

# THE ENGINEERING MANAGER'S GUIDE

## BUILD BETTER. ENGINEER SMARTER.

Drive engineering excellence through standardised, efficient and future-ready systems.



### KEY ENGINEERING PAIN POINTS



#### STANDARDISATION

Inconsistent standards create rework, confusion and inefficiency.



#### DOCUMENTATION

Poor or missing documentation slows projects and increases risk.



#### ENGINEERING EFFICIENCY

Manual tasks, rework and duplication waste time and resources.



#### CODE REUSE

Lack of reusable code and libraries increases development time.



#### UPGRADES

System upgrades are complex, disruptive and time-consuming.



### Standardised. Efficient. Future-ready.

Stratos Control Systems helps engineering teams deliver **better systems, faster—every time.**



#### FOR:

ENGINEERING MANAGERS  
AUTOMATION ENGINEERS  
CONTROL SYSTEM DESIGNERS  
PROJECT ENGINEERS  
SYSTEM INTEGRATORS



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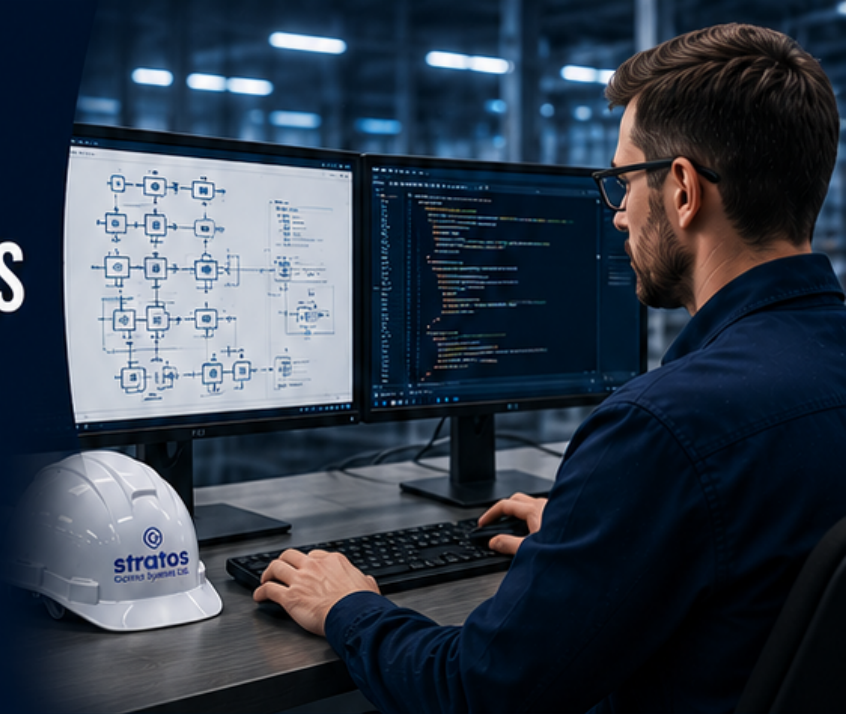


Corby, Northamptonshire,  
United Kingdom

# COMPLIANCE CHALLENGES IMPACTING ENGINEERING

Engineering teams face constant pressure to deliver better systems faster while working with inconsistent standards, poor documentation and legacy constraints.

Stratos Control Systems helps you overcome these challenges with standardised, efficient and future-ready automation solutions.



## THIS GUIDE WILL HELP YOU:



Identify engineering challenges that slow you down.



Understand the impact on project delivery, quality and efficiency.



See how Stratos delivers better systems through proven solutions.

## KEY ENGINEERING PAIN POINTS



### STANDARDISATION

Inconsistent standards across projects create rework, confusion and inefficiency.

**20-40%**

more engineering effort due to lack of standards



### DOCUMENTATION

Poor or missing documentation slows projects and increases risk.

**30-60%**

longer to onboard and deliver projects



### ENGINEERING EFFICIENCY

Manual tasks, rework and duplicate design consume time and resources.

**25-50%**

loss of productive engineering time



### CODE REUSE

Lack of reusable code and libraries leads to duplicate effort and longer delivery.

**20-40%**

increase in software development time



### UPGRADES

Legacy systems and outdated platforms make upgrades complex and risky.

**30-70%**

more effort spent on upgrade-related engineering



Addressing these challenges improves project delivery, reduces engineering effort and enables your team to focus on innovation and high-value work.

