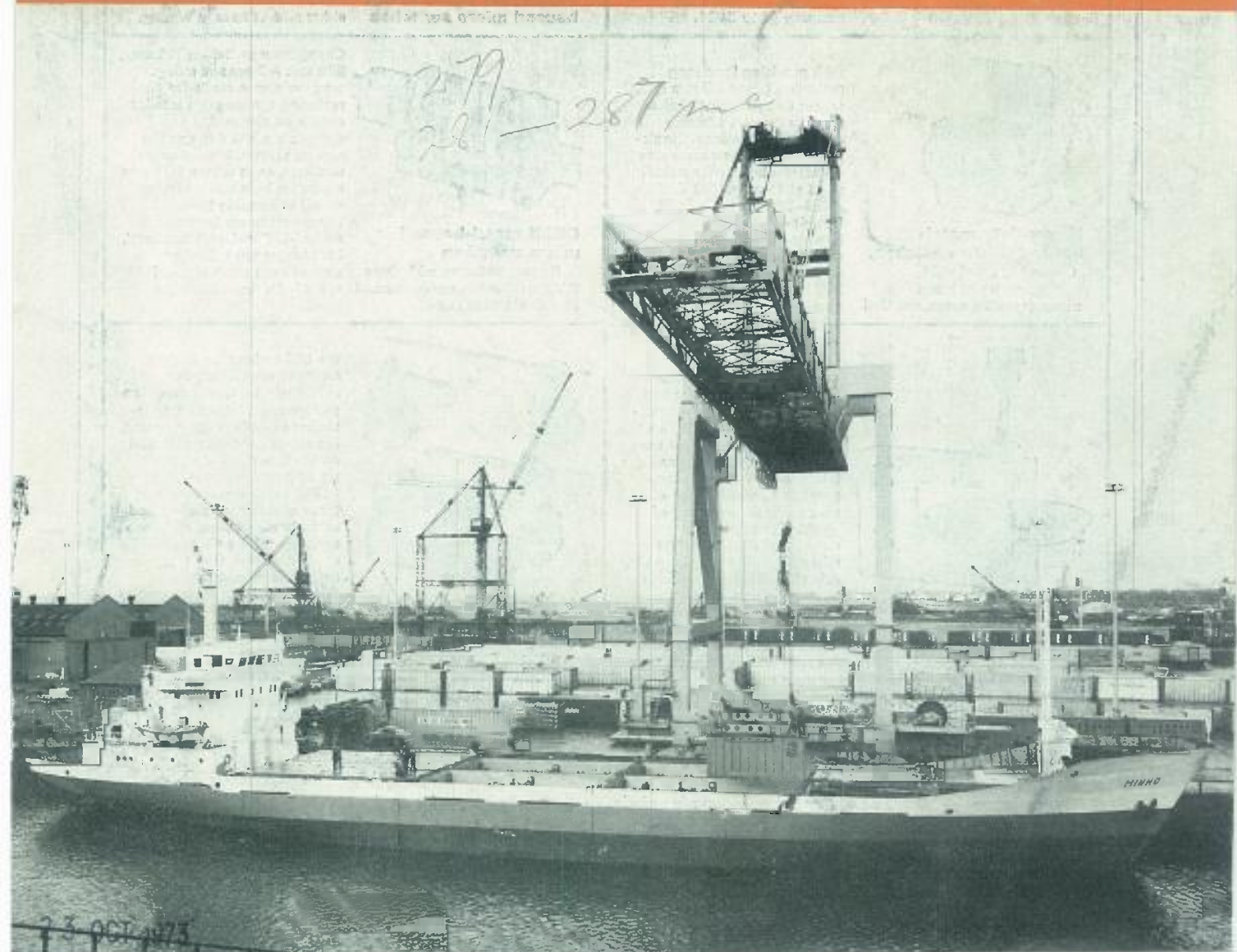


NEW ZEALAND

Engineering

THE JOURNAL
OF THE NEW ZEALAND INSTITUTION OF ENGINEERS



Write now for detailed information

Include indications of possible use, and whether you would like us to make a personal call.

Write: National Electric, Box 9749 Wellington, or contact one of our 20 branches nationwide.



20 Branches throughout NZ.

A member of the CPD Group.

Burgess

Check your needs from the categories shown here.



Compact metal-housed micro switches
V3HM6S, 2V3HM6S

These models have been developed to meet industry's demand for small-size, single or double pole, thoroughly dependable micro switches with rapid interior switch replacement facilities. General rating is 10 amp at 250V.A.C. Mounting holes 5.18 mm. Splashproof 6BA screw terminals. Conduit entry normally $\frac{3}{8}$ " to BS31.



3BRM and 4BRM metal housed micro switches

These switches were designed and first produced over twenty years ago, and they continue to enjoy wide popularity. 3BRM and 4BRM switches have 6BA screw terminals located in 4 mm channels. The general current rating is 15 amp, 250 V.A.C. Their housings are of heavy-duty zinc alloy and have $\frac{3}{8}$ " BS31 conduit entry. Two types of base plates are provided with each switch so that each is suitable for either side or base mounting.



Heavy-duty metal-housed micro switches, CTHMSA, 2V3CMSA.
Robust housing and actuator mechanisms, coupled

with provision for strong mounting (three 6.7 mm holes), render these micro switches suitable for exceptionally arduous applications. Single-pole models incorporate one standard-size interior switch rated at 15 amp, 250 V. AC. 6-32 screw terminals. Double-pole units use an interior assembly consisting of two V3-series miniature switches rated at 10 amp, 250 V. AC. 6 BA screw terminals.



