

## SIMATIC S5 to S7 Migration by Newfield Automation Ltd



Newfield Automation Ltd has a proven track record in migrating SIMATIC S5 to S7 systems and have developed various migration strategies which allows the customer to take advantage of the latest products available. These strategies have been developed to minimise the amount of downtime and disruption during the migration process thereby reducing the costs in loss of production.

Our migration skills not only lie with PLC's but also include the upgrade / migration of Siemens HMI's and Siemens WinCC SCADA systems. We also utilise the best Siemens products available for the Application(s) required with the customer's budget in mind. The migration can also be split into phases or systems to help with both capital expenditure and plant access limitations.

### The Problem

- Your S5 system is currently in use.
- You are aware that spares are becoming difficult and expensive to obtain.
- Support can become costly if you have to call an engineer out to site.

- Risk of your system failing and the impact in lost production.

### Requirements

- Replace obsolete S5 PLC Hardware
- Improve system reliability
- Improve system performance

### The Solution

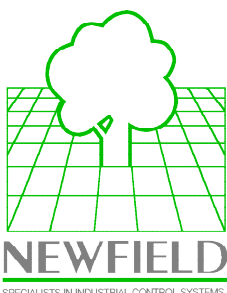
- Replace the existing S5 hardware with S7.
- Convert the existing S5 PLC software to S7.
- Use a pre-planned migration plan to implement the new S7 Hardware with minimum downtime
- Replace the existing S5 hardware with S7.

If your system consists of any of the following Simatic Model code:

- S5 95/100U
- S5 115U/F
- S5135U
- S5 150U/F
- S5 155U

Then your migration path is clearly mapped out to Siemens S7 technology!

**Replace your existing S5 PLC Hardware with the latest S7 PLC Hardware.**





## Certificates

Newfield Automation Ltd have proven competence as Siemens Solution Partners in the following areas:

- Automation System SIMATIC
- Human Machine Interface SIMATIC HMI.
- Industrial Communication SIMATIC NET .

## Implementation

Newfield Automations approach uses a formal structured methodology which has been applied to many successful migrations for satisfied clients in applications ranging from Baggage Handling to Food Manufacturing.

Our steps are as follows: -

- Identify the existing equipment and future operational and functional requirements.
  - Review the process of your existing system and take back ups of PLC and SCADA or HMI equipment as well as details of your existing wiring schematics.
  - Formulate and establish a recommended migration path and advise on the best course of implementation based on your operational requirements. (Some of the parameters to consider are shutdown periods, operational support, business risks/needs and deliverables). Once agreed, a detailed Method Statement and Risk assessment will be produced which will form the basis for the intended changeover methodology.
  - Production of a detailed program of works with identified "go / no go" points.
  - Conversion of the existing S5 PLC software to S7.
- We will work with you to provide a level of documentation that will allow the replacement system to be maintainable. This will include both hardware and software documentation. We can also provide GA's, material lists, wiring schematics, cable schedules, etc as well as user requirement specifications, functional design specifications and software design specifications
  - After the software has been migrated to the new platform(s), we will provide the means of validating the new software. Upon satisfactory validation the completed system is released for installation.
  - The physical changeover phase is normally viewed as the most critical. However by carrying out detailed offline validation prior to changeover and by the use of a number of pre-planned swap over methodologies such as direct I/O connection leads, hot swap terminations and bus coupled I/O. The risks are engineered down to an acceptable level.
  - Finally after completion of the installation phase the commissioning of the system will take place to an agreed testing schedule. Support documentation will then be supplied, enabling you to maintain the system in the future.

## Benefits

- Improved system diagnostics.
- Less downtime due to more reliable hardware.
- Spares readily available.
- Future expansion and modifications made easy.
- Easily integrated into Siemens products

## References

- [SIMATIC S5 to S7 Migration Brochure](#)



**Newfield Automation Ltd**

## Information about the Siemens Solution Partner Program

Under the Siemens Solution Partner Automation and Power Distribution Program, we join forces with our Solution Partner. By merging our product and systems expertise with the application and industry knowledge of our partners, we have created a common basis for the fast, smooth and highly efficient implementation of your requirement –customized solutions for your competitive advantage.

[www.siemens.com/automation/solutionpartner](http://www.siemens.com/automation/solutionpartner)

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