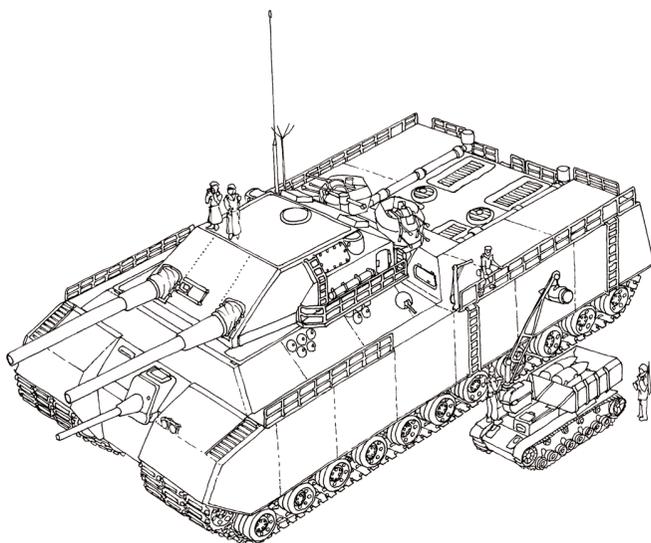


LANDKREUZER P.1000 RATTE



CATEGORY:	ULTRA HEAVY LAND CRUISER
PHASE OF DEVELOPMENT:	PRE-PROTOTYPE
DEVELOPMENT START:	JUNE OF 1942
DEVELOPMENT TEAM:	KRUPP
CREW:	20+
WEIGHT:	1000 METRIC TONS (MINIMUM), 2000+ TONS ESTIMATED
PROPULSION:	8 X DAIMLER-BENZ MB501 20-CYLINDER MARINE DIESEL ENGINES PRODUCING A TOTAL OF 16,000 HORSEPOWER OR 2 X MAN V12Z32/44 24-CYLINDER MARINE DIESEL ENGINES PRODUCING A TOTAL OF 17,000 HORSEPOWER
SPEED:	40 KP/H (SUPPOSED)
RANGE:	UNKNOWN
LENGTH:	35.00M
WIDTH:	14.00M
HEIGHT:	11.00M
ARMAMENT:	2 X 280 MM 54.5 SK C/34 1 X 128 MM KWK 44 L/55 8 X 20 MM FLAK38 2 X 15 MM MG 151/15
AMMUNITION:	100 ROUNDS OF 280MM FOR EACH GUN (ESTIMATED) OTHER VALUES UNKNOWN
ARMOR (MM): (VALUES ESTIMATED)	TURRET ROOF: 150 TURRET SIDES: 220 TURRET FRONT: 360 ADDITIONAL ARMOR VALUES UNKNOWN

Overview

The world will probably never see an armored land vehicle on the scale of the Ratte. Tellingly, Germans didn't even refer to it as a tank: they called it a "land cruiser." The Ratte was so large its dimensions had more in common with a naval vessel than a tank. It had the crew compliment of at least four heavy tanks, armament usually seen mounted on heavy cruisers like the Scharnhorst and Gneisenau, and enough anti-aircraft weaponry to ward off waves of attacking fighter-bombers. It was 35 meters long, as tall as some church steeples, and so wide that maneuvering in an urban area would have been either impossible or apocalyptic. The Ratte was so heavy it would have shattered and churned pavement like a plow through sod and collapsed all but a handful of bridges in Germany.

The Ratte's much smaller cousin, the Maus, turned out to be a ruinous waste of resources for very limited applications in combat. Had the Ratte's development progressed even a fraction as far as the Maus it would have devastated Germany. The Ratte was so large that it would have required naval-scale manufacturing with months of skilled laborers' time involved in the construction of each individual tank. Just building and assembling its components would have required transportation and handling equipment usually relegated to a shipyard.

It is probably to the detriment of the world that the Ratte project was cancelled. It would have been cool just to see one of these hideous machines built and, more importantly, it would have taken the place of perhaps fifty or a hundred more useful tanks like the Panther or Panzer IV. The Ratte would have meant an earlier end to hostilities in Europe and it would have provided a damn hot ticket at a museum in the United States or the Soviet Union.

