

While these vessels were in progress an urgent appeal was received from New Zealand Navy and Admiralty for consideration of the construction of all-steel vessels, nine for New Zealand Navy and five for Admiralty (the latter five were eventually cancelled). Steel plates and frames were naturally at that period at a premium, but through the kind offices of the Broken Hill Pty., Ltd., Australia—whose country also had an enormous shipbuilding programme—sufficient steel was made available. We considered the construction of boilers in New Zealand, but this could not be brought about for the reason that the machine tools were not available in New Zealand to roll the plate of the required size and thickness. Boilers were eventually ordered from England, and in this connection, to expedite construction, the remainder of the boilers, after the first two or three, were delivered from United Kingdom in a prefabricated condition, the balance of the work being performed here by New Zealand Railway Workshops at Woburn and by Messrs. Stevenson and Cook Engineering Co., Ltd., at Port Chalmers. Engine-construction also gave much food for thought, and it was considered that as Messrs. A. and G. Price at Thames had faithfully constructed many locomotive engines for New Zealand Railways—some of these still going strong—they could successfully attempt the construction of marine engines. Engine forgings were ordered from Australia, and the actual construction of the engines was satisfactorily carried out by Messrs. A. and G. Price at Thames, John McGregor and Co. at Dunedin, and by New Zealand Railway Workshops at Woburn. None of the engines so successfully constructed has given the slightest trace of trouble and are a lasting testimonial to the builders. Some of them will be propelling fishing-trawlers for many a year to come.

At the same time as these new steel trawlers were under construction it was decided to build a further composite vessel at Auckland—the “Tawhai”—for special minesweeper work not connected with the usual trawling. This vessel was completed to steam-trial stage when the war finished, and has been sold to the UNRRA authorities for conversion in Auckland to a fishing unit for trawling purposes in Far Eastern waters.

The principal dimensions of the minesweepers are—

Length between perpendiculars	..	..	125 ft.
Length overall	..	..	135 ft.
Breadth	..	..	23 ft. 6 in.
Depth moulded	..	..	13 ft. 6 in.
Loaded displacement	..	..	612 tons.
Engines	..	..	480 h.p. at 103 r.p.m.
Speed	..	..	10 knots.

One of the main features with a minesweeper is the provision of a powerful winch, being much bigger than those usually fitted on a trawler. These winches were built in New Zealand. They can handle 1,000 fathoms of $2\frac{1}{2}$ in. wire rope, exerting a pull of $2\frac{1}{2}$ tons at 300 ft. per minute.

Naturally the order for nine or fourteen further steel minesweepers necessitated the construction of these units at points other than Auckland, where vessels were constructed by the firms previously concerned with the composite minesweepers. One vessel was constructed at Wellington by the Wellington Patent Slip Co., and seven at Port Chalmers by Stevenson and Cook Engineering Co., Ltd., who took over the area known as “Boiler Point” and within a few months had a thriving shipbuilding industry working at full pressure. The ease with which this somewhat waste land was levelled and brought to fruition as a shipbuilding-yard was one of the wonders of New Zealand's war effort and was due solely to the vision of Mr. James Fletcher (now Sir James Fletcher), whose firm at that time took over the establishment of Stevenson and Cook, Ltd.

The programme for the construction of steel minesweepers was no sooner under way than the Marine Department was faced with another difficulty, in that Admiralty had requested consideration by New Zealand Government of the construction of twelve “Fairmile” patrol vessels for anti-submarine warfare.