

WHEN it comes to innovation **kanDO**



The kanDO team and premises in Auckland

New Zealand businesses don't need to look offshore for prototyping and automated solutions, with world-class skills and services on offer at Auckland company kanDO Innovation.

Company overview

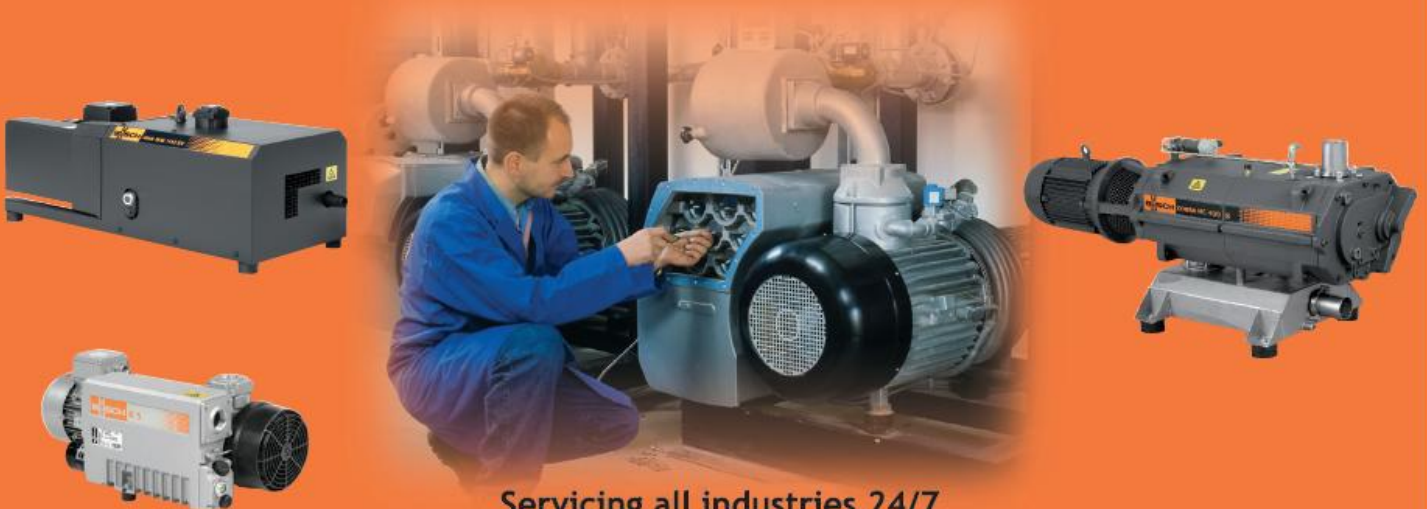
kanDO Innovation was formed two years ago by directors Keith Blenkinsopp and Niven Brown, who previously worked for Industrial Research, together with two other kanDO staff members.

The group left Industrial Research to form kanDO, employing three additional highly skilled people. "We were all involved in automation at Industrial Research. We saw an opportunity to have a go at commercialising some of the ideas we had been working on," Niven says.

In two years Niven and Keith have built the company into a leading automation and prototyping specialist. Its seven engineers have combined experience in mechanical, electrical and software engineering, working together to create innovative products and solutions.

kanDO's collective knowledge and expertise covers a broad range of engineering disciplines, applications and industries.

Leader in vacuum technology



Servicing all industries 24/7
vacuum pumps and systems

Proud to support kanDO Innovation Ltd



Auckland - Christchurch
Phone: 0800 153 270
www.busch.co.nz

Headquarter NZ:
Busch New Zealand Ltd,
Unit D, 41 Arrenway Drive
Albany, Auckland 1311
sales@busch.co.nz

Unit B 12 Settlers Crescent
Ferrymead, Christchurch
PH: 03 3766 212
Fax: 03 3766 213
sales@busch.co.nz

canDO it all!