**Better systems. Smarter engineering. Stronger outcomes.**



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## FAULT FINDING & TROUBLESHOOTING

**FIND FAULTS FASTER.  
GET BACK TO PRODUCTION SOONER.**

Well-designed systems, clear information and better visibility mean faster diagnosis and quicker resolutions.







### THE CHALLENGE

Poor documentation, inconsistent panel layouts and undocumented modifications make troubleshooting slow and difficult.



### HOW STRATOS HELPS

Through standards-based panel design, clear labelling, structured PLC programming and comprehensive documentation, engineers can quickly locate faults and understand system operation.

| BEFORE<br>INCONSISTENT. UNCLEAR. SLOW.  | AFTER<br>STANDARDISED. CLEAR. FAST.   |  |   |
|---|---|--|---|
|   |   |  |   |
| <br>EASY TO FIND | <br>CLEAR DOCUMENTATION | <br>CLEAR LABELLING | <br>STRUCTURED PROGRAMMING |

### TYPICAL IMPROVEMENT



**30-70%**  
REDUCTION IN  
FAULT-FINDING TIME



**50-90%**  
REDUCTION IN  
DOCUMENTATION  
RETRIEVAL TIME

### BUSINESS IMPACT



#### FASTER REPAIRS

Engineers resolve issues quickly and get systems back online.



#### REDUCED DOWNTIME DURATION

Shorter outages mean more uptime and higher production output.



#### LOWER MAINTENANCE LABOUR COSTS

Less time spent searching, more time fixing.



#### LESS RELIANCE ON INDIVIDUAL "TRIBAL KNOWLEDGE"

Knowledge is documented, shared and sustainable.



Better information. Better systems.  
**Better outcomes.**



QUICKER DIAGNOSIS



IMPROVED PRODUCTIVITY



GREATER RELIABILITY



STRONGER REPERFORMANCE



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# ENGINEERING RESOURCE EFFICIENCY

**More Expertise. Less Strain.  
Better Results.**

Access specialist automation expertise when you need it, so your internal team can focus on what matters most.



**YOUR TEAM FOCUSED  
ON IMPROVING OPERATIONS**

**STRATOS HANDLES THE COMPLEXITY**



## THE CHALLENGE

Internal engineering teams are often stretched across maintenance, projects and operational support.



## HOW STRATOS HELPS

Stratos provides specialist automation expertise covering design, programming, commissioning and lifecycle support, reducing pressure on internal resources.

### END-TO-END AUTOMATION EXPERTISE



SYSTEM DESIGN



PLC & SCADA PROGRAMMING



COMMISSIONING & TESTING



LIFECYCLE SUPPORT



CONTINUOUS IMPROVEMENT

## TYPICAL IMPROVEMENT



**20-50%**

**REDUCTION IN  
ENGINEERING  
DESIGN TIME**

Through proven standards, reusable designs and efficient engineering processes.



**FASTER PROJECT  
EXECUTION**

Without increasing headcount, enabling your team to deliver more, sooner.

## BUSINESS IMPACT



**IMPROVED UTILISATION  
OF INTERNAL ENGINEERS**

Free up your team to focus on high-value engineering and continuous improvement.



**FASTER DELIVERY OF  
IMPROVEMENT PROJECTS**

Get expert resources in place quickly to keep projects moving and achieve results faster.



**REDUCED RECRUITMENT  
PRESSURE**

Reduce the need to hire specialist skills by leveraging an experienced automation partner.



**Right Expertise. Efficient Engineering.  
Stronger Performance.**



OPTIMISE  
RESOURCES



DELIVER  
MORE PROJECTS



DRIVE OPERATIONAL  
EXCELLENCE



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# MAINTENANCE EFFICIENCY

**EASIER MAINTENANCE. LOWER COSTS.  
GREATER RELIABILITY.**

Well-designed automation systems reduce maintenance effort and help your team focus on continuous improvement.



## THE CHALLENGE

Many maintenance teams operate reactively, spending time dealing with recurring faults rather than preventative improvements.



## HOW STRATOS HELPS

By designing maintainable systems, improving documentation and implementing standardised hardware platforms, maintenance activities become simpler and more predictable.

## TYPICAL IMPROVEMENT



**20-40%**

**REDUCTION IN  
MAINTENANCE LABOUR  
REQUIREMENTS**



**20-50%**

**REDUCTION IN  
ONGOING SUPPORT  
COSTS**

## BUSINESS IMPACT



### LOWER MAINTENANCE EXPENDITURE

Reduce reactive maintenance costs and get more value from your assets.



