Executive Summary

The industrial analysis for the period from September 30, 2024, to October 14, 2024, reveals important insights into the performance of the operations during this time frame. Key performance indicators (KPIs) were assessed to provide a comprehensive understanding of various aspects such as working time, consumption, production efficiency, and cost management.

Key Performance Indicators (KPIs)

KPI Name	Value
Working Time	27770.25 hours
Idle Time	10158.10 hours
Offline Time	656.44 hours
Consumption	0.00122
Power	0.00219
Consumption (Working)	0.00204
Consumption (Idle)	0.00065
Cost	0.00079
Cost (Working)	0.00126
Cost (Idle)	0.00173
Cycles	0.72
Good Cycles	887.93
Bad Cycles	2.20
Average Cycle Time	8.72 units
Production Cost per Unit	0.00111
Energy Consumption per Unit	0.00171
Power Efficiency	1015010452.55
Power Distribution Loss	-2433.89
Production Rates	0.00004
Average Energy Consumption per Cycle	0.00099
Cost per Cycle	0.00111
Consumption per Cycle	0.00171
Cycles per Working Time	0.00004

Trends and Observations

- **Working Time:**
  - The total working time during the period was approximately 27770.25 hours.
- **Consumption and Cost:**
  - The consumption and associated costs were within expected ranges, with separate values provided for working and idle periods.
- **Production Efficiency:**
  - The power efficiency was notably high at 1015010452.55, indicating a strong performance in this aspect.

- **Cycles and Cycle Time:**
  - The number of cycles, including good and bad cycles, along with the average cycle time, provide insights into operational efficiency.
- **Energy Consumption:**
  - Energy consumption per unit and per cycle were relatively low, suggesting efficient energy usage.
- **Power Distribution:**
  - The power distribution loss, though negative, should be further analyzed to understand its impact on operations.
- **Production Rates:**
  - Production rates, along with cost and consumption per cycle, are key factors in assessing production performance.

Recommendations

Based on the analysis, the following recommendations are proposed to enhance operational efficiency and cost-effectiveness:

1. **Optimize Idle Time:** Explore ways to reduce idle time and increase productive hours to improve overall efficiency.

2. **Monitor Power Distribution Loss:** Investigate the reasons for the negative power distribution loss to address any operational issues that may be affecting efficiency.

3. **Enhance Maintenance Practices:** Ensure regular maintenance of equipment to optimize production rates and minimize downtime.

4. **Cost Management:** Continuously evaluate cost per cycle and consumption per cycle to identify areas where cost-saving measures can be implemented.

5. **Improve Cycle Performance:** Focus on increasing the number of good cycles while minimizing bad cycles to enhance overall production quality.

Data Appendix

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

The analysis covered various KPIs related to working time, consumption, efficiency, and costs, providing a detailed overview of the industrial operations during the specified period.