

XIV. BOMBING DAMAGE AND DEFENSE MEASURES

Bombing of the Moers plant was stated to have occurred on July 20, August 21, October 25, November 2, 8, 20, 21 in 1944 and on February 28, 1945. The first attack, elsewhere referred to as the attack of July 19 since it started before midnight, practically ended the production of synthetic fuels, although partial repairs permitted small scale operation for a few days thereafter. After another heavy bombing on October 25, 1944 attempts to repair the synthesis plant were discontinued and instrument and accessories which could be used elsewhere were moved.

In general the bomb damage in the synthesis plant was widespread and severe. Most of the equipment for charge gas production and purification and for product recovery was completely destroyed. The south end of the contact oven house was very badly damaged but many of the ovens in the remainder of the building looked as though they could be restored to operating condition if desired.

The first serious damage to the coke ovens was caused by the bombing of 25 Oct. 1944 and raids thereafter put the two older batteries permanently out of commission by 21 Nov. 1944. The third (newest) battery of coke ovens continued operation until the bombing of 28 February 1945, four days before the plant was captured. The mine operating machinery was badly damaged by bombing on an unspecified but presumably recent date.

The abrupt drop in actual production as a result of the July 19 raid is well shown by Table IX page 58.

The realization by the plant management that production could not be maintained is evidenced by the monthly forecasts of production submitted to Arsyn from which the following estimates of total liquid products are taken.

<u>1944</u>	<u>Predicted tons, total liquid</u>
June	4800
July	5200
Aug.	4200
Sept.	1200
Oct.	2400

No later forecasts have been found.

On 28 Nov. 1944, Rheinpreussen informed Arsyn that no further production could be expected from Moers.

The monthly statement to "arsyn" for July, 1944 reports the following losses of stocks due to enemy action during that month:-

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<u>Stock</u>	<u>Loss in Tonnes</u>
Crude (Synthetic)	680.3
Grund benzin	172.5
Kogasin in N Diesel Fuel	2.0
Gatsch	11.3
Liquofied Gas	39.8
Kogasin	44.0
Total	949.9 tonnes

Enemy action on 2 Nov. 1944 destroyed 14 tons of Mixed Diesel fuel, and attacks on 2 Nov. and 21 Nov. 1944 destroyed, 103 tons of benzin, which was all the benzin on hand at that time. Of the remaining stocks, 110 tons of "Rohol" were shipped to Brabag and 11.85 tons of mixed Diesel fuel were shipped to Rheinpreussen Schacht IV. This left only 15.5 tons of light Kogasin in car Essen 508394 and 33 tonnes of intermediate oil (not further identified) in cars 551033, 597876, and 505655. There also remained 12.5 tonnes of hard paraffin, presumably that in the storage bin at the North end of the contact oven house, from which a sample was taken. (See page 74 for analytical results) Samples of the oil in cars 551033 and 508394 were also taken and results of the analysis of these samples will be found in the section relating to Kogasin, page 73.

For synthetic fuel plants in general the prevention and repair of bomb damage was organized by Arsyn and considerable correspondence on this subject, dating back to May 1940, was seized (Doc 75). Of the numerous parts of the plants for which protective measures were recommended, special importance seems to have been attached to the storage facilities for lead tetraethyl, and the handling of lead was forbidden unless adequate safe guards against bomb damage were provided. The vulnerability of pipe lines, particularly for water supply, was also a matter of great concern and covered by special instructions. Brabag issued a circular letter (5-12-44) recommending wherever practical, and giving directions for the substitution of canals for pipe lines to handle water supply and drainage in hydrogenation plants, including those which were to be partly underground. Leuna described means adopted for quick emptying of pressure vessels in case of attack. Stettin-Politz described the temporary use of hydrogenation vessels for oil cracking while repairs were being made on other parts of the plant required for hydrogen production. Stettin also recommended independent utility supplies to segments of the synthesis plant (decentralization) to minimize the danger of all production being stopped by a single attack. These recommendations (1 Dec. 1944) concluded with the following significant statement: "This conversion has not yet been undertaken because of an air attack which took place immediately after

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the completion of the repairs necessitated for the reconstruction as outlined.-----Furthermore this reconversion will require obtaining priority construction material from the Ministry of Reconstruction".

As far back as July 1, 1940, the Reich Economics Ministry ordered all fuel producing plants to reduce their stocks for the duration of the war. They were permitted to keep in stock:

Crude Oil a maximum of the amount needed for a monthly production. (Not subject to this rule were the plants in Ostmark, in the Bohemian protectorate and in the Eastern provinces).

Intermediate products a quantity not exceeding that which could be treated over a period of two months.

Finished products under no condition was any amount to be stored, but was to be shipped as soon as ready.

In May 1942, it was decided, in spite of the shortage of personnel, to create within each plant, a fire brigade, which would at all times be ready to step in in case of fire.

As air raid attacks on the Ruhr increased in intensity and the damage to synthetic oil plants became more serious, a committee met in Reuxel, in September 1944, to compare and discuss the extent of damage suffered by various synthetic oil plants. According to the Geilenberg plan, precautions and reconstruction measures, based on common experiences, would permit a much more speedy resumption of operations, and at the same time eliminate undue loss of time and waste of construction material. In order to make these experiences available to all plants, a commission, composed of 4 to 5 highly specialized technicians, was appointed. This commission, it was decided, would visit the individual plant immediately after the bombing and:

- 1) Advise the management on measures to be taken for the necessary repairs and assist them in estimating the material and labor required;
- 2) Clear substitution parts for damage units out of reserves which may be on hand in other synthetic plants.

This exchange of reserve units between the various plants, was expected to prove more efficacious and speedy than calling on the distribution center of the Geilenberg commission.

A Stosstrupp (Shocktroop) service was then created to assist individual plants in repairing damages caused by air attacks, in cases where-local efforts would be inadequate. The Ruhr district Stosstrupp units were located in various cities and functioned under

a supervisor. They consisted of specialized units servicing:

- 1) Pit repairs
- 2) Transport installations
- 3) Coke oven plants
- 4) Power station installations
  - a) furnaces
  - b) machines
  - c) transportation installations of every kind
- 5) Cooling towers
- 6) Steel construction
- 7) Electric installations
  - a) high tension
  - b) low tension.

Requests for services of the shocktroops were to be made to the central Ruhr committee. Debris were to be cleaned out before the arrival of the shock troops so that they could commence work immediately. All necessary repair material was to be on hand. The Stosstrupp supplied the small tools. On the other hand, the individual plants were obligated to have the balance of the machines put into working order, so that full production could be resumed, as soon as the shocktroops completed their repairs. The management of the plant was to inform the stosstrupp unit supervisor of the time the unit commenced and ended work. Furthermore the plant was to supply food and lodgings for these units.

Seized records contain considerable information regarding personnel constituting the commission for the Ruhr area. Copies of the code used for reporting the location and extent of bomb damage in the various Arsyn plants were also obtained.