

# “QES” – Quality Execution System

## One Focus „Quality Assurance Software for Rolling Mills“

To enable industrial mass production and at the same time highest flexibility, QuinLogic developed software products by applying latest generation of computing power and storage capabilities. Based on this technical evolution, QuinLogic provides an “easy to use” quality assurance solution for rolling mills.

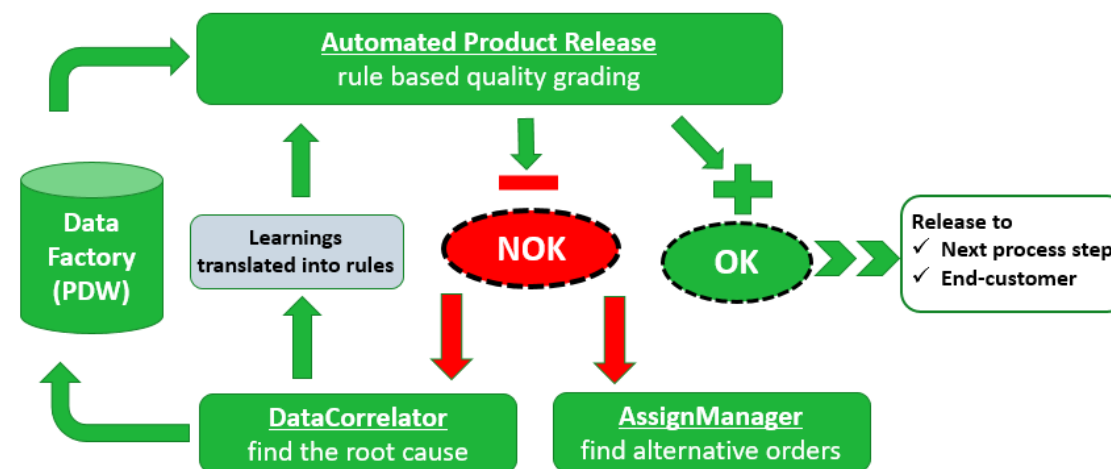
The QuinLogic Software secures reliable quality for the challenging markets e.g. for automotive-, airplanes-, wind energy-, high strength- and wear resistant material grades. And it also provides proactive support, to immediately address production problems and therefore minimize deficiencies in customer products. Its seamless communication interfaces to existing MES, ERP and gauging systems allows fully integrated systems in all existing but also new production lines.

Our focus is on key value drivers:

**improving revenues (upgrades, reassigns) reducing cost (material, energy, labor), increasing yield (uptime, throughput, quality)**

Combining our experience with the digital assistance we provide solutions that make more out of our customers quality and process data!

- ✓ Create 100% transparency of all related production steps
- ✓ Supports to eliminate variability and create stability in the process
- ✓ Early warning in case of quality or process deviations
- ✓ Reduction of quality cost by less internal down grades
- ✓ Reduction of customer claim risks
- ✓ Gain process know how and preserve knowledge
- ✓ Better use of data and derive rules from the models for the continuous quality evaluation
- ✓ Support a continuous improvement process of quality and efficiency



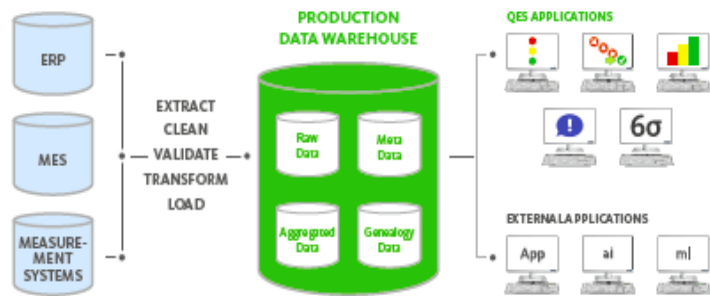
# QES – Quality Execution System

## QES – Data Factory

### Optimum prerequisite for any data driven application

This Data Factory is a specific rolling mill data warehouse solution developed by QuinLogic and designed for the special requirements of the metals rolling industry.

All kind of data that comes from processes, planning system, surface inspection system or any quality measurement system is integrated!



- Unified Data Access
- Rule Based Data Validation
- Configurable
- Lossless Data Compression

## QES – Automated Product Release

### Is the Quality According to the Specification? ✓

In order to minimize variations and deviations and their consequences and to reduce the effort for quality assessment, the Automatic Product release application is already an important component in many rolling mills. It uses comprehensive process, product and quality data to assess the quality - from level 1 to level 4.

Applying the Automated Product Release you

- ✓ secure quality improvements and increase market share in demanding markets
- ✓ decrease internal downgrade rates
- ✓ decrease customer complaint rates
- ✓ standardized quality
- ✓ speed up the throughput



## QES – Data Correlator

### Predictive Quality

As a fully integrated QES application the DataCorrelator provides the user with a powerful explorative data analysis tool.

The primary focus are the root cause analysis, comparative analysis and predictive models. This, combined with the user's expertise, allows the determination of the influence that different factors have on a variable, as well as the comparison of a variable under different conditions.

In addition, it provides the user with an easy way to export the results of these operations to be utilized for the quality monitoring and to predict a quality risk.

