TECHSERVE

MINING & ENERGY

CAPABILITY STATEMENT

TIMELINE

2001
Established By Graeme Downing as an Engineering Services Company

2002
First Field Service Personnel

2005
First Major Conveyor Contract in Underground Mining

2007
Registered as an RTO (31615)

2008
Purchased Lawrence Mechanical

2010
Moved to Paget Workshop

Gained ISO 9001 Accreditation

2011
Established NSW Branch

2012
AS/NZS3800 Electrical Overhaul Workshop Licensing

2013
Tolk Joint Venture Established and first major longwall contracts won

AS/NZ3584 Mechanical Overhaul Workshop Licensing

2016
Purchased Tennyson Street Corporate Office

2017
Winner Regional Industry Network Safety Foremost Award

Licence for Ground Consolidation Products

First Major Gas Fields Labour Contract established

2018
Energy and Infrastructure division established

Acquisition of Five Star Power (Solahart and Tesla Mackay Dealersip)

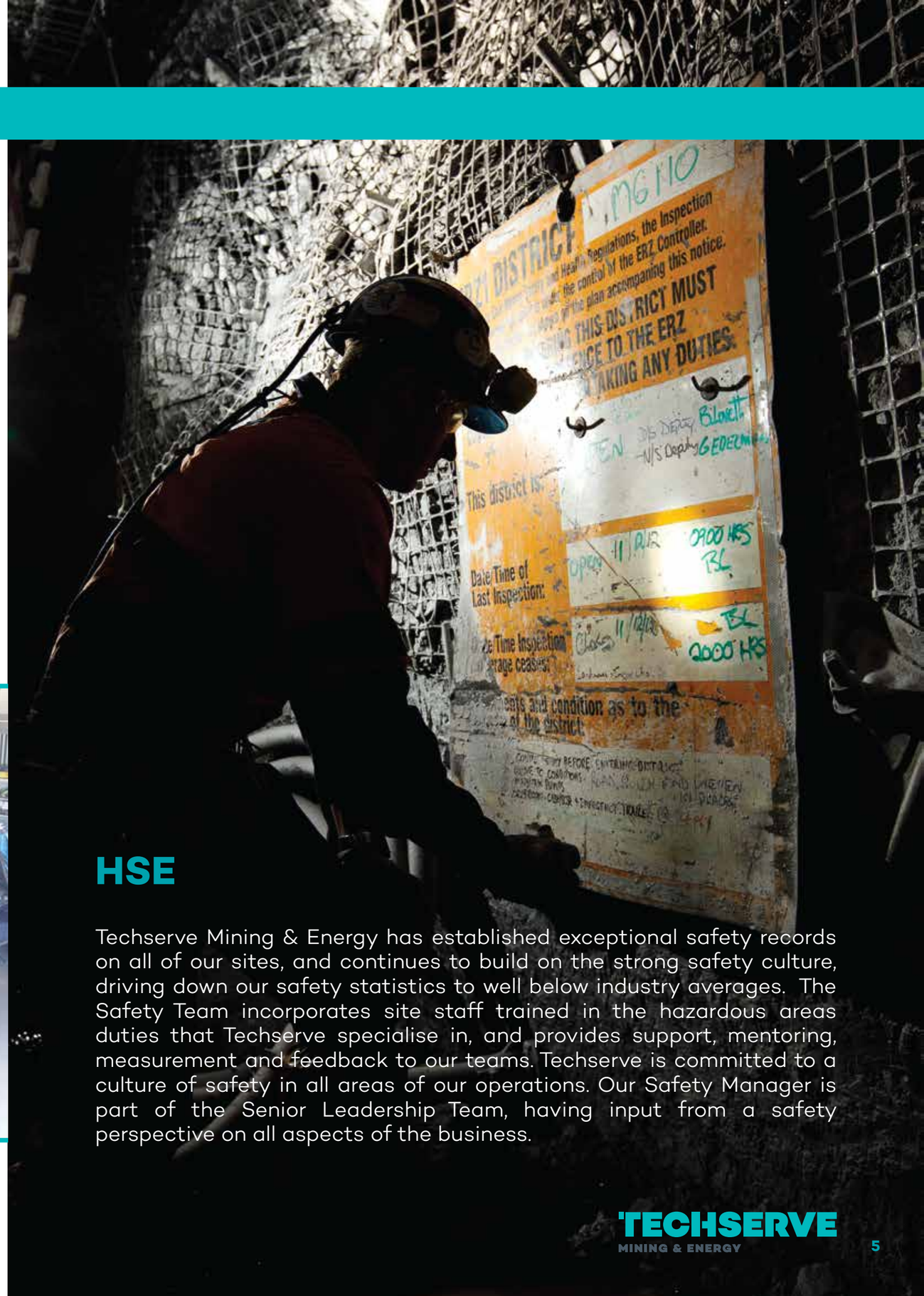
COMPLIANCE AND QUALITY ASSURANCE

- Techserve maintains an ISO9001 Quality Assurance System
- Mechanical workshop holds AS/NZS 3584.3
- Electrical workshop holds AS/NZS 3800 and MP87.2
- Operates under AS/NZS 4801 Safety Requirements Guidelines
- Operates under AS/NZS 14001 Environment Guidelines

We are compliant with the following standards:

AS/NZ 9001
AS/NZ 3800
AS/NZ 3584
MP87.2

Certified System
Quality
ISO 9001
SAI GLOBAL



HSE

Techserve Mining & Energy has established exceptional safety records on all of our sites, and continues to build on the strong safety culture, driving down our safety statistics to well below industry averages. The Safety Team incorporates site staff trained in the hazardous areas duties that Techserve specialise in, and provides support, mentoring, measurement and feedback to our teams. Techserve is committed to a culture of safety in all areas of our operations. Our Safety Manager is part of the Senior Leadership Team, having input from a safety perspective on all aspects of the business.

PARTNERS

TECHSERVE MINING & ENERGY

- Project Management
- Installation and Application

INORAiL

Crouse-Hinds by EATON

- Intrinsically Safe Tablet
- Cloud Based Real Time Connectivity

cut coal technology

DSI UNDERGROUND

- Surface to Seam Pumping (PUR, USR, Phenolic Foams)
- Ground Consolidation Solutions
- Active and Passive Support
- VCD's