Development

The development history of the Ratte originates with a 1941 strategic study of Soviet heavy tanks conducted by Krupp. This study also gave birth to the Ratte's smaller and more practical relative: the Maus. From the start the Maus was envisioned as an even larger and more formidable version of a heavy tank, while the Ratte was to be a class of vehicle unto itself.

This 1941 study produced a suggestion from director of engineering Grote who worked for the U-boat arm of the Ministry of Armaments. In June of 1942, Grote proposed a 1000-ton tank that he termed a "Landkreuzer" equipped with naval armament and armored so heavily that only similar naval armaments could hope to touch it. To compensate for the immense weight of the vehicle the Ratte would have sported three 1.2 meter wide tread-assemblies on each side totaling a tread width of 7.2 meters. This helped with the stability and weight distribution of the Ratte but its sheer mass would have destroyed pavement and prevented bridge travel. Fortunately, the height of the Ratte and its nearly 2 meters of ground clearance would have allowed it to ford many rivers with ease.

Hitler became enamored with the idea of a truly super tank and ordered Krupp to set to work developing the Ratte. While development of the Ratte does not seem to have progressed very far some sources believe that a turret was completed for the Ratte and then used as a fixed gun emplacement in Norway. Several such emplacements survived the war, many mounting turrets from broken-up ves-

sels very similar to the turret intended for the Ratte. However, despite references to a Ratte turret being used as a fixed emplacement there is no evidence that it ever existed. The Gneisenau was broken up in 1944 and its turrets were used as emplacements near Rotterdam in Holland. Similar turrets were used near Trondheim in Norway which was the supposed location of the Ratte turret.

Development of the Ratte was completely cancelled in 1943 by the dangerously wise German Minister of Armaments, Albert Speer. Speer exhibited an uncanny ability to cancel the more moronic and wasteful of Hitler's pet projects and focus German resources on proven weapon systems.

Technical Mumbo Jumbo

There were two proposed power plants (actually power plantses to coin a fake word) for the P. 1000 Ratte. One concept was powered by two MAN V12Z32/44 24-cylinder diesel engines similar to those used on German submarines. This double engine design produced a Herculean 17,000 horsepower. These were the engines used to derive the 44kp/h maximum speed of the Ratte by the Germans. The more likely engine was the Daimler-Benz MB501. This 20-cylinder marine diesel engine was identical to that used on the German fast torpedo boats or S-boats. Linking eight of these engines would have theoretically produced 16,000 horsepower. Given that the MB501 was a more proven, inexpensive, and easier to manage engine it seems likely this eight-engine design would have appeared in the Ratte prototype.

The primary armament of the Ratte was two 280mm SK C/34 naval guns mounted in a modified naval heavy cruiser turret fitting two guns instead of three. The SK C/34 was a devastating piece of artillery capable of penetrating more than 450mm of armor at its maximum effective direct-fire range of roughly five kilometers. The guns could also be elevated up to 40 degrees to achieve a range of 40 kilometers. Armor-piercing shells and two types of high explosive shells were available for these naval guns. One difficulty facing the 280mm dual battery would have been the Ratte's inability to sufficiently depress its weapons to fire at nearby targets. Accompanying vehicles would have likely accomplished this task.

Additional armament was a 128mm anti-tank gun like that mounted on the Jagdtiger or Maus, two 15mm heavy machineguns and eight 20mm anti-aircraft guns, probably with at least four of them as a quad mount. The 128mm anti-tank gun's location on the Ratte is a point of contention among historians. Most believe it would have been mounted within the primary turret, though some think a smaller secondary turret would have been mounted at the rear of the Ratte near the engine decking. The rear turret makes more sense logistically, but the surface area of engine decking at the rear of the Ratte might have made this unrealistic. A third option would have been a hull-mounted version of the 128mm gun similar to that seen on the Jagdtiger. This would have at least been able to engage nearer targets than either of the other options.

Additional armament would have been spread on and throughout the Ratte. The heavy-machineguns and some of the 20mm guns would have probably been mounted inside ball mounts in the hull of the Ratte. A quad 20mm flak gun could have been mounted on the extremely large top surface of the turret and additional 20mm guns mounted on the top hull at the rear of the Ratte. If they were will-

ing to put up with the exhaust fumes, an entire platoon of panzergrenadiers could have sat atop the rear hull of the Maus.

