XCIRCLE

ENGINEERED TO ORDER

Capability Statement

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XCircle Pty Ltd produces tailored ICT and infrastructure solutions for some of the world's largest international Data Centre and Infrastructure companies.

WELCOME

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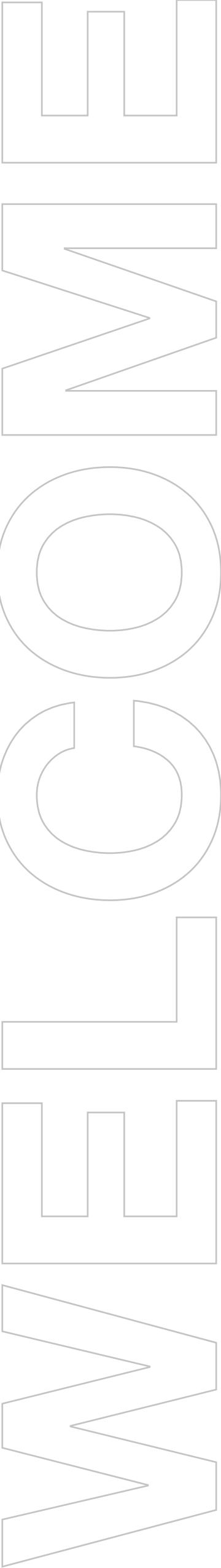
Our in-house automated manufacturing, electrical and mechanical capabilities complement our turnkey data centre and diverse modular, rapid deployment solutions.

Who we are

XCircle Pty Ltd produces tailored ICT and infrastructure solutions for some of the world's largest international Data Centre and Infrastructure companies.

XCircle provides **complete integrated** solutions including prefabricated modules, electrical distribution, cooling and IT space. Our in-house automated manufacturing, electrical and mechanical capabilities complement our **turnkey** data centre and diverse modular, rapid deployment solutions.

Key team members

Hein Vorster
Chief Executive Officer

30-year veteran in ICT solution manufacturing.

Provided solutions for a range of industries from Telcos to the defence force industries, and boasting a client list which includes Microsoft, Teraco, HP, Vodacom, RAF, Multiplex, Helios and many others, Hein boasts unrivalled experience and delivery history.

Justin Kellerman
Chief Operating Officer

Accomplished executive, currently serving as the Chief Operating Officer (COO) at XCircle.

