

C-O-N-F-I-D-E-N-T-I-A-L

GERMAN PETROLEUM INDUSTRY  
HAMBURG DISTRICT

REPORT No. 9

EBANO ASPHALTEWERKE A/G HAMBURG  
REFINERY AT HARBURG

*Reported By*

MR. C.A. HARRISON - Brit. Min. of Fuel & Power

*on behalf of the*

BRITISH MINISTRY OF FUEL & POWER

AND THE

U.S. TECHNICAL INDUSTRIAL INTELLIGENCE COMMITTEE

JUNE, 1945

C.I.O.S. Target No. 30

FUELS AND LUBRICANTS

COMBINED INTELLIGENCE OBJECTIVES SUB-COMMITTEE

G-2 Division, S.H.A.E.F. (Rear) APO-413

## EBANO REFINERY

The Refinery was designed and erected before the War mainly for the purpose of asphalt manufacture from imported Mexican and Venezuelan topped crudes. The asphalt production was marketed by the firm direct while the raw distillate fractions namely: gasoline, gas oil and fuel oil were sold to outside marketers for disposal.

The normal crude input was 360,000 tons/year and broadly the plant comprised the following units:-

1. 2 combination atmospheric/vacuum pipe still distillation units each having a capacity of 180,000 tons/year.
2. 3 asphalt air blowing units each having a capacity of 60,000 tons/year.
3. Tank storage for 120,000 tons and wharf and rail facilities to handle some 500,000 tons/year of products in bulk or packed.
4. A boiler house and water pumphouse to meet the refinery demands for steam and water with power supplied from the mains via a transformer station located in the works.
5. Complete laboratory facilities, office buildings and workshops to service and maintain the refinery on a routine production basis.

In 1939 the Company decided to double the refinery capacity by the installation of a third combination atmospheric/vacuum pipe still distillation unit of improved design having a capacity of 360,000 tons/year crude input. Erection work on the unit was started in August 1939 for estimated completion in April 1940 but, because of the war, work was seriously delayed so that the plant was not ready until early 1943 and has actually never operated due to lack of feedstock.

Refinery operation during the war was restricted to the processing of indigenous crudes mainly from the Reitbrook, Heide, Roumanian, Hungarian and Austrian fields. No new processes have been introduced with the exception that various blends of asphalt were

improvised to meet special war demands. These were substitutes for standard products and have no significant commercial or military value.

The following statement indicates the refinery input and production during the period of the war:-

Refinery Throughput & Production Statement

	<u>1940</u>	<u>1941</u>	<u>1942</u>
Crude run in tons approx.	264,000	221,000	71,600
Origin of crude .....	Reitbrook (German)	Reitbrook & Hungarian	Hungaria
Productions of gasoline			
Petroleum			
gas oil			
fuel oil			
asphalts			
Oxidized asphalt	30,000	19,900	74,000
Tar products and mixtures	34,850	52,550	
Refinery force, average	280	233	156
foreigners	---	---	---
	<u>1943</u>	<u>1944</u>	<u>1945</u>
Crude run in tons approx.	-	73,000	14,000
Origin of crude	-	Roumanian, Austrian & German (from Heide field)	Hungarian, Austrian & German
Productions of gasoline			2,500
petroleum			715
gas oil			{ 3,050
fuel oil			
asphalts			{ 5,250
Oxidized asphalt			Balance of
Tar products & mixtures {	73,626	42,000	crude des-
Refinery force, average	158	142	140
foreigners	20	32	32

Refinery operation ceased on April 4th 1945 following a heavy raid during which serious damage was done to the water pumphouse, part of the boiler house and, in particular, to the tank farm where all the main storage tanks were destroyed, leaving only the following intermediate storage available for operation:-

1 tank	about	1,400	tons	capacity	for	crude	oil.
5 tanks	"	240	"	"	"	"	distillates.
2 tanks	"	1,400	"	"	"	"	"
							after minor repairs.
1 tank	"	1,400	"	"	"	"	for fuel residue or asphalt storage after extensive repairs.

Thus, though the distillation equipment is only slightly damaged, extensive repairs and additions to auxiliary plant and tankage are necessary in order to restore the refinery for full capacity operation:-

1. New water pumphouse which should not be difficult as replacement pumps are stated to be available at the works of the original makers Messrs. Weise & Monski in Halle/Saale.
2. New tankage for main and intermediate storage.
3. Extensive repairs to the railway sidings in and outside the works.
4. Repair of the coal handling facilities to service the refinery plants which were all designed to burn coal.

The above work represents major repairs and will take some time to complete, particularly in the present circumstances. Nevertheless considerable improvisation is possible with the plant available and the Management are confident that they can resume operations on a limited scale within 4-6 weeks at the rate of 15,000 tons crude input per month provided that power requirements from the mains are met together with certain demands for spares, transport, craneage, welding

gas and the following estimated labour to operate under the supervision of the Refinery Management:-

10 skilled bricklayers.  
15 carpenters  
25 welders and mechanics  
60 labourers  
plus 150 contractors' labour.

Because of the present transport and labour difficulties the above estimate of 4-6 weeks is considered optimistic, but there is no doubt that refinery operation can be resumed within a reasonable period.

#### Personnel Interrogated

Due to bombing, the refinery personnel have been dispersed and no senior staff were seen at the refinery. The above information was provided by Herr. F.A. Pabelick Managing Director.

#### Date of Visit & Party

16th May, 1945.

Mr. P. de H. Hall (Brit.)  
Mr. Donald S. Fraser (U.S.)  
Mr. C.A. Harrison (Brit.)

(Sgd.) C.A. HARRISON.