OEE Management

Licence Agreement, Copyright & Legal Disclaimer

Document Version: 1.0
Effective Date: February 2026
Product: OEE Management
Parent System: CNC Machine Shop Manager V 1.0.1

Table of Contents

---

1. Product Information

1.1 Product Name

OEE Management

1.2 Parent System

OEE Management is an integral component of the automated machine shop management system:

CNC Machine Shop Manager V 1.0.1

1.3 Author and Developer

Developed by Oleksandr Velyvchenko

Engineer / Software Developer

1.4 Development Context

This software application has been independently developed as a professional portfolio project, demonstrating expertise in:

- Full-stack web application development

- Manufacturing process analysis and optimisation
- Data visualisation and reporting systems
- Industrial software engineering principles

---

2. Product Status

2.1 Development Phase

This product has been developed:

- **In test mode** for demonstration and evaluation purposes
- **Exclusively for familiarisation** with manufacturing efficiency concepts
- **As a proof of concept** for digital transformation in mechanical workshops

2.2 Commercial Status

At the present time, this product:

- **Is NOT a commercial product** and is not offered for sale
- **Is NOT intended for industrial exploitation** without further development and customisation
- **Is NOT certified** for use in production environments requiring regulatory compliance

2.3 Data Disclaimer

IMPORTANT NOTICE:

All data presented within this system, including but not limited to:

- Database entries and records
- Report outputs and statistics
- Charts, graphs, and analytical visualisations
- Machine configurations and parameters
- Production metrics and efficiency calculations

Are entirely fictitious and have been created solely for the purpose of:

- Demonstrating the user interface
- Showcasing system functionality
- Illustrating analytical capabilities
- Providing a realistic user experience for evaluation

No real manufacturing data, company information, or actual production statistics are represented within this demonstration system.

---

3. System Purpose

3.1 Primary Functions

The OEE Management system is designed for:

Data Collection

- Capturing production data from manufacturing operations

- Recording time-based activity classifications
- Documenting quality metrics and scrap rates
- Tracking setup times and cycle times

Efficiency Analysis

- Analysing Overall Equipment Effectiveness (OEE)
- Evaluating department-level performance
- Comparing machine utilisation rates
- Assessing shift-by-shift productivity
- Measuring workshop-wide efficiency trends

Reporting & Analytics

- Generating comprehensive statistical reports
- Producing analytical dashboards
- Creating visual charts and diagrams
- Exporting data in multiple formats (PDF, Excel)

3.2 Business Value

The system is intended to:

- **Identify strengths and weaknesses** in production processes
- **Support management decisions** with data-driven insights
- **Enable engineering improvements** through trend analysis
- **Serve as a digitalisation tool** replacing paper-based reporting
- **Automate data processing** and analytical calculations

3.3 Target Users

The system is designed for use by:

- Machine operators for data entry
- Shift supervisors for operational monitoring
- Production managers for strategic analysis
- Process engineers for continuous improvement
- Quality departments for compliance tracking

---

4. Innovation & Technology

4.1 Technical Implementation

The system incorporates:

Mathematical Calculations

- Complex OEE formulae (Availability × Performance × Quality)
- Aggregated production metrics
- Statistical analysis algorithms
- Trend calculation methodologies

Data Presentation

- Numerical reports with calculated totals
- Interactive charts and diagrams
- Visual efficiency indicators
- Comparative analysis displays

4.2 Benefits

These features facilitate:

- Simplified interpretation of complex production data
- Rapid identification of efficiency losses
- Effective monitoring of scrap rates and quality
- Clear visualisation of productivity trends
- Informed decision-making at all organisational levels

---

5. Legal Disclaimer

5.1 Independent Creation

This project constitutes an **independent side project** created by Oleksandr Velyvchenko.

The development has been undertaken:

- Based on **general engineering knowledge** acquired through professional experience
- Using **publicly available information** regarding manufacturing best practices
- **Without access** to any proprietary systems, trade secrets, or confidential information belonging to any third party
- **Without utilisation** of any employer’s intellectual property, resources, or confidential data

5.2 OEE Standard

Overall Equipment Effectiveness (OEE) is:

- A **globally recognised industry standard** for measuring manufacturing productivity
- An **open methodology** documented in numerous public sources
- **Not a patented or proprietary method** owned by any single entity
- A standard widely adopted across industries including automotive, pharmaceutical, electronics, and general manufacturing

The implementation of OEE within this system:

- Represents the author’s **own interpretation** of established principles
- Is based on **publicly available formulas** and calculation methods
- Does not incorporate any proprietary algorithms or protected methodologies
- Follows **industry-standard conventions** for metric calculation

5.3 No Affiliation

This product:

- **Is NOT affiliated** with SAP, Oracle, Siemens, or any other enterprise software provider
- **Does NOT utilise** proprietary SAP logic, modules, or intellectual property

- **Does NOT incorporate** code, designs, or methodologies from any commercial ERP system
- **Is NOT endorsed** by any manufacturing standards organisation

Any references to industry standards, manufacturing terminology, or established practices are used:

- **Exclusively for educational purposes**
- **In a demonstration context**
- **To illustrate common manufacturing concepts**

5.4 Third-Party Technologies

This application is built using open-source technologies including:

- Next.js (React framework)
- TypeScript
- PostgreSQL
- Prisma ORM
- Tailwind CSS
- Recharts

All third-party components are used in accordance with their respective open-source licences.

---

6. Intellectual Property

6.1 Ownership

All intellectual property rights in this software, including but not limited to:

- Source code and programming logic
- Database schemas and data structures
- User interface designs and layouts
- Calculation methodologies and algorithms
- Documentation and user guides
- Visual elements and styling

Are owned exclusively by **Oleksandr Velyvchenko**.

6.2 Restrictions

Without prior written consent from the author, you may NOT:

- Copy, reproduce, or duplicate the software or any portion thereof
- Distribute, publish, or transmit the software to third parties
- Modify, adapt, or create derivative works
- Reverse engineer, decompile, or disassemble the software
- Use the software for any commercial purpose
- Remove or alter any copyright notices or attributions
- Claim authorship or ownership of the software

6.3 Permitted Use

This software may be:

- Viewed for demonstration and evaluation purposes
- Referenced in the context of professional portfolio review
- Discussed in academic or professional settings with appropriate attribution

---

7. Copyright Notice

This software application, including its:

- Design and visual presentation
- Logical structure and architecture
- Mathematical calculations and algorithms
- Data processing methodologies
- User interface components
- Documentation and supporting materials

Is protected by **copyright law** and international intellectual property treaties.

7.1 Attribution

Any authorised use of this software must include clear attribution:

“Developed by Oleksandr Velyvchenko”

7.2 Enforcement

The author reserves the right to pursue legal remedies for any unauthorised use, reproduction, or distribution of this software.

---

8. Limitation of Liability

8.1 “As Is” Provision

This software is provided **“AS IS”** without warranty of any kind, either express or implied, including but not limited to:

- Implied warranties of merchantability
- Fitness for a particular purpose
- Non-infringement of intellectual property rights
- Accuracy or reliability of calculations
- Availability or continuity of service

8.2 No Liability

The author shall NOT be liable for:

- **Direct damages** arising from the use or inability to use this software
- **Indirect damages** including lost profits, business interruption, or loss of data
- **Consequential damages** resulting from decisions made based on system outputs
- **Special damages** of any kind whatsoever

8.3 User Responsibility

The user acknowledges and agrees that:

- All decisions made based on data from this demonstration system are made at the user's own risk
- The system outputs should not be relied upon for actual production decisions
- Independent verification of any data or calculations is the user's responsibility
- This is a demonstration system not suitable for production use without modification

8.4 Indemnification

The user agrees to indemnify and hold harmless the author from any claims, damages, or expenses arising from:

- Misuse of the software
- Reliance on demonstration data for actual business decisions
- Violation of these terms and conditions

---

9. Acceptance of Terms

9.1 Agreement

By accessing or using the OEE Management system, you acknowledge that you have:

- Read and understood these terms and conditions
- Agreed to be bound by all provisions herein
- Accepted the limitations and disclaimers stated above

9.2 Modifications

The author reserves the right to modify these terms at any time. Continued use of the software following any modifications constitutes acceptance of the revised terms.

9.3 Governing Law

These terms shall be governed by and construed in accordance with applicable intellectual property and contract law principles.

9.4 Severability

If any provision of these terms is found to be invalid or unenforceable, the remaining provisions shall continue in full force and effect.

Contact Information

For enquiries regarding licensing, permissions, or authorised use, please contact:

Oleksandr Velyvchenko
Engineer / Software Developer

Document Reference: OEE-MGMT-LEGAL-2026-001
Classification: Public
Last Updated: February 2026

This document constitutes the complete legal agreement between the user and the author regarding the use of OEE Management software.
