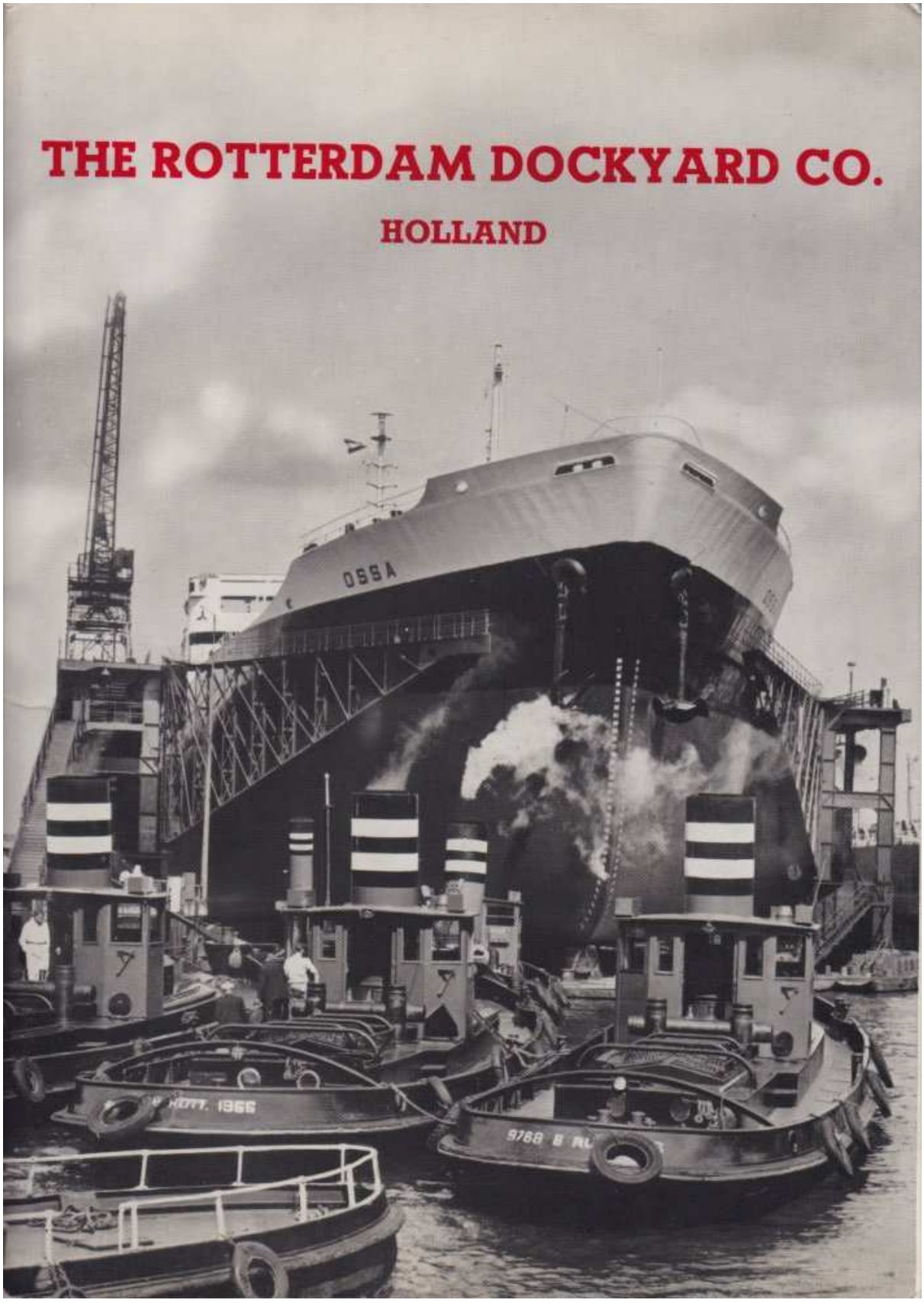
“The Rotterdam Dockyard Company, Holland”, ± 1961.

Ontvangen van Rob van den Broek, ’s-Hertogenbosch; uit het archief van Piet van der Horst, Rotterdam.



THE ROTTERDAM DOCKYARD COMPANY

(DE ROTTERDAMSCHE DROOGDOK MAATSCHAPPIJ N.V.)

ROTTERDAM - HOLLAND

Telegrams: Dockyard, Rotterdam - Telephone: 17 69 20 (15 lines), Rotterdam - Postbox 913, Rotterdam
Telex: 22181

Subsidiary Company:

NEW WATERWAY SHIPBUILDING COMPANY

(SCHEEPSBOUW MAATSCHAPPIJ "NIEUWE WATERWEG" N.V.)

SCHIEDAM - HOLLAND

Telegrams: Shipyard, Schiedam - Telephone: 26 90 23 (6 lines), Rotterdam - Postbox 913, Rotterdam

Aerial view of the RDM yard showing from left to right the large dock harbour with two 85,000 tons dw floating docks, Nos. 9 and 10, the carpenters and joiners shops, shipbuilding workshops and building berths, engine shops, the small dock harbour with floating docks Nos. 1, 3, 7 and 8, the forge, foundry and pressure vessel and boiler shop. On the right the garden village "Heyplaat" owned by the Company.

THE ROTTERDAM DOCKYARD COMPANY

(DE ROTTERDAMSCHE DROOGDOK MAATSCHAPPIJ N.V.)

R·D·M

R.D.M., these initials stand for more than half a century of the company's stirring history, of its ups and downs and tenacious energy in times of prosperity and adversity. The company was founded on the 23rd of January 1902 as a continuation of the shipbuilding and repairing firm "De Maas", which had existed under that name since 1880 but whose origin actually dated back to 1856.

The special purpose of the new enterprise was to start business in premises which allowed for expansion and to give ships entering the port of Rotterdam more facilities for repairing and docking in floating drydocks privately owned by the company. In 1903 two floating drydocks of 3000 and 7500 tons lifting capacity which had been ordered in the U.K. were put into service. In order, however, to broaden the economic basis of the company, the building of ships, engines and boilers was considered. A number of building berths were erected and the newbuilding department was inaugurated in 1905.

Since those early days a gradual enlargement of the yard's equipment and facilities has taken place which is reflected in a corresponding increase in the turnover of the repair and newbuilding departments.

During slack periods in the depressions, two docks were built by the company itself, one of 13,000 tons in 1923 and one of 16,000 tons in 1933. In 1925 the New Waterway Shipbuilding Co. was taken over, which added 3 floating docks to the existing number. In 1948 a 32,000 tons dock was purchased and a new dock of 52,000 tons lifting capacity suitable for tankers up to 85,000 tons dw was put into service early in 1959.
Another slightly larger dock of 54,000 tons lifting capacity was also acquired and this brings the total number of privately owned floating docks to 10.

The availability of this large number of floating docks and various modern well equipped workshops make it possible to execute expeditiously all kinds of repairs to ships and engine installations.

Forgings of every kind, i.e. propeller shafts, intermediate shafting, crankshafts either fully built, semi-built or solid forged, piston rods, connecting rods,

turbine rotors, etc. in carbon or alloy steel are produced in a large forge. This forge is equipped with 6000, 3300 and 600 tons hydraulic forging presses in addition to a number of smaller hammers. The 6000 tons press is capable of handling ingots up to 100 tons by means of two overhead cranes and a 20 ton rail type manipulator. The heating of ingots is done in eight oil fired furnaces and for heat treatment there are four horizontal and two vertical electric furnaces, as well as three gasfired annealing furnaces complete with the necessary oil and water quenching tanks.

As a special product, solid forged crankshafts are made by The Continuous Grain Flow process under licence of the Cie. des Ateliers et Forges de la Loire. The cranks are forged by upsetting from a bar to a form closely resembling the finished crankshaft. The foundry is capable of producing castings in iron up to 32 tons weight and every type of bronze and brass castings to a maximum weight of 5 tons. Facilities are also available for production of castings in spheroïdal graphite cast-iron up to 10 tons and for all kinds of small steel castings up to a weight of about 3 tons.

In October 1960, production was started in our new heavy engineering and boiler shop. In this shop, the most up to date machines are installed such as heavy plate bending rolls, hydraulic plate forming presses, automatic electric welding machines, etc. In the main bay, the crane capacity is such that vessels up to 300 tons weight can be handled.

Apart from carrying out repairs to all types of marine boilers, Foster Wheeler and Babcock and Wilcox type boilers are built under licence from these two firms.

Welded high pressure steam and water drums are fabricated to Lloyd's class I requirements. Various apparatus and pressure vessels also in clad and alloy steel up to 7" wall thickness are fabricated and welded for the chemical and oil industries.

For heat treatment and stress relieving of these vessels, two oil fired furnaces are available of which the largest is 16 ft. wide, 16 ft. high and 54 ft. long.

The machine shop has particularly large dimensions and is equipped with a great number of most up to date recently acquired machine tools some of which are remarkable of their large capacity. A number of turbines are regularly under construction and large diesel engine overhauls are executed. Large diesel engine crankshafts are one of our specialties and to cope with the ever growing size and weight of these shafts, a new extension to the machine shop is at present under construction, where the

largest and most up to date machine tools will be installed. The production of this workshop comprises the machining of all types of engine parts produced by the forge and foundry for ships under repair and also for other clients.

A well equipped pipe fitters' and coppersmiths' workshop completes the engine works.

Our laboratory is well equipped to execute all kinds of mechanical, metallurgical and chemical tests.

The lay-out of the shipbuilding workshops has been redesigned in order to give greater facilities for prefabrication and welding of large sections.
A new welding bay with increased crane capacity was added for this purpose. Before entering the production process all steel plates and profiles are automatically gritblasted and sprayed with a zinc compound primer.

A huge new building berth was constructed on which tankers up to 150,000 tons dw can be built. This berth is equipped with luffing cranes of 90 tons capacity each.

New workshops for carpenters, joiners and painters have replaced the old buildings.

Up to the present more than 300 ships have been built by our yard; these comprise passenger and cargo ships, tankers and several Royal Navy vessels, submarines as well as surface vessels.

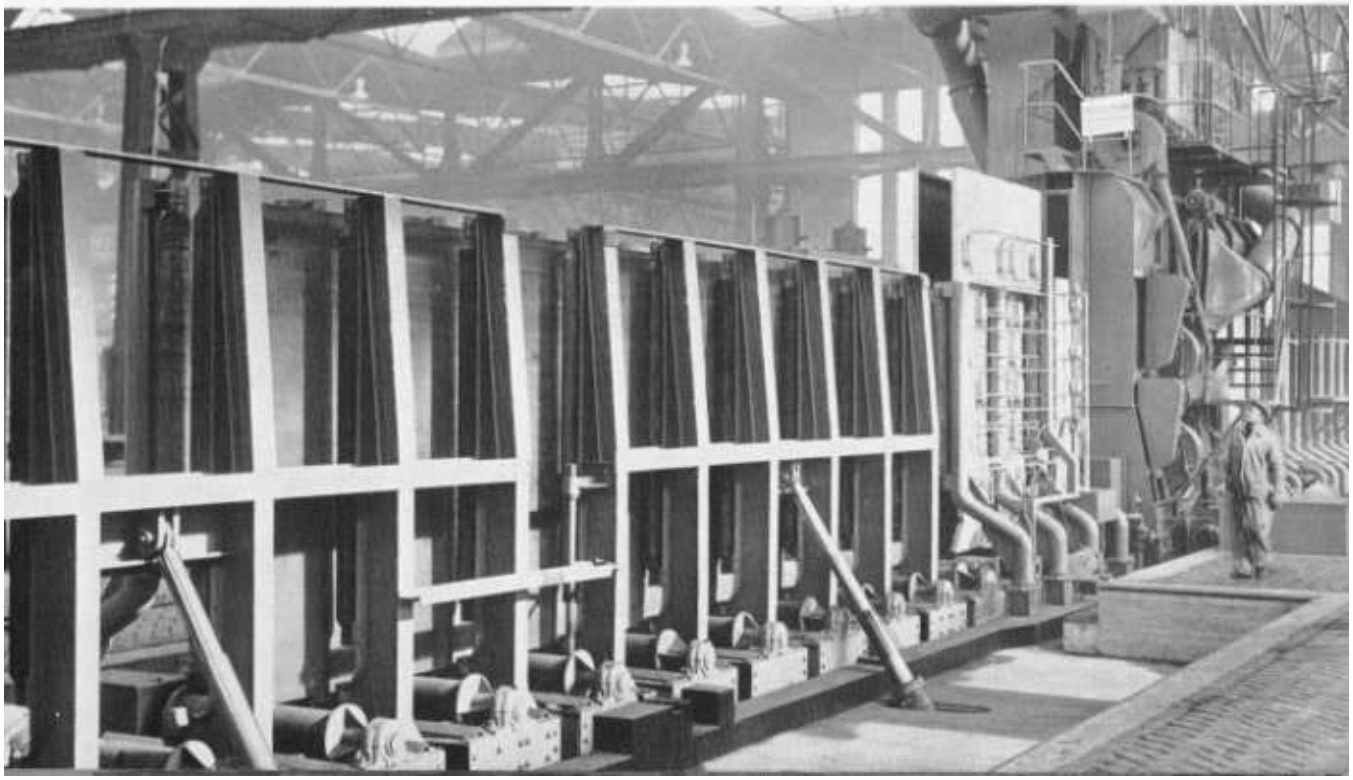
Special mention may be made of the building in 1936-1938 of the t.s.s. "Nieuw Amsterdam", 36,670 tons gross, then the largest vessel in the Netherlands merchant fleet and flagship of the Holland-America Line.
A second large passenger ship was ordered in 1956 by the same owners. This ship the t.s.s. "Rotterdam" of 38,645 tons gross was delivered on August 20th 1959 and is now the flagship of the Holland-America Line.

