

Excellence in 3D Measurement

Precision Metrology Products &
3D Measurement Services Since 1997



To measure something is to understand it.

3D Scanning | Reverse Engineering | Inspection | Design | Simulation | 3D printing | Gap & Flush



Your partner in
innovation



Scan-Xpress - industry leaders for a reason

24 years in the business, hundreds of successful product installations, and thousands of satisfied service customers.

Benefits of 3D measurement technology

3D Measurement plays a significant role for a variety of manufacturing processes. Decisions across multiple sectors, regarding product innovation, design, tooling, production and quality control are made a lot easier and quicker.

Whether you wish to reinvigorate existing products, refine production processes, introduce innovation or simply improve product quality, our diverse range of measurement services and product solutions can assist you to make these objectives *far more* efficient, *a lot more* achievable and *significantly* less costly.

Scan-Xpress your partner in:

- ✓ **Risk Mitigation:** Early detection of product attributes
- ✓ **Efficiency:** Fewer build iterations, faster time-to-market
- ✓ **Value Engineering:** Enhanced design, tooling, machining and quality control
- ✓ **Cost Savings:** Production costs controlled and kept low
- ✓ **Quality:** Better information leads to more informed decisions.

Servicing clients with a passion:

- Accurate Non-Contact 3D Measurement
- Rapid Turnaround Reverse Engineering
- Thorough Inspection of Complex Parts
- 3D CAD Design, Drafting & Engineering Services
- FEA & CFD Simulation
- 3D Printing - plastics, metal, clay

Suppliers of leading 3D technologies:

- 3D Precision scanners
- 3D deformation/material testing
- 3D Inspection software
- 3D printers FDM, SLA, SLS
- 2D Gap & Flush Profilers
- 3D Disappearing Scanning Spray

Get the project moving quickly!

With its headquarters in Melbourne, service bureaus in NSW and QLD, Scan-Xpress also offers a completely mobile measurement service.

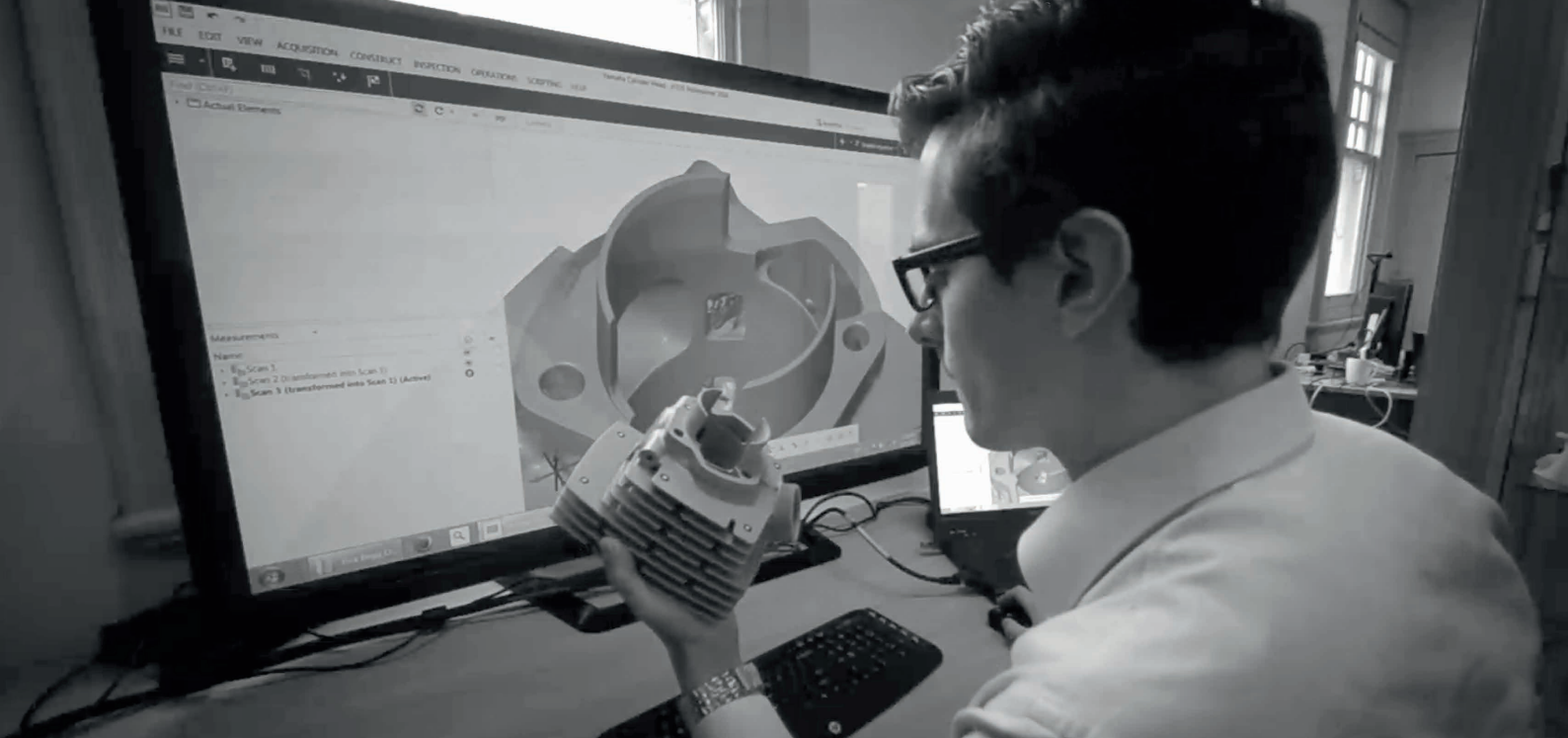
Everything from small plastic injection moulded parts such as bionic hearing implants, to large boats, aircraft and trains can be captured at your location or ours in a timely and cost-effective manner.