The company provides a complete service, from initial concept design and prototyping work, through to manufacturing, installing and commissioning automation systems.

kanDO specialises in:

- ▷ Early-stage prototyping development
- ▷ Process automation and integration
- ▷ SolidWorks modelling and design
- ▷ Engineering design and consultancy services
- ▷ Project planning and management.

World-class innovations

Niven Brown and Keith Blenkinsopp believe kanDO has a lot to offer New Zealand businesses, which often do not recognise the degree of talent within their own country.

"We're doing some work for an Australasian company, which has grown into developing a prototype machine for a process they are doing," Niven says. "From that we have built the first of a number of machines. Once people understand our capabilities they realise we're not just a design office. We really do go from the innovative ideas through to the working solution that can add value to your business. That's what automation is about — it's a value-add. It keeps New Zealand internationally competitive."

kanDO Innovation has worked with customers in a wide range of industries, including the food industry and manufacturing sector. Food industry work has covered seafood processing systems, robotic systems for automated meat processing and automated process development.

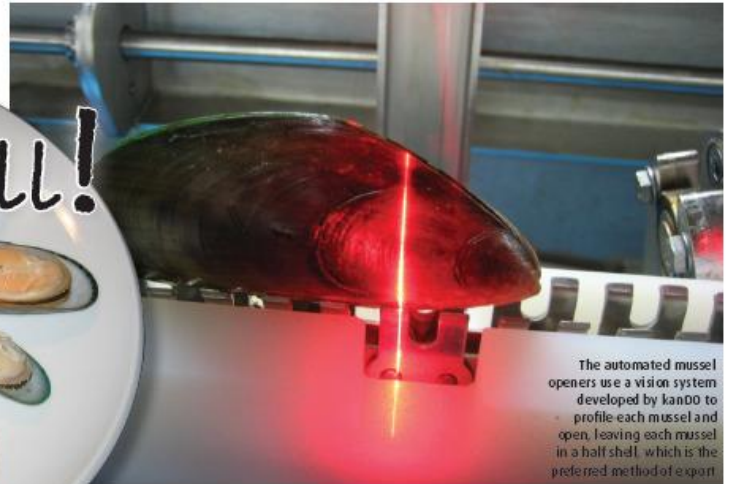
kanDO specialises in designing complex automation systems, machines and assemblies. It utilises SolidWorks to quickly develop

virtual 3D models for the ultimate design and visualisation tool. The company's software engineering and design capabilities mean staff can develop anything from a stand-alone software application and embedded control to an integrated test and measurement system.

kanDO's staff have years of experience in automation and robotics and deliver creative and intelligent automation solutions for various industries as an expert in sensing techniques and control system design and implementation.

As well as general automation expertise, kanDO is also an expert user of KUKA and ABB industrial robots, including robotic programming, process development and end-effector tool design. In addition, kanDO offers service and support arrangements, for example with printing company Adhesifs, which has a laser cutting system designed by kanDO members when they worked for Industrial Research.

"We don't just build machinery — we support it as well," Niven says.



The automated mussel openers use a vision system developed by kanDO to profile each mussel and open, leaving each mussel in a half shell, which is the preferred method of export.

kanDO Innovation has developed a unique automated mussel opening machine that could revolutionise New Zealand's mussel industry.

Leading mussel technology

The mussel opening machine, designed and built by kanDO for Sanford Limited, was the motivation for the formation of kanDO Innovation. A prototype machine was developed in conjunction with Sanford and a grant from Seafood Innovations Limited. The company then built a pilot line for Sanford consisting of five mussel processing machines.

Directors Niven Brown and Keith Blenkinsopp say the machines can process one tonne of mussels per hour and leave the mussel in a half shell, which is the preferred method of export.

"We set some really demanding standards in terms of our success rate with the mussel opening machine and we worked long and hard to achieve that," Niven says. "We invested in the technology ourselves. Following demonstration of the technology working within

that environment we have since secured a contract to supply automated mussel openers to North Island Mussel Processors Limited (NIMPL), which is a joint venture between three mussel processing companies. That will be the first fully automated mussel opening plant in the world."