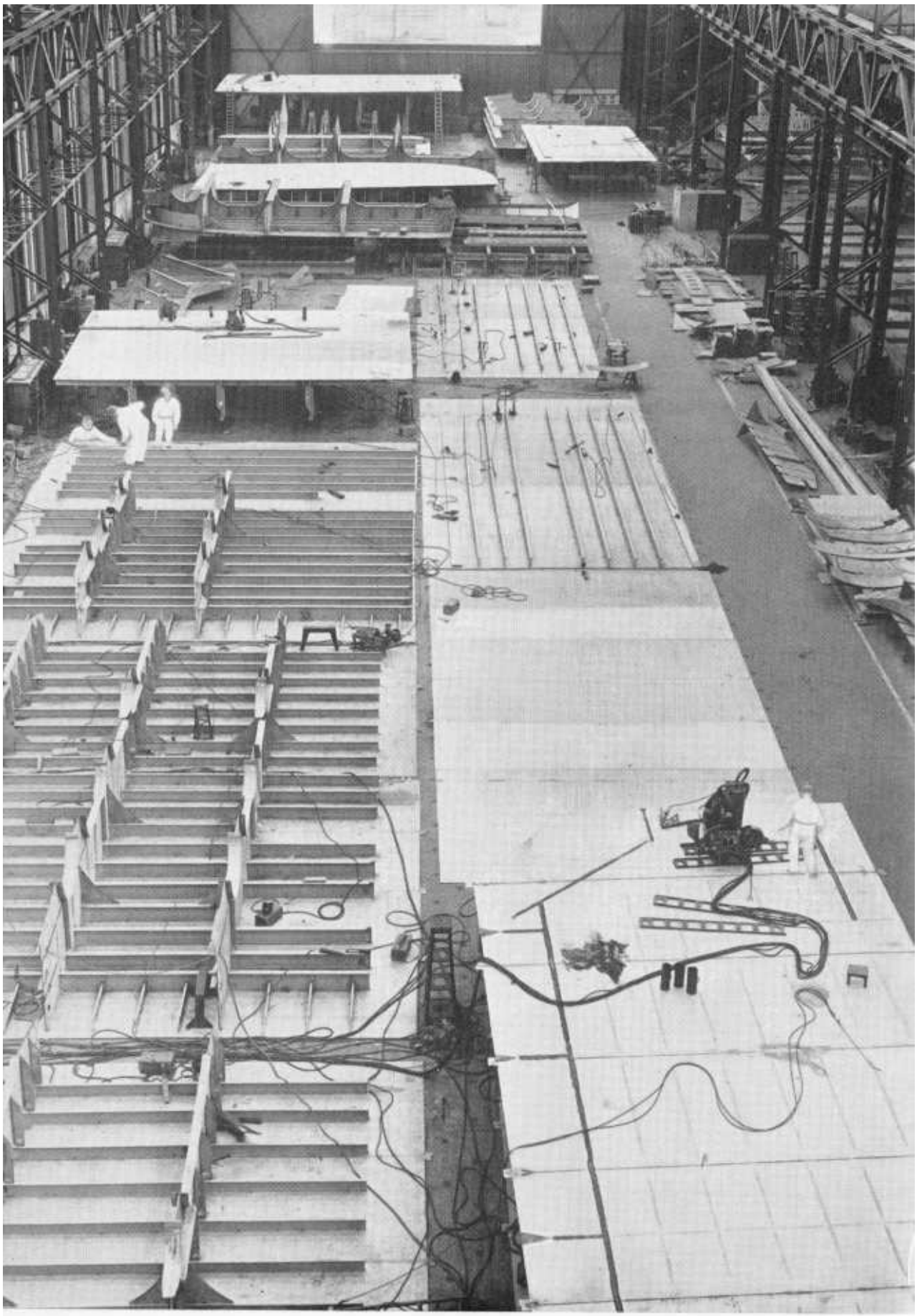
To end this short description of the yard we may mention that to give greater availability and encourage better class workmen to seek employment and remain in service with the R.D.M., the company obtained in 1913 a site of sufficient size for houses for the staff and workmen, and started building the garden village "Heyplaat". At present this area covers almost 50 acres with about 3600 inhabitants. The village comprises 3 churches, 3 schools, various shops, a recreation building and a home for our pensioners. A sports ground as well as a children's playground and a swimming pool are also provided.

The launching of the t.s.s. "Rotterdam" by Her Majesty Queen Juliana of the Netherlands.

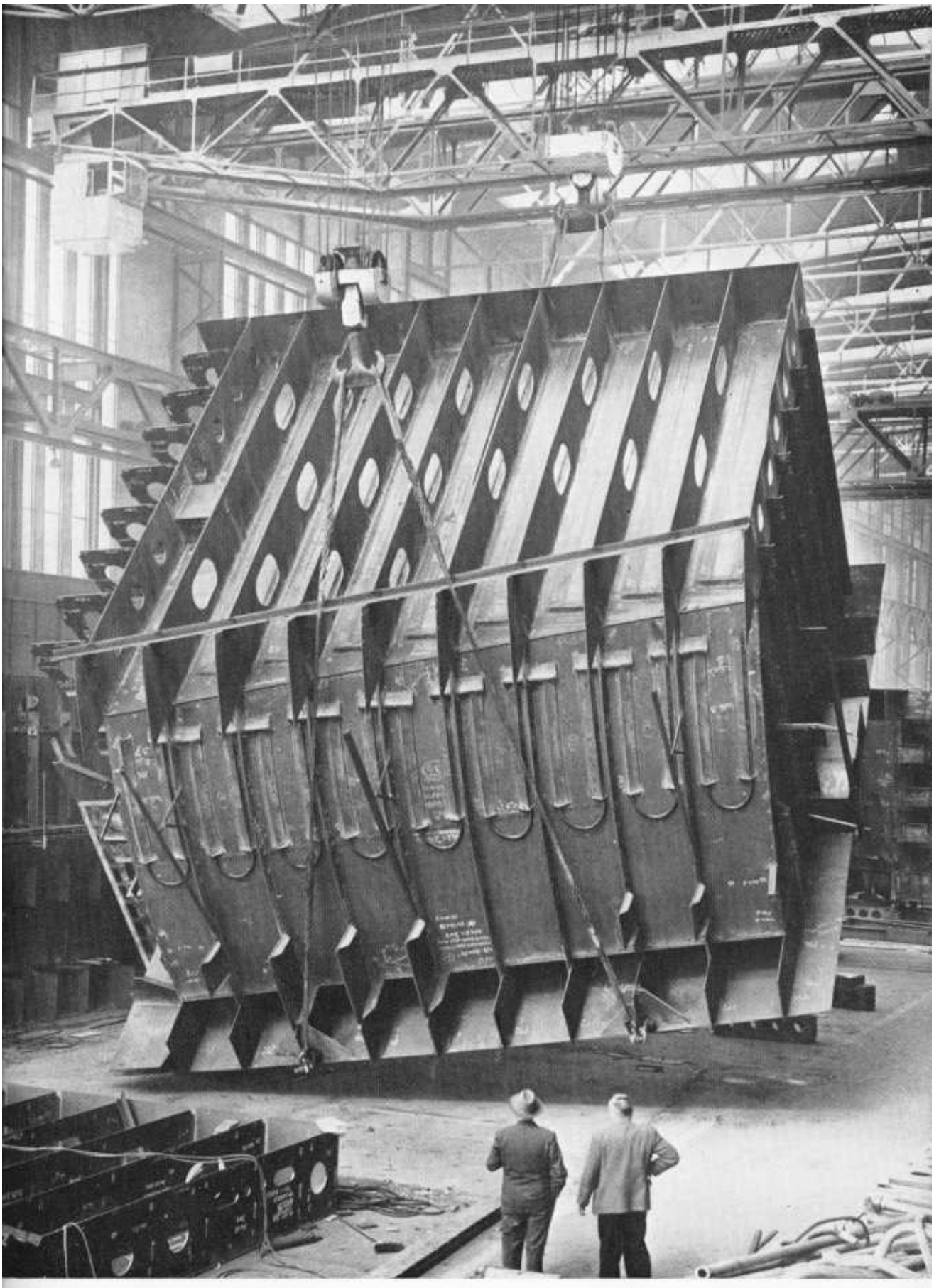
The 48,800 tons dw turbine tanker "Ondina" ready for launching from our largest building berth.

Automatic grit blasting and paint spraying installation for treatment of plates and sections prior to fabrication.

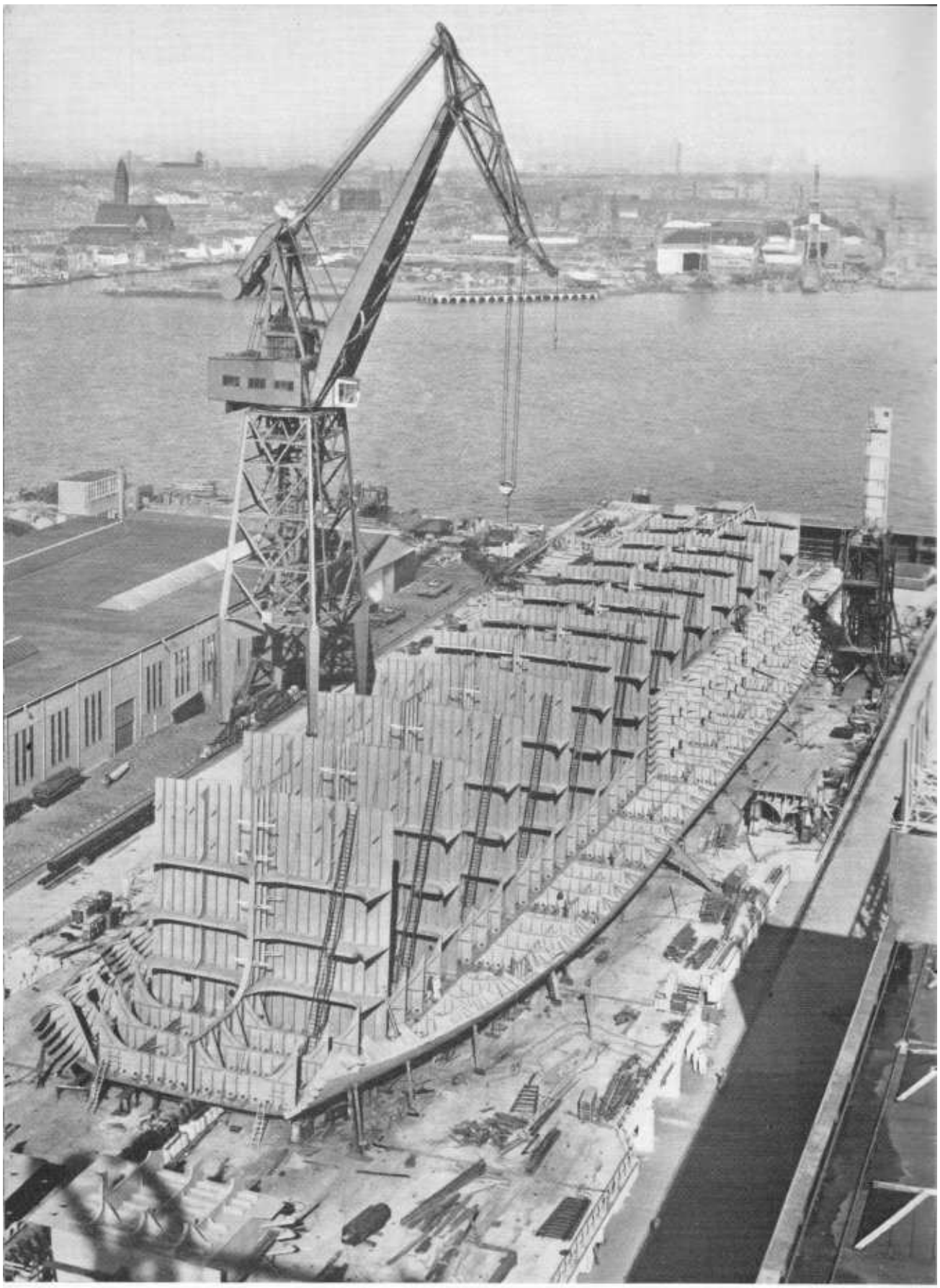




View of the prefabrication and welding bay.