Our technology is certified by:



Proud distributors of:





3D Measurement & Engineering Services

“When it comes to 3D Measurement no project is too small, too large or too complex.
We will accept any challenge and passionately get straight to work!”



Turnaround times

Consultation services and turnaround times range typically as follows:

- **Small jobs:** 2-3 days
- **Medium jobs:** 5-7 days
- **Large scale jobs:** 10-20 days

Our team is dedicated to delivering projects effectively and on time.

[Contact us to find out more >](#)

A quick look at the services we offer:

Accurate Non-Contact 3D Measurement

- Onsite 3D measurement Services anywhere in Australia, New Zealand or the APAC region
- Offsite 3D measurement services in VIC, NSW and QLD
- Optical and Touch Probe Inspection
- Terrestrial 3D laser mapping services

Rapid Turnaround Reverse Engineering

- Reverse Engineering Free Form / Solid Modelling (deliverables in native & industry standard formats)

Thorough Inspection of Complex Parts

- Inspection of physical parts to 3D CAD and 2D Drawings

3D CAD Design, Drafting & Engineering Services

- Manufacturing drawings
- Product and Tooling Design

FEA & CFD Simulation

- FEA and CFD analysis

3D Printing - plastics, metal, clay

- Additive Manufacturing SLS/DMP/DLP
- Rapid Prototyping including SLA, FDM

Accurate Non-Contact 3D Measurement

Scan-Xpress has a wide range of technologies, readily available to meet the unique needs of different industries.

- ✓ **Precision Engineering:** (eg Aerospace) can have their parts described with the greatest of accuracies and in minute detail by Structured Light Systems.
- ✓ **Metal Fabrication:** (Casting and Forging), enjoy the freedom of mobility and the variety of surface finishes afforded by handheld laser systems.
- ✓ **Largescale industrial manufacturing:** Photogrammetry is very useful. It constrains tight measurement tolerances, helping to maintain global accuracy even when measuring objects as large as 20 to 30 meters. When combined with with Structured Light, localized features can sharply be described while measuring large assemblies.
- ✓ **Power Generation:** The fine profiles of the leading and trailing edges on Aerofoil Blades are easily captured, ideal for refurbishing equipment.
- ✓ **Manufacturing clients:** Benefit from highly accurate 2D profile descriptions produced by extremely portable Gap and Flush technologies. When faced with upgrading and installing new equipment, Plant Managers gain a better understanding of their space constraints with the use of our terrestrial laser mapping services.

Quality data of an accurate, reliable and repeatable nature is critical for our customers. Crucial engineering decisions are frequently based on the results we are trusted to provide. The information simply needs to be right!



Rapid Turnaround Reverse Engineering

3D Scanning alone doesn't produce CAD data.

