

CAPABILITIES STATEMENT

Q1 2025



WE THINK
OUTSIDE
THE BOX

WHO IS ERNTEC?



We are a locally owned business which began in 1972. With longstanding clients in the Infrastructure, Defence, Medical and Electronics Sectors.

We have operated long enough to witness multiple industry cycles. To that end Erntec is ever evolving aiming to meet the market and continuously improve.

At our core we have developed knowledge and year of experience providing:

- ▶ Design & Engineering Services
- ▶ Manufacturing and Integration Services
- ▶ Access to an established, reliable network of local and international suppliers
- ▶ Area of expertise
 - Electromechanical Components
 - Electrical & Electronic Enclosures
 - MicroDrive Solutions



WE THINK

OUTSIDE

THE BOX



The Erntec team combines years of technical and practical expertise when it comes to designing and manufacturing a mechanical solution.

We operate within an ISO 9001 framework and have developed a 6-step process that requires we ask pertinent questions in order to define and create a brief (or scope) to deliver the goods. Our aim is to work with our clients to deliver an outstanding outcome.

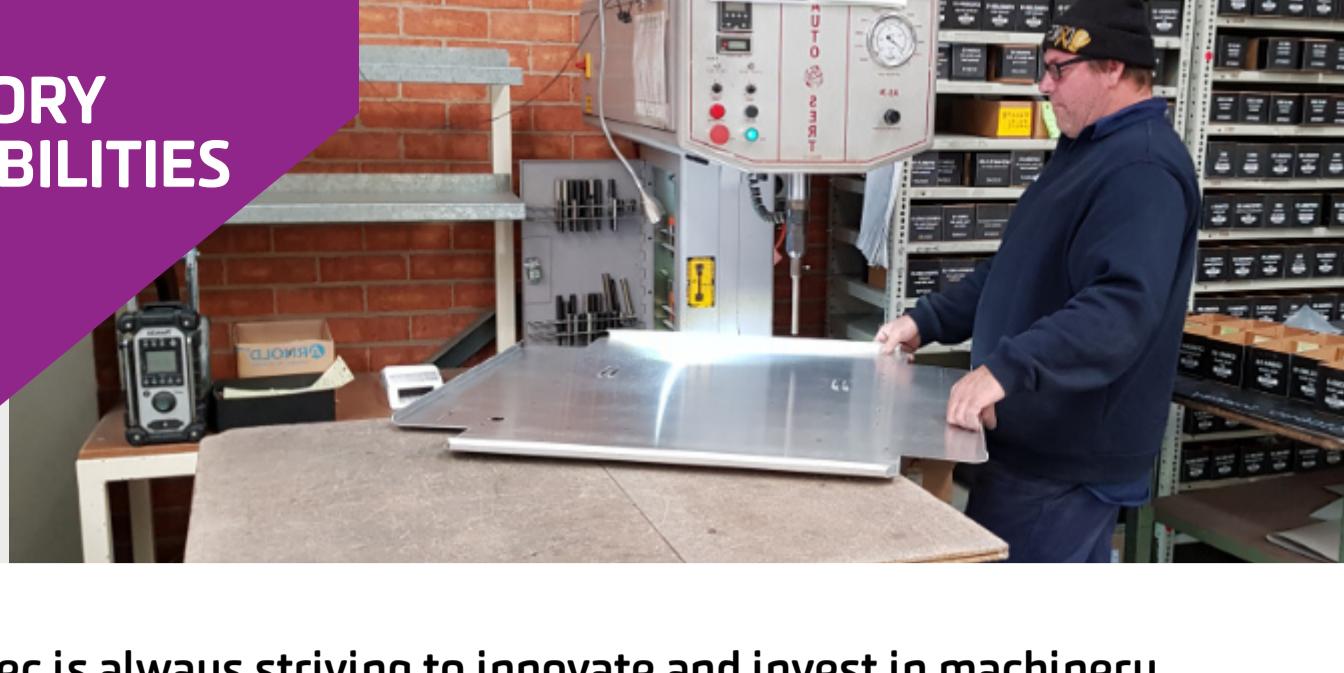
This demands a continuous line of thinking that always comes back to just one question: How can we do this better?

