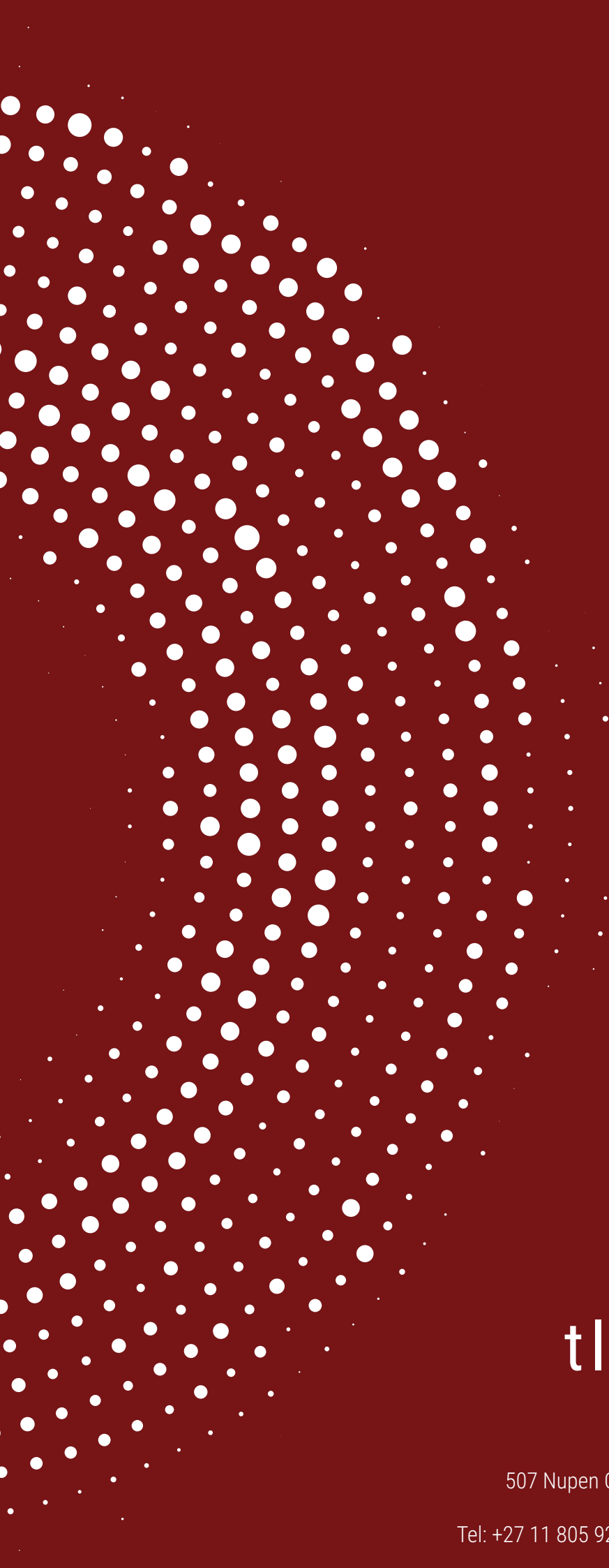
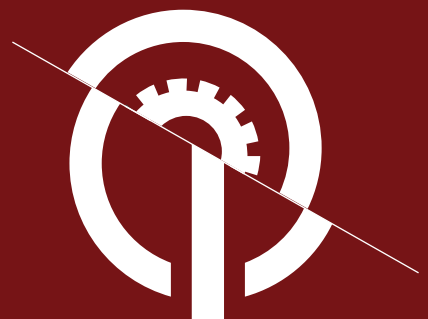




PROFILE



tlouengineering

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About Us

Tlou Engineering is a 100% black owned and managed company. Tlou Engineering provides range of services in asset management (predictive maintenance solutions), construction & engineering and non-destructive testing solutions within different industries.

We believe we are one of the only few companies in the country who uses technology to deliver the most accepted solutions on the market. With our knowledge in analytics and business intelligence, our monitoring solutions are accepted by the industries locally and internationally.

Through our professional conduct we have managed to establish trustworthy relationships with all our clients and investors based on respect and integrity. As a corporate citizen we are committed to providing our clients with sustainable and profitable development. As such, we endeavour to deliver services that are not only on par with industry standards but also surpass them.