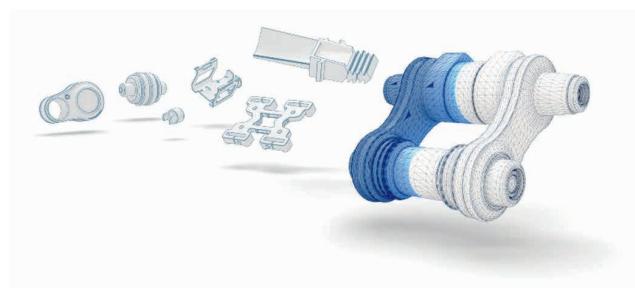
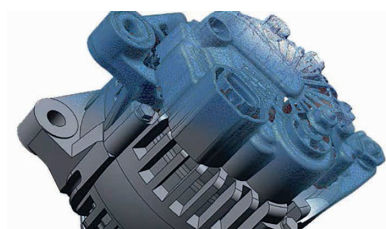
When CAD is the requirement Scan-Xpress offers a Reverse Engineering service. The process involves a skilled engineer importing the scan data into one of our CAD software packages and rebuilding the geometry. The data can be delivered in industry standard file formats such as IGES, STEP and PARASOLID.

For our customers using SOLIDWORKS, CREO or NX, even native CAD files are possible. Native files have the benefit of including the complete construction history of the 3D models. This enables easy modification and editing by our clients downstream.

Common applications of Reverse Engineering

- ✓ A part or tool has little or no information describing its constraints, or the information is no longer current.
- ✓ Changes need to be made to an existing design of an extremely complex freeform shape.
- ✓ A new part needs to be produced to mate with an existing one.

Scan-Xpress turnarounds can be as quick as 72 hours.



SERVICES

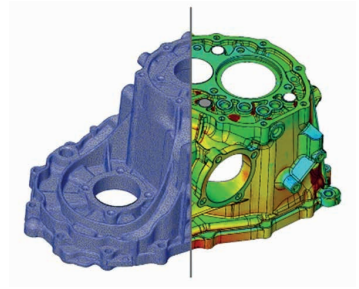
Thorough Inspection of Complex Parts

Our Inspection services offer great value to all our clients. Even those who already have their own inspection capabilities, often face challenges that result in them turning to Scan-Xpress. Customers with Contact Measuring Machines (CMM's), as well as non-contact lasers often realize, that their own technology is not ideally suited. In these cases, customers turn to our Inspections services for a number of reasons:

- 1. Complexity of Geometry:** The challenging geometry of some components makes CMM measurement too time consuming to capture and to program.
- 2. Free Form Features:** The organic nature of the geometry simply makes it impossible for traditional tactile methods.
- 3. Other 3d Scanning Equipment Limitations:** Our clients that own In-house non-contact measurement devices often come across parts, tools and components that present too great a challenge for those technologies.

Tolerances might be too tight, the features too small or too large, or perhaps line of sight restrictions exist, meaning critical features can't be seen or captured.

Scan-Xpress's measurement technologies including optical probes ensure even the most difficult of measurement tasks can be met.



VALUE ADDED SERVICES

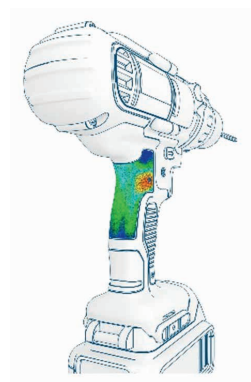
3D CAD Design, Drafting and Engineering Services

Scan-Xpress provides a variety of quality engineering services to meet the requirements of our customers. We have experience in special purpose machine design, product design and process improvement in a range of different industries and production processes. For customers this means a 'one stop shop'.

Our experience in these areas has been applied to a large range of different industries and production processes across the country. From Consumer products Medical, Automotive, Manufacturing and Maritime to name a few.

Our customers benefit from a balanced combination of experience, creativity and technical skill. These characteristics, along with personable, friendly and professional engagement mean our clients continue to trust in us and further benefit from an extended range of services from concept through to design, fabrication, installation and commissioning.

We look forward to assisting you with your design and supporting the project through to its completion. Tailoring quality engineering solutions is our passion.



