Sheet Metal Client Hub Test Plan

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Introduction

This Test Plan outlines the testing strategy for the Sheet Metal Client Hub, following the Design Document in the Waterfall SDLC. It defines the approach for validating the Tkinter GUI, cost calculation logic, and file I/O to ensure the application meets functional and performance requirements.

Testing Objectives

1) Verify GUI functionality for login, part input, cost output, and settings screens.
2) Validate cost calculations for 10 work centres across all material thicknesses (1, 1.2, 1.5, 2, 2.5, 3 mm), lay-flat dimensions, and bends.
3) Ensure secure file I/O for user credentials and rates.
4) Confirm unit tests cover core functionality (calculator, GUI).

Test Scope

- ☑ In-Scope: Functional testing of GUI and calculations, unit testing of code, file I/O validation.
- ☒ Out-of-Scope: Performance testing, security penetration testing.

Next Steps

- ➢ Develop detailed test cases and execute tests during the Testing phase (21 May – 31 May 2025).
- ➢ Document results in Test Logs.