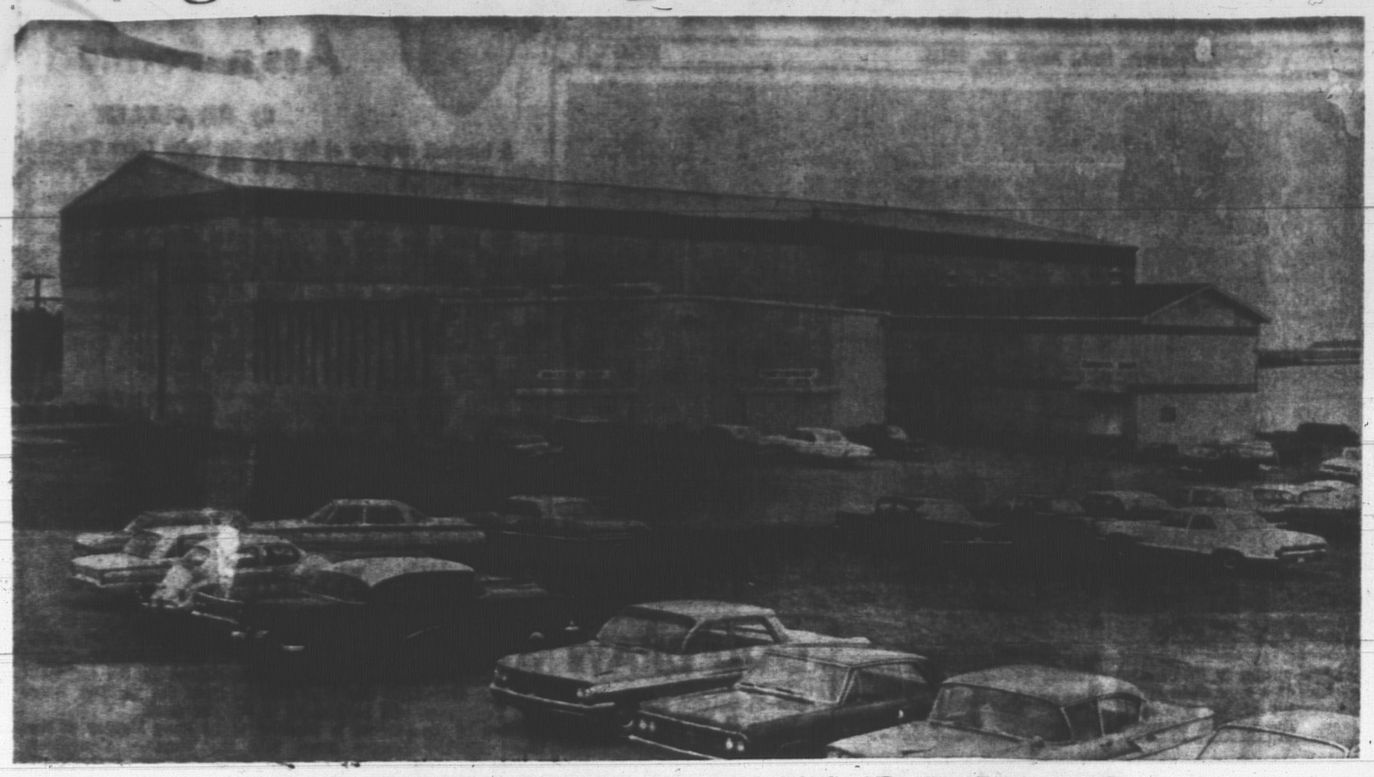
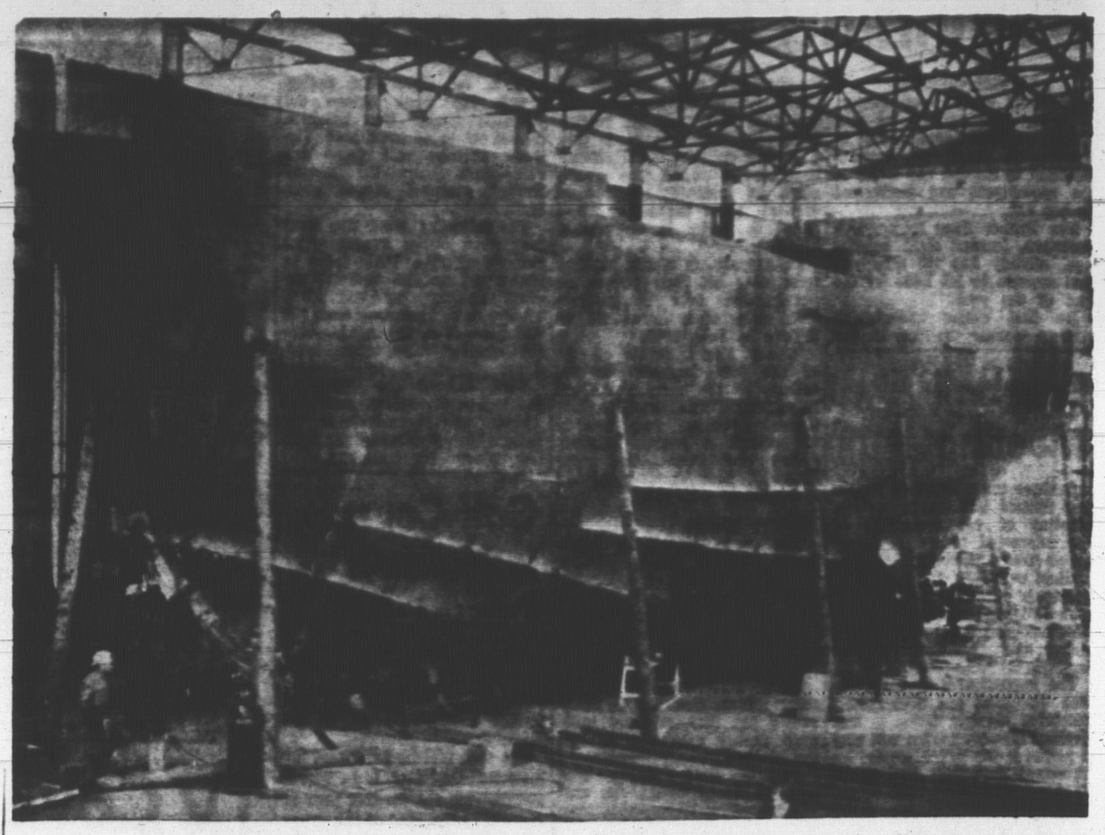
Georgetown Shaping Up As Industrial Centre In Southern Kings