FEA & CFD Simulation

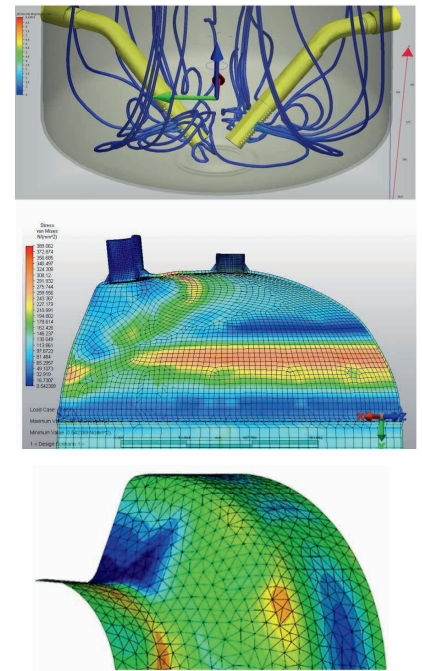
Finite element analysis (FEA) and Computational Fluid Dynamics (CFD) have been added to the fray. With over 10 years' experience designing products and validating them in FEA and CFD we continue to offer professional services from an experienced base with a personal touch.

What is FEA?

FEA is a computerized method for predicting how a product reacts to real-world forces such as *vibration*, *heat*, *fluid flow*, and other physical effects. By offering this service, our customers can be sure they will understand whether their product will break, wear out, or work the way its design intended.

Complementing FEA is our service offering

Scan-Xpress can analyze complex problems, involving fluid-fluid, fluid-solid or fluid-gas interaction. Manufacturing clients who have an interest in their products' aerodynamics or hydrodynamics, can now quantify properties such as *lift and drag* as well as *pressures and velocities*.



3D Printing - plastics, metal, clay

Today, you have the capability to turn digital ideas, designs and models into functional prototypes or even end-use components. FDM, SLA, SLS, DLP, and DMP 3D Printing technologies can create physical parts and prototypes quickly and accurately out of a range of materials.

Additive manufacturing

Additive manufacturing is a fantastic method for short-run manufacturing, allowing products to be produced in innovative and unconstrained ways. Additive manufacturing has arrived and is here to disrupt the way products are designed. Innovation can reach the market faster, with far less outlay and often superior quality. Our high-end capabilities are achieved using ceramics, plastics, polymers and metals.

Design to part in one day!

Some of our plastics feature tremendous strength enabling products to be created without the need for tools. Parts comparable to Plastic Injection Moulding with one massive advantage, Design to Part in one day.



Flexible inspections, fast delivery

You can convert almost any object into a digital 3D model in one day. Objects ranging in size and complexity can be measured quickly and with high precision. Scan-Xpress are completely flexible in servicing clients at their site with fully portable scanning equipment or in one of our Melbourne, Sydney or Brisbane locations.



Partners & Solutions

Scan-Xpress offers metrology solutions tailored to your business and production needs. Our team of experts will help you select the best solution for your budget from our state-of-the-art partner product line.



GOM specializes in industrial 3D coordinate measuring technology, 3D computed tomography and 3D testing. Synonymous with quality, GOM is the international standard in optical 3D metrology.



ZEISS develops, produces, and distributes highly innovative solutions for industrial metrology and quality assurance using contact, optical and X-Ray technology.



WASP an Italian company designing and producing multiaxial 3D printers providing fast and highly precise printing solutions in a variety of materials that meet small to large business needs.



is a specialized manufacturer of non-contact, optical profile measurement systems for gap and flush, radius, edge breaks, seals and more.



AESUB produces of state-of-the-art scanning spray technology facilitating optical 3D scanning and improving precision.



3D Measurement & Printing Technologies

Proud reseller of premium measurement technology solutions.
Distributing over 200 scanning & printing products to Australia & New Zealand.