Hastings Deering CAT

MINING

- Installation Contracts (Surface and Underground)
- Conveyors – Install and Maintenance
- Labour Hire (Trades, Operators, Supervisors, Co-ordinators etc.)
- Project Management
- Statutory Position Coverage
- Engineering and Professional Services
- Procurement
- Compliance Training
- Mentoring and Cleanskin Development
- Site Specific Training Package development
- Electrical Overhauls
- Mechanical Overhauls
- Site Compliance: AS/NZ3800 Overhauls, Pre-Overhaul Inspections

GROUND CONSOLIDATION

Techserve has attained ISO 9001 certification and is licenced by the NSW Resources Regulator to inject a series of strata consolidation and cavity filling resin products throughout the mining and tunnelling industry.
“The injection or application of polymeric material for the purpose of strata control and foam cavity filling within the mining and tunnelling industry” – ISO 9001 Certificate QEC27689

Licenced products we can pump from surface to seam include:
- Strata Bond is a two-component polyurethane resin
- Mineral Bond is a two-component urea silicate resin
- Mine-Fill is a two-component phenolic cavity fill resin

Additional Services
- Cementitious 2 part product for cribs, 20psi, 50psi and 120psi seals can be pumped 5km surface to seam
- Design, fabrication, supply and installation of Ventilation Control Devices
- Secondary Support and Outbye Services

ENGINEERING

Techserve Mining & Energy has a multi-disciplined projects department specialising in amalgamated mechanical, electrical and civil engineering concepts in order to provide a turnkey project solution service across multiple sectors, including:

- Renewable Energies
- Bio-Ethanol and Sugar
- Mining
- Oil & Gas (CSG, LNG, LPG)
- Utilities and power generation
- Pumping/irrigation/agriculture
- Materials handling
- Petro-Chemical, and
- Process Plants

Techserve Mining and Energy offers a unique platform that draws on our broad range of expertise across multiple disciplines to develop and engineer solutions from initial inspections/audits, to design and master planning, right through to intelligent manufacture and installation/commissioning. Techserve Mining and Energy can also provide ongoing services including asset management and maintenance, periodic servicing agreements and even facility management and coordination.