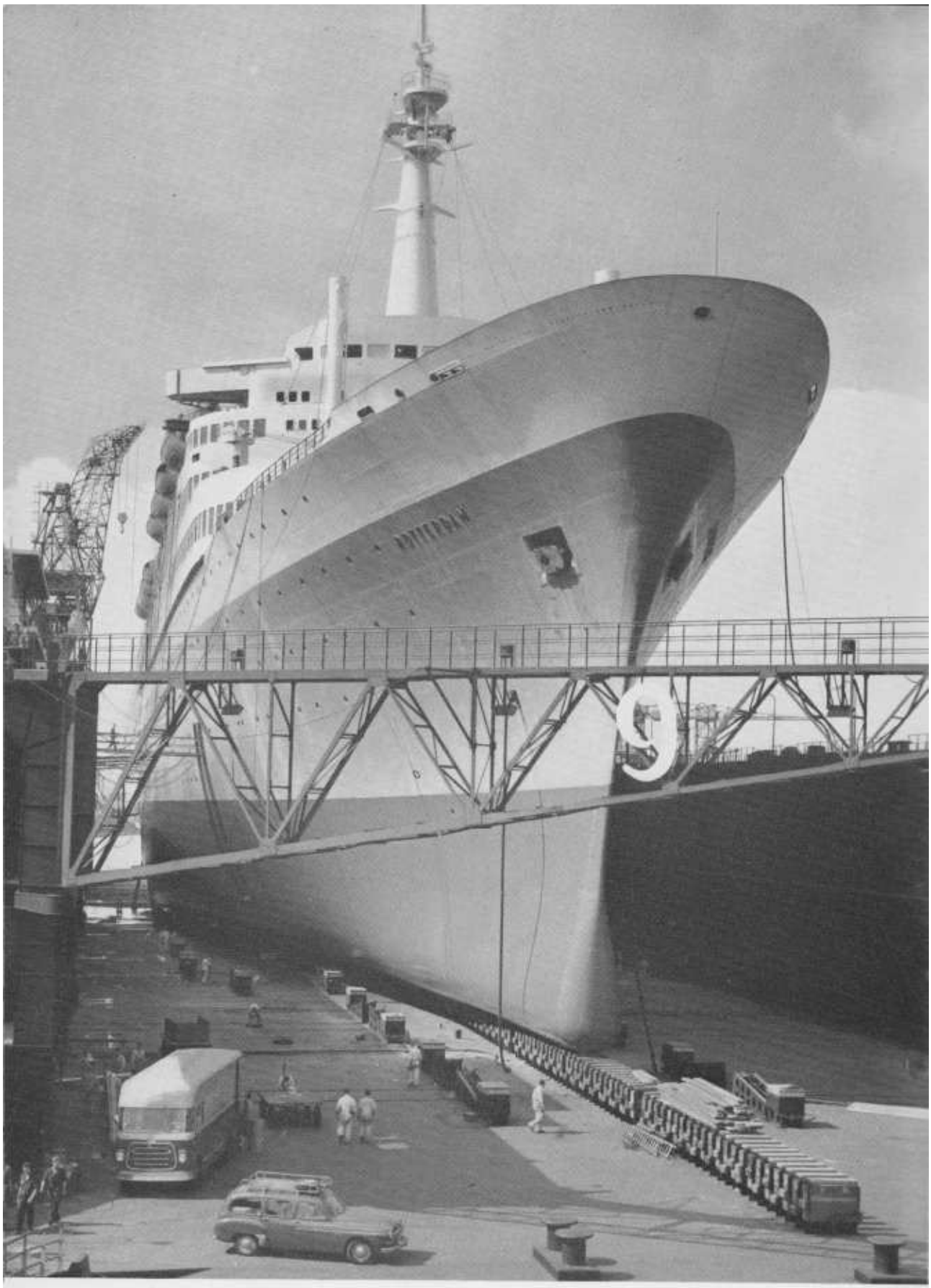


A large prefabricated section weighing 60 tons for a 12,000 tons dw cargoship. Manufactured from clad steel with external heatingcoils.



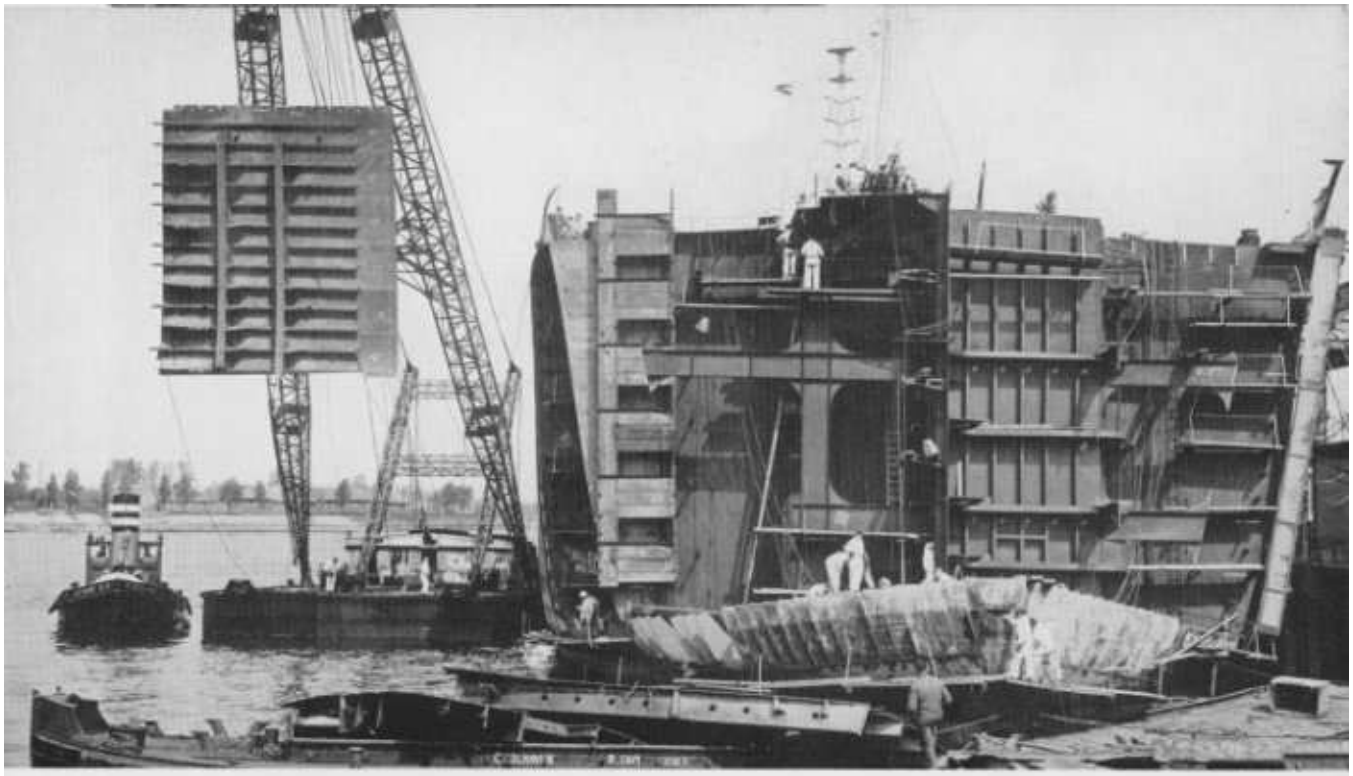
The 48,800 tons dw tanker "Ondina" during construction. From start to completion all hull steel was adequately protected by an epicote-zinc primer.

The large west dock harbour with two 85,000 tons dw floating docks Nos. 9 and 10. In the docks can be seen the 36,000 brt Holland-America Liner "Nieuw Amsterdam" and the 45,000 tons dw ore carrier "Ore Meridian". PHOTO BART HOFMEESTER



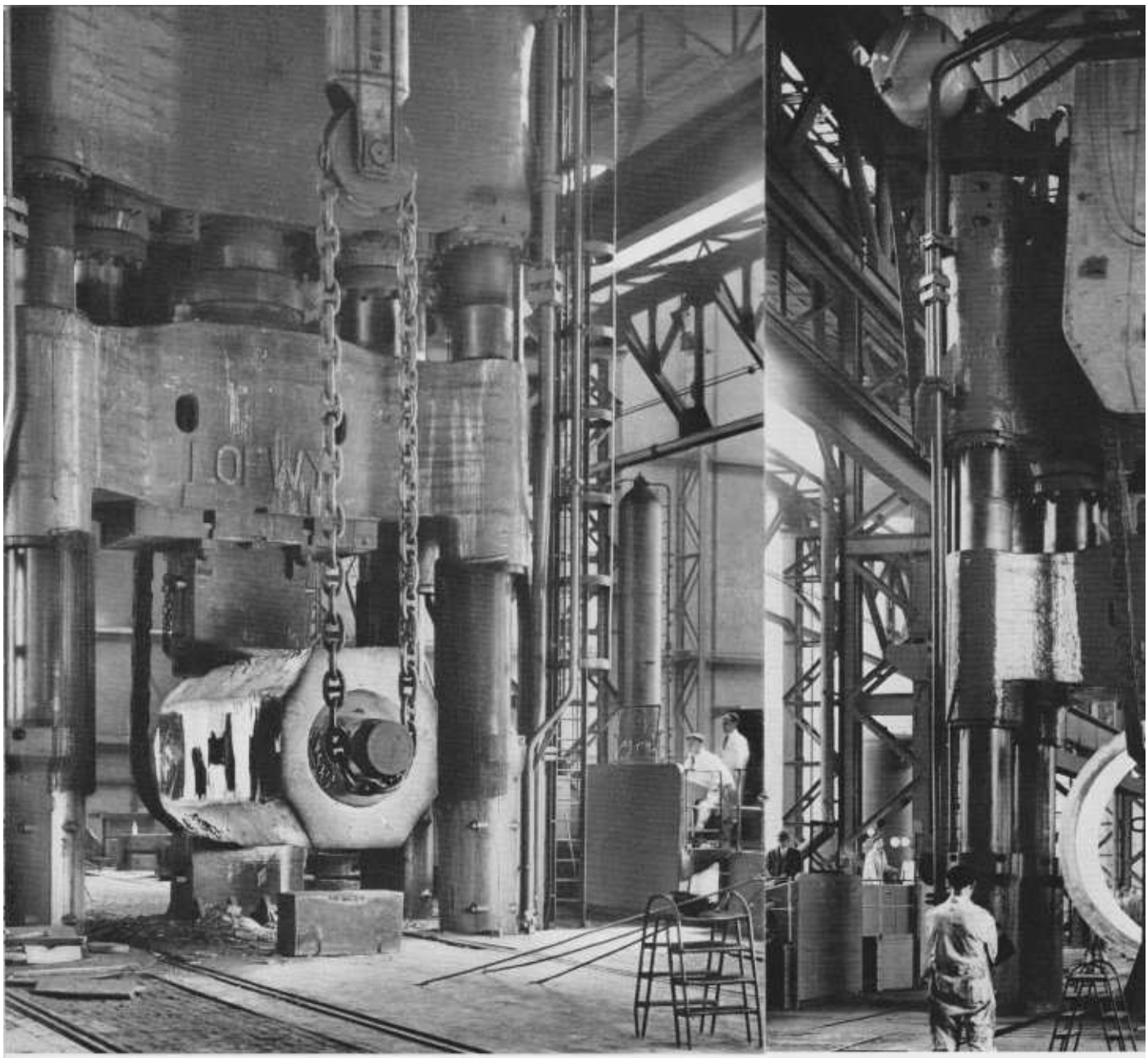
T.s.s. "Rotterdam" in floating dock No. 9.
The dock floor is accessible to buses, lorries and mobile cranes.

Collision repairs on "Lise Højsgaard" 499 tons gross.



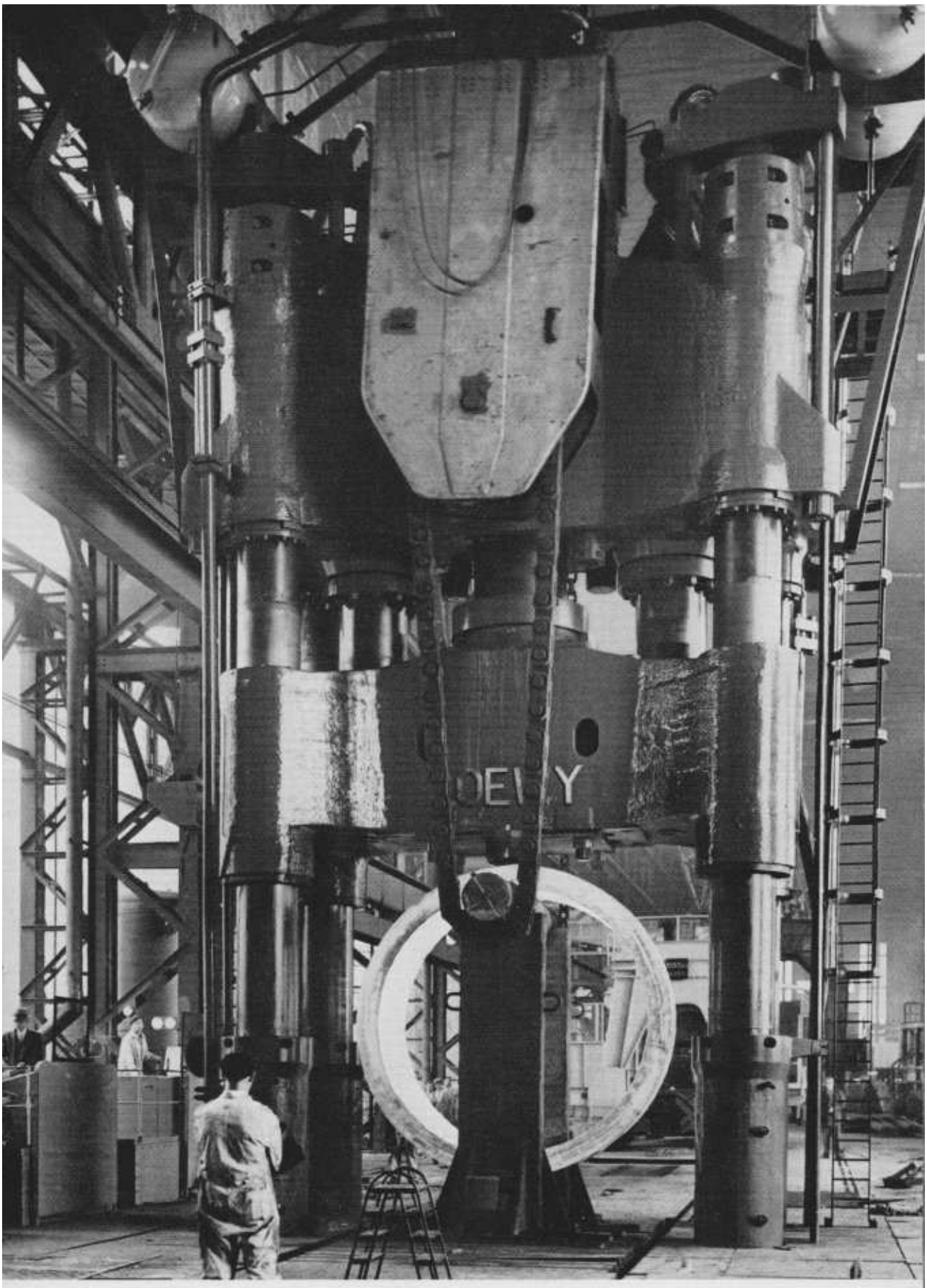
A large prefabricated section being transported to the 40,000 tons dw tanker "Kissavos" during collision damage repairs.