### IMPROVED ASSET RELIABILITY

More reliable systems mean fewer unexpected failures and greater operational stability.



### MORE TIME FOR PLANNED MAINTENANCE

Free up your team to focus on planned work and continuous improvement initiatives.



Smarter systems. Simpler maintenance.  
**Lower costs. Better performance.**



MAINTAINABLE  
BY DESIGN



CLEAR  
DOCUMENTATION



STANDARDISED  
SOLUTIONS



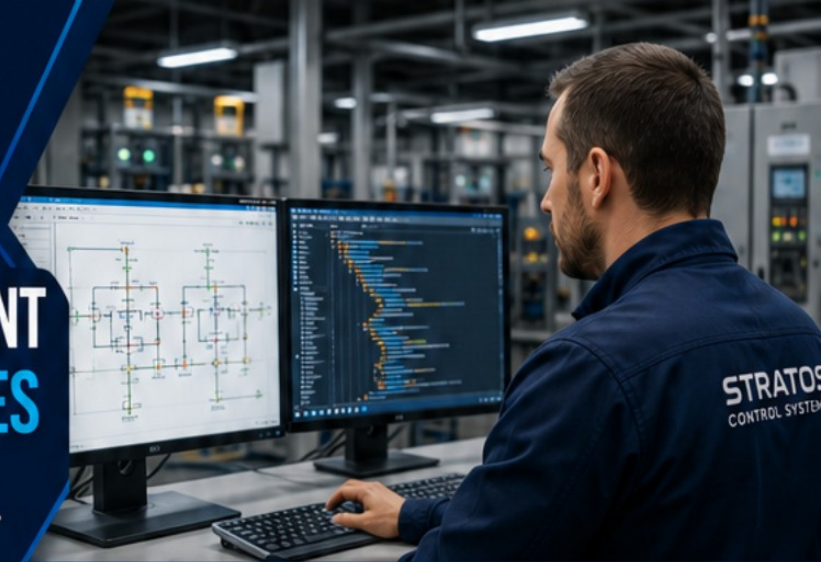
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## CHANGE MANAGEMENT & FUTURE UPGRADES

Designed for Change. Built for the Future.

Stratos designs and documents control systems so changes and upgrades are easier, faster and lower risk — today and in the future.



MODULAR  
BY DESIGN



EASY TO  
CHANGE



BUILT FOR  
TOMORROW



### THE CHALLENGE

Many organisations find even small modifications difficult because systems are poorly documented and inconsistent.



### HOW STRATOS HELPS

Modular designs, standardised programming and comprehensive documentation make future upgrades simpler and lower risk.

#### DESIGNED FOR EASY CHANGE



MODULAR  
ARCHITECTURE



STANDARDISED  
PROGRAMMING



COMPREHENSIVE  
DOCUMENTATION



REUSABLE  
COMPONENTS



SCALABLE FOR  
FUTURE NEEDS

SMALL CHANGES TODAY. BIG BENEFITS TOMORROW.

### TYPICAL IMPROVEMENT



**30-60%**

REDUCTION IN  
UPGRADE PROJECT RISK

Lower risk through consistent designs, standards and clear documentation.



FASTER  
IMPLEMENTATION OF  
FUTURE IMPROVEMENTS

Changes can be delivered quicker with less rework and downtime.

### BUSINESS IMPACT



LOWER  
LIFECYCLE COSTS

- ✓ Easier, lower-cost upgrades
- ✓ Less rework and re-engineering
- ✓ Lower total cost of ownership



REDUCED FUTURE  
PROJECT COMPLEXITY

- ✓ Clear structure and documentation
- ✓ Faster scoping and planning
- ✓ Simpler testing and commissioning



GREATER OPERATIONAL  
FLEXIBILITY

- ✓ Adapt quickly to changing needs
- ✓ Easier integration of new technologies
- ✓ Future-proofed operations



CHANGE WITH CONFIDENCE.  
UPGRADE WITH EASE.  
FUTURE-READY BY DESIGN.



DOCUMENTED  
& TRACEABLE



LOWER RISK  
CHANGES



LESS DOWNTIME  
& DISRUPTION



BUILT FOR  
CONTINUOUS  
IMPROVEMENT



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# TRAINING & ENGINEER ONBOARDING

Knowledge Shared.  
Engineers Empowered. Teams Stronger.