While the Ratte was supposedly a 1000-ton vehicle this number was an almost mystically optimistic figure, much like the 100-ton weight intended for the Maus. The turret alone for the Ratte would have weighed more than 600 metric tons. The actual combat-loaded weight of the Ratte would have been closer to 1,800 tons. The speed, range, and longevity of the engines and transmission would have suffered accordingly.

Variants

The Ratte was a paper panzer and as such the only real variants were the two choices of engines.

Analysis

The Ratte was a very problematic vehicle and the size of the Ratte was responsible for most of the issues it would have encountered on a hypothetical battlefield. A Ratte on the move would have been relegated to fields and countryside because of its road-destroying weight. Without bridges as a river-crossing option, the Ratte would have been unable to cross flooded or deep rivers and scouting parties might have wasted lengthy periods and squandered lives finding a crossing point.

Gunners on a Ratte would have found it awkward to engage targets from close or medium range with even a hull-mounted 128mm gun. Concealing the Ratte from aircraft would have required a blimp hangar or some sort of bizarre camouflage that would make it resemble a building. Such camouflage is feasible, if comical, but would have been useless the first time ground units spotted the Ratte. From that point on the Ratte would have been constantly harassed by fighter-bombers. Even if the Ratte's 20mm AA guns had managed to drive these off, the Ratte was such an enormous target that high-altitude bombers could have been employed to attack it.

Not everything was bad about the Ratte. Infantry would have been less of a risk than with the Maus because of the number of point defense weapons and the space for infantry to ride on the vehicle's hull. The Ratte would have likely served as the cornerstone of a unit of traditional military vehicles and these would have assisted in defending it from enemy tanks and aircraft. Enemy armor posed almost no conceivable threat to the Ratte. They might have destroyed things like the AA guns on the turret or damaged radio antennae or weapon optics, but beyond minor damage enemy tanks were toys next to this mammoth vehicle. Enemy artillery was slightly more threatening and became downright dangerous if the Ratte made the mistake of straying within range of naval bombardment.

The greatest strength of the Ratte would have been its ability to single-handedly halt a major enemy offensive. It would have been slow and poor on the attack but the sight of a Ratte looming out of fog on a battlefield would have almost immediately scattered enemy ground forces. If they didn't flee right away they would have once they realized their weapons were nearly useless against it.

Make no mistake, the astronomical cost of building a Ratte would not have

been offset by its strengths. Once deployed and used in combat, it was just a matter of time before enemy aircraft destroyed it. With such poor speed and the limitations of the terrain the Ratte would not have enjoyed the same advantages of a wide open sea as its naval counterparts. The Ratte could have turned the tide of a single battle at the cost of a campaign.

Hypothetical Deployment History

Construction began on three Landkreuzer Rattes in July of 1943 at modified shipyards in Hamburg. Bombing and attacks throughout the year delayed the construction significantly. The first Ratte was completed in March of 1944 and the Ratte was moved with difficulty to a staging area east of Berlin. Training began for the crews of Landkreuzer Befehl "Phoenix" as the unit awaited the arrival of its remaining two vehicles. In the meantime a force of panzers and panzer-grenadiers were formed into three kampfguppen with a Ratte as the centerpiece of each. The second Ratte arrived in late April of 1944. The third Ratte was bombed and damaged beyond repair while still under construction. The Allies believed that they destroyed an unusual light cruiser design.

On August 15th of 1944 former Maus commander Generalmajor Schuft took charge of Landkreuzergruppe 216 consisting of one Ratte ("Midgard-Schlange"), 30 panzers, dozens of lighter vehicles, and almost a thousand infantrymen. The unit was to be deployed to engage Soviet forces approaching the German border through Poland and on August 26th, lead elements engaged in a moving skirmish with the Soviet tank armies. Generalmajor Schuft ordered his troops into ambush position from his command Ratte and moved his own vehicle into relative concealment inside a primeval forest. Radio aerials extending well past the treetops were camouflaged with bark and leaves.

On August 28th the tip of the Soviet advance was engaged in force and turned back without the direct involvement with the lurking Ratte. The following day the Soviets withdrew to assess the German force's disposition. On the night of August 29th the panzers and light vehicles rumbled out of the forest with the Midgard-Schlange lumbering behind them. Scouts reached the Soviet lines in the gloomy light of pre-dawn and the Ratte immediately began a devastating bombardment of Soviet rear echelons. The panzers and infantry advanced into the Soviet lines and the battle grew intense.