High Precision 3D Metrology

Fully automated, semi-automated and manual



ATOS 5

Complex parts captured
with great accuracy



ATOS Capsule

Small Object Precision Measuring



ATOS 5X with Photogrammetry

High-speed 3D scanning

PRODUCTS

3D Scanning Solutions

Large & small scale



ATOS CORE

Scanning made simple



ATOS COMPACT SCAN

Mobile 3D scanning system



ATOS Q

Versatile quality inspection



GOM SCAN 1

Powerful & mobile system

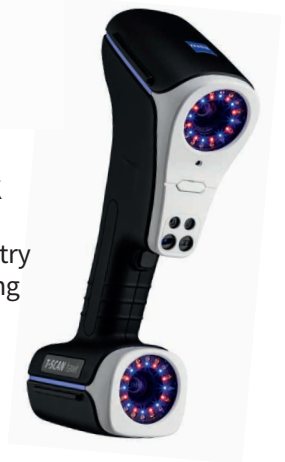
Portable Scanners

Handheld, fast, reliable



T-SCAN

Data capture without part preparation



T-SCAN HAWK

Combining photogrammetry & laser scanning

Dynamic Deformation & Material Testing Solutions



ARGUS

Optical Forming Analysis



ARAMIS

Adjustable Dynamic Motion Testing



ARAMIS

Industrial optical 3D digitizer



ARAMIS SRX

Speed & Resolution for 3D Testing

Automated 3D Measurement Solutions

High-end Precision Sensors



SERIES 4 SCANBOX

Small complex parts up to 500mm



SERIES 5 SCANBOX

Automated inspection up to 2m

MOTORIZATION STANDS

Small objects captured with speed



COBOT

Portable Automation for shop floor



AUTOMATED TURNTABLE

Ease of use
3D scanning



Additional Products

GAP & FLUSH GUNS

Revolutionary step in laser measurement



AESUB

SCANNING SPRAY

Vanishing & permanent solutions

PRODUCTS

3D Printers

Fast prototyping solutions in a variety of materials



WASP 40100 CLAY
Print in clay



WASP 2040
Small scale



WASP 4070
Medium scale



WASP 3MT
Large scale

Contact Measuring Machine

ZEISS state of the art CMM technology

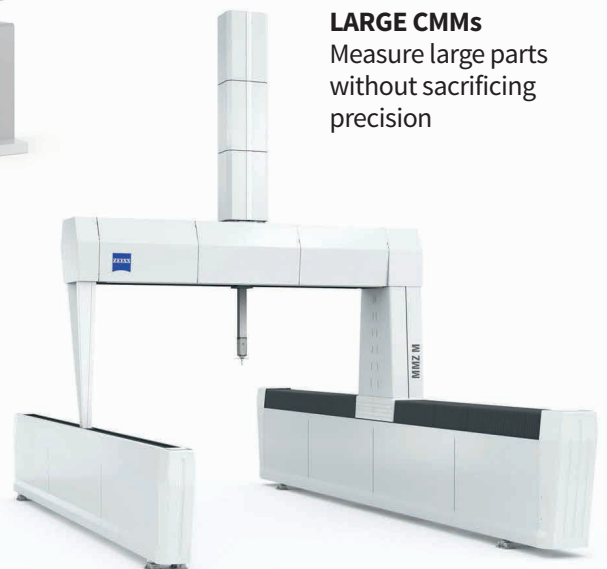


BRIDGE CMM
Precise probe-based system



HORIZONTAL ARM CMMs
Automated inspection systems

SHOP FLOOR CMMs
Adaptable
stand-alone system



LARGE CMMs
Measure large parts
without sacrificing
precision

ZEISS X-Ray Systems

Make the invisible, visible



ZEISS METROTOM
High-Precision Metrology
and Inspection



ZEISS VOLUMAX
Fast and Automated
Inspection & Metrology



ZEISS XRADIA
High-Resolution
Analysis and Inspection



ZEISS BOSELLO
Fast and Automated
2D Inspection

ZEISS Vision Measurement Machines

Simple and Reliable Optical Measurements

ZEISS O-DETECT
Entering the world
of Optical Metrology



ZEISS O-INSPECT
Multi-sensor system
combining Tactile and
Optical Metrology

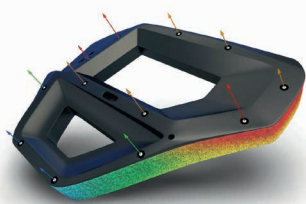


Software Packages

Inspect, analyse and automate



GOM INSPECT
Parametric Inspection



GOM CORRELATE
Digital Image Correlation



GEOMAGIC DESIGN X
Reverse Engineering



ZEISS REVERSE ENGINEERING
RE & tool correction

The Scan-Xpress difference

Experience Matters - Established in 1997

Client extract



Scan-Xpress's dedicated team consists of more than 40 years' combined metrology experience. This means, our customers simply don't need to worry whether the job is getting done right the first time. Our deep knowledge ensures it! It's what we pride ourselves on.