The significant plant expansion at Tauranga-based NIMPL will more than double the plant capacity, while the automated mussel technology will be used to improve productivity and reduce the cost of processing and increase the return to shareholders.

Niven says new design innovations were included in the NIMPL machines, which will be more robust and efficient. Commissioning on the new machines will start in December.

Unique processing technology

Niven says the mussel machine is unique technology. "This is the first commercially successful automated mussel opening machine. The major export market is the mussel in a half shell. The machine takes a cooked mussel and removes one of the shells. In order to do that you need to use a computer image system to view every mussel that goes through."

Feature continues on next page >>

A.S.I.

Automation Ltd

<ul style="list-style-type: none"> Cable Accessories Cable Assemblies Cable Glands Cables Computer Cables Computer Stuff Connectors Electrical Power Enclosures 	<ul style="list-style-type: none"> Fieldbus Interface Marking Power Supplies Relays Sensors Terminals Dinrail Terminals PCB Tools
---	--

ASI Automation Ltd are pleased to be associated with kanDO Innovation Ltd

ASI Automation Ltd
Unit E, 241 Rosedale Road, Albany, Auckland
Phone: 09-4444 977 Fax: 09-4444 936
www.asi.net.nz

W-EP GEARMOTOR - designed for the Marine Industry

CORROSION PROTECTION AND RUST FREE STAINLESS STEEL

Classified "C5" under ISO9223 for corrosion resistance

Ph: 0800 432 777 or visit: www.bonfiglioli.co.nz

BONFIGLIOLI

TRANSMISSION NEW ZEALAND

MORE TORQUE
MORE ACTION

- Automation and Control
- Prototype Development
- Mechanical Design
- Software Engineering
- Turnkey Solutions

Unit 3, 20 Hannigan Drive,
St Johns, Auckland 1072
PO Box 18387, Glen Innes, Auckland 1743
Phone: 0800 KANDO 4U (526364)
Website: www.kandoinnovation.com
Email: we.kan@kandoinnovation.com

"New Zealand annual production is around 100,000 greenweight tonnes with more farming potential recently approved."

Last year mussels were the biggest seafood export for New Zealand, with \$204 million exported.

"Ninety five percent of mussel production is exported all over the world and primarily in the half shell. We are working with Sanford to improve the international competitiveness of the New Zealand mussel industry."

Sanford Ltd, the owners of the Intellectual Property, have international patents pending on the machine's technology.

"There's a lot of mussel production already and it's all done by hand. It's pretty demanding work and seafood companies have a lot of problems with staff turnover."

Keith believes this automation will improve the New Zealand mussel industry's international competitiveness in processing shellfish.

A big feature of the kanDO machine is that it is self cleaning and can withstand operation within the tough processing environment. "It will effectively become the industry standard because the cost benefit of it is significant," Niven says.

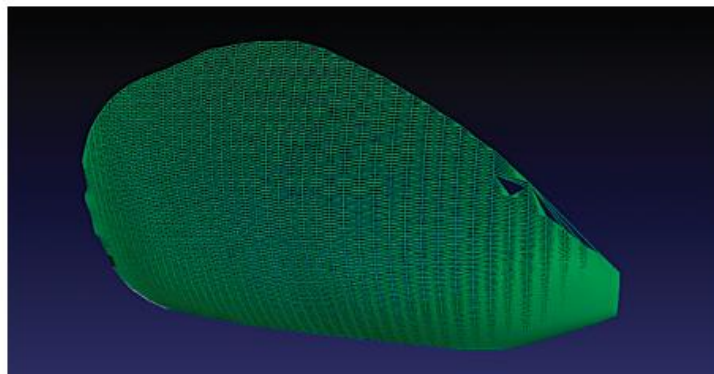
"It's a very sophisticated intelligent technology. It taps into all our skills in engineering, design and manufacture. We have developed information on user interfaces. We can remotely monitor the progress of the machine, which is important for maintenance. All of these skills are in-house."

Keith says it would be typical of a large company like Sanford to buy its specialised seafood processing machinery offshore.