Tlou Engineering is situated in Midrand a superbly located business venue which is home to numerous well established companies and organizations, many businesses have relocated to Midrand due to its proximity to excellent Highway links and its location in the economic centre of Gauteng Province.

We believe in being the best, getting the best and giving our clients the best. To fulfil this service promise we have invested in highly specialised skilled resources in the field of construction and engineering, mechanical engineering and electronics engineering.



Non-Destructive Testing

Nondestructive testing (NDT) comprises a wide group of analysis techniques used to evaluate the properties of a material, part, product, weld, or system without materially affecting the integrity of the unit under test.

These techniques can identify and assess defects and examine the properties of all kinds of materials and structures without causing any damage. As NDT in no way alters the part or structure under inspection, it is an extremely useful technique that can lead to cost and time savings when applied to product evaluations, asset management and fault identification and repair.

We offer a range of service in Non-Destructive Testing (NDT) which include:

- Radiographic Testing
- Ultrasonic Testing (conventional)
- Wall Thickness Testing
- Liquid Penetrant Testing
- Magnetic Particle Testing
- Hardness Testing
- Level III consultancy
- Phased Array on LP1 & LP2 last stage blade
- Mechanical UT of CRR
- Manual Inspection Chamfer (HP, LP, IP)



Engineering

Enterprise Asset Management

Monitoring Systems dedicated to turbo-electric generators

Asset Risk Management System brings decades of knowledge and experience with power systems diagnostics and data analysis to the areas of online monitoring, condition assessment and the strategic management of assets. It's a new breed of application offering real-time event notification around a sophisticated suite of analytics that are infused with our expertise in asset life-cycle and associated risks. Our on-line solution provides intelligent alerts and event notification so organizations can make more informed decisions between times of crisis and long-range operational planning. With Our on-line solution, companies can move beyond traditional notions of condition-based maintenance allowing employees to think more strategically about managing risks. Our on-line solution is a cost-effective tool for monitoring assets across the enterprise and providing the needed information to maintain and optimize assets - thereby reducing unplanned shutdowns, boosting production, increasing operational efficiency and decreasing maintenance costs

Too few or too many details - those are the typical complaints about most asset management systems. Asset managers need to know when a "notification" is a real or developing problem, and which asset needs the most attention. solution combines real-time with online and offline data sources and then compares the analytic results to decades-worth of benchmark data on asset performance. Our knowledgebase contains years of information and over millions records from equipment around the world, and offers a considerable advantage to enhanced interpretation and analysis of asset issues.

Our on-line solution is transformational by providing a clear view of asset health from the convenience of your workstation. Instead of wasting critical time searching for the right information, Our on-line solution searches for the needle in the haystack which is an asset event, and rolls up the salient details to a higher level - offering a consolidated geospatial view with clear, visual understanding of asset condition, criticality and risks. Our on-line solution gives you the power to drill down to the specific details you want and need to see.



Summary

Our asset risk management system powered by a sophisticated suite of analytical tools infused with our partners expertise in asset life-cycle and associated risks. Our on-line solution provides intelligent alerts and notifications. This means you can make more informed decisions between times of crisis and long-range operational planning. The solution pulls in on-line and off-line data sources, comparative data, advanced analytics and consideration of risk factors like load, cost and customers interrupted. It turns thousands of individual data points – everything from dielectric tests to operational data – into actionable information you can use to make critical decisions about day-to-day and long-term operations.

Type of Monitoring (Online)

- Partial Discharge Monitoring
- End-Winding Vibration Monitoring
- Rotor Flux Monitoring (Synchronous Machines)
- Rotor Winding Monitoring – Induction Motors
- Mechanical Vibration Monitoring
- Shaft Voltage and Current Monitoring
- Installation of air gap probes