Our products and services are delivered by qualified engineers and metrology experts with decades of experience as well as helpful & friendly attitudes. We are a small business that our customers trust, feeling safe in the knowledge that we not only understand the technologies we use, but have extensive experience across a broad range of manufacturing industries and processes. Our expanding bureau service, now with representation in three states, is seeing a growing list of customers benefit from the fact, we remain everyday users of our tools.

"A professional & personable approach you can trust"

Michael Bouchier - Managing Director AMIGA Engineering

Whether you're an individual, investigating 3D measurement for the first time, or a large business, looking to supplement existing capabilities, we're here to support your measurement needs. Here at Scan-Xpress we put our core beliefs into practice. We believe communication is everything!

We listen intently to our customers so that we can better tailor the appropriate solution for the project at hand. We take the time to enhance our customers' understanding of the technologies and services on offer, so that they may better be informed. It's imperative for us, to deliver what matters to you. Quality work in a timely manner!

"We pride ourselves on a responsive and proven service from an experienced and friendly team"

Kevin Warwick - Director

Helping businesses and innovators (of any size) think ‘outside the square’.

Here are some diverse ways our clients have successfully leveraged our services:

Improving Product Quality - Quality Control

Production can regularly face unforeseen problems. This is especially true when products made up of complex assemblies and numerous parts rely on multiple supply sources and manufacturing processes. Scan-Xpress produces high quality information delivered in a timely and efficient manner to key decision makers at multiple stages of the production process. The data is easy to interoperate, quick to generate, accurate and reliable. This assists companies to better understand the nature of parts forming the basis for improvement in product quality.



Creating (PMI) Product Manufacturing Information

Think about all the components that were developed and manufactured decades ago when only 2D drawings existed ... no 3D CAD nor digital data. It was often the case, that after those drawings were created, they remained untouched. Any modifications were rarely reflected in the drawings. These days, it's not uncommon, that such drawings can't be located. When faced with the need to resurrect, refine or innovate these products, the absence of up-to-date information presents a significant problem. Scan-Xpress 3D measurement helps create relevant data where none exists. Legacy parts can be updated, obsolete drawings can be replaced, product characteristics can be redefined.



Reproducing (OEM) Manufacturing Data

As Original Equipment Manufacturers modernize, rationalize and streamline their operations, it's often the case that the components they produce become increasingly difficult to obtain or cease to exist completely. When such parts are integral to the operations of other businesses, the absence or shortage of them can cause critical problems. Scan-Xpress provides a proven solution that helps companies develop their own manufacturing data and mitigate the risks to production schedules, delivery commitments and customer orders. We can quickly and accurately capture parts and components for our customers.



Optimizing Product Design - Competitor Analysis

A breakthrough for many of our customers, is the ability to analyze the products of their industry competitors, gaining insight into their design methods and rationale. Years of development time can be saved and the cost of reinventing that which already exists can be avoided. Scan-Xpress can quickly identify the attributes of competitors' products for integration into new designs. Scarce resources are allocated more efficiently so our customers' focus is re-directed towards innovation. The result is our clients gain a deeper understanding of their products design, processes are refined, and better products reach the market.





Providing Excellence in 3D Measurement for more than 24 years

Successfully supporting thousands of companies across Australia

Australian industry has benefitted from the experience, reliability and quality of product and service offered by Scan-Xpress for over 20 years.

We are proud to have helped enhance our customers own reputation, ensuring they consistently produce quality products and dependable services.

Here at Scan-Xpress we look forward to assisting thousands more companies over the coming years in industries such as:

- | | | |
|--------------|-------------|------------------|
| ✓ Automotive | ✓ Medical | ✓ Power Gen. |
| ✓ Aerospace | ✓ Mining | ✓ Manufacturing |
| ✓ Defense | ✓ Maritime | ✓ Civil Eng. |
| ✓ Arts | ✓ Packaging | ✓ Transportation |

Client feedback



“Scan-Xpress went above and beyond to deliver an exceptional level of Sales & Service Support”

Anna Paradowska

ANSTO Industry
Engagement Manager Australian
Centre for Neutron Scattering

Proudly Distributing:



CERTIFIED Partner of:



Contact us to discuss your needs and get a quote today!

Call: 1300 3D SCAN (1300 337 226) **Email:** info@scan-xpress.com.au

MELBOURNE • SYDNEY • BRISBANE



www.scan-xpress.com.au