The Graudenz class of light cruisers was a class of two ships built for the German Imperial Navy . The class comprised SMS Graudenz and SMS Regensburg . The ships both were laid down in 1912 , launched in October 1913 and April 1914 and commissioned in August 1914 and January 1915 , respectively . They were armed with a main battery of twelve 10 @.@ 5 cm guns , though over the course of their careers , they were rearmed with seven more powerful 15 cm guns . They displaced 6 @,@ 382 t ( 6 @,@ 281 long tons ) at full load and were rated at a top speed of 27 @.@ 5 knots ( 50 @.@ 9 km / h ; 31 @.@ 6 mph )

Both ships saw extensive service during World War I , primarily in the reconnaissance forces of the High Seas Fleet . They participated in several raids on the British coast , screening for the battlecruisers of the I Scouting Group . Regensburg saw heavy combat at the Battle of Jutland , the largest naval battle of the war ; Graudenz had been damaged by a mine and was in dock for repairs at the time of the battle . Both were involved in the Wilhelmshaven mutiny at the end of the war . Following Germany 's defeat , Graudenz was ceded to Italy and served as Ancona until 1937 , when she was sold for scrap . Regensburg was transferred to France , where she served as Strasbourg until 1936 , when she was converted into a barracks ship . She was ultimately scuttled in Lorient to protect the German U @-@ boat pens there .

= = Design = =

= = = General characteristics and machinery = = =

The ships of the Graudenz class were 139 meters ( 456 ft ) long at the waterline and 142 @.@ 70 m ( 468 @.@ 2 ft ) long overall . They had a beam of 13 @.@ 80 m ( 45 @.@ 3 ft ) and a draft of 5 @.@ 75 m ( 18 @.@ 9 ft ) forward and 6 @.@ 08 m ( 19 @.@ 9 ft ) aft . They displaced 4 @,@ 912 metric tons ( 19 @.@ 834 long tons ) at designed displacement and 6 @,@ 382 t ( 19 @.@ 281 long tons ) at full combat load . The ships ' hulls were constructed with longitudinal steel frames and contained seventeen watertight compartments and a double bottom that extended for forty @-@ seven percent of the length of the keel .

The two vessels each had a standard crew of twenty @-@ one officers and 364 enlisted men . While serving as a second command flagship or a flotilla leader , they had an additional three officers and fourteen enlisted men for the commander 's staff . They carried a number of smaller boats , including one picket boat , one barge , one cutter , two yawls , and two dinghies . The German Navy regarded the ships as good sea boats , with slight weather helm and gentle motion in a swell . The cruisers were maneuverable , but were slow going into a turn . Steering was controlled by a single large rudder . They lost speed only slightly in a head sea , but lost up to sixty percent in hard turns . They had a transverse metacentric height of .79 m ( 2 ft 7 in ) .

The ships ' propulsion system consisted of two sets of Marine @-@ type steam turbines , each of which drove a three @-@ bladed screw 3 @.@ 50 m ( 11 ft 6 in ) in diameter . Each turbine was divided into its own engine room . They were designed to give 26 @,@ 000 shaft horsepower ( 19 @,@ 000 kW ) . These were powered by ten coal @-@ fired Marine @-@ type water @-@ tube boilers and two oil @-@ fired double @-@ ended boilers , divided into four boiler rooms on the centerline . These gave the ship a top speed of 27 @.@ 5 knots ( 50 @.@ 9 km / h ; 31 @.@ 6 mph ) . The ships carried 1 @,@ 280 t ( 1 @,@ 260 long tons ) of coal , and an additional 375 t ( 369 long tons ) of oil that gave them a range of approximately 5 @,@ 500 nautical miles ( 10 @,@ 200 km ; 6 @,@ 300 mi ) at 12 knots ( 22 km / h ; 14 mph ) . At 25 knots ( 46 km / h ; 29 mph ) , the range fell considerably , to 1 @,@ 000 nmi ( 1 @,@ 900 km ; 1 @,@ 200 mi ) . Each ship had two turbo generators and one diesel generator with a combined output of 260 kilowatts ( 350 hp ) at 220 Volts .

The ships were armed with twelve 10 @.@ 5 cm SK L / 45 guns in single pedestal mounts . Two were placed side by side forward on the forecastle , eight were located amidships , four on either side , and two in a superfiring pair aft . The guns had a maximum elevation of 30 degrees , which allowed them to engage targets out to 12 @,@ 700 m ( 41 @,@ 700 ft ) . These were replaced with seven 15 cm SK L / 45 guns and two 8 @.@ 8 cm SK L / 45 anti @-@ aircraft guns in 1916 for Graudenz and 1917 for Regensburg . They were also equipped with a pair of 50 cm ( 19 @.@ 7 in ) torpedo tubes with five torpedoes submerged in the hull on the broadside . Two deck @-@ mounted launchers were added for Graudenz when the gun armament was upgraded ; Regensburg had her submerged tubes removed and four deck mounted launchers installed . Both ships could also carry 120 mines .

The ships were protected by a waterline armored belt that was 60 mm ( 2 @.@ 4 in ) thick amidships and 18 mm ( 0 @.@ 71 in ) thick on the bow . The stern was unarmored . The deck was covered with up to 60 mm thick armor plate forward , 40 mm ( 1 @.@ 6 in ) thick amidships , and 20 mm ( 0 @.@ 79 in ) thick aft . Sloped armor 40 mm thick connected the deck and belt armor . The conning tower had 100 mm ( 3 @.@ 9 in ) thick sides and a 20 mm thick roof . A rangefinder was added with 30 mm ( 1 @.@ 2 in ) thick steel plating . The main battery guns had 50 mm ( 2 @.@ 0 in ) thick gun shields .

= = Service history = =

= = = Graudenz = = =

Graudenz saw extensive service during World War I , including serving as part of the reconnaissance screen for the battlecruisers of the I Scouting Group during the raid on Scarborough , Hartlepool and Whitby in December 1914 . The ship also took part in the Battle of Dogger Bank in January 1915 , and the Battle of the Gulf of Riga in August 1915 . She had been damaged by a mine and was unable to participate in the Battle of Jutland in May 1916 . She was assigned to the planned final operation of the High Seas Fleet in October 1918 , weeks before the end of the war , but a major mutiny forced the cancellation of the plan . After the end of the war , the ship was ceded to Italy as a war prize and commissioned into the Italian Navy as Ancona ; she remained in service until 1937 when she was stricken and broken up for scrap .

= = = Regensburg = = =

Regensburg served in the reconnaissance forces of the High Seas Fleet during World War I. She saw significant action at the Battle of Jutland on 31 May ? 1 June 1916 , where she served as the leader of the torpedo boat flotillas that screened for the I Scouting Group battlecruisers . Like Graudenz , Regensburg was to have participated in the final sortie of the German fleet at the end of the war , and was involved in the mutiny that forced the cancellation of the plan . After the end of the war , she was ceded to France in 1920 and renamed Strasbourg . In 1928 she took part in the Arctic rescue operations searching for the Airship Italia . Removed from service in 1936 , she was used as a barracks ship in Lorient until 1944 , when she was seized by the Germans and scuttled in the harbor to protect the U @-@ boat pens there .