View of the central dock harbour and floating docks Nos. 7, 3 and 8.

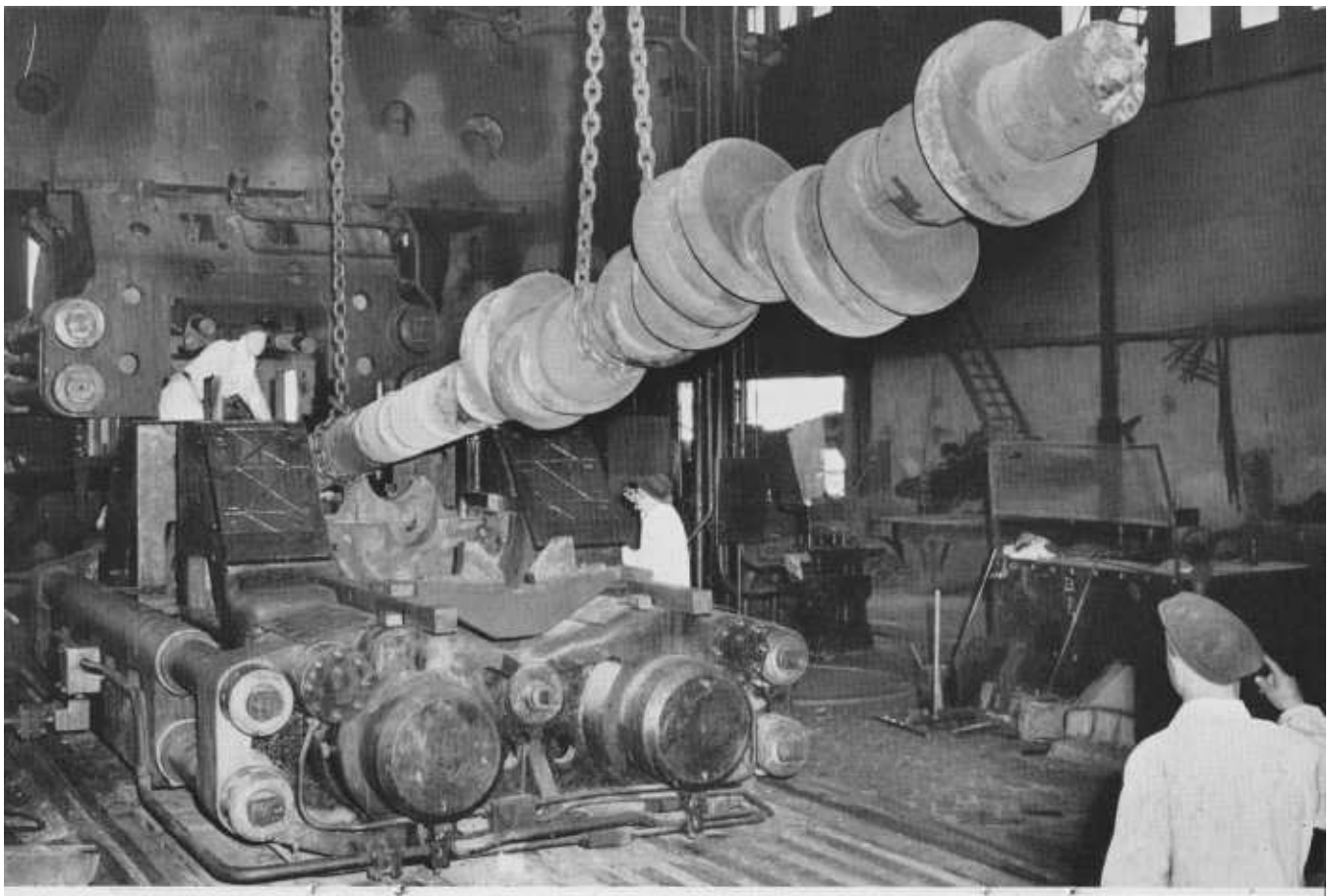


Forging a 90-tons ingot under the 6000 tons press.

Final forging operation of a large rim for

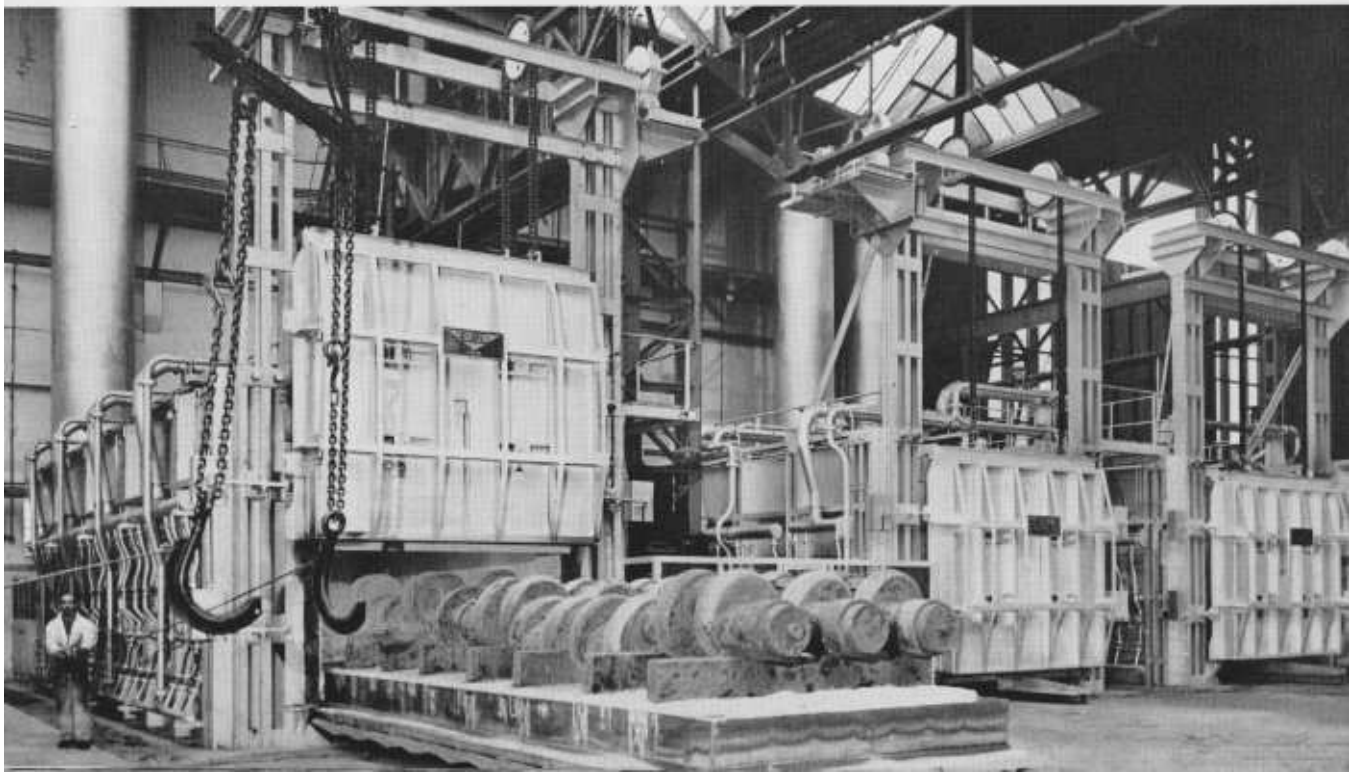


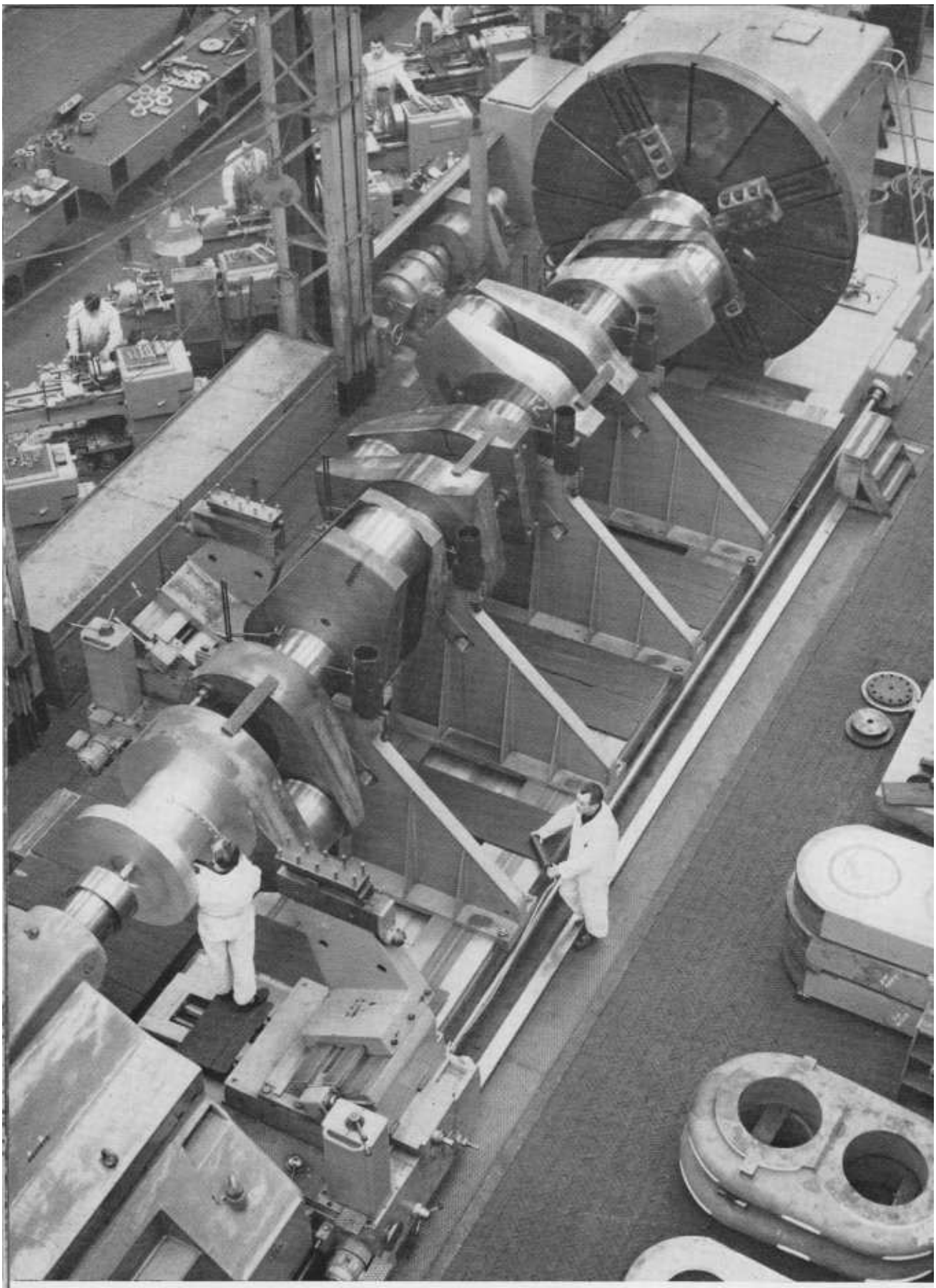
Final forging operation of a large rim for a turbine reduction gear.



