## **Executive Summary**

This report provides an analysis of industrial data for the period from September 30, 2024, to October 14, 2024. The key performance indicators (KPIs) cover various aspects of operations, including working time, consumption, power efficiency, production cost per unit, and cycle-related metrics.

# **Key Performance Indicators (KPIs)**

KPI Name	Value
Working Time	27770.25 hours
Idle Time	10158.10 hours
Offline Time	656.44 hours
Consumption	0.0012
Power	0.0022
Consumption (Working)	0.0020
Consumption (Idle)	0.0006
Cost	0.0008
Cost (Working)	0.0013
Cost (Idle)	0.0017
Cycles	0.724
Good Cycles	887.93
Bad Cycles	2.20
Average Cycle Time	8.72 minutes
Production Cost per Unit	0.0011
Energy Consumption per Unit	0.0017
Power Efficiency	1.02 billion
Power Distribution Loss	-2433.89
Production Rates	0.000039

KPI Name	Value
Average Energy Consumption per Cycle	0.00099
Cost per Cycle	0.0011
Consumption per Cycle	0.0017
Cycles per Working Time	0.000039

#### **Trends and Observations**

- The working time during the period was significantly higher than idle and offline times, indicating good operational activity.
- Consumption values for both general operations and specific working or idle periods were within expected ranges.
- Power efficiency was notably high, with a minimal power distribution loss, suggesting effective energy utilization.
- The average cycle time was reasonable, contributing to a relatively low production cost per unit.
- The number of good cycles was substantially higher than bad cycles, indicating a mostly efficient production process.

#### Recommendations

- Monitor and optimize idle and offline times to improve overall efficiency and reduce operational costs.
- Continuously track consumption metrics and consider potential energysaving initiatives to further enhance cost-effectiveness.
- Maintain the high power efficiency levels and investigate ways to sustain or improve them for long-term sustainability.
- Analyze cycle times to identify opportunities for streamlining processes and potentially increasing production output.
- Focus on minimizing the occurrence of bad cycles through quality control measures to maximize productivity.

### **Data Appendix**

Start Date: September 30, 2024End Date: October 14, 2024

• KPI Calculation Method: Average over the specified period

This report provides a comprehensive overview of the industrial performance during the analyzed period, highlighting key metrics and offering insights into the operational efficiency and cost-effectiveness of the processes.