

# TOYOTA DESIGN AUSTRALIA PROJECT



## CNC RETROFIT FOR TARUS 5-AXIS MILLING MACHINE

Retrofit the CNC control system to the latest SINUMERIK ONE CNC from Siemens

# The Customer



**TOYOTA**DESIGN  
AUSTRALIA

Since its founding in 1963, Toyota Australia has strived for excellence and continues to strengthen its position as the country's leading automotive company. Toyota Design Australia, the research & development team based at Toyota's Centre of Excellence in Melbourne, plays a crucial role in keeping the company at the forefront of technological advancements in the highly competitive automotive industry.





## The Challenge

In the modelling process of a new car, complex machines are involved. One of these machines, located at Toyota Design Australia, is a TARUS HM5L 5-Axis Milling Machine explicitly designed for this type of work.

After many years of doing great work, the control system of this machine became outdated and aligned with their constant goal to stay at the top of technology; Toyota Design Australia decided to upgrade this machine.



# The Retrofit



- Optimizing the dynamic of the retained linear and torque motors
- Making great use of the new functions for 5-axis high-speed milling available for SINUMERIK ONE, like TOP SURFACE and TOP SPEED PLUS.
- Optimizing the safe functions for the machine for a safer environment during part setup work using SINUMERIK Safety Integrated functions.
- Adapting the new SINUMERIK OPERATE Human Machine Interface and devices for this specific machine.

As a result, CNC Design was contracted to retrofit the CNC control system to the latest SINUMERIK ONE CNC from Siemens, the top CNC platform on the market for high-end machine tools. The new SINUMERIK ONE CNC is complemented with SINAMICS S120 drive system.





# 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 160 people located in our offices in Australia, New Zealand and SE Asia, we have been the exclusive Siemens distributor in this region for their Machine Tool Systems products and services for more than 40 years. CNC Design has experience working with our customers to develop solutions tailored to their applications with more than 3,000 projects completed in over thirty countries.



## Client Feedback



*“After seeing the strong performance gains from CNC Design’s retrofit of our Rambaudi H60L 5-axis machine, choosing them again for our Tarus HM5L retrofit was an easy decision. Alongside the functionality improvements delivered by the Siemens SINUMERIK ONE control and drives, CNC Design’s real advantage is their deep technical expertise, exceptional customer focus, and reliable service—making them a trusted partner in advancing Toyota Design Australia’s machining capability.”*

**Joe Starc**  
**Senior CNC Milling Coordinator**

**Product Design & Development**

**Toyota Motor Corporation  
Australia Ltd (TMCA)**



# THANK YOU

**CNCdesign**  
Motion Control Solutions

**Our technicians are by your side all over the world**



Upgrades &  
Retrofitting



On-site  
Support



Installation



Spare  
Parts



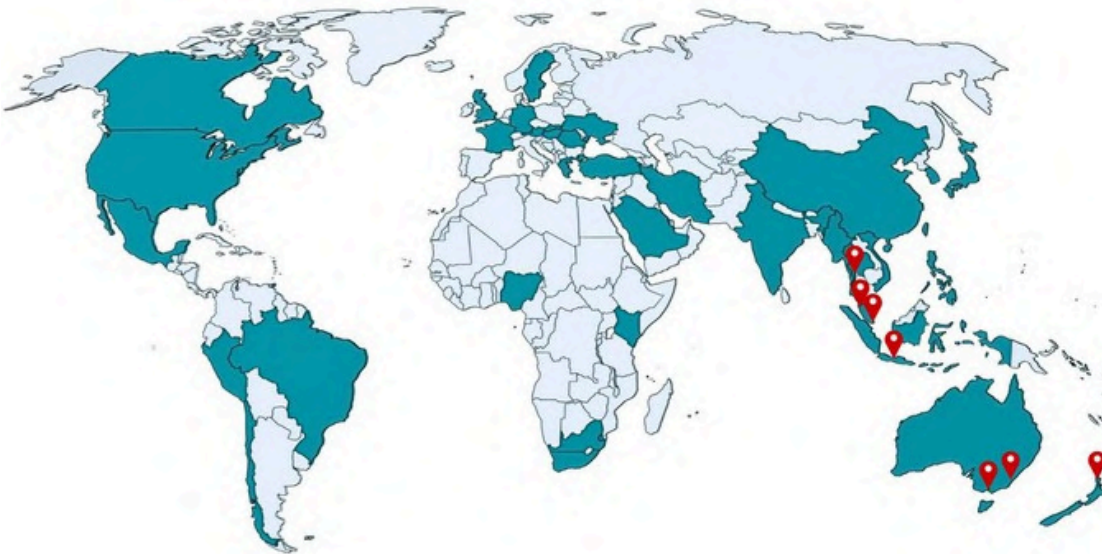
Maintenance



Training



Remote  
Customer  
Care (RCC)



CNC Design Pty. Ltd.  
Melbourne, Sydney, Australia  
Established 1984



CNC Design Ltd.  
Auckland, New Zealand,  
Established 1989



PT CNC Disain Nusantara  
Jakarta, Surabaya, Indonesia,  
Established 1996



CNC Design Co. Ltd.  
Bangkok, Thailand,  
Established 2000



CNC Design Sdn. Bhd.  
Kuala Lumpur, Johor Bahru, Malaysia,  
Established 2003



CNC Design Pte. Ltd.  
Singapore,  
Established 2009



**CNC Design**

[www.cncdesign.com](http://www.cncdesign.com)