Our technical capabilities cover

- ▶ Enclosure Design & Development
- ▶ Mechanical Design & Development
- ▶ Mechanical Analysis and Testing
- ▶ 3D Visualisation
- ▶ System integration and assembly
- ▶ Design Projects
- ▶ Mechanical & Electrical Testing



FACTORY CAPABILITIES



Erntec is always striving to innovate and invest in machinery and processes to deliver best-practice quality at competitive pricing. Our aim is to design, manufacture & repeat.

Our facility in Scoresby has the following capabilities:

- ▶ Experienced team of production engineers
 - Experts in 3D CAD (Solid Works)
 - Experienced in Mechanical Design
- ▶ Sheet Metal Fabrication . Operating
 - 3 x Precision CNC machines
 - NC Turret Punch
 - Digital Printers
 - High Quality Powder Coat Plant
 - High Quality Welding facilities
 - 3 x Precision Folding machines
- ▶ Plastic Additive manufacturing able to
 - Prototype in PLA, PETG, ABS (Others on request)
 - Production parts in black Nylon/Carbon fibre
- ▶ Long established network of subcontractors
 - Coatings (Anodise, chromate etc..)
 - Laser Cutting
 - Water-jet Cutting
 - Specialised 5-Axis CNC
 - Extrusions
 - Labels



OUR 6-STEP PROCESS



Erntec operates within the ISO 9001 framework and has developed a 6-step process to help deliver outstanding outcomes for our clients

How can we help?

▶ LEARN ABOUT YOU

Our first job is to ask questions and listen to learn about you, your business and your project to get context for what you're trying to achieve.



▶ UNDERSTAND THE BRIEF

Next we will ask for information to understand the project. Here we can work with sketches, drawings, CAD files or even a sample product.



▶ THINK OUTSIDE THE BOX

Here we can question the status quo by taking a wider perspective and perhaps offering an uncommon solution. On your agreement we can explore deeper to draw a picture of the scope with you. Armed with that knowledge we can then develop a concept and align on a way forward.



▶ PRESENT OUR PROPOSAL

As we finalise the concept. We provide you with ideas & quotes so you know precisely what it will cost before you consent to engage us.



▶ DESIGN, REVISE, FINALISE

Upon your acceptance of our proposal by way of an order, your job enters our system for production drawings, which are sent to you for approval.



▶ DELIVER THE GOODS!

Now we manufacture, deliver and followup to ensure you are happy with the outcome



LARGE ENCLOSURES



When it comes to large enclosures we have your back. Erntec has already designed and manufactured a wide variety of indoor and outdoor solutions across many industries.

Large Enclosure Solutions

- ▶ 40+ years of industry experience
- ▶ Modular frame system
 - Up to IP54
 - Heavy duty steel frame
 - Flexibility of modular fit-out
 - RFI ready construction
- ▶ Welded frame system
 - Ideal for IP > 54
 - Heavy duty Steel or Aluminium
 - Fit-out ready construction
 - Dual Skin Options
- ▶ Standards compliance
 - DIN 41488
 - IEC 60297-1 and 2, IEC 60917
 - Any other specific standards reviewed on request
 - Example AS/NZS 61439
- ▶ Wide range of accessories
 - Plus anything else we can fabricate to help



SMALL ENCLOSURES



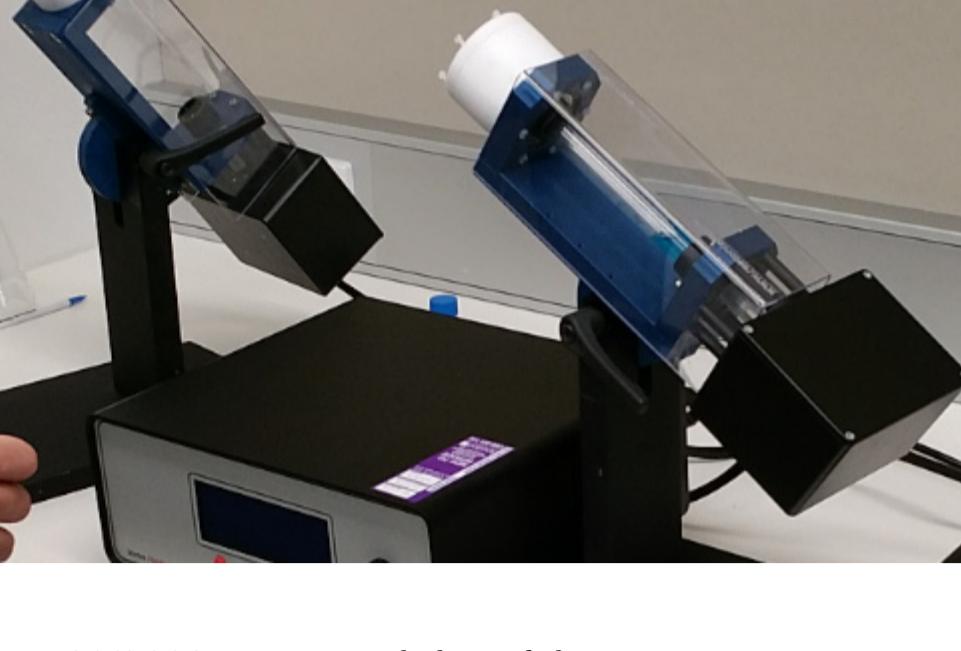
Small enclosures are great solutions for many applications. Backed by our design & manufacturing capabilities the Erntec team can address a wide variety of needs.