**CLEAR SYSTEMS.  
BETTER UNDERSTANDING.  
STRONGER TEAMS.**



## THE CHALLENGE

New engineers often struggle to understand legacy systems due to inconsistent standards and poor documentation.



## HOW STRATOS HELPS

Standardised architectures, documented systems and structured control philosophies reduce the learning curve for new personnel.

**BUILT FOR UNDERSTANDING. DESIGNED FOR SUCCESS.**



STANDARDISED ARCHITECTURES



COMPREHENSIVE DOCUMENTATION



CONSISTENT PROGRAMMING STANDARDS



INTUITIVE DIAGNOSTICS & VISUALISATION



CLEAR CONTROL PHILOSOPHIES & WORKFLOWS



From day one, new engineers can understand, contribute and **add value**.

## TYPICAL IMPROVEMENT



**30-60%**

**FASTER ONBOARDING OF NEW ENGINEERS**

New engineers reach productivity faster.



**50-90%**

**FASTER ACCESS TO TECHNICAL INFORMATION**

Find what you need, when you need it.

## BUSINESS IMPACT



**FASTER COMPETENCY DEVELOPMENT**

Engineers become effective sooner and contribute more quickly.



**REDUCED DEPENDENCY ON KEY INDIVIDUALS**

Knowledge is captured, shared and retained within the team.



**IMPROVED WORKFORCE RESILIENCE**

Strong, capable teams ready to support today and scale for tomorrow.



**EMPOWERING ENGINEERS.  
STRENGTHENING TEAMS.  
DELIVERING RELIABLE OPERATIONS.**



BETTER DOCUMENTATION



SHARED KNOWLEDGE



STANDARDISED SYSTEMS



STRONGER PERFORMANCE



# PRODUCTION EFFICIENCY & PROCESS PERFORMANCE

Consistent Control.  
Improved Performance.  
Stronger Results.

Stratos delivers automation solutions that improve process control, increase consistency and maximise equipment performance.



**PRECISE CONTROL**  
Better control of process variables



**REAL-TIME VISIBILITY**  
Actionable data for quicker decisions



**STABLE & REPEATABLE**  
Consistent results, every time



## THE CHALLENGE

Inconsistent automation systems often result in variable process performance and reduced productivity.



## HOW STRATOS HELPS

Improved process control, modern PLC systems and enhanced visibility increase consistency and repeatability.

### OUR APPROACH



**Analyse**  
Understand current performance



**Optimise**  
Improve control strategies & processes



**Implement**  
Modern systems & real-time visibility

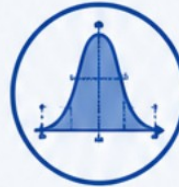


**Sustain**  
Monitor, refine and drive continuous improvement



BETTER CONTROL. BETTER PERFORMANCE. BETTER RESULTS.

## TYPICAL IMPROVEMENT



### REDUCED PROCESS VARIABILITY

Tighter control leads to more stable, predictable performance.



### IMPROVED PRODUCTION CONSISTENCY

More consistent output quality and throughput.



### HIGHER OVERALL EQUIPMENT EFFECTIVENESS

Improved Availability, Performance and Quality across the plant.

## BUSINESS IMPACT



### INCREASED THROUGHPUT

- ✓ More output with the same assets
- ✓ Better cycle times and less downtime



### IMPROVED PRODUCT QUALITY

- ✓ Consistent processes reduce defects
- ✓ Better compliance and customer satisfaction



### BETTER UTILISATION OF ASSETS

- ✓ Maximise the value of your existing equipment
- ✓ Lower operating costs and higher returns



**OPTIMISE TODAY.**  
**PERFORM BETTER TOMORROW.**



DATA-DRIVEN DECISIONS



STRONGER PROCESSES  
BETTER OUTCOMES



SUSTAINABLE RESULTS  
YOU CAN RELY ON



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# SPARE PARTS MANAGEMENT

**Standardise Today.  
Reduce Inventory. Lower Costs.**

Managing spare parts doesn't have to be complex or costly. Stratos helps you streamline your inventory and focus on what matters most.



**RIGHT PART. RIGHT TIME.  
LOWER COST. LESS RISK.**



## THE CHALLENGE

Legacy systems often contain multiple hardware platforms and obsolete components requiring extensive spare inventories.



