

= Landkreuzer P. 1000 Ratte =

The Landkreuzer P. 1000 " Ratte " (English : Land Cruiser P. 1000 " Rat ") was a design for a super @-@ heavy tank for use by Nazi Germany during World War II , proposed by Krupp director Edward Grotte in June 1942 , who had already named it " Landkreuzer " . Submitted designs and drawings of the tank went under the names OKH Auftrag Nr. 30404 and E @-@ 30404 / 1 , which were presented in December 1942 . The tank was planned to be 1000 metric tonnes , being far heavier than the Panzer VIII " Maus " , the heaviest tank ever built (weighing 188 tonnes) . The project gained the approval of Adolf Hitler , who had expressed interest in the development of the tank . The project was canceled by Albert Speer in early 1943 , with no prototype tank ever built .

= = Development = =

The development history of the Ratte originated with a 1941 strategic study of Soviet heavy tanks conducted by Krupp , the study also giving birth to the Panzer VIII Maus super @-@ heavy tank . The study led to a suggestion from Krupp 's director (Grotte) , a special officer for submarine construction , who , on 23 June 1942 , proposed to Hitler a 1 @,@ 000 @-@ tonne tank which he named " Landkreuzer " . It was to be armed with naval artillery and armored with 25 centimetres (10 in) of hardened steel , so heavy that only similar weapons could hope to affect it .

Hitler became enamored with Grotte 's concept and ordered Krupp to begin development of it in 1942 . As of December 29 , 1942 a few preliminary drawings had been completed , by which time the concept had been named " Ratte " (Rat) by Hitler himself . These submitted designs went under the titles OKH Auftrag Nr. 30404 and E @-@ 30404 / 1 . Albert Speer saw no reasonable use of the tank and canceled the project in 1943 before any prototype could be manufactured , although this did lead to the concept of the Landkreuzer P. 1500 Monster self @-@ propelled siege gun , which would have been heavier than the Ratte . The general idea for such a big tank was best summed up by Heinz Guderian , saying that : " Hitler 's fantasies sometimes shift into the gigantic " .

= = Description = =

The Ratte is known for its enormous size : it would have weighed 1 @,@ 000 tonnes , five times the weight of the Panzer VIII Maus . The divided weight of the Ratte includes 300 tonnes of armament (the total weight of the guns themselves are 100 tonnes , so turret armour would have weighed 200 tonnes) , 200 tonnes of armour and frame and 100 tonnes of track and automotive components , while remaining weight would be distributed to miscellaneous features . It was planned to be 35 m (115 ft) long (39 metres (128 ft) when including naval guns) , 11 m (36 ft) high and 14 m (46 ft) wide . To compensate for its immense weight , the Ratte would have been equipped with three 1 @.@ 2 m (3 ft 11 in) wide and 21 m (69 ft) long treads on each side with a total tread width of 7 @.@ 2 m (23 ft 7 in) . This would help stability and weight distribution , but the vehicle 's sheer mass would have destroyed roads and rendered bridge crossings next to impossible . It was expected that its height , and its ground clearance of 2 m (6 @.@ 6 ft) , would have allowed it to ford most rivers with relative ease .

Planned propulsion was by two MAN V12Z32 / 44 24 @-@ cylinder marine diesel engines of 6 @,@ 300 kW (8 @,@ 400 hp) each (as used in U @-@ boats) or eight Daimler @-@ Benz MB 501 20 @-@ cylinder marine diesel engines of 1 @,@ 500 kW (2 @,@ 000 hp) each (as used in E @-@ boats) to achieve the 12 @,@ 000 kW (16 @,@ 000 hp) needed to move this tank . The engines were to be provided with snorkels , also like those used by German submarines . The snorkels were designed to provide a way for oxygen to reach the engine , even during amphibious operations passing through deep water .

The Ratte 's primary weapon would have been a dual 280 mm SK C / 28 gun turret . This was the same turret that was used on the German capital ship Gneisenau but modified by removing one of the guns and its associated loading mechanism . Removing the third gun allowed extra

accommodation of ammunition , which on ships is stored in the hull and later on sent to the turret through an ammunition elevator . This reduced the total weight of the tank by 50 tonnes . The guns used for the Ratte would have fired ammunition developed for other naval guns . It also included armour @-@ piercing rounds with 8 @.@ 1 kg (18 lb) of explosive filler , and high @-@ explosive rounds with 17 @.@ 1 kg (38 lb) of explosive filler .

Further armament was to consist of a 128 mm anti @-@ tank gun of the type used in the Jagdtiger or Maus , two 15 mm Mauser MG 151 / 15 autocannons , and eight 20 mm Flak 38 anti @-@ aircraft guns , probably with at least four of them as a Flakvierling quad mount . The 128 mm anti @-@ tank gun 's precise location on the Ratte is a point of contention among historians , most believing that it would have been mounted within the primary turret , with some others thinking a smaller secondary turret at the rear of the Ratte more logical . Some concept drawings exist to suggest a flexible mount on the glacis plate . The tank was to be provided with a vehicle bay that could hold two BMW R12 motorcycles for scouting , and several smaller storage rooms , a compact infirmary area , and a self @-@ contained lavatory system .

= = Issues = =

Its large size and weight would have rendered the tank unable to cross bridges at the risk of collapsing them , and travelling on roads would soon destroy them . Its top intended speed was 40 kilometres per hour , resulting in a slow , highly visible tank , vulnerable to air bombardment and artillery fire , despite having heavy armour . Issues with transporting the vehicle to the battlefield were also prominent . No railway or train car could bear the weight and the width would be too large for any railway or tunnel to accommodate .