

VIRTUAL COMMISSIONING

Commission it before you ship it.

Your real PLC program, proven against a simulated plant, long before site.

✓ Find faults in the office

✓ Test trips safely

✓ Calmer days on site

WHAT WE DO

Emulated controller

Simulated I/O and plant behaviour

SCADA and HMI against the simulation

Sequence, interlock and fault testing

Changes to running plants

Witnessed tests and familiarisation

Talk to us about virtual commissioning

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www.matrixsystems.co.uk

SOUND FAMILIAR?

Site is the worst place to find a bug

THE PROBLEM

Bugs found on site**Found in the office**

Sequences, interlocks and alarms tested against a simulated plant.

THE PROBLEM

Risky live tests**Simulate the failure**

Trip drives, fail sensors, lose comms: safely, as often as needed.

THE PROBLEM

Interfaces meet on day one**Meet them early**

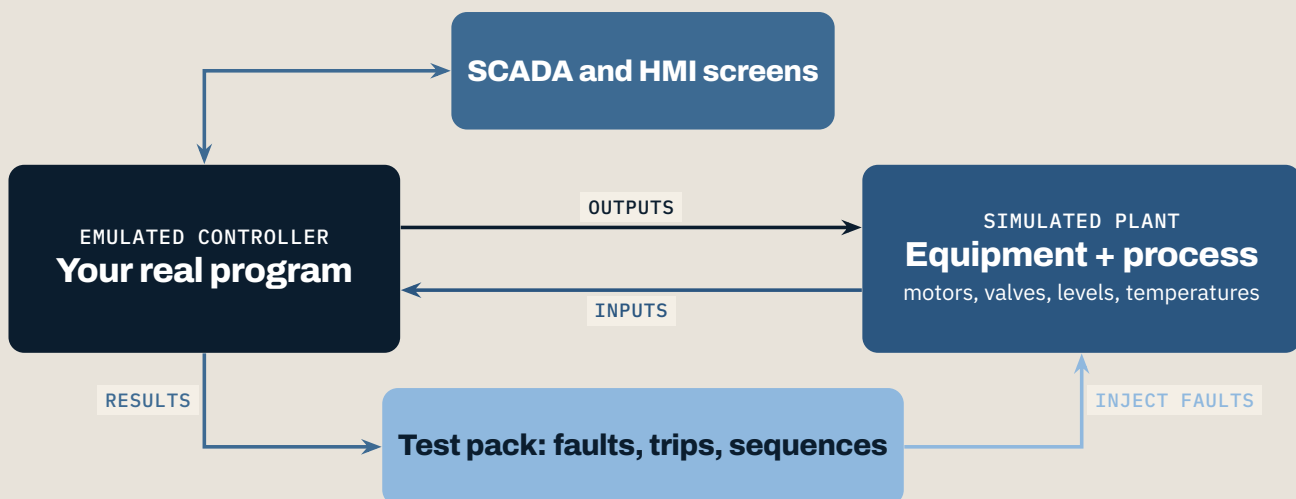
Screens and links tested before the equipment arrives.

THE PROBLEM

Operators see it at go-live**See it before**

Your team reviews screens and alarms in advance.

HOW IT WORKS

The real program, a simulated plant, every test recorded

WHAT WE DO

What virtual commissioning covers

01

Emulated controller

The real program in an emulated PLC

02

Simulated I/O and plant behaviour

Equipment and process that respond

03

SCADA and HMI against the simulation

Screens tested end to end

04

Sequence, interlock and fault testing

Every sequence and fault path tested

05

Changes to running plants

Prove changes before download

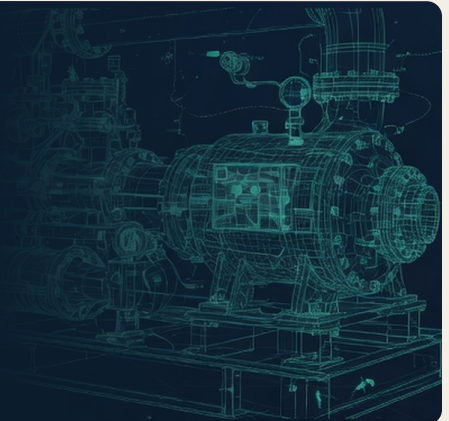
06

Witnessed tests and familiarisation

Witness early, practise early

OUR PROMISE

The real control program, proven against a simulated plant, before site.



HOW WE DELIVER

From specification to proven program

Model

Model the plant

Connect

Connect controller and SCADA

Test

Test and record

Witness

Witness early

Accept

Factory acceptance

Site

Site acceptance

WHY MATRIX

Engineers you can rely on

Since 1997

Designing, building and supporting industrial control systems.

ISO 9001

Certified quality system, plus Cyber Essentials, CHAS, Constructionline and SafeContractor.

24/7

Support available under a support agreement, for the life of your system.

Multi-vendor

Siemens, Rockwell, ABB, Schneider, Mitsubishi, Beckhoff, Emerson, Honeywell, GE.

QUICK ANSWERS

Does it replace FAT and SAT?

No. It comes before them, so they can focus on the real equipment and the process.

Can we use it on an existing plant?

Yes. A copy of the program that runs today is simulated, so a change is proven before it is downloaded.

Do we need a 3D model of the plant?

No. The simulation models how equipment and process behave, which is what the control program needs.

LET'S TALK

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Ask for the full service brief, or book a call with an engineer.

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