer-Tropsch Synthesis
R-17-FS-1	Unit 17	Methanation
R-18-FS-1	Unit 18	Liquid Product Recovery
R-19-FS-1	Unit 19	Chemicals Recovery
B-21-FS-1	Unit 21	Sulfur Recovery (Claus Unit)
B-21-FS-2	Unit 21	Sulfur Recovery (Tail Gas Unit)

CONTENTS (Contd)

FLOW DIAGRAMS
(Section 6) (Contd)

B-22-FS-1	Unit 22	Water Reclamation
R-25/27/28/31-FS-1	Unit 25, 27, 28, 31	Fire Water System, Potable and Sanitary Water System, Raw Water System and Effluent Water Treating
R-26-FS-1	Unit 26	Power Generation

ABBREVIATIONS

av	average
bb1	barrel(s)
BCY	bank cubic yards
bp	boiling point
BPD	barrels per day
BPCD	barrels per calendar day
BPSD	barrels per stream day
Btu	British thermal unit
Btu/hr	British thermal units per hour
CI	cast iron
CS	carbon steel
DCF	discounted cash flow
D/E	debt/equity ratio
DTPH	dry tons per hour
eff	efficiency
ERDA	Energy Research and Development Administration
EUAC	equivalent uniform annual cost
FIFO	first in first out
FOE	fuel oil equivalent (6,300,000 Btu/bbl)
FSC	flame sprayed catalyst
F-T	Fischer-Tropsch
gpm	gallons per minute
Hdr	header
HHV	higher heating value

ABBREVIATIONS (Contd)

hp	horsepower
kV	kilovolt (1,000 volts)
kWh	kilowatt hour
lb/hr	pounds per hour
M	thousand
MAF	moisture and ash free (coal)
MF	moisture free (coal)
MM	million
MW	megawatts
MWe	megawatt electricity
PERC	Pittsburgh Energy Research Center
ppm	parts per million
ppmv	parts per million by volume
psia	pounds per square inch absolute
psig	pounds per square inch gauge
RAR	required annual revenue
ROM	run-of-mine (raw coal from mine, unbroken, and not cleaned)
scf	standard cubic feet
scfd	standard cubic feet per day
scfh	standard cubic feet per hour
sh	shell
SLTC	steel lathe turnings catalyst
SNG	substitute natural gas

ABBREVIATIONS (Contd)

sp gr and SG	specific gravity
SS	stainless steel
stp	standard temperature and pressure
STPD	short tons per day
Syngas	synthesis gas
T	tubes
TPD	tons per day
TPH	tons per hour
TPSD	tons per stream day
TPY	tons per year
TWR	tube wall reactor
wt	weight