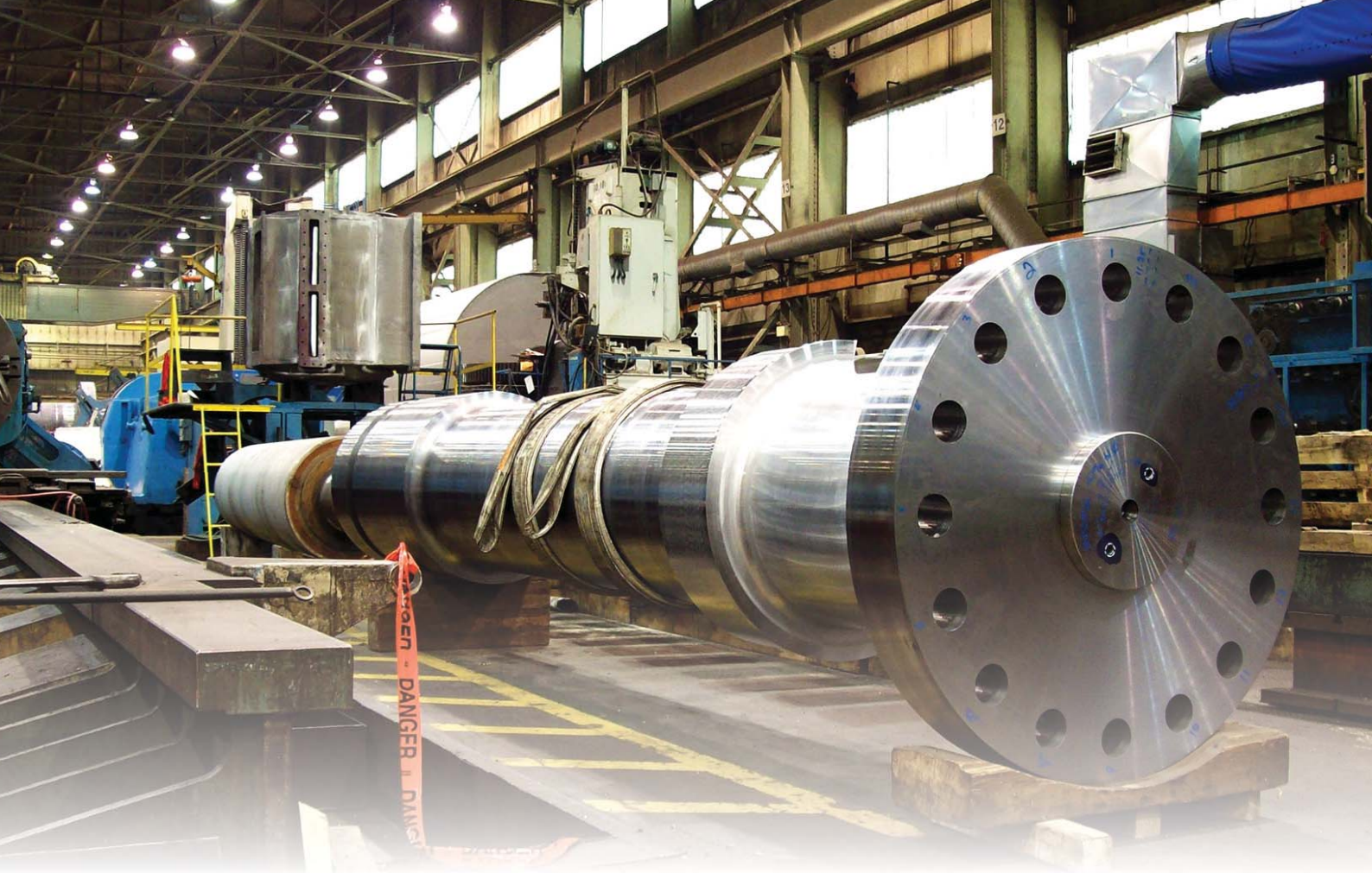
Why Condition Monitoring?

