= Number 13 @-@ class battleship =

The Number 13 @-@ class battleship was a planned class of four fast battleships to be built for the Imperial Japanese Navy (IJN) during the 1920s . The ships never received any names , being known only as Numbers 13 ? 16 . They were intended to reinforce Japan 's " eight @-@ eight fleet " of eight battleships and eight battlecruisers after the United States announced a major naval construction program in 1919 . The Number 13 class was designed to be superior to all other existing battleships , planned or building . After the signing of the Washington Naval Treaty in 1922 , they were cancelled in November 1923 before construction could begin .

= = Design and background = =

By 1918 , the Navy had gained approval for an " eight @-@ six " fleet , all ships under eight years old . However , having four large battleships and four battlecruisers on order put an enormous financial strain on Japan , which was spending about a third of its national budget on the Navy . Despite this , the IJN gained approval of the " eight @-@ eight @-@ eight " plan in 1920 after American President Woodrow Wilson announced plans in 1919 to re @-@ initiate the 1916 plan for ten additional battleships and six battlecruisers . The Japanese response required the construction of eight additional fast battleships in the Kii and the Number 13 classes .

When designing the latter class , the Japanese followed the doctrine that they had used since the First Sino @-@ Japanese War of 1894 ? 95 of compensating for quantitative inferiority with qualitative superiority . In the words of naval historian Siegfried Breyer , " had [the ships] been completed , they would have been the world 's largest and most powerful battleships . Their gun calibre alone would have caused a new and more intensive naval arms race . From an engineering aspect they were more than ten years ahead of their time because they anticipated the characteristics of the fully developed , fast battleship . " Naval architects William Garzke and Robert Dulin concur saying , " These ships would have completely outclassed any European battleship " .

The Number 13 class was designed by Captain Yuzuru Hiraga , the naval architect responsible for most of the previous Japanese capital ships . The ships were based on his previous Kii @-@ class battleship and Amagi @-@ class battlecruiser designs , enlarged to take 457 @-@ millimeter (18 @.@ 0 in) guns .

= = = Description = = =

The ships had a length of 259 @.@ 1 meters (850 ft 1 in) between perpendiculars and 274 @.@ 4 meters (900 ft 3 in) overall . They had a beam of 30 @.@ 8 meters (101 ft 1 in) and a draft of 9 @.@ 8 meters (32 ft 2 in) . The normal displacement of the battleships was 47 @,@ 500 metric tons (46 @,@ 700 long tons) .

The class was intended to be equipped with four Gijutsu @-@ Hombu geared steam turbines , each of which drove one propeller shaft . The turbines were designed to produce a total of 150 @,@ 000 shaft horsepower (110 @,@ 000 kW) , using steam provided by 22 Kampon oil @-@ fired water @-@ tube boilers , to reach a maximum speed of 30 knots (56 km / h ; 35 mph) .

The primary armament of the Number 13 class was eight 45 @-@ caliber 457 @-@ millimeter guns in four twin @-@ gun turrets , two each fore and aft of the superstructure . No examples of this gun were ever built , but it was planned to fire a 1 @,@ 550 @-@ kilogram (3 @,@ 420 lb) shell at a muzzle velocity of 800 meters per second (2 @,@ 600 ft / s) . The secondary battery consisted of 16 single 50 @-@ caliber 14 @-@ centimeter guns was mounted in casemates in the superstructure . The manually operated guns had a maximum range of 19 @,@ 750 meters (21 @,@ 600 yd) at an elevation of + 35 ° and fired at a rate up to 10 rounds per minute . The ships ' anti @-@ aircraft defenses consisted of either four or eight single 45 @-@ caliber 12 @-@ centimeter 10th Year Type anti @-@ aircraft guns mounted around the single funnel . Each of these guns had a maximum elevation of + 75 ° and a maximum rate of fire of 10 ? 11 rounds per minute . They could fire a 20 @.@ 41 @-@ kilogram (45 @.@ 0 lb) projectile with a muzzle velocity of 825

? 830 m / s (2 @,@ 710 ? 2 @,@ 720 ft / s) to a maximum height of 10 @,@ 000 meters (32 @,@ 808 ft) . The Number 13 class was also designed with eight 61 @-@ centimeter (24 in) above @-@ water torpedo tubes , four on each broadside .

The waterline armor belt was intended have a maximum thickness of 330 millimeters (13 in) and , like the Kii class , it was angled 15 ° outwards at the top to increase its ability to resist penetration at short range . The deck armor would have had a total thickness of 127 millimeters (5 in) .

= = Construction = =

After the end of World War I , the United Kingdom , the United States and the Empire of Japan all announced large capital ship building programs , incorporating design lessons from the war . These ships would have been much larger and more expensive than earlier vessels and President Warren G. Harding called a conference at Washington , D. C. in late 1921 to forestall a very expensive arms race . The attendees at the conference agreed to limit capital ship construction for the next decade and scrapped large numbers of existing ships as well as many ships still under construction . Japan suspended the Number 13 class while the conference was in progress before any ship was laid down and formally cancelled them on 19 November 1923 . As construction of the ships was scheduled to begin in 1922 , and completed by 1927 , they were already allocated to specific shipyards :

Number 13 : Yokosuka Naval Arsenal ; Yokosuka
Number 14 : Kure Naval Arsenal ; Kure
Number 15 : Mitsubishi ; Nagasaki
Number 16 : Kawasaki ; Kobe