

UMGENI IRON AND STEEL FOUNDRY

IMPROVING CASTING ACCURACY WITH SOLIDWORKS PREMIUM

ABOUT

Established in the late 1890s as Umgeni Engine Works, Foundry & Forge, [Umgeni Iron and Steel Foundry](#) is one of Durban's oldest iron and steel foundries.

Based in Springfield Industrial Park, Durban, South Africa, they specialise in high-quality castings.

Their work supports sugar mills, mining, shipping, brick works, and general engineering sectors, where accurate weights, scale drawings, and clear method sheets support casting preparation.

CHALLENGE

Umgeni Iron and Steel Foundry previously relied on Excel for calculations and 2D instruction sheets.

This was time-consuming and inaccurate because Excel is not designed for technical drawings or complex 3D modelling.

SOLUTION

Implementing [SOLIDWORKS Premium](#) for casting simulation, running system design, and workshop method sheets.

RESULTS

- Improved 3D model accuracy for casting preparation.
- Printed scale drawings for the foundry floor.
- Identified casting adjustments through simulation tools.
- Improved quoting accuracy with reliable material weights.

“ Adopting **SOLIDWORKS** will put your company 10 steps ahead of the competition, with major advantages in planning, casting quality, time management, and competitiveness. ”

Audy Bekker

General Manager, Umgeni Iron and Steel Foundry