Avoid costly, unplanned outages - know the condition of your equipment

- Continuous monitoring
- Protects Expensive Equipment
- Predictive Maintenance
- Maximizes Production
- Reduces Downtime
- Asset Management

Benefits

- Detecting Early Stages of Stator Core and Frame Component Loosening
- Detecting Loose or Defective Wedging, End-Winding Support Systems and Stator Winding Insulation Problems
- Detecting Stator Core Delamination, Stator Bar and End-Winding Deterioration
- Detecting Rotor Shorted Turns
- Detecting Unwanted Shaft Currents
- Detecting Anomalies in Switchgear and Brushes

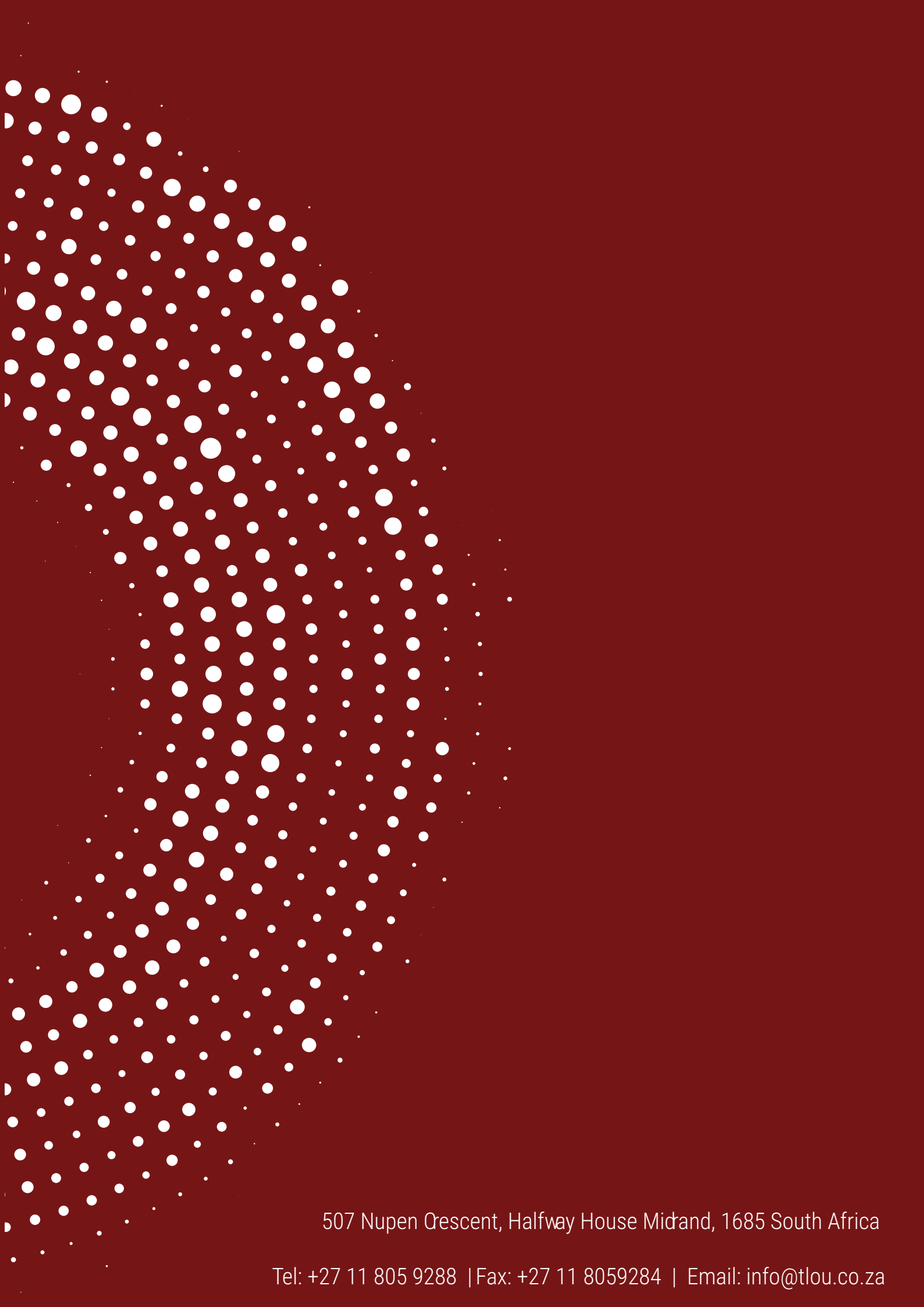


Monitored Asset

- Hydro Generator
- Turbine Generator
- Motor
- Switchgear

Business Intelligence

Tlou Engineering uses industry approved on-line software solutions, our technology is based on: Webservices, Java



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