

After the failure of Operation Barbarossa in 1941, Germany scrambled to come up with a new tank specifically for the eastern front. The best engineers were put on the project, and the Raketenhammer was the brainchild of their efforts. It was designed to keep the speed and mobility of the Panzers, with better firepower for knocking out the new T-34 and KV designs. It was fitted with an 85mm cannon and 20 rockets to destroy its durable Russian adversaries. The production was rushed, leading to serious engineering deficits that delayed production. Because of the rockets, the turret had to be moved back. This created design headaches, with the turret having to be aimed around the rockets, making a small miss fatal. This was not helped by the fact that the rockets made the designers mount a short barrel on the 85mm cannon, making the accuracy abysmal. Due to an issue with the periscopes, armored view ports were added to increase visibility, creating a weak point for the tank. The turret was too heavy to turn with the 85mm gun, so they moved the commander's seat into the body, creating more problems. They eventually added a retractable view port to give the commander a view out of the tank. Another major problem was the ammunition storage. To save even more weight in the turret, the ammunition was moved into a compartment in the body. However, this meant that shots that penetrated around the body would turn the tank into a destructive fireball, likely taking out other German tanks as well. However, they overlooked this, as it allowed the tank to carry far more ammunition. However, this configuration caused even more problems. The engineers debated how to get the ammunition from the body into the turret, and eventually came up with a simple solution. They put the access to the ammunition compartment in front of the radio operator. The radio operator would have to carry the ammunition from the compartment to the turret, saving weight and reliability. However, like anything else, this presented a new set of problems. The commander's chair, which had been moved to the main compartment, was in the way of the access path to the turret. Eventually, the designers added a small rail system that

automatically moved the commander's chair sideways, allowing access to the turret. It could then be moved back, allowing access to the ammunition storage. However, during trial runs, problems soon emerged. A resounding question about the tank was "How is it going to get through the snow?" To asset that drawback, a retractable snowplow was fitted. It was also armored to add extra protection to the tank. However, armor means weight, and considering it was mounted on a moving mechanism, weight is not always a good thing. The snowplow proved to be unreliable, sometimes jamming in one position, leaving tanks stranded and abandoned in snowdrifts, or vulnerable and clumsy in battle. However, when it worked, the snowplow was a useful asset in clearing the way for armored vehicles. Finally, they named the tank Raketenhammer, meaning "rocket hammer." Once completed, the tanks were produced, but production was sidelined quickly to work on other more conventional tanks. However, some of the tanks produced did see combat. In combat, the tanks proved to be mediocre at best. While they could hold their own against older tanks, new types such as the T-34-85 all but rendered them obsolete. First off, the rockets were hard to aim and almost never succeeded at hitting the enemy. The tanks were fast, but too underpowered to get up many hills. They were also not armored very well, and were easily penetrated. More than a few of these tanks in combat were totally destroyed when the ammunition was hit. To add insult to injury, it was quickly discovered that shooting the rocket racks would cause severe damage to the tank if they exploded. The Russians used this to no small advantage, and German tank crews soon began taking the rockets off. However, this made things even worse. All the compromises that were made to fit the rockets on the tank were even more apparent without them. The short barrel and rear-mounted turret made the tank especially difficult to use effectively in combat. However, despite all the shortcomings, the Raketenhammer performed largely as desired. When all was right, it was largely successful at destroying the Russian tanks. With the rockets and 85mm gun, it was adept at

knocking out anything thrown its way. However, like many other German designs at the time, it was never meant to fill just the role it was given. It was originally designed to be a demolition and bombardment tank, less about armor and more about firepower. However, when it was redesigned to be a tank-killer, the problems started to arise. It was a great tank at the one role it had, but it was not the role it was intended for. And unfortunately, tank combat of the war was almost never of the sort suited to the Raketenhammer. For that is the true reason it couldn't achieve the success it was designed for.