Wondering where the heavy artillery was situated, Soviet commanders dispatched several scout aircraft. One happened upon the Ratte as it continued to move towards Soviet lines but was shot down by anti-aircraft fire before it could notify ground forces. By noon the Ratte was visible as an ominous shape in the distance. At 12:30 the badly mauled panzers and infantry fell back with the Soviets in hot pursuit. As they pulled away the Ratte began to open fire with its 280mm guns in the direct-fire role. Soviet tank forces were pummeled and smashed. Those vehicles that got close enough to fire on the Ratte quickly realized their folly.

Soviet tanks withdrew and Soviet artillery batteries exchanged fire with the Ratte. The Ratte got the better of them but also began sustaining damage from the volume of fire being directed at it. By the late afternoon most of the Ratte's anti-aircraft guns had been knocked out and the 280mm guns were down to their

last fifteen or so shells. With dusk gathering Soviet fighter-bombers attacked in force, screaming down on the nearly defenseless Ratte. At 18:23 a 500lb bomb penetrated the engine deck and destroyed all but two of the engines. The Ratte was incapable of doing anything more than turning slowly and rotating its turret.

Generalmajor Schuft ordered the Ratte to be demolished and evacuated but at 18:29 a second 500lb bomb penetrated the top armor of the turret and struck the remaining shells in the Ratte's magazine. With a roar and flash of fire the mighty Midgard-Schlange was decapitated. Generalmajor Schuft and all but a few lucky crewmen were killed by the explosion and the ensuing fires that raged through the scarred hull.

The remaining Ratte was rushed to engage the Soviets but was destroyed by American long range bombers long before it reached the enemy lines.

What Fight Have Been

12:28 PM August 29th, 1944

The Eastern Front, Army Group North Ukraine
Eight Kilometers East of Sandomierz

Viktor Fleischer cursed and dropped down into the turret of the Panther. The hatch slammed shut behind him.

"Oberst!" Willi Bayer called from the radio operator's position.

"I am aware of your situation." Viktor yelled back over the din of the engine and yanked a long sliver of one of the radio antennae from his forearm.

Viktor glanced over at Heinrich who was pressed to the gun sight and had blood from metal flaking speckling his cheek.

"Armor-piercing up!" The loader, Gunther, shouted.

"Heinrich, pick your target. Try to ease things up a bit for the grenadiers." Viktor turned his head to shout down to his long-time driver Jacques "Franky" Meijer. "Franky, give him a shot and then I want you to veer northwest."

The stench of burning gasoline and propellant was nearly overpowering in the enclosed turret. Viktor surveyed the battlefield as best he could through the cupola viewing blocks.

Panzer detachment 216, supposedly of battalion strength, was attempting to disengage from the Soviet forces of the 1st Ukrainian Front. They had slammed headlong into the Soviet lines and rolled them back several kilometers. Years ago that might have been the end of things, but Konev or one of his subordinates had learned that a tank penetration did not mean defeat. Soviet Guard tanks, the more dangerous up-gunned T-34s, had come boiling out of a wooded area to the north-east. Dismounted tank infantry teams were in a hell of a bloody grapple with the panzergrenadiers on loan from 17th Panzer.

Detachment 216's retreat was all part of some elaborate scheme cooked up by Generalmajor Schuft to entrap the Soviet counterattack in the Midgard-Schlange's ranged artillery zone. Making things more difficult, whatever panzers made it out would have to navigate the immense craters left in the wake of Schuft's previous bombardment a kilometer or so to the west. Although Viktor hated the wasteful metal beast the staff officers fawned over, he was forced to admit that its barrage in support of the initial assault had been quite impressive.

He just hoped he would live to see it happen again when Schuft's trap was sprung. "Tank to rear, 700 meters!" Heinrich called his target.

Viktor spotted it, a T-34 spinning its treads over one of the formerly Soviet trenches trying to crush the German grenadiers who had taken them.

"Fire!"

The percussion of the 75mm gun crazed Viktor's vision and jarred his bones. A tongue of flame lanced out from the long barrel and a moment later the Soviet tank slewed sideways and spit fire from its hatches. A crewman toppled out of a hull hatch, his legs ablaze, and tumbled into the trench where he was no doubt dealt with impolitely by the panzergrenadiers.