## HOW STRATOS HELPS

Standardisation reduces hardware diversity and simplifies inventory requirements.

## TYPICAL IMPROVEMENT



**15-40%**

**REDUCTION IN SPARE PARTS INVENTORY REQUIREMENTS**

Fewer parts. Less inventory. Lower cost.

## HOW STANDARDISATION DELIVERS VALUE



**REDUCED HARDWARE DIVERSITY**  
Fewer platforms mean fewer spare parts.



**SIMPLIFIED INVENTORY MANAGEMENT**  
Easier to track, manage and forecast.



**LOWER HOLDING COSTS**  
Less capital tied up in excess inventory.



**REDUCED OBSOLESCENCE RISK**  
Current platforms with long-term support.

## FROM COMPLEX TO SIMPLE

**BEFORE**

Multiple Platforms  
High Inventory



**AFTER**

Standardised Platform  
Optimised Inventory



## BUSINESS IMPACT



**REDUCED INVENTORY HOLDING COSTS**

- ✓ Lower capital commitment
- ✓ Reduced storage requirements
- ✓ Less waste and write-offs



**EASIER PARTS SOURCING**

- ✓ Common components
- ✓ Multiple supplier options
- ✓ Faster lead times



**LOWER OBSOLESCENCE RISK**

- ✓ Proven, current technology
- ✓ Planned lifecycle support
- ✓ Fewer urgent replacements



**STANDARDISE. SIMPLIFY.  
SAVE TODAY. STAY READY FOR TOMORROW.**



STANDARDISED PLATFORMS



OPTIMISED INVENTORY



REDUCED COSTS



IMPROVED RELIABILITY



# MULTI-SITE STANDARDISATION

**One Standard.  
Every Site. Better Together.**

Standardised automation solutions that simplify operations, improve consistency and deliver long-term value across your entire facility network.



**ONE STANDARD. EVERYWHERE.  
CONSISTENT. RELIABLE. SCALABLE.**



## THE CHALLENGE

Different sites often use different PLC platforms, panel standards and control philosophies.



## HOW STRATOS HELPS

Stratos develops standardised automation architectures that can be deployed across multiple facilities.

### OUR STANDARDISATION APPROACH



**DEFINE STANDARDS**  
Common architectures and interfaces



**DESIGN ONCE**  
Standard panels, code and documents



**DEPLOY ANYWHERE**  
Consistent implementation across sites



**SUPPORT EVERY SITE**  
Simplified support and maintenance



Standard by design. Built for performance. Deployed at scale.

## TYPICAL IMPROVEMENT



**50-80%**  
**IMPROVEMENT IN  
PANEL BUILD CONSISTENCY**

Standard designs and build processes deliver consistent quality every time.



**FASTER SUPPORT AND  
MAINTENANCE ACROSS SITES**

Common platforms, code and documentation mean faster diagnosis and resolution.



**EASIER SCALABILITY AND  
REPLICATION**

New sites and projects benefit from proven, repeatable solutions.

## BUSINESS IMPACT



**REDUCED  
SUPPORT COMPLEXITY**

- ✓ Fewer platforms to support
- ✓ Common tools and training
- ✓ Lower spare parts diversity



**EASIER ENGINEER  
MOBILITY**

- ✓ Engineers can work across sites
- ✓ Less re-training and ramp-up time
- ✓ Stronger workforce flexibility



**LOWER LIFECYCLE COSTS  
ACROSS THE ESTATE**

- ✓ Economies of scale in design and build
- ✓ Reduced maintenance overhead
- ✓ Lower total cost of ownership



**ONE STANDARD.  
EVERY SITE.  
STRONGER TOGETHER.**



STANDARD  
ARCHITECTURES



STANDARD  
DOCUMENTATION



STANDARD  
CODE LIBRARIES



STANDARD  
PROCESSES



CONSISTENT  
PERFORMANCE

# THE OVERALL RESULT

Measurable impact. Real business value.  
Across every part of your operation.



**BETTER AUTOMATION.**  
**BETTER OUTCOMES.**

## TYPICAL IMPROVEMENTS ACHIEVED WITH STRATOS



**15–50%**  
**FEWER DOWNTIME INCIDENTS**

Improved reliability and greater uptime.



**30–70%**  
**FASTER FAULT FINDING**

Quickly identify issues and resolve faster.



**20–40%**  
**LOWER MAINTENANCE EFFORT**

More efficient processes and better systems.