Features of our Small Enclosure Solutions

- ▶ Bespoke Design or Customisation
- ▶ Specialists in 19" Subracks
- ▶ Modular profile based solutions
- ▶ Folded sheet metal solutions
- ▶ Modification of Standard Plastic & Metal Enclosures
- ▶ Wide Range of Finishing Options (Paint, Anodise, Chromate etc..)



MICRODRIVES

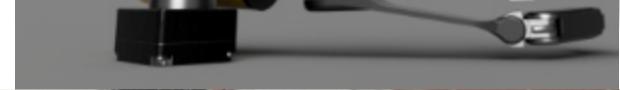


**Value add distributor for FAULHABER precision drive systems
Erntec can assist in specifying and customising for specific
"MicroDrive" requirements**

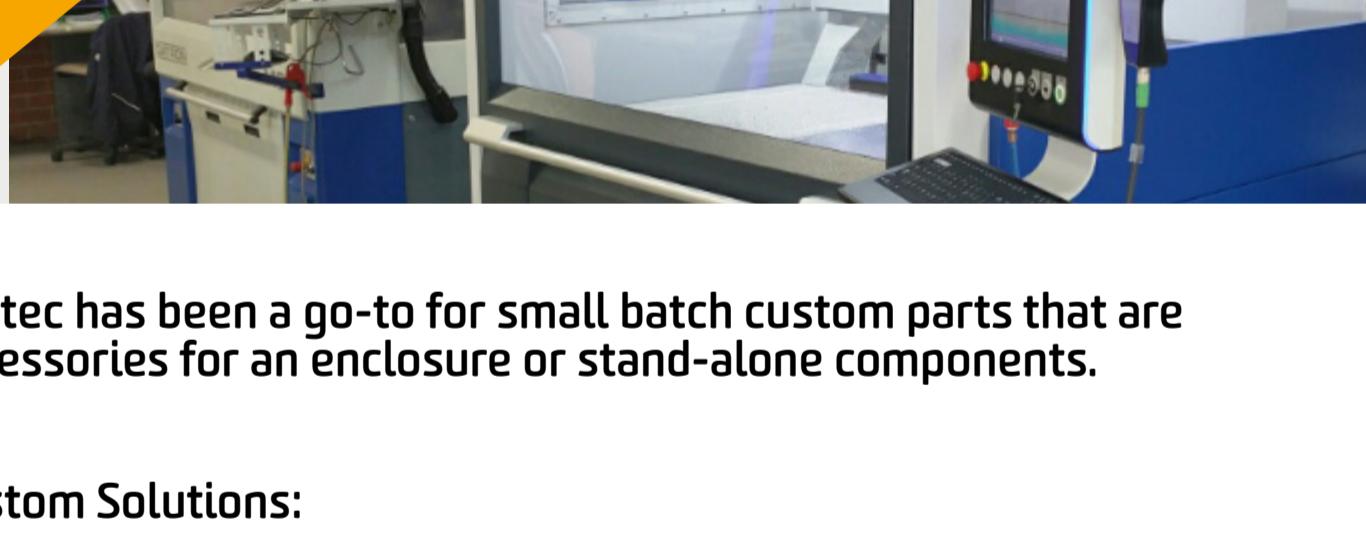
- ▶ Suitable for critical applications in areas such as
 - Aeronautics & Space, Medical, Defence, Robotics & Automation, Scientific & Laboratory
- ▶ DC, Brushless, Stepper, Linear motors
 - From 6mm to 44 mm diameter and up to 250W
 - Standard integrated encoder options
- ▶ Gear-heads & Linear elements
 - 6mm to 44 mm diameter up to 40Nm
 - High input speed and low backlash options
- ▶ Drive electronics (speed, motion control)
 - Integrated & stand alone
- ▶ Many customisation options
 - Factory built (FAULHABER)
 - ▷ Winding, Commutation
 - ▷ Lubrication & bearings
 - ▷ Shaft & pinion options
 - ▷ Run-in & Calibration
 - After build options (Erntec)
 - ▷ Special wiring & connectors
 - ▷ Mounts and Mechanisms
 - ▷ Turnkey integration