BATHURST MARINE, ENCLOSED BUILDING WAYS AND ATTACHED SHOPS



HULL OF NEW DRAGGER NEARS COMPLETION

Georgetown Shipbuilding Yard And Fish Processing Plant Are Closely Integrated

By J.W. LAVERS

In the fall of 1963, it was decided by the directors of Bathurst Marine Ltd. to re-locate their entire shipbuilding establishment in Georgetown, Prince Edward Island. This decision was the result of a number of factors.

On August 20 the provincial government announced that it would co-operate with a Canadian-Norwegian development organization in the establishment of a multi-million dollar, fully integrated fish and vegetable processing plant, since named Gulf Gardens Foods Ltd., to be located at Georgetown.

The Prince Edward Island Industrial Corporation concluded agreements with Gulf Gardens Foods Limited to establish this ambitious and far-sighted processing plant in Georgetown, based upon the potential of the area in supplying raw materials, and in a long-term endeavour to create more employment and so to prevent the depopulation typical of similar areas where the pattern of farming and rural life has changed so much during the last 10 or 20 years.

On November 4, 1963 Premier Walter R. Shaw, confirmed the locating of Bathurst Marine Limited in Georgetown and that the government had signed an agreement with the firm, under which the province would assist the company by means of a $300,000 loan on a 12 year plan.

In co-operation with the Department of Fisheries and the Fishermen's Loan Board of the province, it was intended to develop a large enough fleet of modern off-shore trawlers to supply Gulf Garden Foods Ltd. In order to maintain and repair such a fleet of 12 or more units, it was natural for the authorities to examine the possibilities of shipbuilding in the province, and the result of discussions was that a new shipyard would be established in Georgetown, thus providing new construction, as well as repair facilities, at the fish plant's front door, and also conveniently located for the expanding fishing industry out of Souris.

LIMITATIONS

This plan fitted in well with certain limitations about the facilities in Bathurst, New Brunswick. Already there appeared to be a limitation on the length of vessel of about 150 ft., and the shipyard there not being originally laid out as such, had a number of operational drawbacks.