Typical projects include the design, manufacture, supply, installation, commissioning and ongoing services of the following types of equipment:

- Transportable Substations and Switchrooms
- Underground Mining Substations and Switchboards
- HV, MV & LV Switchboards and Switchgear
- Hazardous Area Switchboards and Switchgear
- Pumping & Conveyor Switchboards and Switchgear
- Pumping project pipe works, manifolds and support structures
- Conveyor support structures and installations
- Longwall Mining relocation products
- Sheetmetal Production

Techserve Mining & Energy's ability to provide dynamic thought processes to complex problems enables us to develop best practice solutions. Other engineering services Techserve Mining & Energy can provide include:

- Electrical and Mechanical Design
- Earthing and Lightning Assessments from Auditing and Soil Resistivity Testing, Grid Design and Modelling, Installation and Testing
- High Voltage and Hazardous Area Auditing
- Electrical and Mechanical Drafting
- Arc Fault Control and Arc Flash Category Assessments
- Primary and Secondary Injection Services including Relay Statutory Testing
- Transformer Servicing and Testing

PEOPLE

A complete resource solution for underground mining and support.

Specialists in supplying skilled trades:
- Electricians
- Fitters
- Engineers
- Supervisors

In diverse areas:
- Conveyors
- Pumps
- Monorails
- Longwall
- Outbye
- Transport
- Project based
- Flexible
- Long term

Our workshops provide complete overhaul and maintenance services, covering Queensland and NSW.

ELECTRICAL OVERHAULS

AS/NZS 3800 electrical overhaul of flameproof equipment
- Miner
- Shuttle Cars
- DCB's, marshalling panels, junction boxes and communications equipment
- Fans
- Belt starters and substations
- Pre-Overhaul audit inspections
- On-site inspections and repair
- Service exchange flameproof components
- Refurbishment and overhaul of electrical equipment
- Supply, fabrication and overhaul of IP rated equipment
- Onsite maintenance and upgrades
- Substation switchboard upgrades and refurbishment
- Telephone marshalling enclosures
- Fibre J boxes
- Switchboards

MECHANICAL OVERHAULS

AS/NZS 3584.3 accredited workshop for DES overhauls
- Refurbishment and rebuilds of underground mechanical equipment
- Diesel overhauls and repairs
- Code D mechanical inspections and repairs
- Component rebuilds and overhaul
- Alternate part sourcing and supply
- Fabrication and welding
- Site based project design and installs

ROLLER SCREENS AND CRUSHERS

- Roller screen shaft rebuilds
- Field service crews performing roller screen, secondary and tertiary sizer maintenance on site
- Parts supply for roller screens
- Shaft change outs
- Gearbox change outs
- Lubrication system servicing
- Secondary and tertiary sizer servicing
- Redesigned components giving lower pricing and longevity of product.

FIVE STAR POWER

Five Star Power is an Electrical Project Management and Contracting Company, with a strong commitment to renewable energy.

Established in 2007, Five Star Power has developed an excellent reputation for quality work throughout the Central Queensland Area, and is now the established dealer for Solahart products.

The company has an enviable list of capabilities including:

- Domestic Solar Power and Hot Water systems
- Industrial Solar Power design and installation
- Design and Installation of Switch Room and Power Conditioning
- Remote connection and monitoring of pumps, starters and plant
- Water Waste Treatment controls
- Design, wiring, testing and supply of Control Panels
- AutoCAD capabilities for layout and design
- Shutdowns, Electrical Upgrades and Maintenance
- Electrical Audits
- Test and Tag to AS/NZS 3760-2003 and Inspection to AS/NZS 3012-2003
- PLC Control Systems
- Industrial Electrical