With a strong background in data center design and project management, Justin has consistently demonstrated his expertise in driving operational excellence and delivering successful projects across Australia and Asia Pacific.
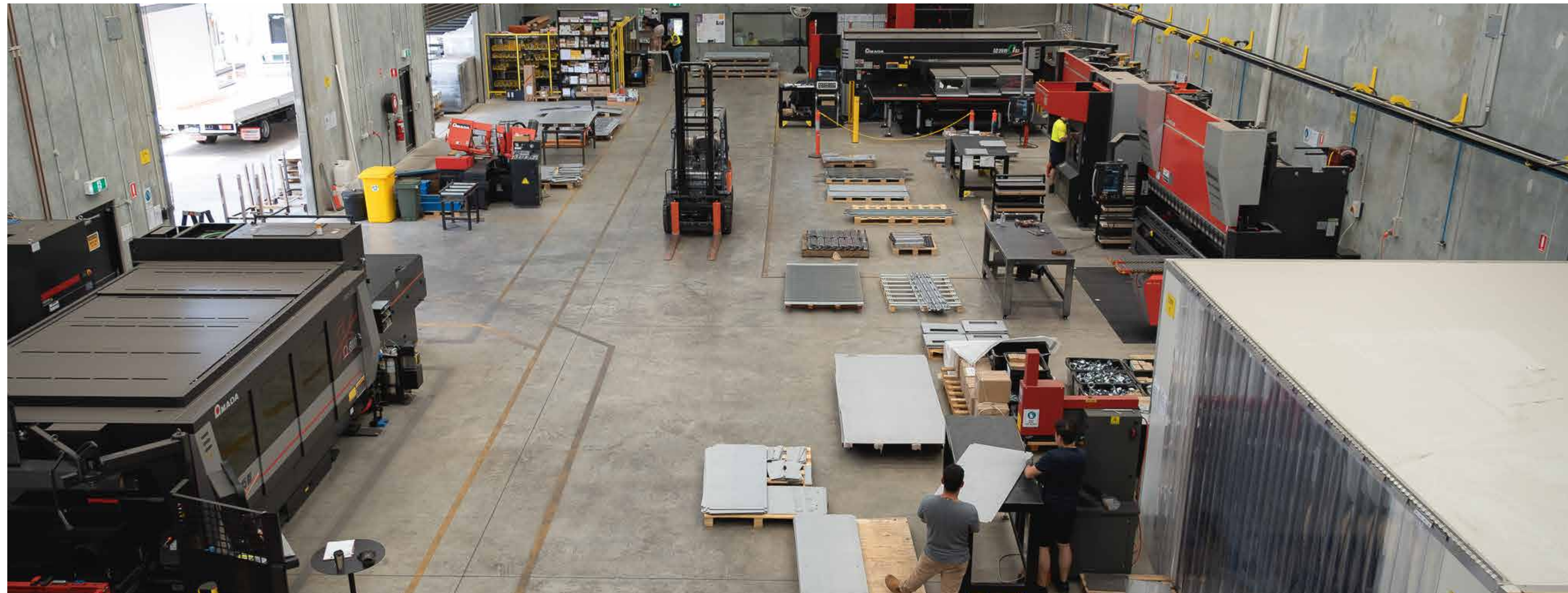
Lex van Wyk
Director

Founder of Teraco DC, the largest Data Centre company in Africa, which counts Berkshire LLC and Digital Realty as shareholders.

Our
Facilities

Custom built production facilities in Perth, WA.

Geared for the manufacture of modular ICT units and all related equipment and componentry

Manufacturing Equipment

State of the art Amada equipment backbone:
- LC 2515 fibre laser/punch combination
- Ensis 3015 rotary pipe fibre laser
- HG 1003 ATC and HRB 2204 press brake

