New Plymouth's Industries — No. 14:

Engineering Firm Began In Small Wooden Shed

TWENTY-SIX years ago, in a small wooden shed opposite New Plymouth's railway station, began what is to-day one of the city's most active and important industries. It is known as the Swanson Engineering Co., Ltd., and carries out marine and industrial engineering. The company's premises, now in Devon Street on the fringe of the shopping area, cover the best part of 25,000 square feet, and are still too small to cope with the growing business.

A number of those on the company's payroll are apprentices and the company fulfils a very important role in this respect. The Marine Department recognises that apprentices trained at Swanson's can emerge as completely qualified engineers. This is a distinction not usually bestowed on firms in New Zealand's smaller centres.

At present this industry employs about 80 on its permanent payroll. For the carrying out of some big contract up to 20 temporary workers may be engaged.

A look through Swanson's workshops at any time of the year will give a good idea of the wide scope of work done. Yesterday a tour of inspection showed several beams of a ship being straightened, the construction of smoke stacks, whey tanks and pressure tanks of various sizes, a boiler being repaired, a steel tank fabricated, arches for a bridge being bent, and a section of a pipe-line to carry fuel from the port under construction.

Other repair work was also being carried out and hardly any of the equipment in the structural department or the machine shop was out of action for long.

To appreciate fully the importance of that last statement one must realise there are lathes, forges, a power pipe bending machine, an angle iron bending machine, power shears, a punching machine, an hydraulic press, a steam and spring hammer, power saws, a power screwing machine for putting threads on pipes, a power rolling machine, numerous electric welding plants and other machinery in the two departments.

As an example of the range covered in different types of machinery operated by the company take the lathes. The smallest has a six inch swing and the largest is 12ft. in diameter and 40ft. long.

Marine engineering work carried out by the company covers repairs to ships calling at the port and boiler surveys. One of the jobs undertaken in this department has been a complete overhaul of the dredge Paritutu.

On one occasion, quite recently, the company had to perform a very difficult operation on the Paritutu. A propellor shaft was bent and it was thought the ship would have to be towed to Wellington for dock repairs. By ballasting the bow of the craft, to bring the stern out of the water as much as possible, Swanson's were able to withdraw the old shaft and insert a new one. Most of the work was done underwater.

DIFFICULT JOBS

That is only one of the many difficult jobs that have been performed.

On many occasions customers call at the workshop office and say they want a piece of machinery constructed to do a certain job. The firm is often given no indication how the machinery is to be made and employees have to use their own ingenuity and invent the required article.

Work performed by Swanson's staff can be seen almost anywhere in Taranaki. One area where a good range of their work can be seen is at the port of New Plymouth.

Structural steel work on the New Zealand Shipping Company's wool store, the five hoppers used in discharge of phosphate, the fuel line to the port for the Shell Oil Co. of N.Z., Ltd., and the majority of the huge bulk fuel storage tanks have been constructed by this firm.

The largest structural steel job done by the company was at Kapuni where Dairy Products Ltd.'s sugar of milk factory was erected. This was started about six years ago and though the main plant has now been completed and in operation for some time members of Swanson's staff are still on the job working on an extension.

Heavy stainless steel equipment for dairy factories is produced and for the cutting of the steel for this equipment Swanson's installed a gas power cutting machine made by New Zealand Gas Industries. They were the first in New Zealand to use such a machine.

One unusual construction job done by the firm was the making of pig de-hairing machines for the New Plymouth and Wanganui abattoirs. They have also converted old steam log haulers to diesel.

All the fasteners for the freezing chamber doors in the Moturoa cool stores' new additions were made by Swanson's. They have also manufactured and are at present erecting elevators in this building. These elevators will be driven from the ground floor and will carry butter or cheese. The old type of elevators in the building will carry only one product.

The company owns an area of several acres with frontages on Devon Street and Dawson Street and a smaller section on the southern side of Devon Street opposite the workshops. The original business was owned by Mr. C. Swanson from 1927 to 1935. It was then formed into a company and started as such in the building which is still the largest part of the present premises.

This first building was 150 feet long and 100 feet wide and is now known as the machine shop. A new bay 135 feet by 60 feet, known as the structural department, was added in 1950 to meet the rapidly increasing demand for space.

In the structural department flat steel up to one inch thick and mild steel plates up to three and a half inches thick, are worked. To one side of this department is the steel rack carrying a large assortment of steel pipes and rods as well as non-ferrous rods and pipes.

At the end of the structural department the blacksmith's shop is situated. Here there are forges and an oil-fired furnace for spring making and the tempering of steels. The steam and spring hammers are also located here.

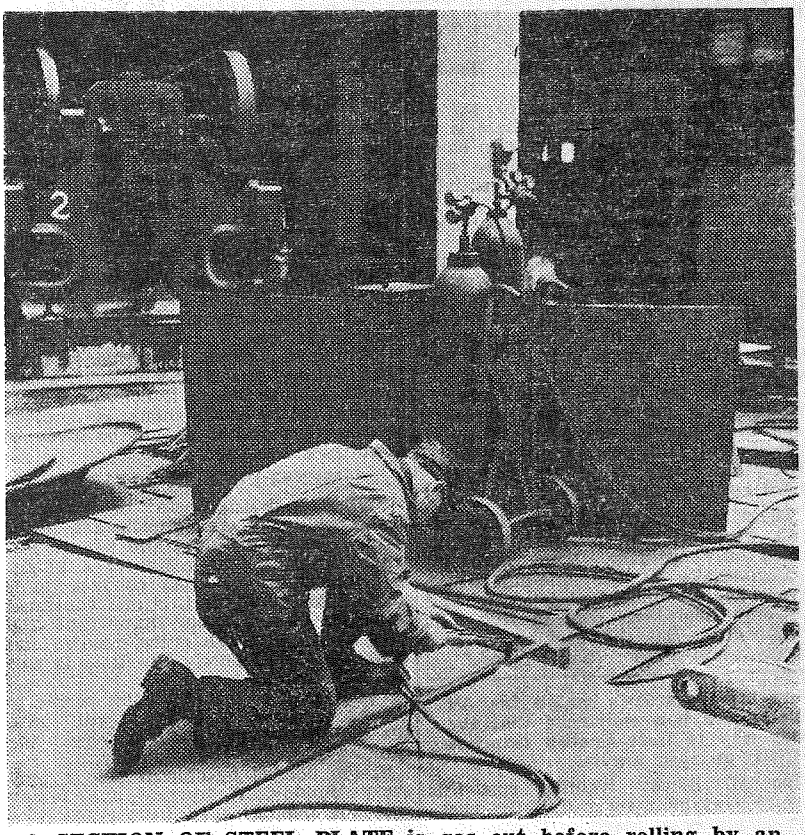
There are two tool rooms from which are issued a varied assortment of tools, including huge drills almost as thick as a man's forearm. Small fittings like bolts and nuts are also issued from this section.

Not so very long ago there were meters and fuses in different parts of the premises but recently these were all centralised and now all the fuses and the meters are housed in a concrete fireproof room.

Large quantities of acetylene gas and oxygen are used in cutting metal, and cylinders of these are coming and going from the premises all the time.

Swanson's import their steel from England and Australia direct.

Passing their premises almost any night of the week one will see the blue flashes of welding equipment at work and hear the clang of steel being hammered. Much overtime is worked of necessity to keep up with the amount of work to be done by this busy New Plymouth industry.



A SECTION OF STEEL PLATE is gas cut before rolling by an employee working in the construction department of the Swanson Engineering Company Ltd.