INTELLECT
SYSTEMS

CAPABILITY STATEMENT

We are Intellect Systems,
a leading provider of bespoke
Operational Technology Solutions.

Safety, progressive thinking,
collaboration and a proven systematic
approach drives every project solution.

A COMPANY BUILT ON REPUTATION

For nearly two decades we have been providing, innovative, safe and sustainable operational technology solutions across a range of industries and markets.

Founded in 2005 and proudly Western Australian owned, Intellect Systems are a specialist provider of End to End Operational Technology solutions to the domestic and international markets. As an ISO 9001 and 45001 certified organisation we are committed to continuous improvement and holding ourselves accountable to the highest level of quality and safety.

Our forward thinking, skilled and pragmatic team has a solid track record of delivering Control Systems, Electrical Engineering, Communications and Industrial IT services throughout every phase of the project lifecycle.

We are experts in developing bespoke turn-key operational technology solutions from concept to reality. We engineer, manufacture, implement and optimise our projects in-house to the highest level of quality and compliance.

We listen to your ideas, and draw on our industry and technology know-how to tailor a solution to suit your specific needs. While in the process, we keep a close eye on the budget and of course the schedule, to ensure your project is a success. That's what makes us different.

We place importance on service and satisfaction and our core values form the cornerstone of our project delivery model. When you deal with Intellect Systems you are guaranteed to receive personal service, honest advice, a quality product and commitment which exceeds all expectations.

Our aim is to build enduring relationships through collaboration and personal customer service. As testament to this, we count many of Australia's most prestigious companies among our clients and we are proud to have earned the trust of the global vendors we work with.

OUR PROMISE

The Intellect Systems promise lies in our values and our commitment to provide a product at the highest level of quality, while taking ownership of the process and project drivers – safely.

› **SAFETY**
We are committed to a safe and injury free workplace and the development of a strong safety culture.

› **QUALITY**
We drive our projects using established processes and systems while working pragmatically and systematically to deliver excellence in every solution.

› **TRUST**
We invest time to listen carefully, understand our customers and build enduring relationships based on integrity and honesty.

› **AGILITY**
We have the stability of a large cooperation, with dynamics of a small organisation, and can pivot and react swiftly to project transients and requirements.

› **COMMITMENT**
We are passionate about our work, take ownership of the outcome and stand by our solutions and services.

› **INNOVATION**
We think progressively, embracing disruptive technology and trends to differentiate and continuously improve.

WHAT WE DO

No two projects or clients are the same. Our portfolio of specialist operational technology skills allow us to tailor our services to meet your needs. We understand project dynamics and our lean and flexible approach allows us to react to transient environmental and project requirements.

At Intellect Systems we drive projects by combining practical engineering methods, proven processes and emerging industry technologies. Our value proposition lies within our experience in integrating diverse technology platforms through a range of industrial processes and environments.

It's this know how that gives us the edge in developing solutions that deliver tangible benefits – translating to cost, productivity and efficiency.

From Control Systems to Panel Manufacturing, Functional Safety, Industrial IT or Electrical Design, or any combination of the above, we will work with you to navigate the minefield of technical challenges and provide unbiased advice and support that delivers real world results.

Our comprehensive capabilities, diverse industry experience and fundamental technical know-how are scalable to suit your project requirements.
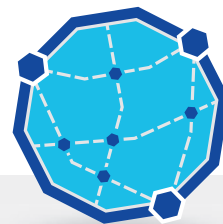
CONTROL SYSTEMS

Extensive industry and integration knowledge tailored to your requirements to deliver real-world results.
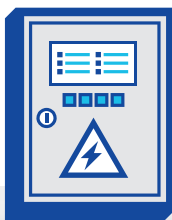
ELECTRICAL

Practical, comprehensive and systematic engineering design processes.

COMMUNICATIONS AND INDUSTRIAL IT

Unified information and operational technology to connect your boardroom to the process floor.

SWITCHROOM AND PANEL MANUFACTURING

Engineering DNA and industry leading manufacturing production in a safe and integrated package.

SITE SERVICES

Experienced and specialised resources that understand your process to drive projects into operation.

PROCESS OPTIMISATION

Operational know how and process intelligence to unlock productivity and efficiency improvements.

CONTROL SYSTEMS

Extensive industry and integration knowledge tailored to your requirements to deliver real-world results.

- Programmable Logic Controllers (PLC)
- Human Machine Interfaces (HMI)
- Safety Instrumented Systems (SIS)
- Distributed Control Systems (DCS)
- Supervisory Control and Data Acquisition (SCADA) Systems
- Remote Telemetry Units (RTU) and metering
- Training
- Research and development

At Intellect Systems we provide bespoke control systems solutions from concept to implementation and into optimisation. Our control systems experts have the knowledge and experience to add value at any phase of a project, from feasibility studies to detailed engineering, to site commissioning and support.

Every project is different so we start by understanding key drivers that underpin every project to ensure a practical, cost-effective and sustainable control system solution is developed. We ensure that every solution is backed up by comprehensive engineering fundamentals and industry best practices.