"The skills are here in New Zealand. We have taken this research project and commercialised it and have used local manufacturers."



An automated mussel opener (above), and the technology that makes the operation possible (below), a scan picking up the physical orientation of a mussel as it is processed



The production line at Sanford Havelock, with five automated mussel openers

Even small New Zealand companies can benefit from the automation skills of kanDO Innovation.

Automation opportunities

The Auckland-based company's automated mussel opening machine, which was developed in conjunction with Sanford Limited, is not just technology suitable for large corporates.

Director Keith Blenkinsopp says by delivering smart automation to small businesses, kanDO helps them become internationally competitive and open to new growth opportunities.

kanDO success

The intellectual nature of kanDO's work means there are no international barriers with customers. "We're just in discussion with two overseas clients at the moment," Niven says.

"The work we do is very free of barriers in that respect. A lot of what we do is thinking, solving the problem and then doing it. It doesn't really matter where we are."

He believes kanDO's success is due to a combination of its skills and the quality of its employees. "There's a really good synergy between the people in the business. Keith and myself are from very different backgrounds, but we have very shared visions. I have an academic background and Keith has a very applied background. It works very well. There's a real powerful synergy between having a problem and creating ideas to solve those problems," Niven says.

"All the people in kanDO bring their individual talents to the fore. We're a fairly small group and are fairly adaptable and can really lend our talents to solving anything."

Keith says people within the business who have expert knowledge are comfortable focusing on their own area of expertise while knowing other members of the team are doing their job.

"There's no one who is having to write the software and fix the machine at the same time — it's a real team environment."

They both agree kanDO Innovation is at an exciting stage of development.

"We're in a position now where the things that we set up kanDO to achieve, have been achieved. Now it's a case of bedding that success in and building from it," Niven says.

"In spite of the current economic climate, if there are good ideas and solutions to tricky problems, people are ready to invest in them."

"It is available in New Zealand. The skills are here and we can do it ourselves," he says.

"Another industry we're looking at is grape harvesting and processing. We've seen great expansion within New Zealand.

"To be competitive, operators need to be innovative and smarter. We're sure we will start to see automation coming in there. New Zealanders should start to back themselves. You don't have to be in a big business to solve an automation problem and create the next opportunity."

Niven says projects often grow once customers see what kanDO can offer. Introducing an automation system can highlight other quality or efficiency issues, which can then be addressed and improved.

kanDO Innovation Limited
PO Box 18387
Glen Innes, Auckland 1743
T 0800 kanDO4U (526364)
F (09) 527 1671
www.kandoinnovation.com

Allround Engineering Limited
Ernest Park, Te Kowhai Road
P.O.Box 20022, Te Rapa, Hamilton,
Phone: 07 849 1334
Fax: 07 849 1342
Email: ed@allround.co.nz
Allround Engineering Ltd are pleased to be associated with kanDO Innovation Ltd

AXIAM
concept >>> component metals >>> plastics

Axiam Diecasting Axiam Engineering Axiam Plastics

The Axiam Group of manufacturing companies are proud to be associated with kanDO Innovation Ltd.

For further info call Grant McKinlay **0800 285 226** email: g.mckinlay@axiam.co.nz

SKF **Products, Service & Solutions**

- Bearings
- Seals
- Lubrication
- Maintenance Tools
- Mechatronics
- Power Transmission
- Industrial Adhesives
- Service

SKF is proud to be a partner to kanDO Innovation Ltd for their Bearings & Power Transmission needs

www.skf.co.nz

SAWDEN & ASSOCIATES LTD
CHARTERED ACCOUNTANTS

- All Accounting Services
- Taxation
- Monthly Management Accounts
- MYOB Set-up & Support
- New Business Appraisals
- Trusts & Asset Protection

Pleased to support and to be associated with kanDO Innovation Ltd

Fencil House, 2 Kings Road, PO Box 14 380, Panmure, Auckland
Phone 09 570 2011 Fax 09 527 6272 Email tax@sawden.co.nz
www.sawden.co.nz