

= Lyon @-@ class battleship =

The Lyon class was a proposed type of battleship which was planned for the French Navy in 1913 , with construction scheduled to begin in 1915 . The class was to have comprised four ships : Lyon , Lille , Duquesne , and Tourville . The first two were named for cities in France , while the rest honored French admirals Abraham Duquesne and Anne Hilarion de Tourville . The design was an improvement on the previous Normandie class , and mounted a fourth quadruple gun turret , for a total of sixteen 340 mm (13 in) guns . Construction was cancelled due to the outbreak of World War I in August 1914 before any of the ships could be laid down .

= = Design = =

Starting in 1910 , the French Navy began a dreadnought battleship construction program , starting with the four ships of the Courbet class that year . The three @-@ ship Bretagne class was authorized the next year , and five Normandie @-@ class battleships followed in 1912 . Design work began in 1912 ; the design staff submitted several proposals for the new battleships . Displacements ranged from 27 @,@ 000 metric tons (27 @,@ 000 long tons ; 30 @,@ 000 short tons) to 29 @,@ 000 t (29 @,@ 000 long tons ; 32 @,@ 000 short tons) ; the various designs featured a main battery of fourteen or sixteen 340 mm (13 in) guns , eight or ten 380 mm (15 in) guns , or twenty 305 mm (12 @.@ 0 in) guns , in a mix of quadruple or twin gun turrets .

In 1913 , the Navy authorized a fourth class of battleships , Lyon , which was scheduled for 1915 . The design staff determined the 38 cm gun would take too long to design , so the proposals that incorporated these weapons were cancelled . The design staff settled on one of the two 34 cm proposals . The first proposal , which mounted fourteen guns , was a 27 @,@ 500 t (27 @,@ 100 long tons ; 30 @,@ 300 short tons) ship 185 meters (607 ft) long . On 24 November 1913 , the design staff instead chose the slightly larger second design , armed with sixteen guns in four quadruple turrets . The first two ships , Lyon and Lille , were scheduled to be ordered on 1 January 1915 , and Duquesne and Tourville would have followed on 1 April 1915 . World War I broke out in August 1914 , however , and shifting military requirements , particularly for the army , forced the cancellation of the class .

= = = Ships = = =

= = = Characteristics = = =

The ships would have been 190 m (620 ft) long between perpendiculars and 194 @.@ 5 m (638 ft) long overall . They would have had a beam of 29 m (95 ft) and a draft of 8 @.@ 65 to 9 @.@ 2 m (28 @.@ 4 to 30 @.@ 2 ft) . Their full load displacement was estimated at 29 @,@ 000 t (29 @,@ 000 long tons ; 32 @,@ 000 short tons) . The propulsion system had not been settled by the time the class was cancelled ; the design staff proposed either the mixed steam turbine and triple expansion engine system used in the first four ships of the preceding Normandie class or the all @-@ turbine system used in the last ship of the previous class , Béarn . They also considered new geared turbines that had proved satisfactory in the new destroyer Enseigne Gabolde . The final design called for a propulsion system rated at 43 @,@ 000 shaft horsepower (32 @,@ 000 kW) with a top speed of 23 knots (43 km / h ; 26 mph) . An unknown number of boilers were trunked into two funnels amidships .

Sixteen 340mm / 45 Modèle 1912 guns mounted in four quadruple turrets comprised the main battery . The turrets , which were equipped with electric @-@ hydraulic training and elevation gear , were all mounted on the centerline , though the arrangement is not clear . According to Conway 's All the World 's Fighting Ships , one turret was placed forward , one amidships , and two in a superfiring pair aft . The contemporary Journal of United States Artillery , however , suggests the turrets would have been mounted in two superfiring pairs , forward and aft . The turrets weighed 1

@, @ 500 t (1 @, @ 500 long tons ; 1 @, @ 700 short tons) , and were electrically trained and hydraulically elevated . The guns were divided into pairs and mounted in twin cradles ; a 40 mm (1 @. @ 6 in) thick bulkhead divided the turrets . Each pair of guns had its own ammunition hoist and magazine . They could be fired simultaneously or independently . The guns had a range of 16 @, @ 000 m (52 @, @ 000 ft) and had a rate of fire of two rounds per minute . The shells were 540 @- @ kilogram (1 @, @ 190 lb) armor @- @ piercing rounds and were fired with a muzzle velocity of 800 meters per second (2 @, @ 600 ft / s) .

The secondary battery was to consist of twenty @- @ four guns , either the 138 @. @ 6 mm / 55 Modèle 1910 or a new automatic model , each singly @- @ mounted in casemates in the hull . The M1910 guns fired a 36 @. @ 5 kg (80 lb) shell at a muzzle velocity of 830 m / s (2 @, @ 700 ft / s) . The ships would also have been equipped with an unknown number of 40 mm (1 @. @ 6 in) or 47 mm (1 @. @ 9 in) anti @- @ aircraft guns and six torpedo tubes of unknown size , submerged in the hull . The ships would have been protected with a variation of the armor layout of the previous Normandie class . The primary alterations were slightly thinner casemate armor and upper deck plating to compensate for improved armor below the waterline .