CRLN metal-housed micro switches

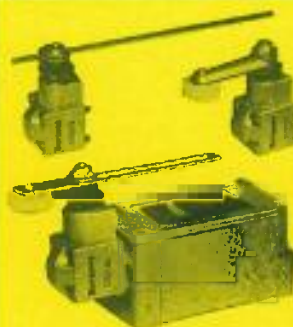
Robust switches with three P.V.C.cables factory-connected and all electrics sealed.

Changeover switching, 15 amp, 250 volt AC general rating. No provision is made for replacing the long-life interior switch on site as this operation might derange the sealing system. Mounting by two lugs, each with a 6.76 mm mounting hole and a smaller dowel or locating hole. The switches are handed: suffix '-LH' indicates left hand, i.e. plunger top left when viewed from the front, and suffix '-RH' indicates right hand.



Thermostat units therm/C1

Designed specifically for precise temperature control in incubators, brooders and similar agricultural and horticultural appliances, these units nevertheless have wider uses in general engineering and the laboratory. Within the temperature band of 21° to 43°C, they bring the accuracy of $\pm 0.3^\circ\text{C}$, temperature differential with complete reliability over a very long life. Adjustment is by a lockable knurled knob. Sensitive, 15 amp micro switches are used to ensure snap-action no matter how slow or hesitant the temperature change.



L25 series plug-in limit switches 'The down-time misers'

Burgess have developed

the L25 series plug in limit switches specifically for industrial use, where precision performance, reliability, resistance to machine environment, full adjustment capability and down-time minimisation are of prime importance.

The series comprises four types of complete switch and actuator assemblies, each one available with a choice of conduit entries. One type has an in-line plunger actuator and the other three have rotary action actuators. Additionally, a switch unit without actuator and the actuator heads are offered as separate items.

Burgess - switches for every application

5.30r

For more information circle No. 42 on reader service card.

N.Z. Institution of Engineers

1974 conference

PRELIMINARY NOTICE

DATE: Monday 18 February to Friday 22 February 1974
VENUE: Victoria University of Wellington
THEME: "Engineering for Tourism"

PROGRAMME

MONDAY 18 FEBRUARY

Morning Registration
Afternoon Opening ceremony: Welcome by His Worship the Mayor of Wellington, Sir Francis Kitts; opening by Hon. Mrs Tirikatene-Sullivan, Minister of Tourism; W. L. Newnham Lecture, J. L. Newnham, partner, King and Dawson, architects
Evening Presidential Address, followed by President's Reception and Supper

TUESDAY 19 FEBRUARY

Morning Technical papers
Afternoon Technical papers
Evening Technical groups' annual general meetings

WEDNESDAY 20 FEBRUARY

Morning Technical papers
Afternoon Technical papers
Divisions' annual general meetings
Evening Guest speaker

THURSDAY 21 FEBRUARY

Morning Institution of Structural Engineers lecture
Panel discussion
Afternoon Annual general meeting of the Institution and Benevolent Society
Presentation of awards and induction of President
Evening Conference dinner dance

FRIDAY 22 FEBRUARY

Visits for members and their wives:
Todd Motors, Pauatahanui housing development, Atlas Copco head office, television complex at Avalon, Bryant and May match factory.
Whole day: Visit to Picton on Cook Strait ferry and drive round scenic Grove Track.

A programme, registration form, and accommodation form will be posted to every member at the end of October. You will be expected to return the forms by 1 December.

*All inquiries to: The Conference Secretary,
P.O. Box 447,
Wellington.*

TO ALL MEMBERS OF THE NEW ZEALAND INSTITUTION OF ENGINEERS:

We expect that the 1974 conference will continue the high standard of past Institution conferences and indeed my committee is now working hard to see that this does occur.

The invited speakers have been selected on the basis of compatibility with the theme "Engineering for Tourism". We believe that there is tremendous scope for engineering supporting the growing tourist industry. We also believe that the general public is not aware of the amount of dependence this industry has upon the skill of engineers. For instance, take airports and associated buildings and services, roading, water supply and sewerage, hotels and motels, power requirements, etc. If these services operate well, we have satisfied tourists.

It will be a nice departure for the official opening of the conference to be performed by a lady Minister who is vitally interested in tourism. We are thrilled to have John Newnham, an architect, and son of W. L. Newnham, to give the Newnham Lecture.

Our panel of speakers will, we are sure, enlarge on significant areas in which the engineer is being used and can be utilised in the future.

Most of the technical groups and divisions have confirmed that they will be participating significantly to make our conference a success.

Finally, we look forward to seeing as many as possible at the conference. We hope that we and you will make many more friends during the week.

COLIN STRACHAN,
Conference Director for the Conference Committee.

LADIES PROGRAMME

Wives of delegates to the 1974 Institution conference can look forward to five days of fun. The ladies' committee has plans to show you as much of Wellington and its environs as we can possibly fit in to the time available.

Some of the visits we have planned for you are: a tour of places of interest in Wellington, Lower Hutt, and Eastbourne, with sidelights, such as a peep at Government House and a cable car ride; an evening at the new Downstage for dinner and a funny/serious New Zealand play; an architect's guided tour of three fascinating Wellington homes plus a country club luncheon; and a Wool Board fashion parade with a difference.

As well as these, we combine with the men on such occasions as the Presidential Address, the dinner dance, and Friday trips.

So do make an effort and plan to come to the Wellington conference, 18 to 22 February 1974. We want to show you what a lovely city New Zealand's capital is. We can guarantee the weather will be completely free of snowstorms, frosts, humidity, and smog!

See you in February.

JEAN STRACHAN,
Convener, Ladies' Conference Committee.