The building berths, outfitting wharf, and fabrication and machine shops, were all a considerable distance from each other, thus making for difficult and slow communications and inefficient use of labour. Furthermore, the wharf that was used for outfitting was part of a former sawmill property, and provided very poor foundation conditions. In order to build a modern outfitting wharf, with suitable craneage, the extent of piling and dredging would, in all probability be greater than that required to produce a new artificial jetty protruding out from a firm shoreline.

The P.E.I. Government made a grant of land, made available to the government by the Town of Georgetown, and authorized the P.E.I. Industrial Corporation to assist the company in financing the new fixed assets on the site. The key to the management's thinking in the layout of the yard for trawler building can be expressed in the phrase "Raw materials to launching conditions under one roof".

An essential minimum area for steel marking, cutting, prefabrication and vessel erection of vessels up to approximately 130 feet in length was considered to be of the order of 16,000 square feet. This was based on a production capacity of approximately four vessels per year, without excessive shift work.

It was decided that the correct direction for the given area was to take the greatest width of shop possible, without running into excessive costs for the building structure or for the shop cranes. This factor and a consideration of the breadth of the largest type of vessel which was considered likely for total indoor construction, resulted in a shop breadth of 80 feet. The length of the shop, for the first phase, was thus fixed at 220 feet.

Plans for the future include extending the shop at both ends so as to increase both the fabrication area and the permissable length of vessel that can be assembled entirely indoors.

CONVENIENT LAYOUT

Laid out for convenient communication with the main fabrication shop are a carpenters shop with traditional type mold loft over a stores and a machine shop, the latter two both being in the same building. Future plans for outfitting facilities include an outfitting wharf, and pipe fitting and electrician shops.

Should the requirements arise in future years for building vessels of 200 feet or more, an area has been reserved for laying out a launching berth to accommodate vessels up to about 350 feet. This berth will be arranged so that vessels will be erected from pre-fabricated sections weighing 15 or 20 tons each.

The main features of the plant equipment are as follows: Heating of the main building is by Dravo hot air furnaces, and a comfortable working temperature is attained at all times. Power at 550 volts, three-phase, and 230-115 volts single phase is available at convenient locations throughout the layout. The main switchboard is located on a steel platform suspended between the building's side columns and the panels and wiring have been designed with ample capacity for future expansion. Most of the welding is by AC transformer welders, with one or two special purpose machines giving AC and DC output.

From the point of view of color quality, accessibility for replacement, stroboscopic effect placement, stroboscopic effect and speed of recovery after shut-off, a combination of mercury vapour, incandescent and fluorescent tube lighting was chosen. A 535 cfm air compressor has been installed in a separate compressor house and piping installed around the shop to provide compressed air at 100 pounds pressure at convenient locations.

The shop floors are heavy reinforced concrete throughout, and anchor plates flush with the concrete surface have been embedded in a grid pattern, so that welding jigs and fixtures may be welded to them and then chipped off again when no longer required.

Too Munck overhead shop cranes of 10 ton capacity each cover the main fabrication shop. The machine shop is served by one three ton Demag crane. The 10 ton cranes can be controlled alternatively from the floor or from cabs at crane girder height. The Demag crane is arranged for pendant push button control only and is fitted with a creep speed on the hoist mechanism for careful placing of large work pieces on the machines.

The fabrication shop contains one 18 ft. five-eighths inches mild steel capacity pyramid type plate bending rolls, one 10 ft. by three-eighths inches mild steel capacity pearson electro-hydraulic shear and one horizontal press for frame bending. The latter was designed by the shipyard's own staff, and built by two engineering firms in Nova Scotia. It is a very versatile machine, being quickly and conveniently adaptable for cold frame bending, flanging of brackets and floors, removal and installation of heavy liners and bushings and other similar jobs.

MACHINE CAPABILITY

There are plans to install a press brake in the future if the quantity of work warrants it. The machine shop is fitted with all the necessary machines to repair and manufacture such items as propeller sharfs, rudder stocks, goose-neck fittings, in other words the normal range of fittings which are traditionally manufactured by the shipyard.

The carpenter's shop is well equipped with modern woodworking machines for manufacturing the ship's furniture and cabin linings. The main doors in the fabrication shop are supported on tracks at the lower end, to avoid loading the roof structure with their weight. They are fitted with rubber weather strips and are arranged for opening and shutting using the shop cranes through a series of snatch blocks. These doors do not have to be opened very frequently and the arrangement is proving satisfactory.