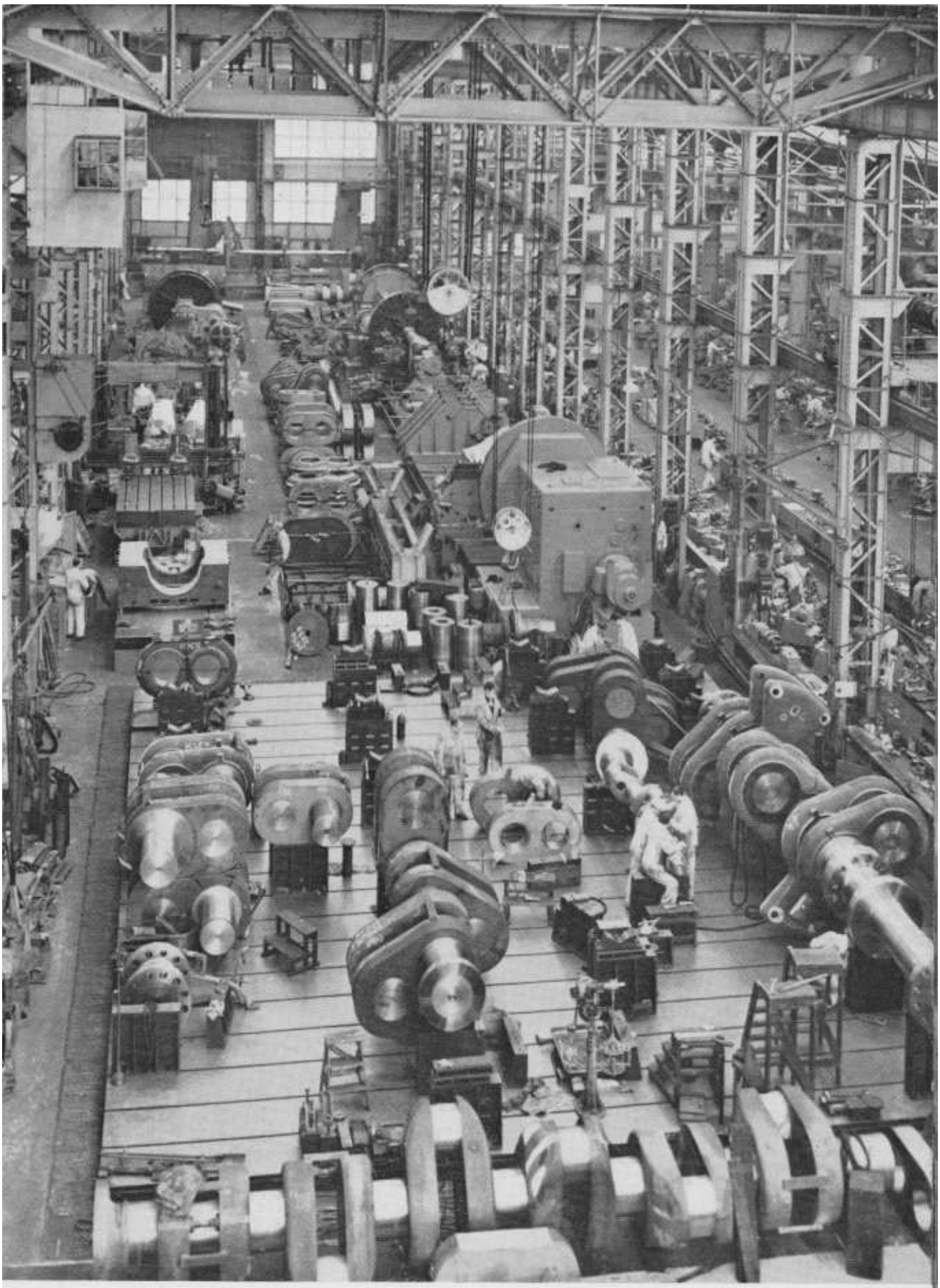
A continuous grainflow crankshaft is brought under the forging press for forming crank No.

Three gas fired annealing and heat treatment furnaces.

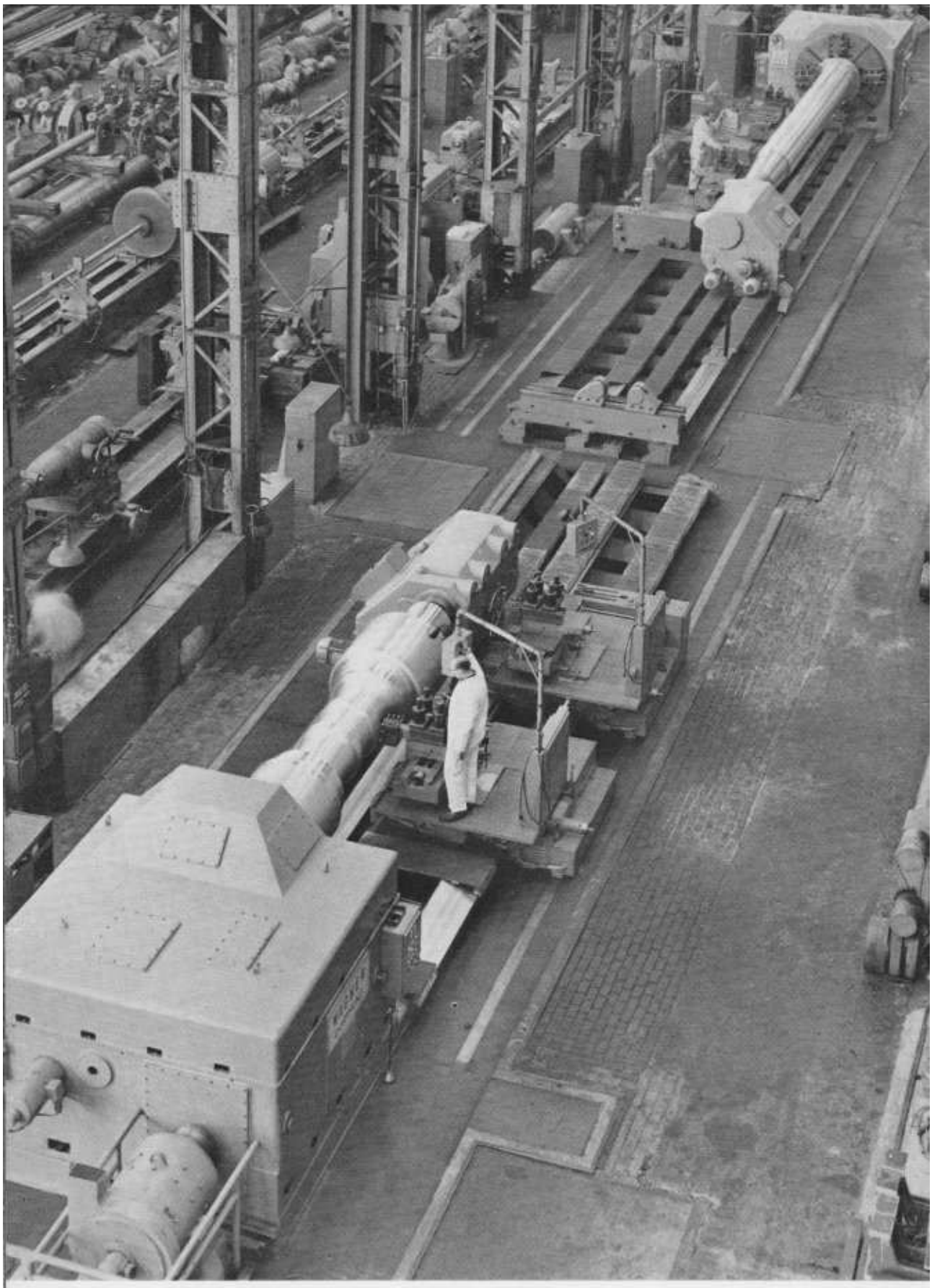




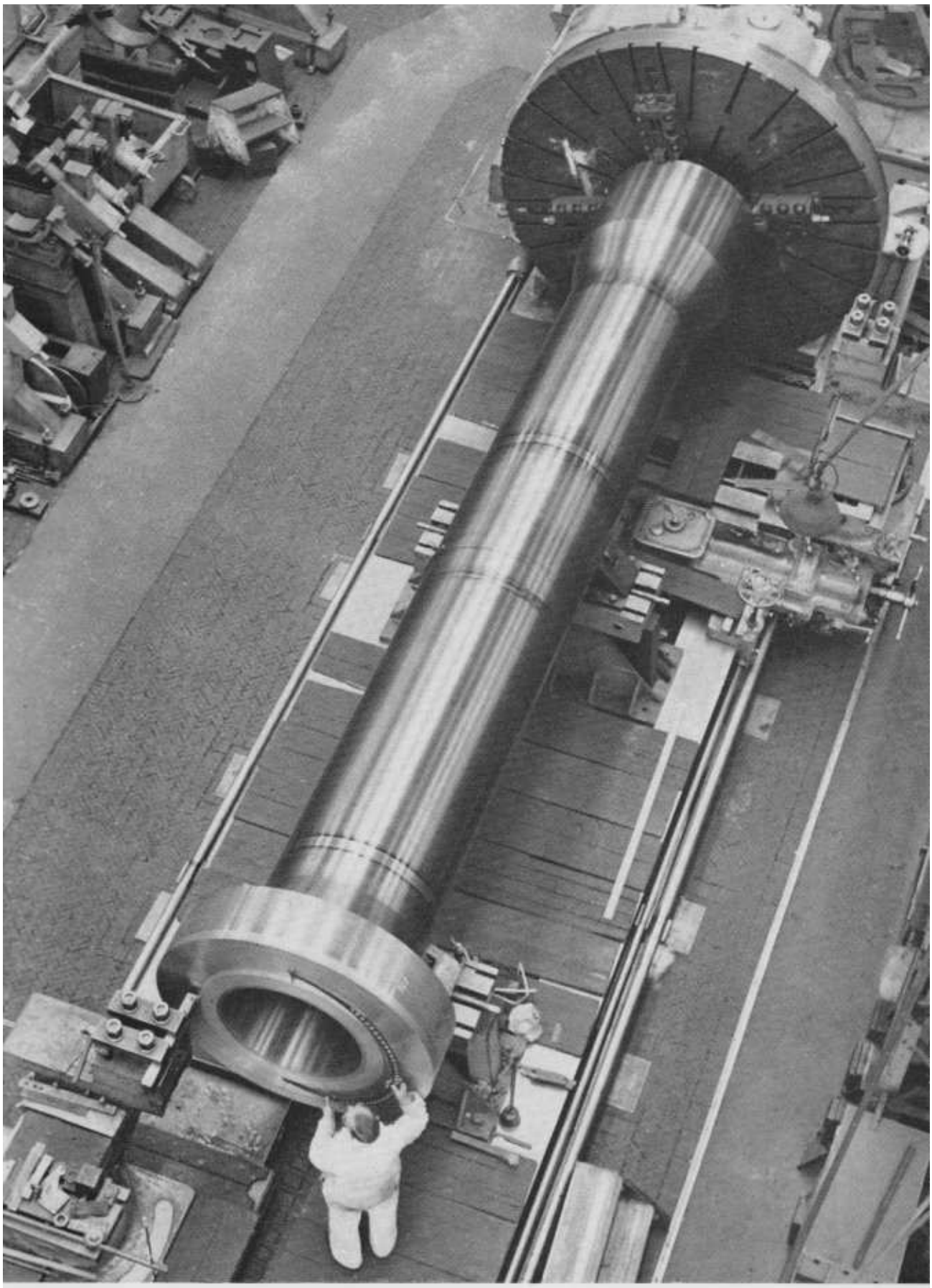
One half of a crankshaft for a large bore 18,000 HP Sulzer diesel engine at the finishing stage of machining. The journals and pins have a diameter of 620 mm.



Fully built and semi-built crankshaft for several types of diesel engines are in regular production.



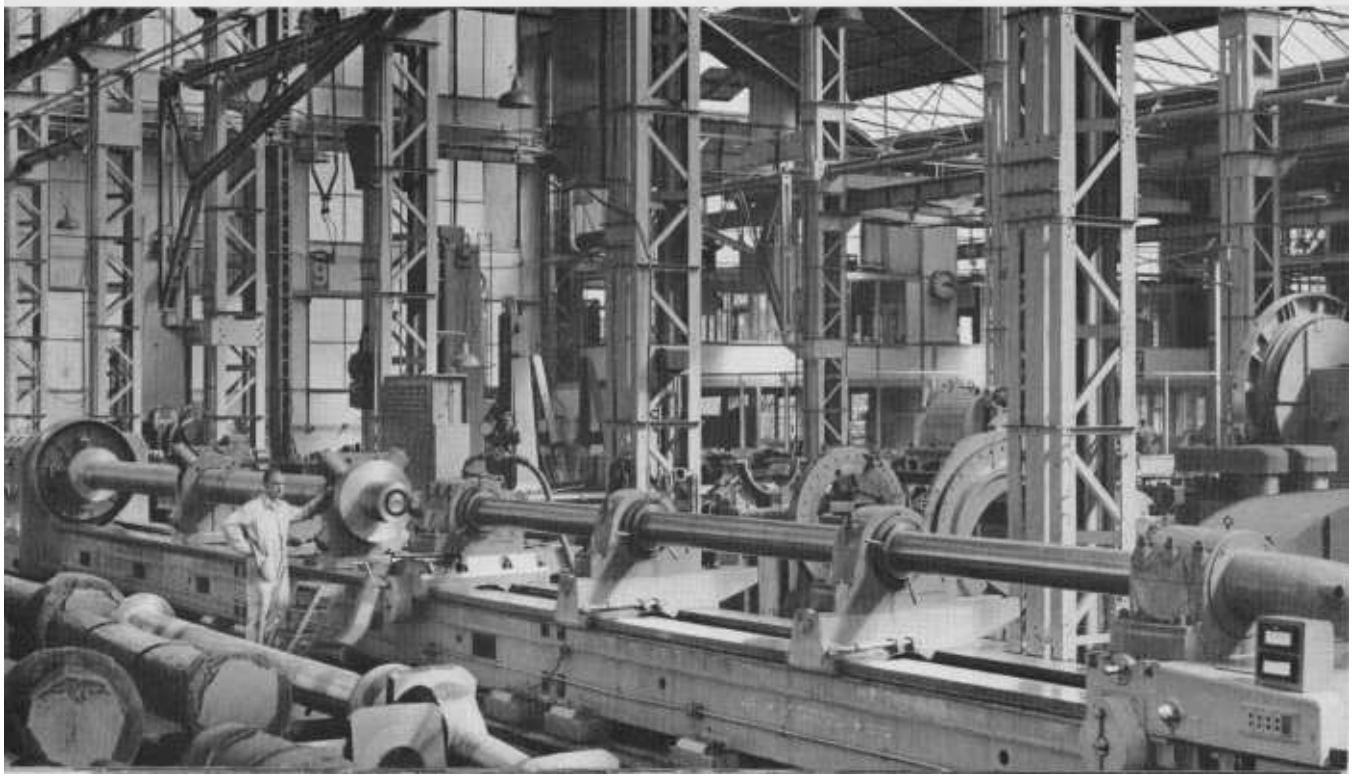
Two heavy and very powerful lathes (height of centre 40") erected in line to enable the machining of shafts up to a length of 85 feet.