 **FAULHABER**



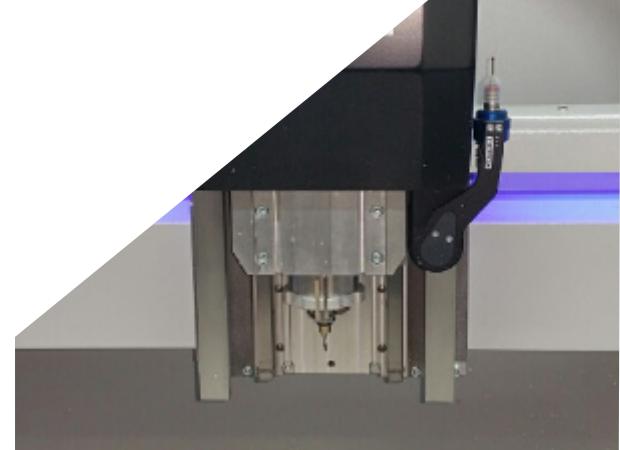
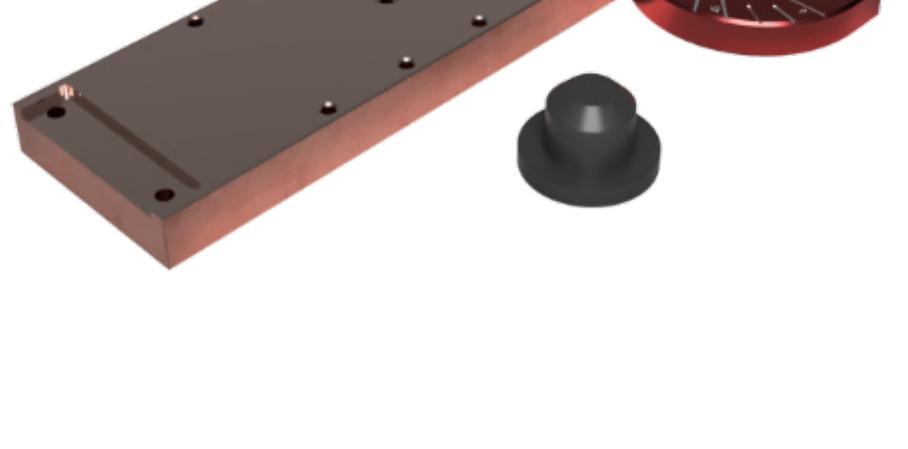
CUSTOM COMPONENTS



Erntec has been a go-to for small batch custom parts that are accessories for an enclosure or stand-alone components.

Custom Solutions:

- ▶ Machined Aluminium Parts
- ▶ Sheet Metal Brackets and Fixtures
- ▶ Machined Copper Parts
- ▶ 3D printed parts



INFRASTRUCTURE POWER



Erntec has developed a broad suite of products with major power providers suitable for substations and related applications, from the communications centre to the yard.

