

Ref. FD 4975/45 - Folder XXVIII

From the Commissioner for the 4-year plan
The Superintendent for special problems of the
Chemical Production,
to the C. in C. Armed Forces, Defence Economy and
Armament Division.
Attention: Col. Fecht

20.8.1941

Synthetic Plant Auschwitz

With the building declaration of 2.5.41 a plan was submitted for a synthetic plant at
Auschwitz, providing for the production of :

- 23,000 tons p.a. gasoline
- 22,000 tons p.a. middle oils (diesel)
- 33,000 tons p.a. paraffin

When the new Goering plan was prepared, the Air Ministry requested that if possible, 100% of the total aviation fuel production should be high duty gasoline. From the raw materials contained in the waste gases of hydrogenation plants etc., a proportion of only 75% can be achieved by means of alkylate plants. The minimum iso-octane content demanded by the Luftwaffe is not attained, and additional iso-octane must be produced to reach the standard for high duty fuel. This is possible if the processing of synthetic gases at Auschwitz is not carried out according to the declaration of 2.5.41; this project should be replaced by one for the production of 25,000 t/year of iso-octane, which would also give 11,000 t/year motor gasoline, 4,000 t/year of higher alcohols and 5,000 t/year propanol. This switch-over of the plan would involve no change in the gas production. The small loss of motor gasoline (12,000 t/year) is definitely admissible in view of the production of a much larger quantity of iso-octane. Moreover it will be possible to import motor gasoline until the new plant will start operations in July, 1943. The loss of 30,000 t/year of paraffin is not so great for the future synthetic grosse production; it has indeed been proved that only about one-third of the paraffins obtained by this method are suited to fatty acid oxidation. Moreover, as cobalt supplies appear to be improving it may be possible to produce paraffins best suitable for the preparation of fatty acids by the conversion of existing Fischer plants. The loss of 22,000 t/year of diesel oil should likewise be covered by imports from July, 1943. Should the diesel oil shortage still exist, there is the possibility to convert one of the hydrogenation plants, e.g. Leuna, and produce a quantity of diesel fuel corresponding to the additional aviation fuel production, instead of the aviation fuel prepared there.

The orders for the materials required at Auschwitz have been placed to cover all parts not affected by the alteration of the plan. As, however, also the orders for the equipment likely to be altered must soon be dispatched, a prompt elucidation is required. I should also point out that this conversion offers at the same time the possibility to carry out the augmented methanol programme.