"Good kill," Viktor said through clenched teeth. "Load me a high explosive on the next one. Heinrich, give me an infantry target."

The tank rocked as Franky rotated it to the bearing Viktor had ordered. The turret traversed at minimum speed with an electric whine and Heinrich called out a new target. Viktor peered at the mass of infantry Heinrich had spotted advancing from the woods in staggered lines. Gunther announced ready.

"Fire!"

Viktor kept his eye on the infantry despite the blast from the gun and could almost make out the wraithlike shape of the explosive round as it sailed into the tree line. The sound of the explosion was all but lost amid the din of battle, but he smiled grimly as dozens of Russians toppled over. Their advance faltered.

"Load anti-armor!" Viktor cried.

The T-34s were faster than Major Baum's Tigers driving in reverse and the enemy was already moving to encircle the retreating grenadiers. The trap Schuft had set for the Soviets was fast becoming a rout for the German forces. Viktor could see no more than three other tanks, not counting Baum's stalwart Tigers, and most of the grenadier's half-tracks were burning. Viktor's view of the battle was already restricted by buttoning up the turret and was growing worse by the second as they passed still-burning Soviet tanks and a few killed panzers facing east. He swore and threw open the hatch again to stand in the cupola.

"Armor-piercing up!"

"Damn it all, give me a target!" Heinrich cursed.

"Ten degrees right!" Viktor shouted back. "Make it quick and you can get a rear shot!"

A low rumbling grew at Viktor's back. It was so powerful and nearly subsonic that it was more a presence than a sound and he had to resist the urge to turn and look.

"Got him!" Heinrich replied.

"Uh, Viktor, I—" Franky called over the intercom.

"Fire!"

Heinrich did not hesitate. Heat and dust thrown up by the gun walloped Viktor in the face. It hurt a bit but any pain was overcome by the sight of the beautiful magazine hit Heinrich had scored. The force of the explosion split the T-34 into halves that were thrown in the air like cast dice. Its severed turret spun higher and farther away from its sundered bulk, trailing metal and shredded men in its incendiary comet's tail.

The rumble had grown more overbearing. Anything not firmly secured to the tank and not already vibrating from the Panther's motion began to move about.

Even the burned out hulks of tanks nearby were shaking and shedding blackened plates of steel. Submerged within this sonic wave was a constant crackle and snap that seemed almost electrical. Viktor could resist no longer, he turned and faced into the noise.

The Midgard-Schlang's arrival was preceded by the mad flight of deer and rabbits from the distant woods. The tall spruce trees began to shake as though caught by cyclones and then they splintered and toppled to be ground beneath the churning treads of the Ratte. Viktor had traveled with it in convoy for weeks and knew the vehicle to be quite slow, but as it moved at maximum speed from the woods it seemed a charging bull with its horns the depressed barrels of the 280mm naval guns. Behind the Ratte was a swath of felled and pulped trees extending deep into the woods. No sappers followed in its wake to brace the trees upright and conceal the vehicle's passing.

When the guns spoke all else was lost for a moment. Two explosions as large as houses blossomed at the ends of the barrels and an instant later Viktor rocked back in the cupola as the noise of their report rippled over him. The shells whistled directly overhead and Viktor turned – too slow – to see the volcanic eruptions of fire, dirt and debris they created in the mass of Soviet tanks. To their credit, or perhaps the reverse, the Soviets did not hesitate in their advance. Viktor's jubilation at the sight of the colossal tank was tempered quickly as Major Baum's Tiger disintegrated under the heavy guns of Soviet tank-killers joining the battle.

The Midgard-Schlang's guns were devastating the advancing waves of Soviet armor, but even as the casualties mounted Viktor knew that it would not be enough. It was at least a full armored division Konev had thrown in to stop the German counterattack and their aircraft could not be far behind. Soviet tanks might not be able to penetrate the immense hide of that rolling fortress, but their aircraft's bombs and rockets surely would.

"Get us to hull down." Viktor instructed over the intercom. "We'll cover the retreat as long as we can and then pull back behind the Landkreuzer."

Viktor's standing orders called for a complete withdrawal. He did not plan on throwing his life and his men's lives away because Schuft wanted to impress Konev with his gigantic toy. The ground heaved again and two more shells whistled overhead. The Ratte would die, there was almost no doubt, but the Soviets would likely pay the price in blood.