Solutions:

► Standard Products for

- Relay Protection
- AC & DC Distribution
- SCADA
- Interface Termination
- Insert Panels
- Yard Boxes



► Product Features

- Cabinets
 - ▷ Indoor & Outdoor
 - ▷ Swing Frame Solutions
 - ▷ Pre-fitted & customisable
 - ▷ Wide range of accessories
- Subracks
 - ▷ PDU / MCB
 - ▷ Test link
 - ▷ MIDOS
 - ▷ Metrosil
- Standard accessories or any other you can imagine
 - ▷ Shelves (Telescopic, cantilever, custom)
 - ▷ Mounting kits & plates
 - ▷ Blank or special panels



INFRASTRUCTURE TELECOM



Erntec is a longtime supplier of distribution products and general enclosures in this space.
Specified & tested to Australian Telecom standards

Solutions:

► Standard Products for

- Power Distribution
- Battery backup
- Power monitoring
- High Current Busbar

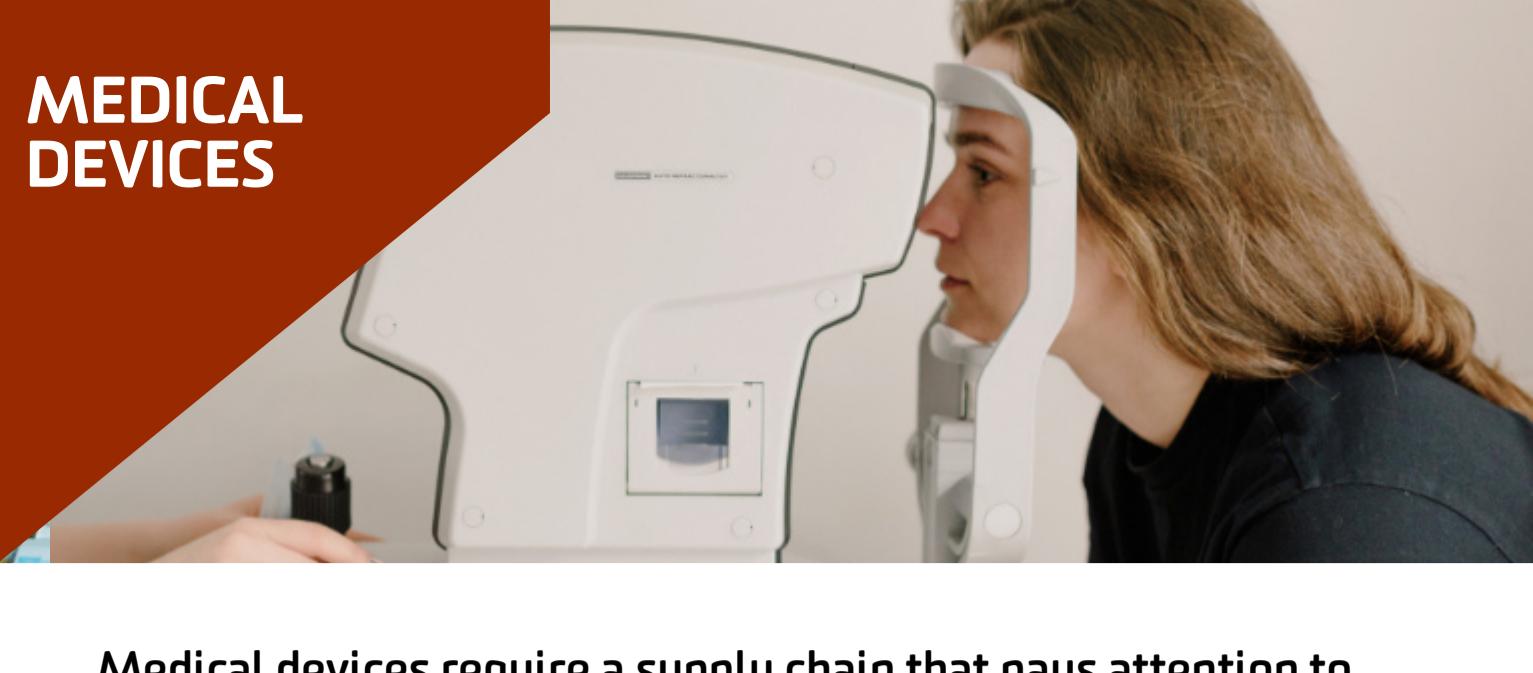


► Product Features

- Network Compliant
- Load Tested
- Cabinets
 - ▷ Indoor & Outdoor
 - ▷ Mechanically Tested
 - ▷ Pre-cabled / bus-linked
 - ▷ Alarm options
- Subracks
 - ▷ PDU / LOD
 - ▷ Power Monitoring
 - ▷ Termination Points
 - ▷ Alarm options