Other key items:
- 2 x 10t overhead cranes (20t total capacity)
- Gluestream rubber mould machine
- Powder coating pre-cleaning tanks, spray booth and oven
- Fanuc Robot Arc Mate 120iD robot welding system
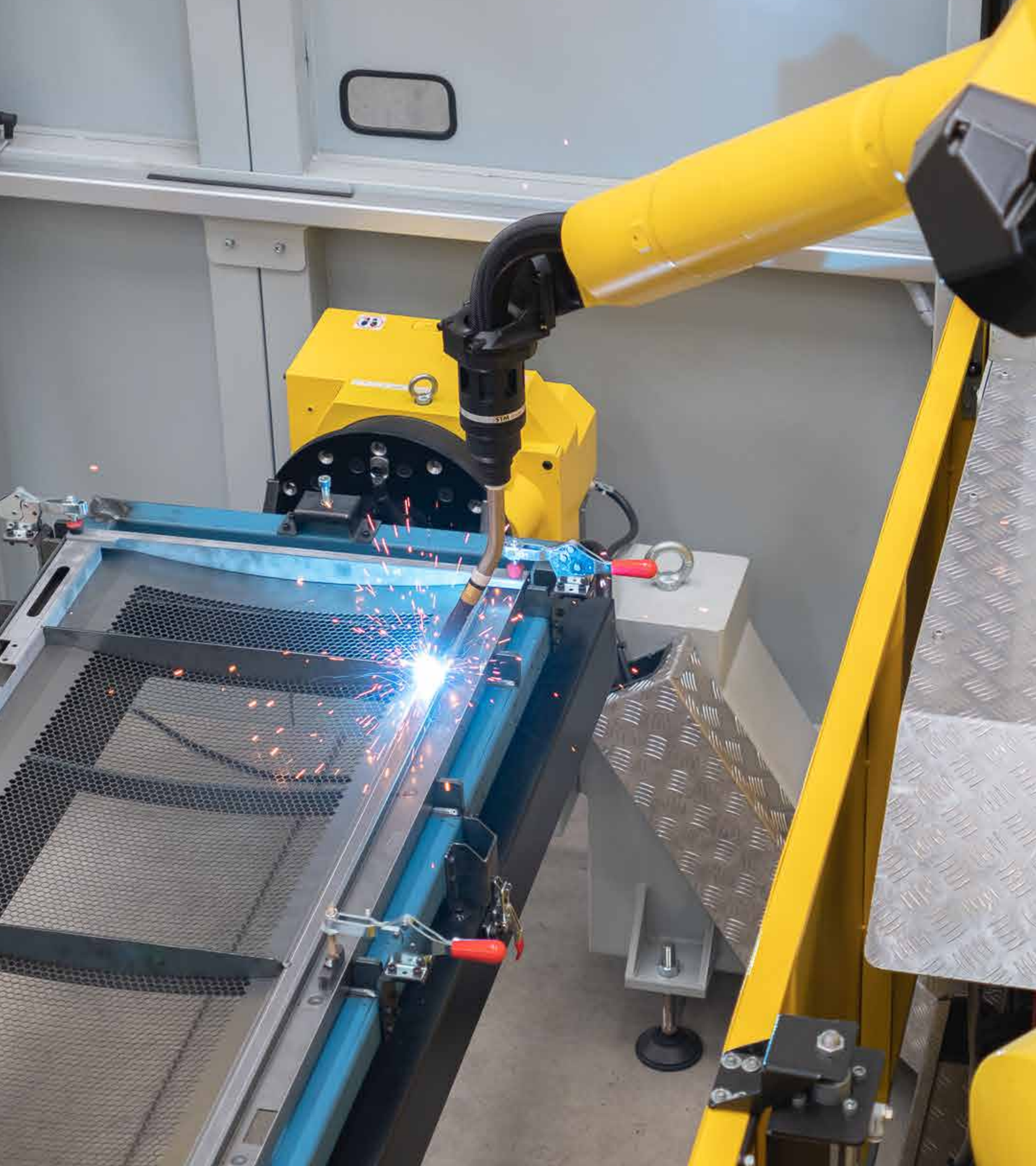
Recent
Projects

CFNR
Perth Project

Australian Government
Department of Finance

MULTIPLEX

CFNR
Perth Project

XCircle was contracted to design, engineer and manufacture ten (10) turn-key communications modules housing critical power and IT equipment to support the modular accommodation blocks for the Western Australian government's Centre for National Resilience (CFNR) project in Bullsbrook.

- All design, engineering, manufacturing and fit out and completed in our factory in Wangara
- Full service fit out included all electrical and mechanical installation and certification
- Full factory acceptance testing and certification completed prior to delivery
- Modular construction to 60/60/60 FRL

SKA SUT3

Testbed Room

SKAO

SKA SUT3
Testbed Room

Located in Geraldton, Western Australia, Square Kilometre Array Observatory (SKAO) Australia, had a requirement for a modular data centre to test and configure their IT and radio equipment for deployment to their multiple Remote Processing Facilities (RPF) at the main site in Murchison, Western Australia.

XCircle was engaged to design, construct, test, deliver and install a 40kW, 7-rack modular data centre which was completed 8 weeks from order.

- All design, engineering, manufacturing and fit out was completed at our facility in Wangara, WA.
- Full service fit out included all electrical and mechanical installation and certification.
- Supply and installation of a 40kW UPS and battery system including electrical distribution to IEC socket for PDU connection.
- Supply and installation of cooling and humidity control systems within the data centre.
- Provision for underfloor piping to facilitate a chilled water-cooling system.
- Supply and installation of fire detection including VESDA, and inert gas suppression system.
- Design, supply and installation of a full monitoring and reporting system including equipment monitoring, environmental monitoring and water leak detection.
- Modular construction structurally certified to withstand Wind Region D extreme weather events.
- C5M paint coat system to withstand harsh marine and corrosive environments.
- Full factory acceptance testing, and certification completed prior to delivery.
- Delivery, installation, commissioning and testing on site.
- Support and maintenance of the data centre equipment for 12 months.

