



CASE STUDY

Customer: Berg Engineering Pty Ltd

End User: Berg Engineering Gladstone

Industry: Machine Tools

Project: CNC Retrofit for Titan TMG SC40/50-4HY-CNC

CNC RETROFIT FOR TITAN TMG TURNING AND MILLING MACHINE

CNC DESIGN PTY LTD

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OVERVIEW

CNC Design complete design and installation of a CNC retrofit for the Titan TMG vertical turning and milling centre.

THE CHALLENGE

Identifying and implementing a cost-effective solution for upgrading the CNC control system to the latest technology with a minimum disturbance of the production was the main challenge for this project. The careful design for integrating the original servomotors, spindle motors and the original interface with the machine sensors and actuators with the new CNC and drive system and re-engineering the software system for the complex, multi-channel machine was the key of success for this project.

Before the retrofit



After the retrofit



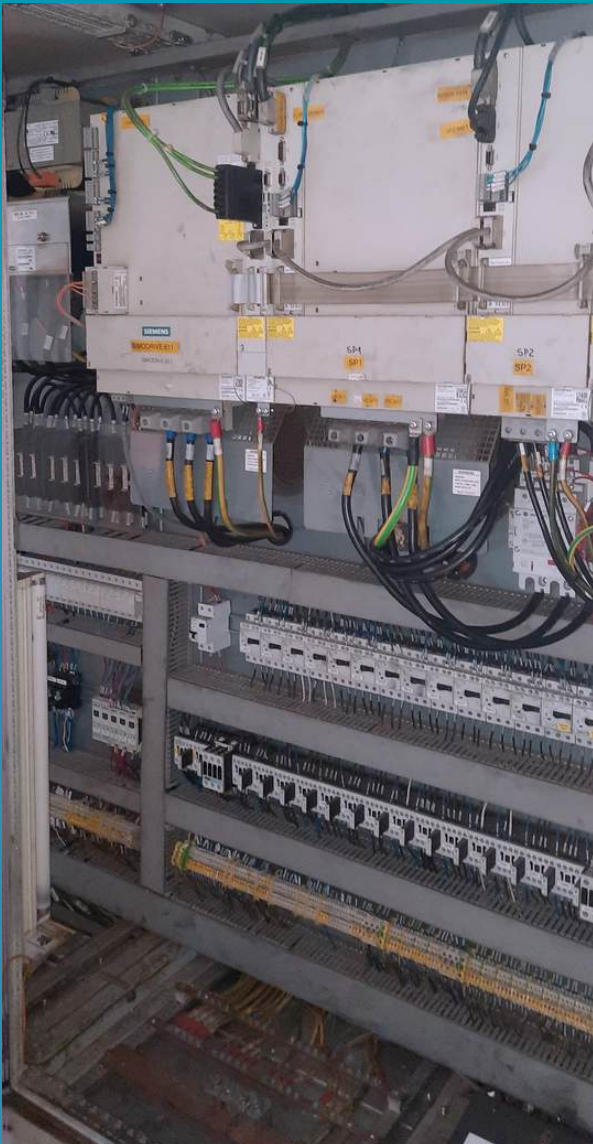
THE END USER

Berg Engineering is a family-owned business. Founded in 1972, Berg has grown from a small operation to a multi-million-dollar group of companies, with a reputation for excellence on the back of two generations of family passion.

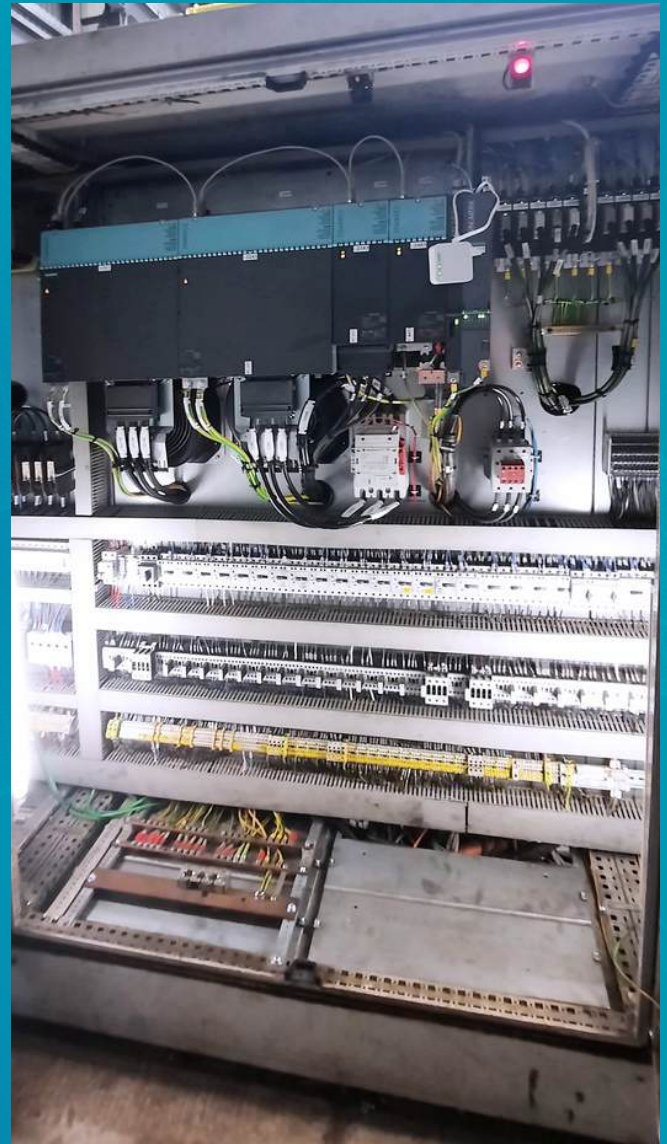
With manufacturing facilities in Australia (Brisbane and Gladstone), New Caledonia, Indonesia and Papua New Guinea, Berg can undertake complete fabrication and installation of complex assemblies and functional structures. The Titan TMG machine is just one of the modern CNC machines which offers Berg Engineering the capacity for manufacturing large parts.

