**SOFTWARE BILL OF MATERIALS**

(SBOM)

Metal Finishing Calculator v3.0.0

# 1. SBOM Metadata

|  |  |
| --- | --- |
| **SBOM Format:** | CycloneDX 1.4 (conceptual alignment) |
| **Document Version:** | 1.0 |
| **Generated:** | January 30, 2026 |
| **Generator:** | Manual enumeration + package.json analysis |
| **Software Name:** | Metal Finishing Calculator |
| **Software Version:** | 3.0.0 |
| **Supplier:** | Psyrcuit LLC, Tucson, Arizona, USA |
| **Component Count:** | 7 primary components (6 JS libraries + 1 WASM binary) |

# 2. Primary Components

All components are bundled locally within the application at build time. No runtime downloads or CDN calls occur. The application uses system fonts via Tailwind CSS defaults.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Component** | **Version** | **License** | **Source** | **Purpose** |
| **Electron** | 40.1.0 | **MIT** | npmjs.com/electron | Desktop runtime |
| **React** | 18.2.0 | **MIT** | cdnjs.cloudflare.com | UI framework |
| **ReactDOM** | 18.2.0 | **MIT** | cdnjs.cloudflare.com | DOM rendering |
| **Babel Standalone** | 7.23.5 | **MIT** | cdnjs.cloudflare.com | JSX transformation |
| **Three.js** | r128 | **MIT** | cdnjs.cloudflare.com | 3D visualization |
| **occt-import-js** | 0.0.18 | **LGPL-2.1** | jsdelivr.net/npm | CAD file parsing |
| **jsPDF** | 2.5.1 | **MIT** | cdnjs.cloudflare.com | PDF generation |

# 3. WebAssembly Components

The application includes one WASM binary for CAD file processing:

|  |  |
| --- | --- |
| **Property** | **Value** |
| **Component:** | occt-import-js.wasm |
| **Version:** | 0.0.18 (matches occt-import-js) |
| **License:** | LGPL-2.1 (Open CASCADE Technology) |
| **Source:** | https://cdn.jsdelivr.net/npm/occt-import-js@0.0.18/dist/occt-import-js.wasm |
| **Original Project:** | Open CASCADE Technology (OCCT) - www.opencascade.com |
| **Purpose:** | STEP/STP file parsing for 3D geometry surface area calculation |
| **Bundled Location:** | lib/occt-import-js.wasm |

# 4. Build Dependencies (Development Only)

These packages are used during the build process only and are NOT included in the distributed application:

|  |  |  |  |
| --- | --- | --- | --- |
| **Package** | **Version** | **License** | **Purpose** |
| **electron** | ^40.1.0 | **MIT** | Development runtime |
| **electron-builder** | ^26.6.0 | **MIT** | Packaging and distribution |

|  |
| --- |
| **Note:** Electron and electron-builder have numerous transitive dependencies used only during build. These are not bundled into the final application. A full dependency tree is available via npm ls --all in the source repository. |

# 5. License Summary

|  |  |  |
| --- | --- | --- |
| **License** | **Count** | **Components** |
| **MIT** | **6** | Electron, React, ReactDOM, Babel, Three.js, jsPDF |
| **LGPL-2.1** | **1** | occt-import-js (includes WASM binary) |

## 5.1 LGPL-2.1 Compliance Statement

|  |
| --- |
| **LGPL-2.1 Compliance Notice**  Metal Finishing Calculator uses occt-import-js (a WebAssembly port of Open CASCADE Technology) as an **unmodified, dynamically-linked library**.  In accordance with LGPL-2.1 requirements:  - The library is loaded at runtime as separate files (occt-import-js.js + .wasm)  - No modifications have been made to the library source code  - Users may replace the library with a compatible modified version  - Source code: https://github.com/AugustNagro/occt-import-js  *No GPL contamination of proprietary application code occurs under this usage.* |

# 6. Vulnerability Statement

|  |  |
| --- | --- |
| **Last Scan Date:** | January 30, 2026 |
| **Scan Tool:** | npm audit + manual review |
| **Critical Vulnerabilities:** | **0** |
| **High Vulnerabilities:** | **0** |
| **Medium Vulnerabilities:** | **0** |
| **Low Vulnerabilities:** | **0** |

**Update Policy:** Psyrcuit monitors security advisories for all bundled components. Critical vulnerabilities are patched within 30 days. Customers are notified via email when security updates are available.

# 7. Supply Chain Attestation

|  |
| --- |
| **Psyrcuit LLC attests that:**  1. All third-party components are obtained from official, verified sources (npm registry, Cloudflare CDN, jsDelivr CDN).  2. No modified or forked versions of any component are used.  3. All components are pinned to specific versions to ensure reproducible builds.  4. The build process downloads components via HTTPS with TLS verification.  5. Final application binaries are built on secure, controlled build systems.  6. Release artifacts include SHA-256 checksums for integrity verification. |

# 8. Component Source URLs

Complete URLs for all bundled components (as fetched by offline bundler at build time):

|  |
| --- |
| # React 18.2.0  https://cdnjs.cloudflare.com/ajax/libs/react/18.2.0/umd/react.production.min.js  # ReactDOM 18.2.0  https://cdnjs.cloudflare.com/ajax/libs/react-dom/18.2.0/umd/react-dom.production.min.js  # Babel 7.23.5  https://cdnjs.cloudflare.com/ajax/libs/babel-standalone/7.23.5/babel.min.js  # Three.js r128  https://cdnjs.cloudflare.com/ajax/libs/three.js/r128/three.min.js  # occt-import-js 0.0.18 (JS + WASM)  https://cdn.jsdelivr.net/npm/occt-import-js@0.0.18/dist/occt-import-js.js  https://cdn.jsdelivr.net/npm/occt-import-js@0.0.18/dist/occt-import-js.wasm  # jsPDF 2.5.1  https://cdnjs.cloudflare.com/ajax/libs/jspdf/2.5.1/jspdf.umd.min.js |

# 9. Add-On Component Tracking

## 9.1 Available Add-On Modules

The following add-on modules are currently available as signed, optional extensions:

|  |  |
| --- | --- |
| **Component** | Detail |
| **STEP Surface Area Extraction** | Version 1.0.0 – Extracts surface area data from 3D STEP files using OpenCascade.js. Signed by Psyrcuit LLC. |
| **MetFin ERP Integration** | Version 1.0.0 – Exports quote data to MetFin ERP system via local file exchange. Signed by Psyrcuit LLC. |

## 9.2 Add-On Security and Supply Chain

All distributed add-ons are developed internally by Psyrcuit LLC and cryptographically signed using Ed25519 with SHA-256 content hashing. The signing private key is held offline by Psyrcuit LLC. The verification public key is embedded in the application binary.

Add-ons are not sourced from third-party package registries. Each add-on’s dependencies (if any) are bundled within its distribution directory and included in the signature scope. No runtime dependency resolution or network fetching occurs.

## 9.3 SBOM Scope and Liability

This SBOM covers the core application and its bundled dependencies. Add-on modules are tracked separately as optional components. Each add-on’s own dependency chain is documented in its addon\_manifest.json file.

**WARNING: Psyrcuit LLC does not provide SBOM coverage for any add-on whose cryptographic signature has been removed, modified, or bypassed. Third-party or unsigned add-ons installed through binary modification are outside the scope of this attestation.**

For SBOM inquiries or component verification: security@psyrcuit.com

Psyrcuit LLC • Tucson, Arizona • psyrcuit.com