Our extensive systems integration expertise and vendor neutral approach allows us to offer unbiased and specialised support through a range of services including conceptual design, hardware selection and specification, standards development or logic and configuration. With our site and operations background we are able to optimise either new or existing install bases through advanced process algorithms and tuning.

At Intellect our comprehensive product understanding and long-term partnerships with many of the world's leading industrial automation manufacturers give us the edge in providing an innovative and tailored solution.

ELECTRICAL

Practical, comprehensive and systematic engineering design processes.

Whether it's a motor control centre or a lighting and small power design our engineers have the know-how and qualifications to provide a comprehensive electrical design service.
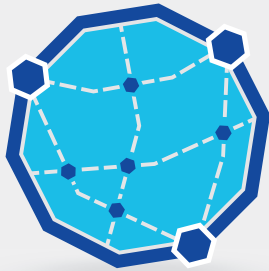
Our engineering solutions are driven by our understanding of real world operational environments. With a vast portfolio of projects executed over a variety of industries, we understand the pitfalls and efficiencies in implementing a fit-for-purpose electrical design.

Combined with the strength of our complementary skills in control systems and functional safety, we ensure our solutions meet your needs and are evaluated on all aspects of compliance and integration.

Our electrical services are not just limited to design – our team has a proven track record in successfully implementing some of the most complex projects throughout Australia and the world. Whether we supplement your own team or deploy our expert commissioning and completions team, we will take ownership of your project every step of the way.

> Control panel and MCC design and drafting
> Lighting and small power design and drafting
> Electrical and instrumentation equipment selection and evaluation
> Power systems studies
> Hazardous area inspections and audits
> Risk Assessments
> Development of Safety Lifecycle Documentation
> Safety System Validation
> LOPA, HAZOP and CHAZOPs

COMMUNICATIONS AND INDUSTRIAL IT

Unified information and operational technology to connect your boardroom to the process floor.

- Fibre and Hardwired Networks
- Industrial Networks
- Radio Networks
- CCTV Systems
- Manufacturing Execution Systems
- Remote Operations

Knowledge is power, and a well implemented Control Systems allows decision makers to access the right key performance data in a concise and timely manner.

At Intellect Systems we design every Control System to have a robust and scalable operational process network that delivers information to the right audience. Our engineers collaborate with corporate IT teams to bring data from the plant floor into the wider environment through the integration of the process and corporate networks.

We are experts in industrial networking and can design, and integrate hardwired and wireless communications and industrial process networks such as Profibus, Modbus, Ethernet/IP and DeviceNet,

We also have the know-how and experience when it comes to the design, development and deployment of CCTV, remote access and security solutions, and their implementation into existing Control Systems. Our experience in integration ensures that all your systems are unified.

SWITCHROOM AND PANEL MANUFACTURING

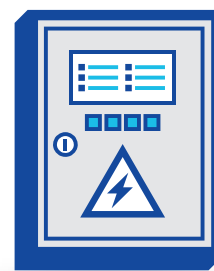## Engineering DNA and industry leading manufacturing production in a safe and integrated package.

Our manufacturing process is underpinned by our engineering knowledge and refined by our real-world execution and implementation experience, helping us to deliver integrated and unified operational technology projects. From Switchrooms, Modular MCCs to Distribution boards, Marshalling and Communications cabinets our method is consistent.

Leveraging our core background in engineering and software development, along with our product knowledge, allows us to break down the barriers between design and manufacturing. Our ability to do this in-house provides a streamlined, controlled and efficient solution fully validated.

Whatever the application we own and commit to the process, providing value and a quality product by ensuring consistency, eliminating interfaces and scope gaps and ultimately reducing management and risk.

Intellect Systems operates a state of the art manufacturing facility south of the river geared to catering for MCCs and switch rooms, large scale manufacturing as well as small panels. With in-house automated wire processing, lasers, and labelling along with our skilled workforce of quality personnel and technicians we are able to deal with the demands of the most challenging projects.

Our in-house manufacturing capability means we can tailor a complete end-to-end solution precisely to your needs and process goals.

> Transportable Switchrooms (>20M)
> Modular Control Rooms (inc containerised 20ft and 40ft)
> HV\MV Kiosks
> Internal and External Motor Control Centres
> Field Marshalling and Control Panels
> Site Main Switchboards and Distribution Boards
> IO and Junction Boxes
> Remote Telemetry Panels and Skids
> Communications Panels and Racks

SITE SERVICES

Experienced and specialised resources that understand your process to drive projects into operation.

- Commissioning Management
- Commissioning Engineers
- Control Systems Engineers
- Electrical and Mechanical Supervisors
- E+I Technicians
- Mechanical Fitters

A well designed system is not only critical to the safe and continuous operation of your process, it protects your most important assets – your people, your plant and the environment. However a poorly implemented design can result in inefficiencies, downtime and in some cases catastrophic disaster.

Our in-house construction and commissioning experts understand the challenges of implementing bespoke process solutions for new and existing installations. We take time to ensure knowledge and information from the design phase is translated into commissioning, covering off all gaps and documenting the process throughout.

We pride ourselves on providing highly experienced and specialised personnel and teams to drive projects from construction into implementation, and beyond. With our systematic processes and deep subject matter understanding we ensure that no stone is overturned to deliver an optimised and highly efficient final product, taking ownership of the outcome.