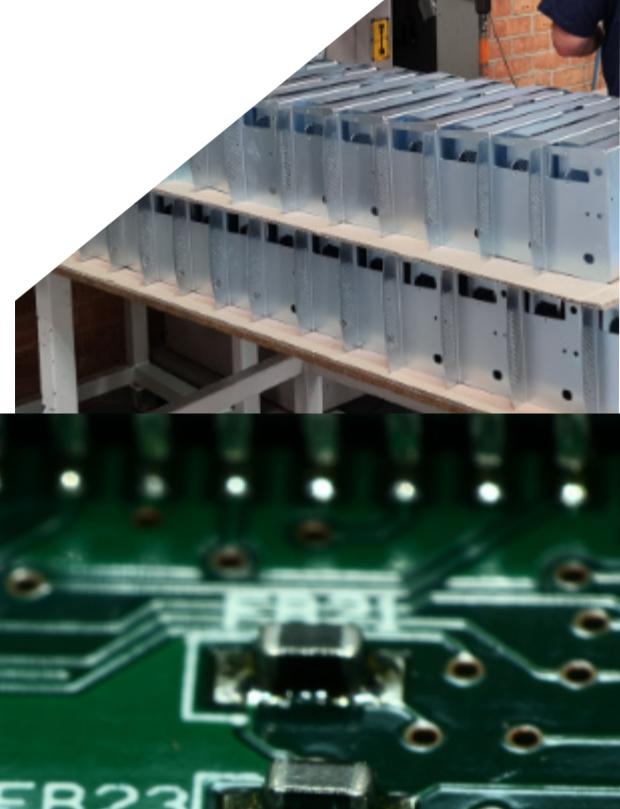
MEDICAL DEVICES



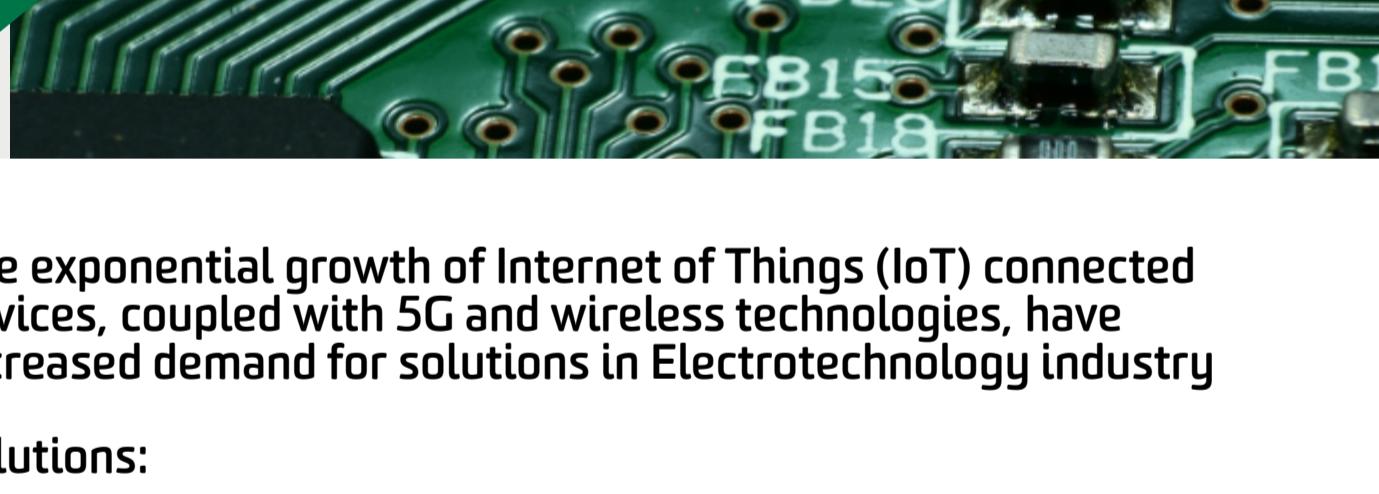
Medical devices require a supply chain that pays attention to design detail and conformance. Erntec understands this, and works with our clients to understand what is required

Solutions:

- ▶ Enclosure Solutions
- ▶ Custom Miniature Drive Solutions
- ▶ Sheet Metal and Additive (3D printed) Components



