



Amada Engineering Europe Reduces Testing Workload by 90%

Challenge

Amada Engineering Europe provides their global corporate group with complex, business-critical software. These products are frequently changed and updated causing the workload of system testing to explode. With limited resources available, the team responsible for the quality assurance of the software had to skip any regression testing of new releases posing a serious risk to vital business operations. With the LEAPWORK Automation Platform, Amada Engineering Europe was able to mitigate that risk by automating their regression testing.

Results with LEAPWORK

Efficiency gain

90%

4 hours of testing,
down from 40 hours

Better coverage

5x

more applications
tested

Quick adoption

67%

of test suite automated
in a year



LEAPWORK is just great a tool. It eliminates the need for an extensive testing phase for each release. Now, we can focus on more strategic work and more meaningful tests.

Lorenzo Minetti, Customer Support Engineer



Amada Engineering Europe

- Develops, and provides technical support for, manufacturing software solutions to the AMADA European subsidiaries.
- Industry: Metalworking machinery
- Part of AMADA Group consisting of approximately 80 companies.

Technologies automated

- A Computer-Aided Manufacturing (CAM) system for sheet metal machines.
- A Flexible Manufacturing System (FMS) for machine automation and communication between devices at plants.
- A web- and SQL-based Manufacturing Execution System (MES).



As part of a global provider of manufacturing solutions, Amada Engineering Europe plays an important role in the corporate group's extensive model for delivering business-critical software. The products are complex and rely heavily on integrations with other systems. As such, they are a challenge to test and pose a serious risk to quality management.

Customer Support Engineer Lorenzo Minetti heads a team of twelve technicians. They are responsible for quality assurance of several vital manufacturing systems. The team's primary task is to test new versions of software coming from company headquarters to be rolled out regionally.

Regression testing neglected

As many as four major upgrades are released annually for each system, not counting patches and service packs. The workload required for proper quality assurance grows with each system upgrade. Previously, the team had to skip any regression testing to make the time available suffice. Even then, Minetti and the team were only able to test a very limited number of test cases. When new versions released, the team could only hope that a recent upgrade wouldn't break essential business operations.

At Amada Engineering Europe, the software solutions under test are complex, legacy systems that have lived in the global organization for years. When new versions are released for aging, heavily customized systems, there is a high risk of critical bugs being released to end-users. The risk is severely heightened when regression testing is compromised.

First test automation attempts were unreliable

Test automation was the obvious solution. Minetti and his team had tried different solutions for automation, but none of them could handle the systems under test, jeopardizing vital business processes. They needed a solution that could handle their need for regression testing of several client-facing systems, including legacy and customized applications going across several technologies.

Within one year of adapting the LEAPWORK Automation Platform, the Customer Support Engineers had partially automated the testing of four business-critical systems; a CAM system, an FMS application, a MES application, and a database-exchange. And now it takes Minetti's team less than a day to build an automated test case – even if it is a very advanced flow containing complex logic and involving several systems.

The team's entire suite of regression tests, including verification of order handling and data management across systems, are covered by approximately 250 LEAPWORK automation flows. Executing these flows take place during night in a virtual environment.



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