Fisher & Paykel Building 3

Project: Fisher & Paykel Building 3
Client: Mainzeal Construction
Location: East Tamaki, Auckland
Contract Value: $5m

DESCRIPTION

Fisher & Paykel Healthcare is a growing business in NZ and needed a larger laboratory in order to increase production and research. Mainzeal Construction Ltd was the contractor for the previous two buildings for Fisher and Paykel and used Electrix as their preferred subcontractor.

SCOPE

Electrix obtained the high and low voltage reticulation from the spare 630Amp breaker on the 11kV switchboard housed in the High Voltage substation. From this breaker the HV cable was run through the trench below the switchboard through an underground cable duct to the HV switchgear in the new HV switch room in the Building 3 Utility Building. Three fuse switches feed the 1.5MVA oil filled transformers in the basement with the other feeding the 2MVA transformer located adjacent to MSB4 switch room, supplying the mechanical plant in the Utility Building. The HV switchgear is suitable for a future extension.

Power Distribution boards supply the office area, service module (workshop) and the plant (manufacturing) area. These boards are located above in the roof space in accessible locations. The sub-main cabling to all distribution boards and mechanical services switchboards (MSSBs) are aluminum XLPE insulated cables run on cable tray or cable basket supplying earthing, small power, lighting, emergency lighting, exterior lighting and C-Bus lighting control.

The construction programme required regular alterations due to bad weather affecting concrete pours, steel construction problems etc. This created a bottle neck affect towards the end of the project so a concise coordination programme was developed through regular site service meetings with Mainzeal and subcontractors.

VALUE TO CLIENT

This is the largest building on site at 45,000 square meters. Mainzeal wished to maintain their strong relationship with F&P. They believe Electrix is the leader in the electrical field and using Electrix allowed the high and low voltage reticulation to be kept within one package.