(Signed) -----

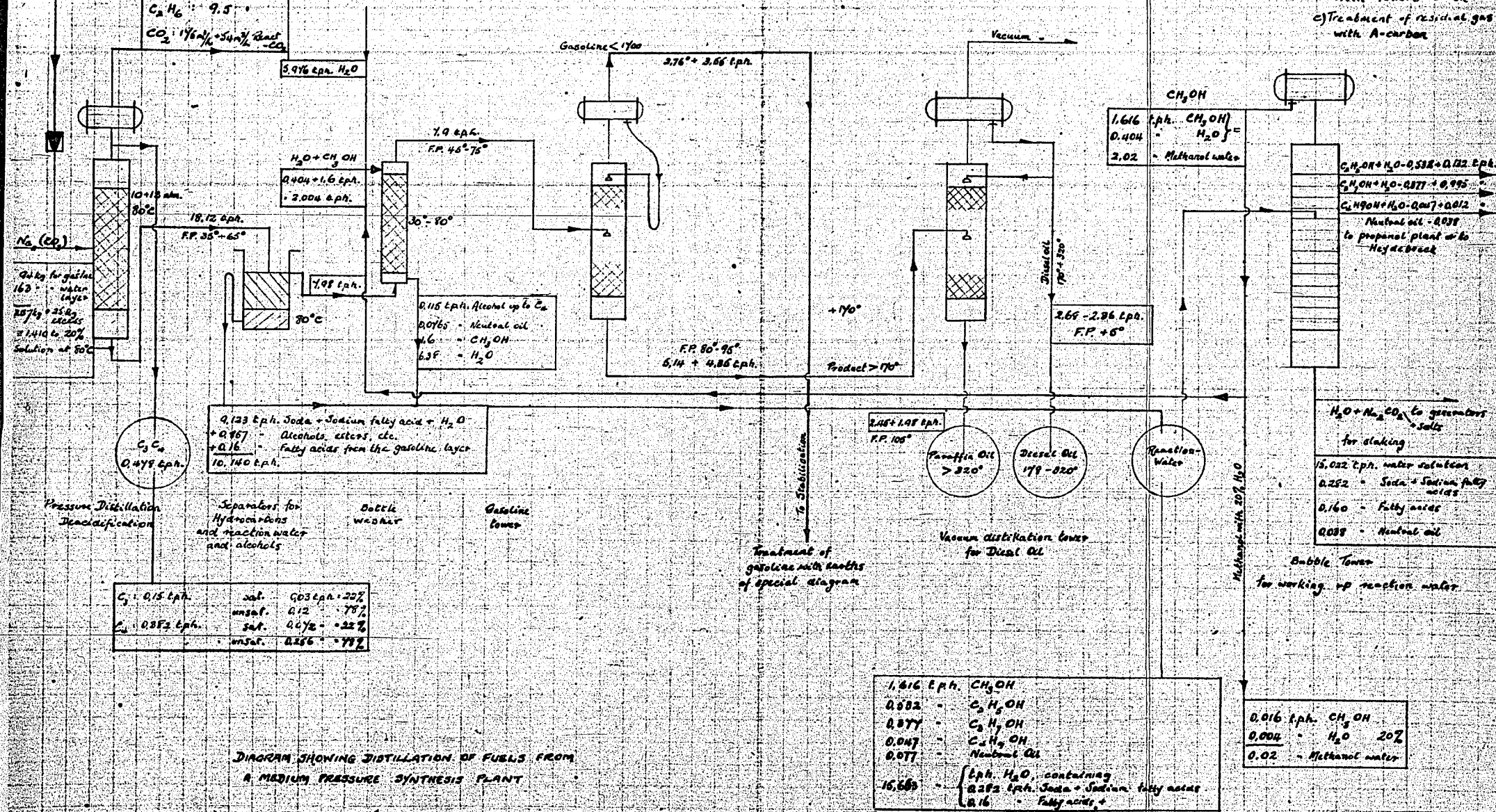
of special diagram
showing synthesis

Gasoline: 8.142 t.p.h. gasoline
layer
0.478 - gas oil

35% + 45% C₅ up to 170°C = 2.95 - 3.66 tons per hour
34% + 30% 170° + 320°C = 2.76 - 2.84
16% + 16% 320° + 400°C = 1.30 - 1.22
15% + 10% > 400°C = 1.23 - 0.52