ELECTRICAL CABINET #1

Before the retrofit



After the retrofit



THE EQUIPMENT

The flexibility of SINUMERIK ONE to work with existing automation products from the previous generations of CNC platforms from Siemens was essential in allowing us to provide a cost-effective upgrade solution. This seamless integration was done in a short time, reducing the production disturbance to a minimum.

In this way, we could offer to the customer power of the new functions available in the latest flagship CNC platform from Siemens and extend the serviceability for the machine for another decade.

The CNC system included:

- SINUMERIK ONE CNC system including SINUMERIK Safety Integrated
- SINAMICS S120 drive system based on active front end infeed module with motor modules for all axes and spindles
- New Renishaw workpiece measuring probe
- The redesign of the electrical cabinet and operating panel

OPERATOR PANEL



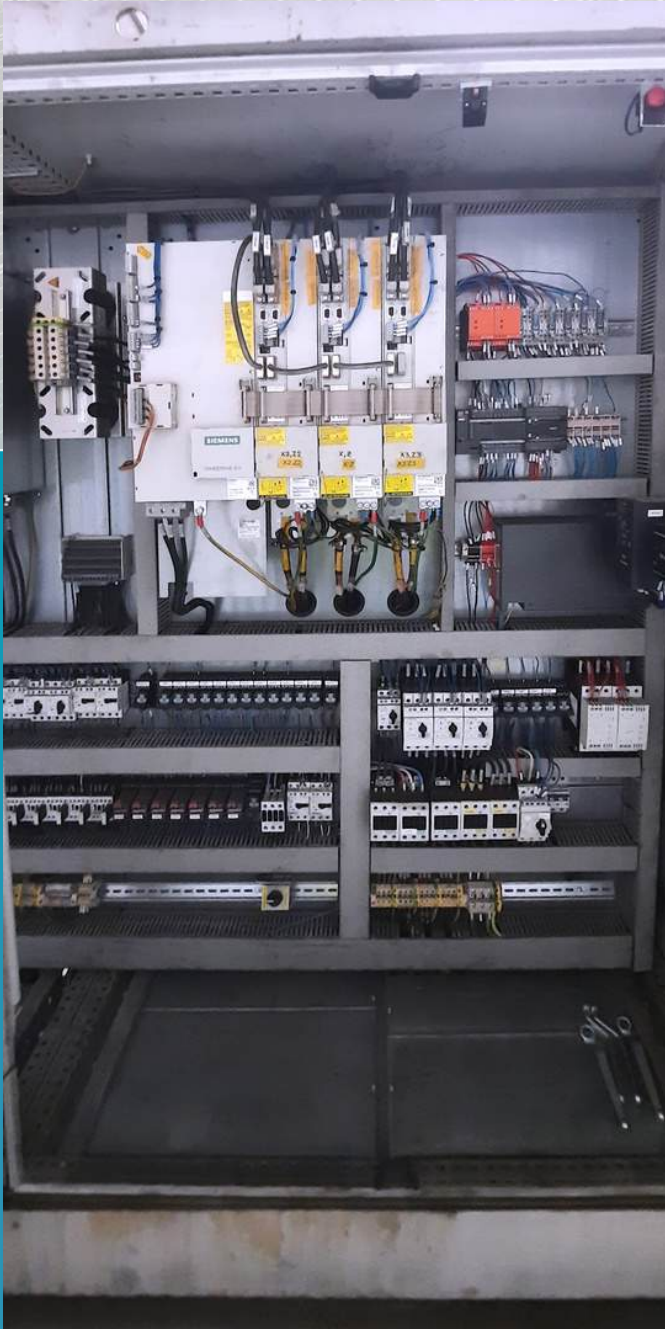
Before the retrofit



After the retrofit

ELECTRICAL CABINET #2

Before the retrofit



After the retrofit



WHY CNC DESIGN?

CNC Design is an Australian company established in 1984 with core competencies in Machine Tools, Production Machinery and associated Motion Control products. With more than 150 people located in our offices in Australia, New Zealand and SE Asia, we have been the exclusive Siemens distributor and Solution Partner in this region for Machine Tool products and services for more than 35 years. CNC Design has experience working with our customers to develop customised solutions tailored to their applications with more than 2,000 projects completed in over thirty countries.

CLIENT FEEDBACK



TESTIMONIAL

We strongly recommend CNC Design for retrofitting & upgrading control systems for CNC machines. The dedicated & professional team has carried out the Titan's new control retrofitting project successfully in due date with outstanding quality. Their team demonstrated a high level of punctuality, professionalism, expertise, and commitment to high quality throughout the project. We were particularly impressed with their attention to details and capability to address all challenges efficiently. We have no hesitation in recommending them to other valued customers those are looking for a reliable and skilled partner for hi-tech projects.

JULIUS SALCEDO

Technical Officer
Berg Engineering Gladstone

MARK RASHIDI

Technical Coordinator
Berg Engineering Gladstone

THANK YOU

Our technicians are by your side all over the world



Upgrades &
Retrofitting



On-site
Support



Installation



Spare
Parts



Maintenance



Training



Remote
Customer
Care (RCC)



★ Head Office

◆ Partners

● Company Branches



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