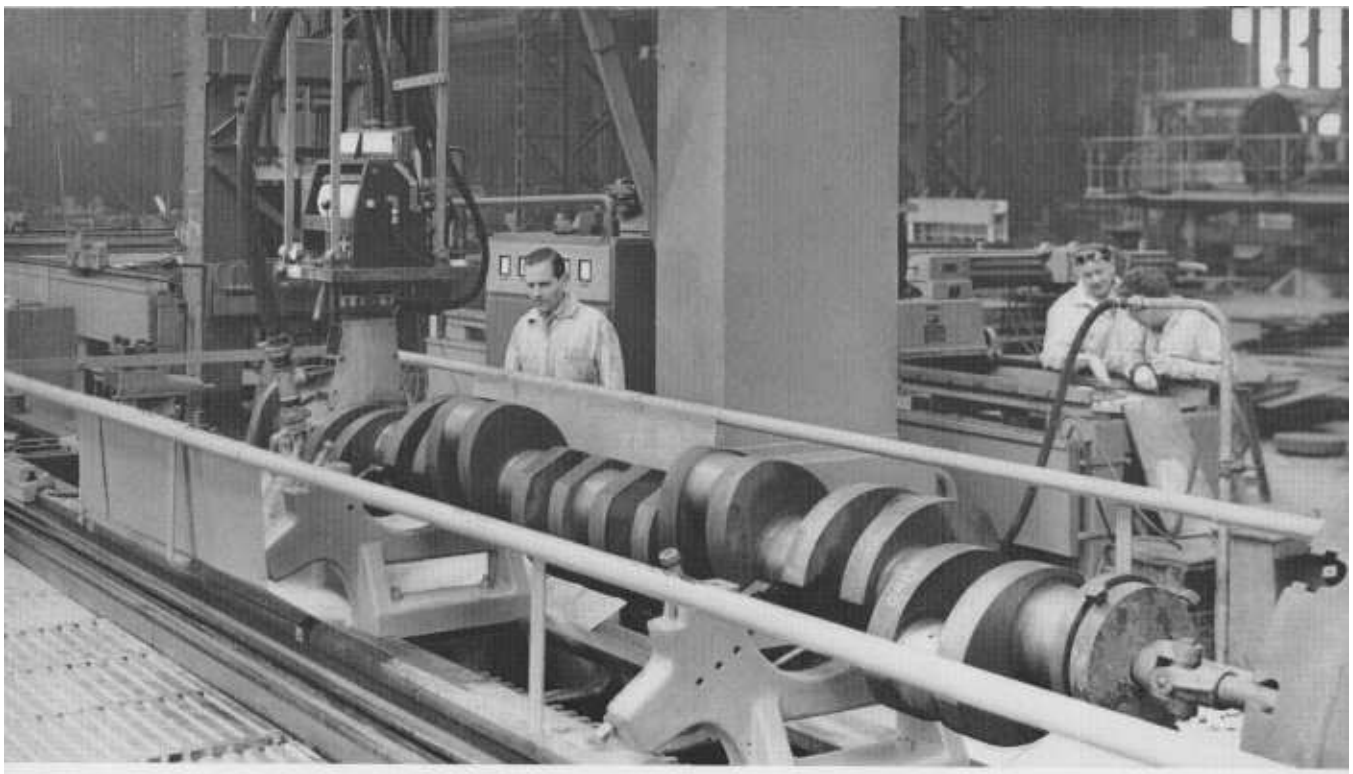


Finish machining a hollow forged pressure vessel for synthetic ammonia plant, working pressure 5000 lbs per square inch, length 23 feet.

A pintle for a large bascule bridge being machined to close tolerances (weight over 40 tons).

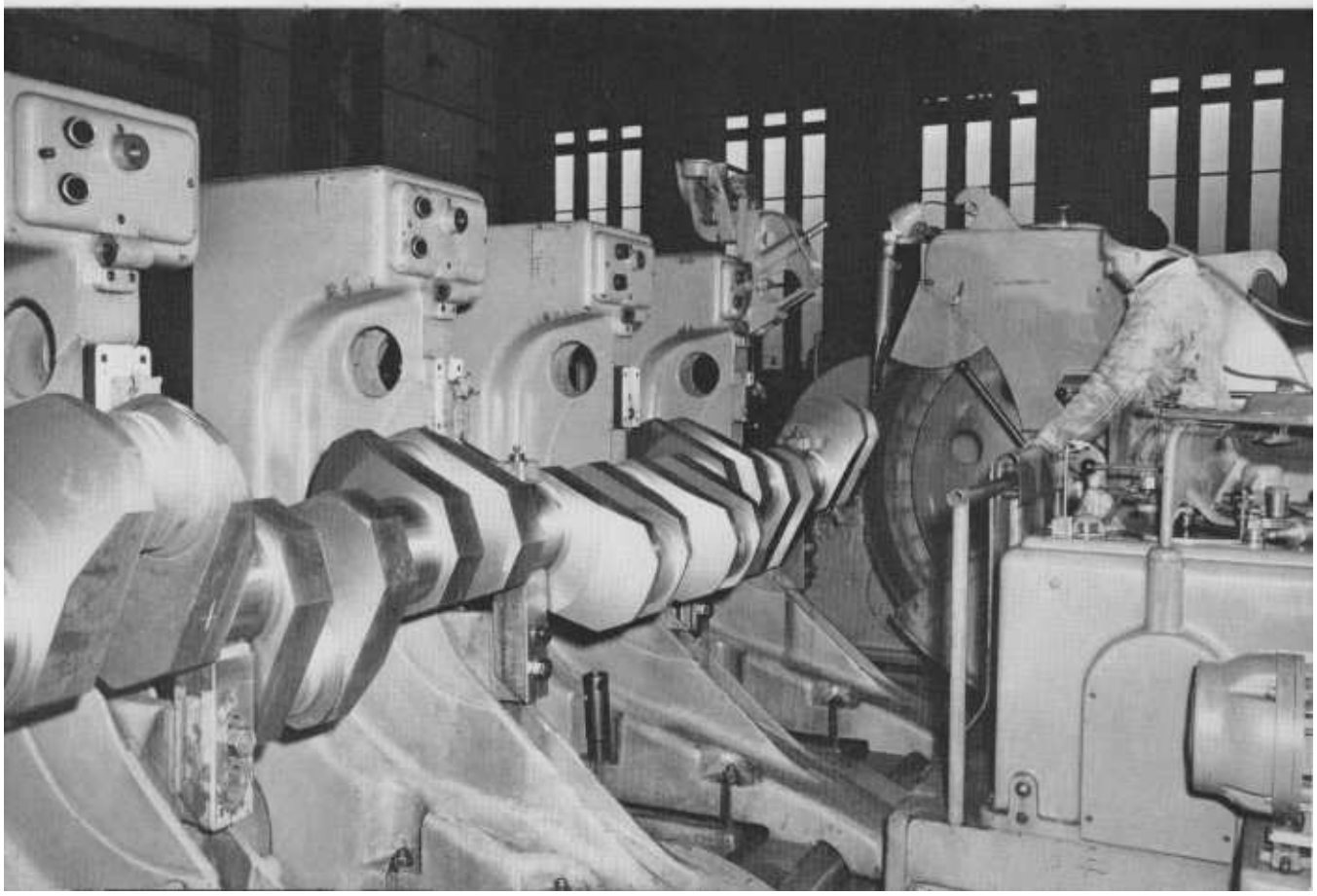
Lathe for trepanning shafting.

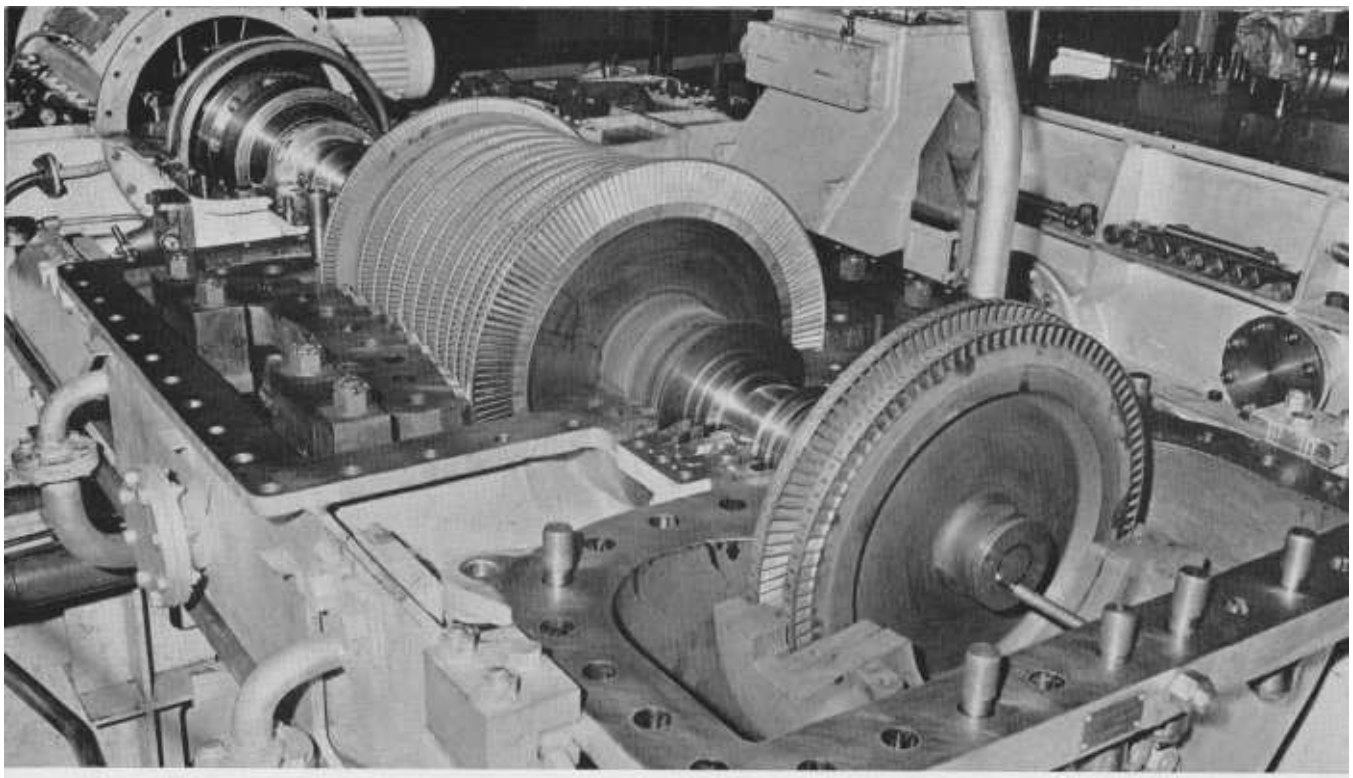




Surface hardening by high frequency induction of the pins and journals of a continuous grained crankshaft.