**20–50%**  
**LOWER SUPPORT COSTS**

Reduced reactive support and external dependency.



**30–60%**  
**LOWER PROJECT RISK**

Better planning, standardisation and proven approaches.



**40–70%**  
**LESS AUDIT PREPARATION EFFORT**

Well-documented systems ready when you are.



**30–60%**  
**FASTER ENGINEER ONBOARDING**

Standardised systems are easier to learn and use.



**15–40%**  
**LOWER SPARE PARTS INVENTORY**

Fewer parts, lower inventory and less obsolescence risk.



**50–80%**  
**GREATER STANDARDISATION ACROSS FACILITIES**

Consistent architectures, designs and standards.

## THE RESULT FOR YOUR BUSINESS



**MORE RELIABLE OPERATIONS**

Reduced interruptions and greater stability.



**HIGHER PRODUCTIVITY AND PERFORMANCE**

Systems that enable your people to perform at their best.



**LOWER TOTAL COST OF OWNERSHIP**

Efficient to operate, support and grow.



**STRONGER, MORE RESILIENT TEAMS**

Empowered engineers and sustainable processes.



**SUSTAINABLE FUTURE**

Better outcomes for your business and the planet.



The result is not simply better automation—  
**it is a more efficient, reliable and maintainable operation that costs less to support throughout its lifecycle.**

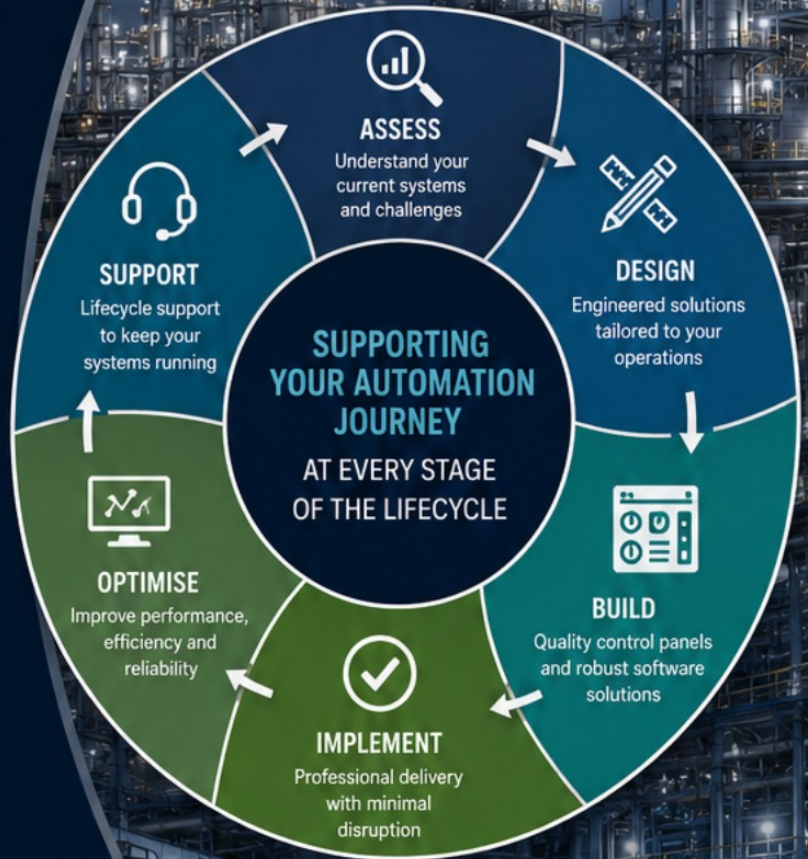
# THE STRATOS DIFFERENCE

Unlike many automation providers who focus solely on project delivery, Stratos Control Systems focuses on the entire lifecycle of your automation systems.



## OUR GOAL IS SIMPLE:

To help industrial organisations spend less time firefighting, less money maintaining ageing systems and more time operating efficient, reliable and scalable facilities.



## THE BENEFITS YOU CAN EXPECT



LESS DOWNTIME



LOWER LIFECYCLE COSTS



GREATER RELIABILITY



IMPROVED PERFORMANCE



EXPERT SUPPORT AT EVERY STAGE



BUILT FOR TODAY.  
READY FOR TOMORROW

## OUR CORE CAPABILITIES

Industrial Automation • PLC Programming • SCADA Systems • Control Panel Design & Build  
Control System Upgrades • Lifecycle Support



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