- Electrical Contractor Licence 72948
- Clean Energy Council Accreditation A7665155
- Hazardous Area Training
- HV Switching
- Construction Blue Cards

Solahart
ENERGY Free FROM THE SUN®

ENERGY & INFRASTRUCTURE

The Energy & Infrastructure division of Techserve involves the provision of personnel and Services from Concept, Design, Engineering, Construction, Commissioning right through to Operation and Maintenance, 24 hours per day, 7 days per week.
At Techserve we provide the following personnel classifications across multiple locations and projects:
Engineers, Project Managers, Commissioning Managers, Site and Construction Managers, Superintendents, Supervisors, QA/QC personnel, Logistics, All Trades, Admin support staff, Mobile plant and civil construction personnel, Solar Panel Installers, Piling Operators, Trades Assistants and General Labourers
Our areas of expertise are provided within the following Industry Sectors:

- Renewable Energy – Solar/Wind/Pumped Hydro and Bio Fuel
- Major Infrastructure Projects
- CSG/LNG developments
- Full Project Resourcing including Energy, Port and Rail
- Shutdowns and turnarounds
- Industrial Corrosion Protection
- Civil Construction

At Techserve our goal is to utilise, train and upskill local/regional personnel on any Project wherever possible, thus creating economic sustainability within the regions that we operate in.

FIELD SERVICES

- Fully Mine Compliant 4WD Service vehicles with Trades Personnel for remote site repair and maintenance capabilities
- Available for short or long term contract requirements

ASSET MANAGEMENT – SITE INSPECTIONS AND REPORTING

1. Preparation and review of Pre-visit documentation pack arising from technical analysis of the project
2. Site visit - Visual Inspections:
- Visual inspection- PV panels including, shading, cleanliness, damage, defects, cables, connectors
- Visual inspection - Structures including integrity, labelling, state of foundations, corrosion etc
- Visual inspection -Weather station, including cleanliness, installation, inclination, serial number, enclosure
- Visual inspection- Cables - labelling, support, sharp edges, over tension, UV, ducts etc
- Visual inspection -Combiner boxes including enclosure, structure, labelling, ingress, fuses etc
- Visual inspection - Inverters - enclosure, operation, vent, etc
- Visual inspection- Transformers and HV□LV stations
- Visual inspection - Client-side substation
- Visual inspection - Monitoring system and communications system
- Visual inspection - Import□export meter
- Visual inspection - Drainage system and compliance with FRA
- Visual inspection- Tracks
- Visual inspection - OH&S including fire exits, documents and procedures, ES Button, availability of a HV AP etc
- Visual inspection - Perimeter fence including footings, ground movement, integrity of structures, access points and signage
- Visual inspection - Landscaping and site compliance with LEMP
- Visual inspection- Security system installation

3. Additional Services including Issue Management, Contractor Management, Contract Management and rectifications
4. Report generation for visual site inspections and additional services

SPECIALISED SERVICES

Specialised services operates in the following industries (Covering HA Groups I, II & III):

- Coal Mining – Underground and Surface
- Gas and Petroleum (CSG, LNG, LPG)
- Sugar and Bio-Ethanol
- Ammonium Nitrate
- Sewage Treatment/waste water
- Food, beverage and agriculture
- Power Generation
- Petro-Chemi
- Pharmaceuticals
- Port Authorities

DESIGN | ACCREDITED/COMPLIANCE AUDITS | DOSSIERS | TRAINING | SITE WORKS | WORKSHOP SERVICES:

- HA Classifications and Drawings
- HA/HV Audits and Gap analysis
- HA/HV equipment fabrication and overhauls
- Site Inspections
- Site Installation and Supervision
- HA/HV Training
- Competency Assurance
- Asset Management
- HA verification dossiers/machine dossiers
- HV compliance dossiers
- Functional Safety Compliance
- Type B gas appliance AS 3814 compliance consultancy
- Design consultancy - Power, Electrical, Instrumentation and Control for HA/HV Installations
- Functional Safety, consultancy and engineering (SIL, PL, PFH, CAT)
- AS/NZS 3000 site audits
- Equipment Protection Level (EPL) consulting
- HAZOPS and CHAZOPS
- Conformity assessment documents (CADS)
- TUV certified Functional Safety engineers - Machines and Safety Instrumented Systems
- RPEQ Engineers