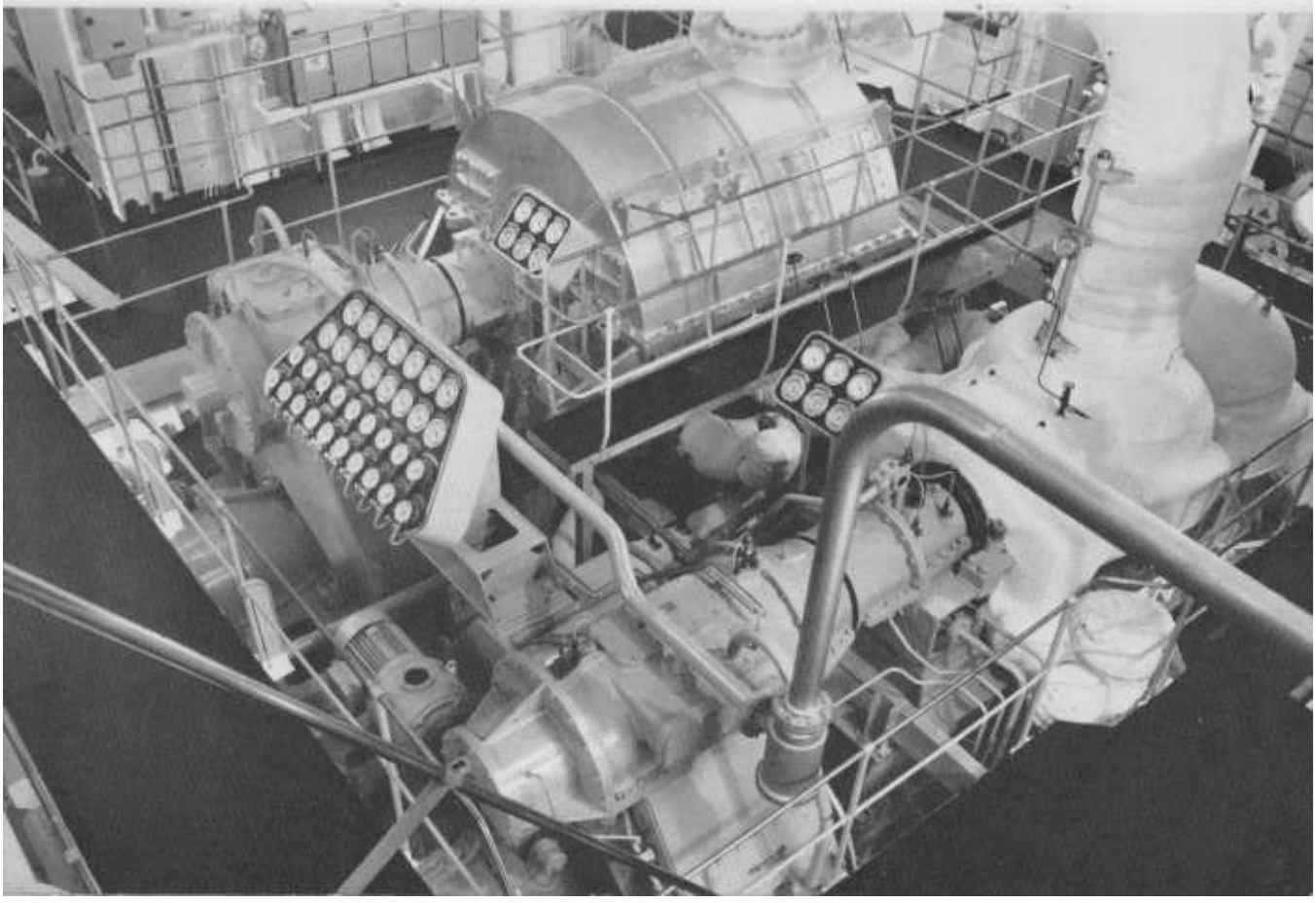
Grinding a surface hardened diesel engine crankshaft.





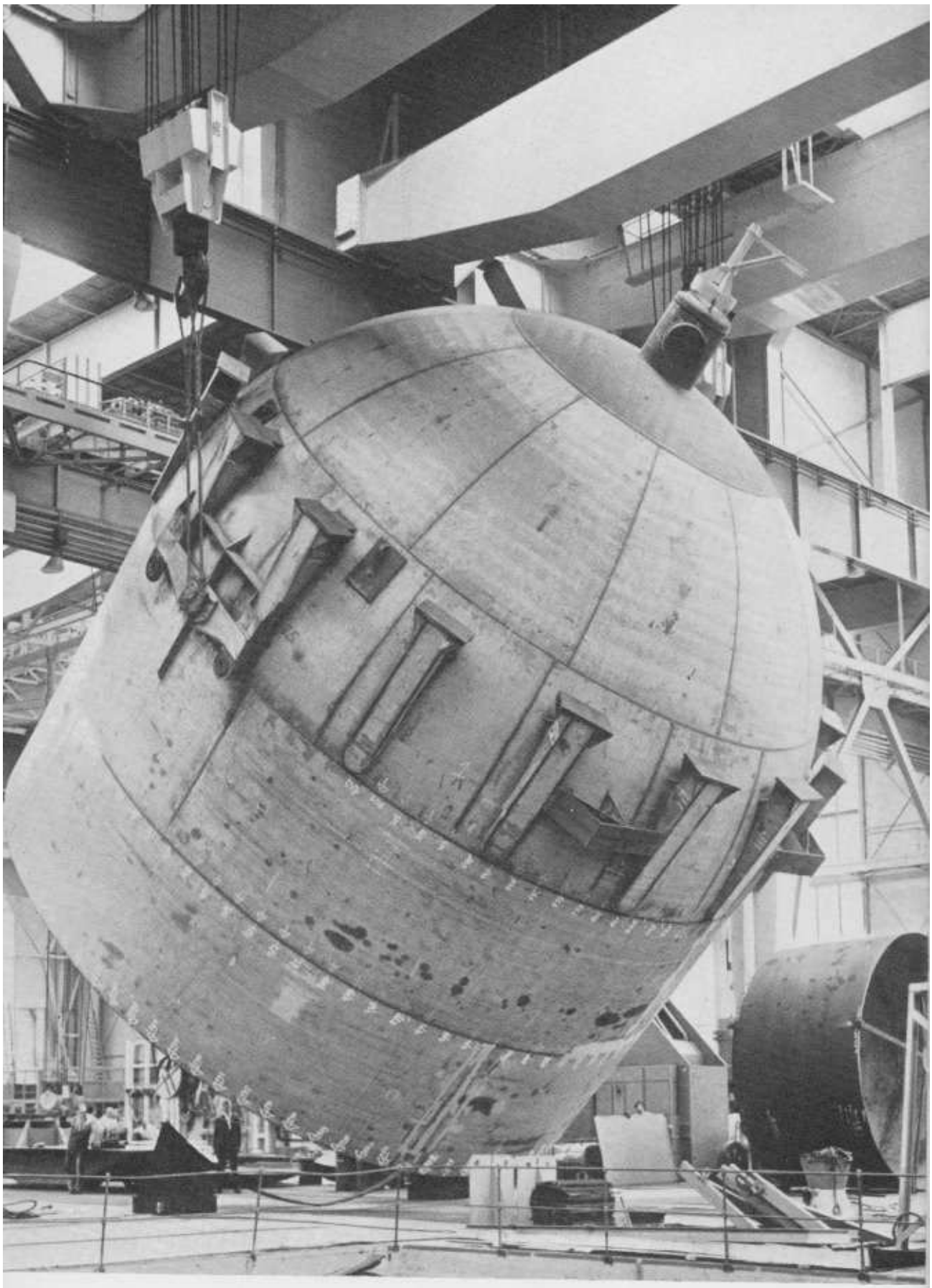
H.P. ahead and astern turbine (Pametrada licence) for the 48,800 tons dw tanker "Ondina".

17,500 h.p. turbine propulsion plan built under licence from Pametrada for the 49,000 tons dw tanker "Doelwijk".

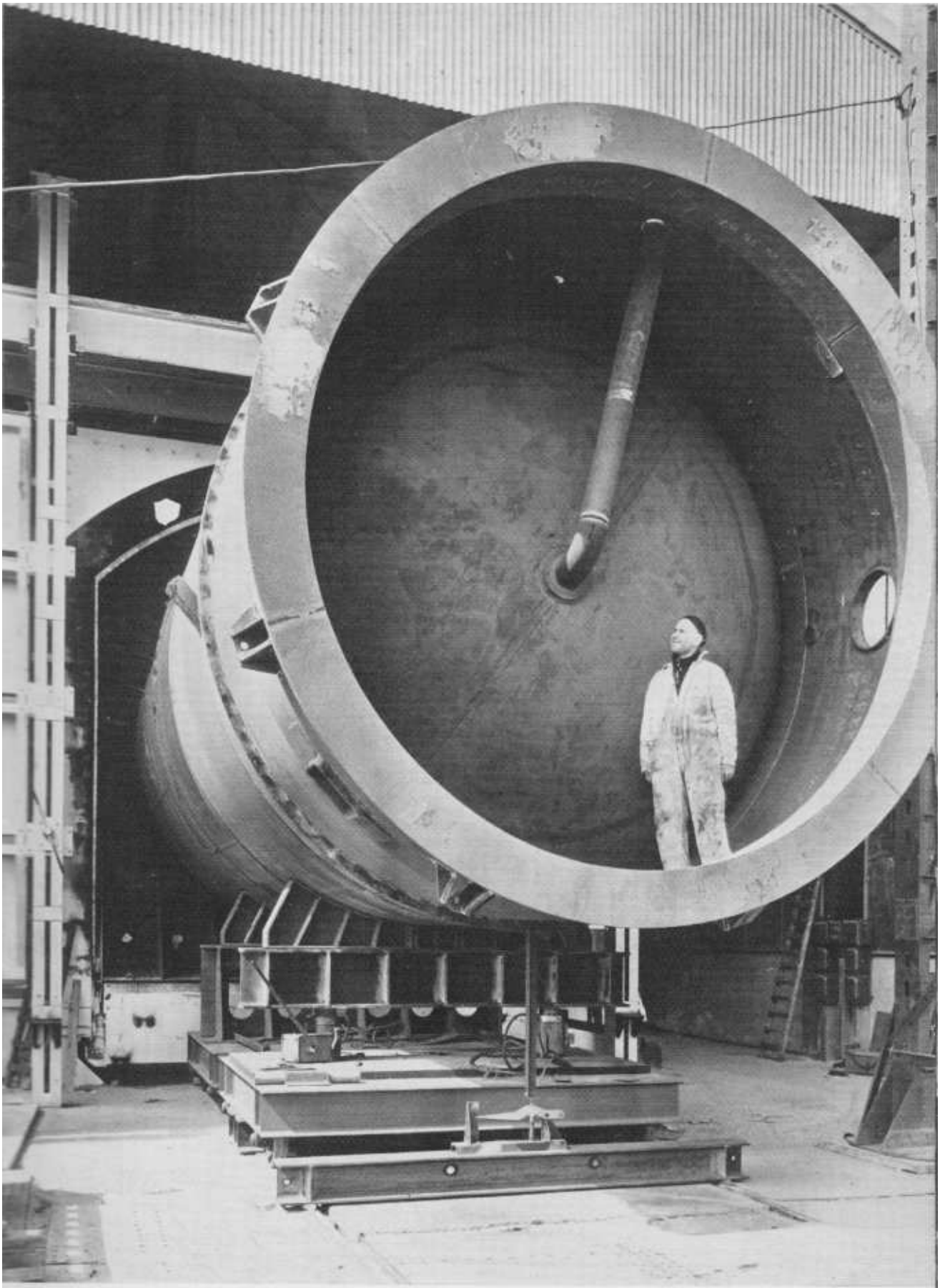


Heavy plate bending rolls in the boiler and pressure vessel shop.

Large vertical boring mill on which a stainless steel thermal shield for the core support of a reactor vessel for a 150 MW nuclear power station is being machined. Mill capacity diam. 21 feet, height 13' 6".



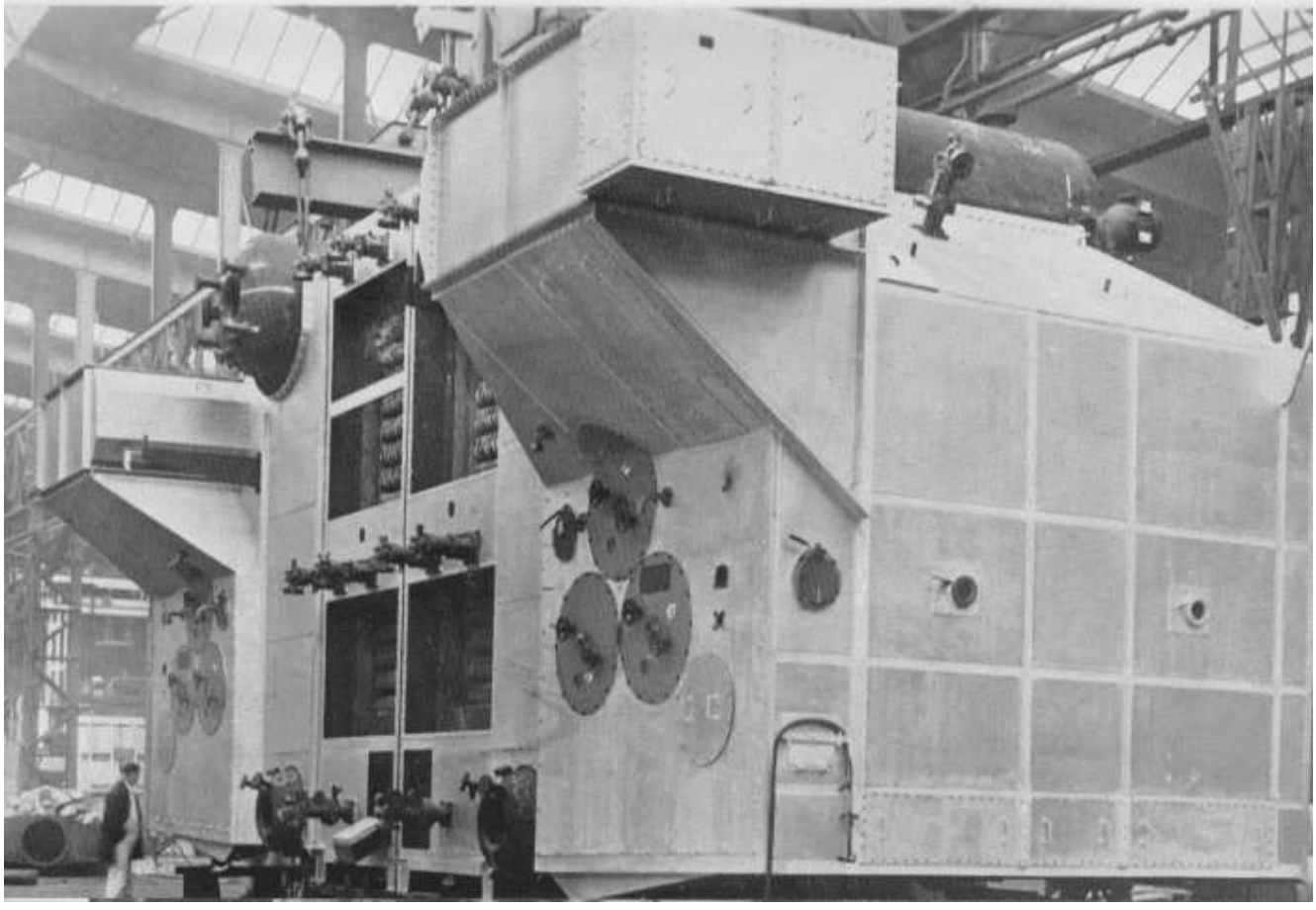
Part of a 70,000 cub. feet propane storage tank for an oil refinery during construction.