BHP
West Musgrave
Data Centres

BHP
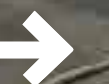
BHP
West Musgrave
Data Centres

In January 2023, XCircle was awarded a highly sought-after contract to design, supply, and install two 40kW, 6-rack modular data centres for BHP West Musgrave. The contract was the culmination of a rigorous tender process that began in June 2022, which saw multiple companies compete for the opportunity to work with BHP.

XCircle impressed the selection committee with their innovative approach, advanced technology, and ability to deliver the project within the specified timeframe and budget.

- All design, engineering, manufacturing and fit of two modular data centres to be completed by June 2023.
- Supply and installation of a 2N, 40kW UPS and battery system with 20 mins autonomy and including electrical distribution to equipment racks in an XCircle custom designed and manufactured UPS rack.
- Supply and installation of 40kW of in-row cooling in N+1 including integrated outdoor condenser mounting to allow for transport in-situ.
- Supply and installation of six (6) 600mm wide XCircle equipment racks and one (1) 800mm wide XCircle ODF rack.
- Design, supply and installation of fibre structured cabling system in conjunction with Codecom.
- Provision for underfloor cabling and piping using XCircle's raised floor design solution.
- Supply and installation of fire detection including VESDA, and inert gas suppression system.
- Design, supply and installation of a full monitoring and reporting system including equipment monitoring, environmental monitoring and water leak detection.
- Modular construction structurally certified to withstand Wind Region A.
- C3 paint coat system to all steel components
- Fire resistant to FRL 120/120/120 for the entire data centre including doors.
- CCTV surveillance and access control system.
- Airlock to prevent dust and contaminant ingress into the main equipment area.
- Full factory acceptance testing, and certification prior to delivery.
- Delivery, installation, commissioning and testing on site.
- Support and maintenance of the data centre equipment for 12 months.
- Site civil works including all concrete pads and plinths, including integration of underground electrical and fibre reticulation.

NEWest
Signalling
Equipment Room

NEWest Alliance

NEWest
Signalling
Equipment Room

XCircle was engaged by NEWest Alliance to construct two Signalling Equipment Rooms (SER) for the Yanchep Rail Extension Project. Measuring 18 metres long, 6 metres wide and 4.5m high, the SERs form part of the critical infrastructure required for Perth Transit Authority's (PTA) project to extend the metro rail network from Butler to Yanchep. The SERs house critical power, communications, and signalling equipment necessary for the operation and automation of the commuter trains servicing this new link. XCircle was chosen to manufacture these after providing assurances that both SERs could be delivered in 3 months, including installation and testing at their respective final sites.

- 2-hour fire rated self-contained Signalling Equipment Room (SER)
- Electrical Room fitout, including multiple large switch boards
- N+1 cooling with integrated outdoor condensers housed in a covered and ventilated area
- Fire detection and gas suppression system
- Access control system
- Raised floor with integrated power tray and cooling trays
- Multiple entries for power, signalling and communications
- Design, engineering and manufacturing including factory acceptance testing
- Transport to site and installation including site acceptancetesting and training

Modular
Solution Offering

XCircle offers a complete prefabricated module:

- Enclosure structure

- Structure Accessories

- Internal Racking system

- IT Cabling and Fibre Cable Management System

- Power distribution

- Cooling system

- Security Access system
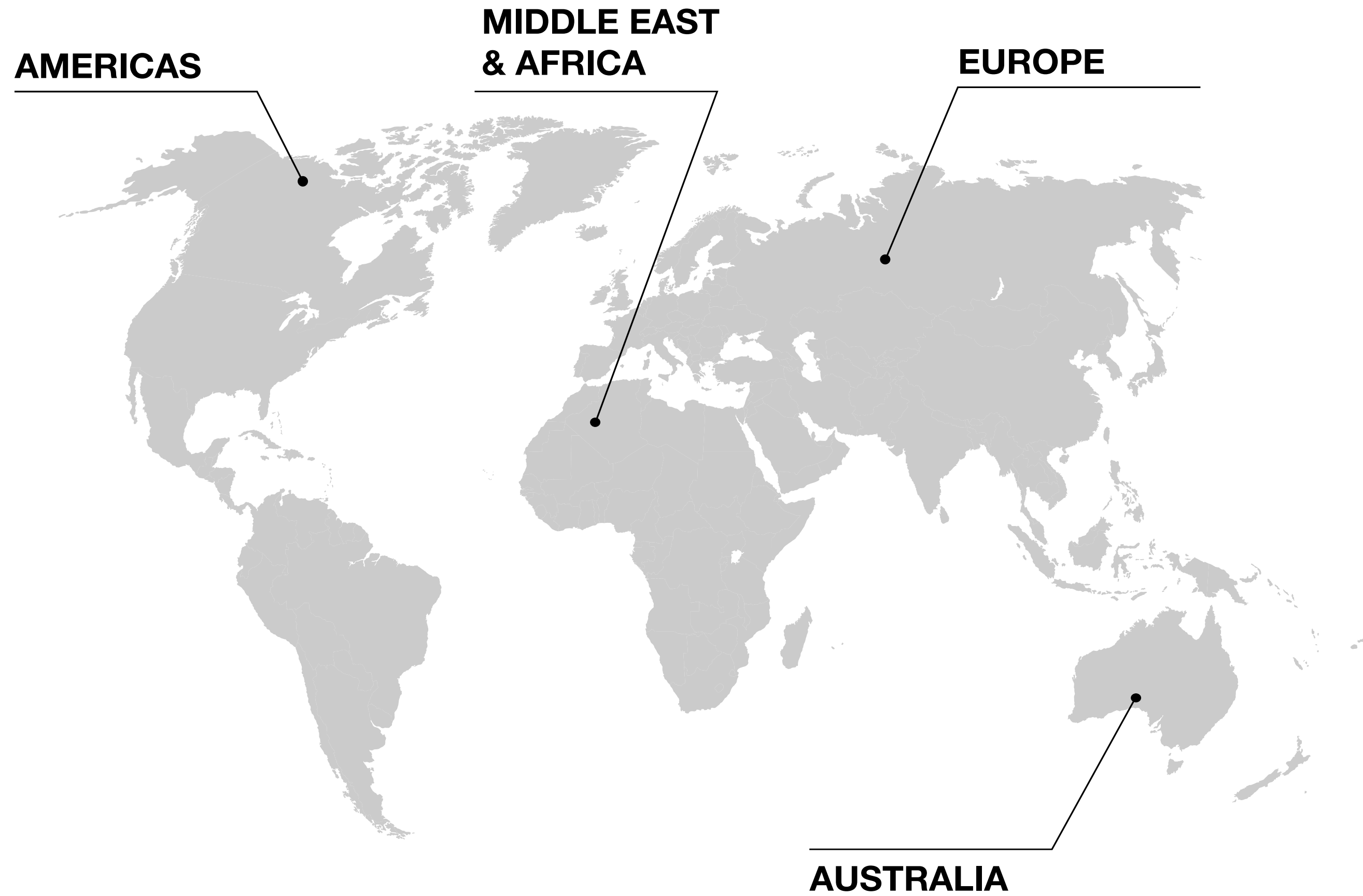
- Fire detection and extinguishing system

- Generators

- Project management

- Factory Services (Design, Production, End of Line Test)

- Commissioning, Testing and Maintenance

AMERICAS

MIDDLE EAST
& AFRICA

EUROPE

AUSTRALIA

Worldwide
Footprint

The XCircle Pty Ltd Prefabricated Data Centers
have been developed to be deployed anywhere in
the world:

XCIRCLE

ENGINEERED TO ORDER

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