TRAINING AND DEVELOPMENT

Techserve have the ability to train on and off site.
RTO Number 31615

Supervisors – EEM/MEE | LVR CPR | EEHA | EEHA Refresher
UEENEEE013B & UEENEEG169A – Plan and Manage Large Electrical Projects
RIIRAI609D – Establish & Maintain Electrical Installations, Reticulation & Protection System
UEENEE110A – Develop & Implement Energy Sector Maintenance Programs
UEENEEM031A/032A/033A/034A – Overhaul & Repair of Explosion-Protected Equipment
UEENEEM035A/036A/037A – Conduct a Conformity Assessment of Explosion-Protected Equipment
UEENEEM047A/074A/078A – Plan, Maintain & Manage Compliance of Hazardous Area Installations

Workshop Electricians | LVR CPR | EEHA | EEHA Refresher
HV4 Competency Cluster | HV4 Competency Cluster Refresher
UEENEEM060A – Carry Out Overhaul & Repair of Explosion-Protected Equipment
UEENEEM031A/032A/034A – Overhaul & Repair of Explosion-Protected Equipment

Site Electricians | LVR CPR | EEHA | EEHA Refresher
HV4 Competency Cluster | HV4 Competency Cluster Refresher

MENTORING PROGRAM

Techserve has had an established Mentoring Program for a number of years, designed to safety introduce new trades and operators to mining.

This formalised programs encompasses a 26 week structured training package with supported and monitored outcomes for each employee.

We recognise that particularly with trades, we are providing quality people that don't need to be retrained in their trade, but need quality training, support and assessment to safely introduce them into the underground mining environment.

OUR MAJOR CLIENTS

Techserve Mining and Energy is driven by Experience professional's committed to continuous high performance.

KEY PERSONNEL

Graeme Downing
Techserve Mining and Energy Director
36 Years Industry Experience.

Tim Magoffin
Chief Executive Officer
30 Years Industry Experience.

Peter Hodges
General Manager
30 Years Industry Experience.

Gordon Bourke
Chief Financial Officer
11 Years Industry Experience.

Ian Corr
Operations Manager – Mining
20 Years Industry Experience.

Megan Pettitt
Human Resources Specialist
10 Years Industry Experience.

Brad Shepherd
Contract & Commercial Manager
20 Years Industry Experience.

Rob Harding
Manager – Mining Division
40 Years Industry Experience.

Gary Kent
Specialised Services Manager
20 Years Industry Experience.

Peter Fenech
Energy and Infrastructure Manager
30 Years Industry Experience.

Josh Partridge
Regional Manager – Mining
10 Years Industry Experience.

Noel Fordyce
Solahart Manager
32 Years Industry Experience.

Scott Geach
Ground Consolidation Manager
17 Years Industry Experience.

Ashleigh Campbell
Corporate Services Manager
8 Years Industry Experience.

Mark Lavis
Diesel Workshop Coordinator
28 Years Industry Experience.

Mark Harrison
Account Manager
20 Years Industry Experience.

Steve Fenech
Branch Manager – Surat Basin
20 Years Industry Experience.

TECHSERVE HOUSE
5-7 Tennyson Street
Mackay QLD 4740
admin@techserve.com.au

MAILING ADDRESS
PO BOX 3334
North Mackay QLD 4740

QLD WORKSHOP AND TRAINING
23-25 Michelmore Street
Paget Mackay QLD 4740
International
P +617 4942 4511

CHINCHILLA OFFICE
Suite 6A
30-50 Warrego Highway
Chinchilla QLD 4413

NSW OFFICE
156 Racecourse Road
Rutherford NSW 2320
admin.nsw@techserve.com.au

MAILING ADDRESS
PO BOX 158
Rutherford NSW 2320

FIVE STAR POWER/SOLAHART
32/34 Malcomson Street
North Mackay QLD 4740

TECHSERVE
MINING & ENERGY