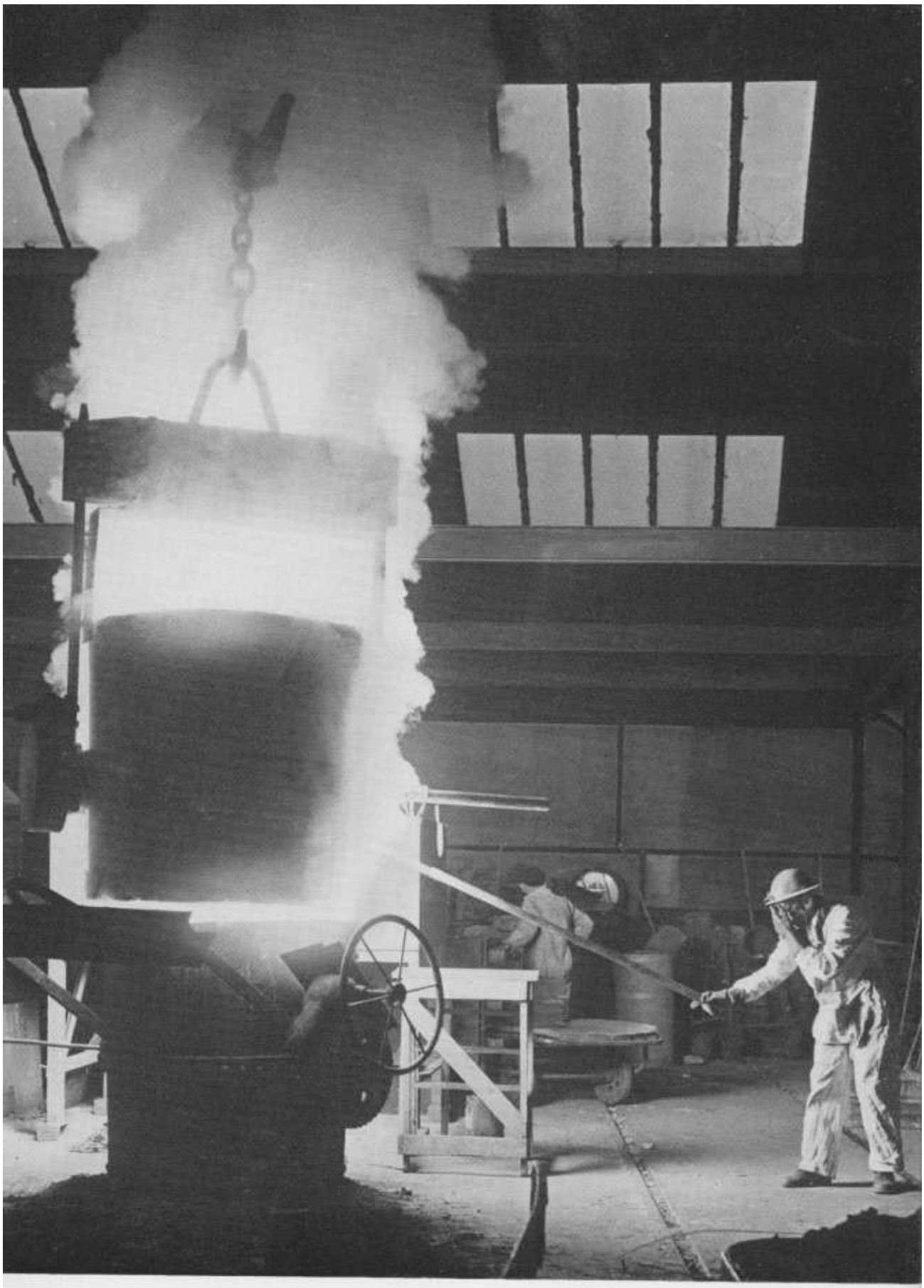


Large welded pressure vessel weight 220 tons in stress relieving furnace for heat treatment of the upper part.

Automatic submerged arc welding machine for external and internal welding of pressure vessels.

Mainboilers built under Foster Wheeler licence for the 48,800 tons dw tanker "Ondina". Type ??D, capacity 2 x 80,000 lbs/h max., steamconditions: pressure 800 lbs/sq.inch., temperature 900 °F.





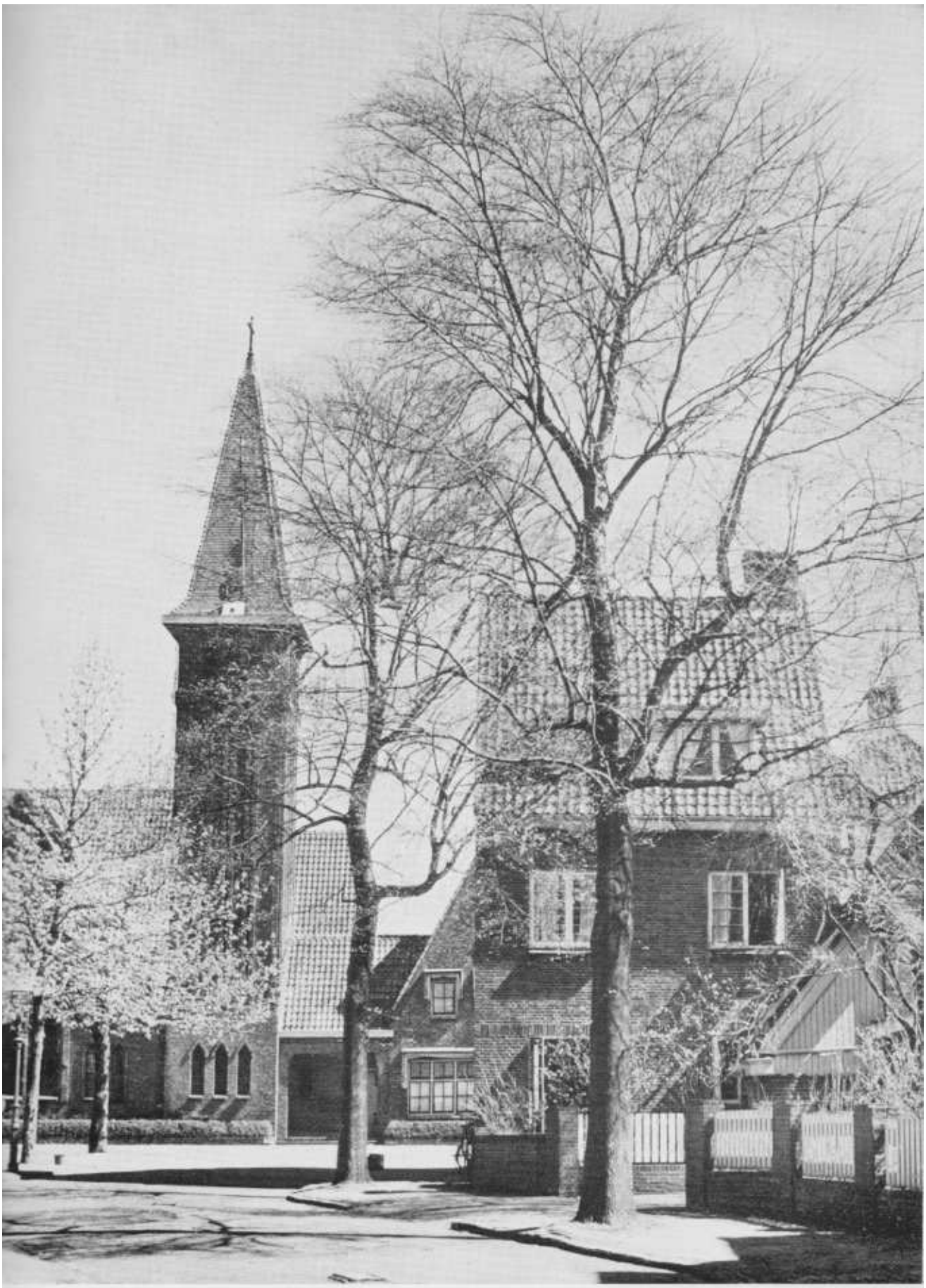
Magnesium treatment of cast iron in the ladle for the production of spheroïdal graphite castings.

Pouring steel from an oil fired rotary furnace.

X-ray spectograph and diffraction apparatus for determining the chemical composition and crystal structure of materials.

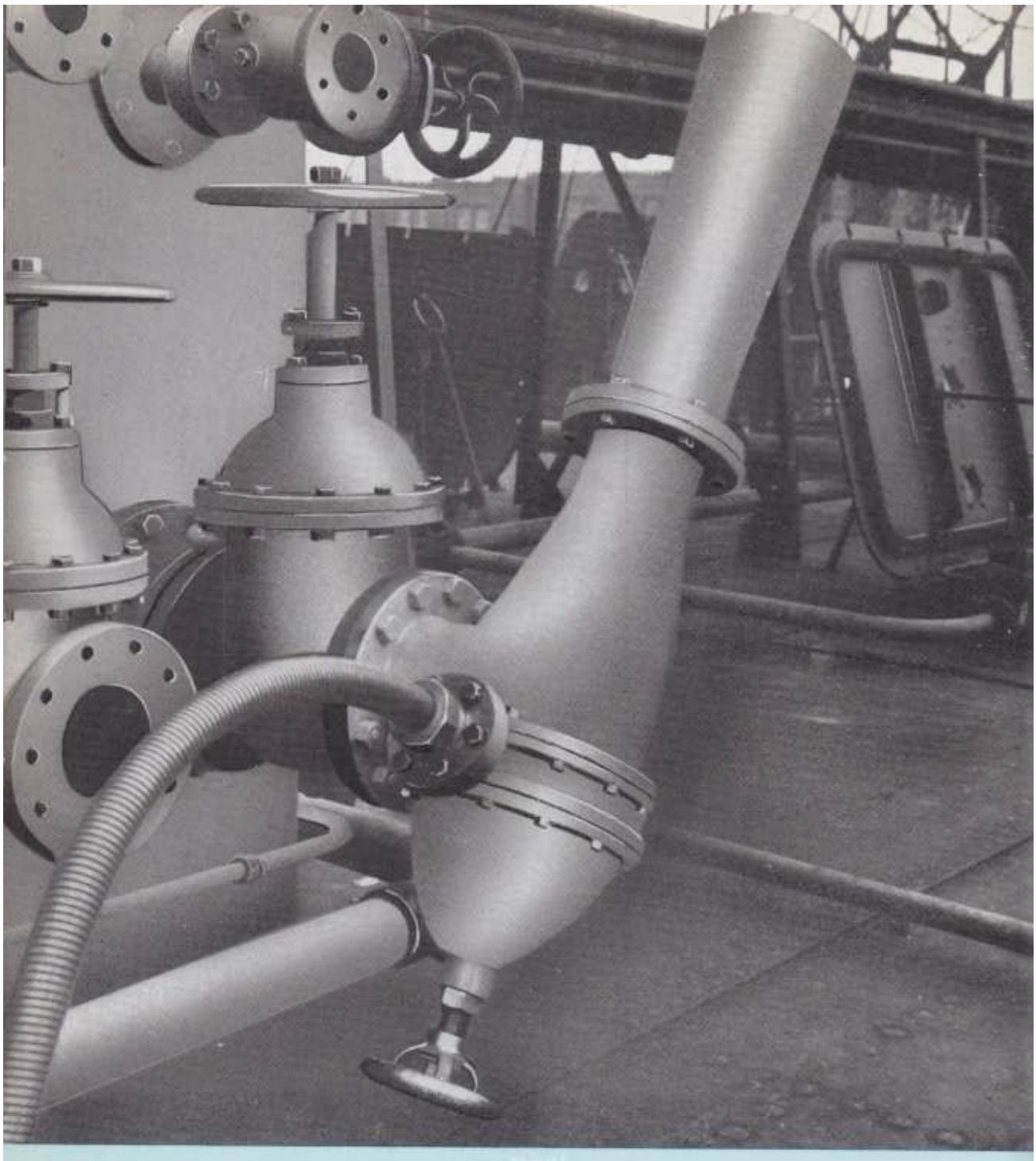
View of the analytical chemistry section of our laboratory.

View of the garden village "Heyplaat" built for officials and workmen of the yard and their families. It now has about 3000 inhabitants.



Garden village "Heyplaat".

View of the floating docks Nos. 2, 4, 5 and 6 of the New Waterway Shipbuilding Company.



R.D.M. PATENT GASDEVOURER

A useful appliance for gasfreeing tankers, which not only clears the cargo spaces, but also pipe lines of any inflammable vapours. About 1000 of these have been supplied to tankvessels in all parts of the world.

WYT–ROTTERDAM