A modern office building has been erected near the entrance to the shipyard and this accommodates about 25 management and staff, with drawing office and conference room.

A basic system of paved roads and outdoor lighting makes for easy communication around the yard. The asphalt is supported by a six-inch layer of soil cement.

The fabrication shop, machine shop and stores are Armco prefabricated steel buildings, insulated with PVC covered fibreglass. The other buildings are of wood frame construction.

The shipyard is now employing approximately 120 people in all and hopes to recruit up to 200 or even more during 1965. The principal obstacles to this aim are the availability of suitable skilled personnel and the temporary housing shortage in the area.

Three vessels have been delivered from Georgetown and one more is at present being outfitted. These four were all launched at Bathurst and were transferred to Georgetown at different stages of completion. The last two to be transferred to Georgetown being the Gulf Gallant and the Gulf Guard. Both these vessels coming to Georgetown as hulls and the outfitting being done during the past winter on them.

The Gulf Gallant was recently completed and underwent her sea trials in Georgetown Harbour. Work is currently being done on the outfitting of the Gulf Guard. The first vessels to be built from the keel up in Georgetown and the first steel vessel to be built in this Province is the vessel to be named at the official opening ceremonies at Georgetown on Saturday, May 22.

This vessel is a 129 foot long stern trawler and is now well underway in the fabrication shop and will it is expected be launched in the near future, as soon as the approach to the end of the launching berth has been dredged. Dredging operations are expected to commence very soon.

Recently Jens Moe, chairman of the board of directors, announced the appointment of T. W. Sanderson as president of Bathurst Marine Ltd. Following extensive service in the British and Canadian shipping industry, Mr. Sanderson, who is a member of the Royal Institute of Naval Architects and the Institute of Marine Engineers, joined the company as production manager was subsequently appointed general manager and has held that position for one year.

Mr. Moe also recently announced the appointment of William E. Bennett as vice-president of Bathurst Marine Limited. After nine years with Brown, Boveri (Canada) Ltd., Mr. Bennett joined Moe Industries Ltd., as office manager and subsequently joined Bathurst Marine Ltd., and held the position of office manager, personnel manager and secretary prior to his present appointment.

Shipbuilding Returns To Kings Co. Centre

By J.W. LAVERS

In Georgetown where once the length of the waterfront was lined with shipyards, building wooden ships that plied the seven seas, once again ships are being built but this time they are ships of steel and their construction is by an entirely different method than that of the wooden ships of by-gone days.

Today the shipbuilding plant of Bathurst Marine Ltd., is a hive of activity as work proceeds on the building of two steel trawlers, with a third to follow. Construction of what is in the trade termed as Hull No. 12 is nearing completion and this hull will be named on May 22, by Mrs. Shaw, wife of Premier Walter R. Shaw, who will officially declare the shipyard open.

Already work is underway on Hull No. 14 and Hull No. 15 will have construction started soon. Old timers would be amazed to witness the method used in the construction of these ships. There is no formal keel laying, at least in so far as it used to be known. At the start the ship is actually built upside down, until construction reaches a certain stage, and then it is turned over. Patterns from the mould loft of frames are cut out of steel and attached to the keel. Keel bars are marked out and cut and main frames shaped, marked and cut port and starboard.

In the building of steel trawlers only the basic construction is completed by launching time. It is after launching that the carpenters and metal workers; pipe fitters, painters, electricians go to work to complete the interior and exterior.

Technicians set about installing the most modern electronic gadgetry, and engineers install the engines, pumps and related devices. The modern steel trawlers are equipped with radio telephones, navigational instruments and echo sounders which are used for the detection of schools of fish.

Introduced to North American shipbuilding by Bathurst Marine Ltd., the Norwegian-designed all-steel stern trawl fishing boats provide safety; economy of manpower and have proven their suitability and capability to do the job.

Wooden trawlers, are side trawlers and drop their cone-shaped net over the side, and drag is along on a cant, and haul it back on deck in the same way it went over. When pulling the net the ship has to lie to in the wind and the fishermen are unprotected from the wind and spray.

The steel stern trawler drops her nets through a gate and ramp aft, then drags them through the water in a direct forward motion. She works with her bow to the wind, this makes her less vulnerable to roll, and her crew operate under a protective roofing. It is estimated that three fishermen on a stern trawler can perform the work of five men on a side trawler.