

Midland Steel Case Study **NightingaleHQ**

Full product lineage achieved and 100s hours saved with steel mill certificate AI process

Midland Steel is recognised as a prominent supplier of reinforcing steel in Ireland and the UK, offering a wide range of products such as Cut & Bend rebar and FasterFix, their off-site solution. The company is focused on digitalising manual, time-consuming processes within production. The Production team previously spent many hours manually handling mill certificates and entering extensive Heat codes to rename documents to support providing construction customers with full product lineage.

Midland Steel adopted the **GoSmarter Compliant Steel** AI tool to save time and improve efficiencies. The tool automated the manual workflows using AI models to classify, extract, and store Mill Certification data, including renaming files by Heat Codes and capturing essential material and chemical information.

APPROACH

We worked closely with the Production Team to review the manual Mill Certification data process and identify opportunities for digitalisation and automation. Allow the end user to upload Mill Certificates and download results easily.

OBJECTIVES

- ❑ Assess existing systems and processes related to Mill Certifications.
- ❑ Develop a tool to automatically save Mill Certifications as separate PDF documents and rename files by product Heat Codes.
- ❑ Use data classification and extraction models to pull key information from Mill Certifications, including: Heat Numbers, CeQ values, Material composition, Chemical composition, Mechanical properties
- ❑ Train and test models by assigning values to fields and tables to improve extraction accuracy.
- ❑ Enable data downloads directly from the system for the Production Manager.

ACHIEVEMENTS

- ✓ Tested, validated, and implemented the GoSmarter Compliant Steel AI in production.
- ✓ Automated file saving and renaming processes based on product codes.
- ✓ Successfully extracted valuable chemical and material data for use in production and compliance.
- ✓ Developed and applied custom classification models, particularly useful when onboarding new mills with different certificate formats.

KEY RESULTS

- ✓ Saved more than 120 hours a year of production manager time
- ✓ Reduced error rates in records
- ✓ Decreased time to provide information to customers

"I logged in for the first time and was up and running in minutes. Compliant Steel AI now pulls all the key info—chemical composition, mechanical properties—automatically. What used to take hours every week is done in seconds." **Production Manager, Midland Steel**



**MIDLAND
STEEL**



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