ELECTRONIC DEVICES



The exponential growth of Internet of Things (IoT) connected devices, coupled with 5G and wireless technologies, have increased demand for solutions in Electrotechnology industry

Solutions:

- ▶ Bespoke Sheet Metal Enclosures
- ▶ Machined Enclosures
- ▶ Modification of Enclosures
- ▶ Custom Miniature Drives and Mechatronics Solutions
- ▶ Sheet Metal & Machined Parts
- ▶ Special integrated solutions (Full or partially assembled)



DEFENCE



Erntec has been a long time supplier for projects in defence and continues to support both new projects and sustainment

Solutions:

- ▶ Custom Machined Enclosures
- ▶ Custom RFI 19" Cabinets
- ▶ Large Modular Shelters
- ▶ Ship-borne 19" Cabinet Solutions
- ▶ Custom Miniature Drives and Mechatronics Solutions

- ▶ Machined Parts
- ▶ Sheet Metal Parts
- ▶ Custom Design and Tested Enclosures

CONFIDENTIAL

INFRASTRUCTURE WATER



The Water sector in Australia covers water catchment supply, sewerage & drainage services and Pipeline transport. Erntec has provided various solutions across these sectors

Solutions:

- ▶ Dosing Cabinets
- ▶ Outdoor Enclosures
- ▶ Drive Solutions for Pipe Cleaning Robots



INFRASTRUCTURE RAIL



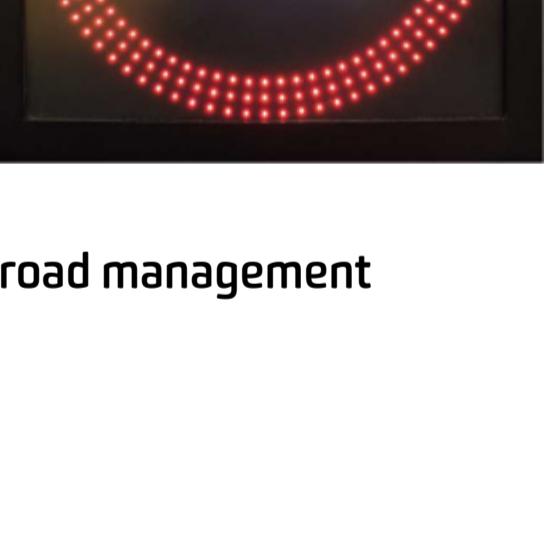
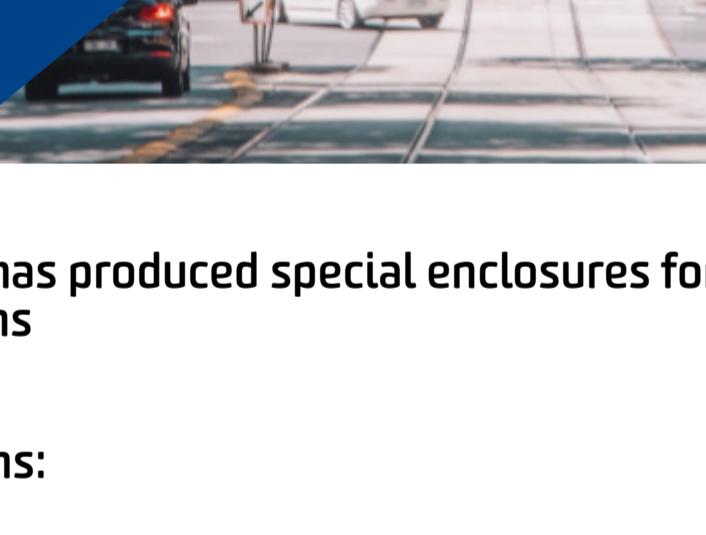
Erntec has long supported rail projects for custom 19" enclosures and component solutions

Solutions:

- ▶ Custom Machined Enclosures
- ▶ Custom 19" Subracks
- ▶ Machined Parts & Front Panels
- ▶ RFI Backshells
- ▶ DIN 41612 components



INFRASTRUCTURE ROAD



Erntec has produced special enclosures for road management solutions

Solutions:

- ▶ Roadside Cabinets
- ▶ Signage Enclosures
- ▶ Custom 19" Subracks