Water layer
7.719 t.p.h. H₂O
0.887 - Alcohols + Esters
17.190

C₂H₆ = 15.4 kg/h
C₂H₄ = 9.5
CO₂: 176 kg/h = 34% gas
- CO



AUSCHWITZ GASOLINE

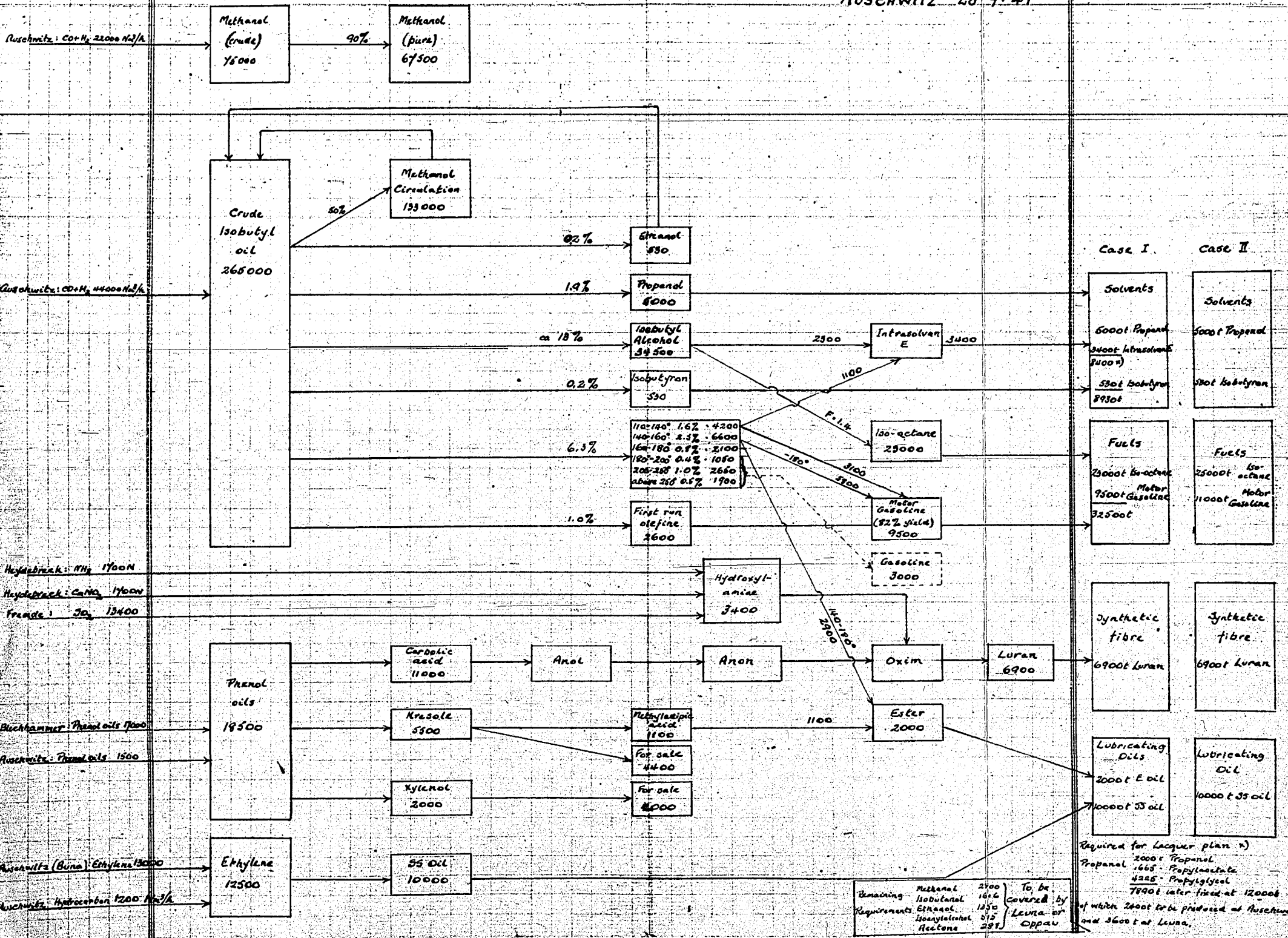
QUANTITY DIAGRAM AS AT 6-6-41
75000 t.p.a. Gasoline = 8.57 t.p.h.
7500 - Gasoil = 0.857
365 days @ 24 h/a = 8760 h/yr

Yield per Nm³ CO + H₂ = 140g Gasoline + 14g Gasoil
of Gasoil 80% in residual gas + 60% in product

Supplementary Diagram of Synthesis plant
b) Treatment of gasoline with fullers earth
c) Treatment of residual gas with A-carbon

DIAGRAM SHOWING DISTILLATION OF FUELS FROM A MEDIUM PRESSURE SYNTHESIS PLANT

AUSCHWITZ 28.9.41



Case I Case II

Solvents
 6000t Propanol
 3400t Isobutyl Alcohol
 530t Isobutyron
 3400t

Fuels
 25000t 6-octane
 9500t Motor Gasoline
 32500t

Synthetic fibre
 6900t Luran

Lubricating Oils
 2000t E oil
 10000t 55 oil

Required for Lacquer plan *)
 2000t Propanol
 1665t Propylacetate
 4225t Propylglycol
 7890t later fixed at 12000t
 of which 2000t to be produced at Auschwitz and 2600t at Lura.

Remaining Requirements: Methanol 2100, Ethanol 1616, Isobutylalcohol 1250, Acetone 285. To be covered by Lura or Oppau.

PRODUCTION AUSCHWITZ

in tons per year