PROCESS OPTIMISATION

Operational know how and process intelligence to unlock productivity and efficiency improvements.

As operational technology specialists, we take ownership of your production and process goals, leveraging innovative design and progressive technology to drive business and production gains.

Our service does not end at project handover. We collaborate with operations to ensure process performance is optimised at all levels with specific attention to driving productivity and throughput. With our industry and process experience we understand the typical constraints in most systems where potential can be unlocked, quite often simple and effective software changes using existing infrastructure can reap large productivity and efficiency gains.

At Intellect Systems we take a holistic approach to analyse and interpret process information and data, to identify bottlenecks and implement solutions that deliver real-world results. We strive to support and maintain your assets and mission critical processes by providing on-site or office based engineering support, 24 hours a day, 7 days a week.

> Process and Infrastructure Audits
> Production Optimisation
> Plant Infrastructure Modernisation
> Constraint Control and Debottlenecking
> Mobile Machine Optimisation
> Stockyard and Port Optimisation
> In-loading and Out-loading Optimisation

OUR END-TO-END PROCESS

Often the largest component of risk and inefficiency within a project comes from poorly managed interfaces. At Intellect Systems we take accountability and along with our end to end approach we intimately guide project delivery process to ensure that we extract maximum value for our customers to not only de risk, but fast track projects into realisation.

Our customers realise the benefit of having a subject matter expert who intimately understands the industry and technology, and who can advise and manage the project delivery process. In doing so we maintain a single point of contact, consistency and quality throughout the process to ensure the final outcomes are met or exceeded.

DESIGN

- Feasibilities
- Conceptual Design
- Budget Estimates and Take-Offs
- Product Specification and Selection
- Drafting
- Detailed Design
- Functional and Process Safety
- Risk Assessments
- Hazardous Area Design
- Control Philosophies
- Functional Specifications

DESIGN

MANUFACTURE

DEVELOP

DEVELOP

- Standard Control Logic Development
- PLC and DCS Software Programming
- SCADA and HMI Software Development
- Radio, Telemetry and RTU Software Development
- Virtual Server Configuration and Deployments
- Hardware and Communications Configuration

MANUFACTURE

- Switch Rooms
- Control and Remote Telemetry Panels
- Distribution Boards
- Junction Boxes
- Communications Cubicles
- Power Distribution Panels
- Security Cabinets

The Intellect Systems difference is all about our ability to merge our collective skill sets to deliver an end-to-end product, taking ownership of the outcome through every phase of the process.

COMMISSION

- Commissioning Management
- Construction Verification
- Functional and Process Safety Validation Testing
- Electrical and Control Systems Commissioning Support
- Performance Verification and Validation
- Commissioning Closeout and as Building

MAINTAIN

- Site Based Support Personnel
- Operational Remote Support
- Remote Operations
- Maintenance and Shutdown Support
- Customised Interactive E-learning Training
- Classroom Training
- Operator and Maintenance Training

COMMISSION

MAINTAIN

TEST

OPTIMISE

TEST

- Simulated Test Environments
- Software Acceptance Testing
- Panel Functional Testing
- Factory Acceptance Testing
- Instrument Testing
- Integration Testing
- Functional Safety Validation Testing

OPTIMISE

- Process and Infrastructure Audits
- Production Optimisation
- Plant Infrastructure Modernisation
- Constraint Control and Debottlenecking
- Mobile Machine Optimisation
- Stockyard and Port Optimisation
- In-loading and Out-loading Optimisation

WHERE WE OPERATE

Proven real world operational experience tailored to your business and industry.

Each industry sector we operate in has its own unique set of requirements and solutions, ranging from proven and established processes to technologically ground-breaking concepts.

Intellect Systems' diverse industry exposure, along with comprehensive process and optimisation experience, ensures we are uniquely positioned to provide valuable insights that have a direct and tangible impact on your business's investments.

OUR INDUSTRIES

RESOURCES

- Materials Handling
- Mobile Machines (Stacking, Reclaiming, Ship Loading)
- Mineral Processing
- Dewatering and Borefields
- Specialised Stockyard Management and Anti-Collision Systems

ENERGY

- Oil and Gas Production
- Oil and Gas Processing
- Gas Compression
- Gas Metering and Delivery

INFRASTRUCTURE

- Motorways
- Tunnel and Bridge Solutions
- Energy and Power Management
- Fuel Management and Delivery
- Power Generation
- Water Treatment
- Camps
- Maintenance Facilities

MANUFACTURING

- Food and Beverage
- Dairy
- Feeds
- Packaging
- Composites
- OEM Solutions

CLEAN ENERGY

- Waste to Energy
- Wind
- Solar
- Hydrogen
- Microgrids

AGRICULTURE

- Bulk Commodity Handling (Unloading / In-loading)
- Debottlenecking
- Storage Facilities

We are experts in developing bespoke turn-key solutions tailored to the industry you operate in.

Innovative, comprehensive and integrated operational technology solutions to drive projects from concept to realisation, and beyond.

INTELLECT
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