Digitally mastering challenges in assembly line operation and optimization.

PIA INDUSTRIAL APP SUITE

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PIA 4.0 - MAKING BIG DATA SMART
**PIA INDUSTRIAL APP SUITE**

**THE DIGITAL PACKAGE OF THE FUTURE**

The PIA Industrial App Suite (piaIAS) is a modular software package and contains smart apps, to meet the challenges of assembly line operation and optimization. In developing the apps, the knowledge of custom machine builders - especially the know-how of PIA Automation - and customers from a wide range of industries were combined. It is thus a digital solution portfolio, that is perfectly aligned with customer requirements. Assembly and test systems can be analyzed worldwide, their weak points localised and their productivity optimised. It doesn’t matter whether it is a single station or a complex interlinked assembly line locally on site or remotely at another location.

PIA's smart tools address different user groups with their features: They provide e.g. information for line workers, evaluations for shift managers and the maintenance team, or reports for management. All apps share the following advantages: (1) Increasing the degree of digitalisation of production, (2) future-proofing thanks to modular, expandable design, and (3) reduction of travel through location - and device-independent access.

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**THE 3 LEVEL OF SUCCESS**

<table>
<thead>
<tr>
<th>WHAT</th>
<th>KEY FIGURES (KPI, OEE)</th>
<th>CALCULATE</th>
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<tbody>
<tr>
<td>Visibility Box</td>
<td>PLANT DIGITIZATION AND PRODUCTION TRANSPARENCY</td>
<td>piaOEEtracker</td>
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<td>piaOptimum</td>
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<tr>
<td>Target Groups</td>
<td>Production manager, Operator</td>
<td>Production Manager</td>
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<td>Production Manager</td>
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<tr>
<td>Key- Features</td>
<td>Dashboard for production data</td>
<td>Calculation and visualisation of the Overall Equipment Effectiveness</td>
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<td>Visualisation and localisation of assembly line bottlenecks</td>
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<td>Benefits</td>
<td>Increasing the information base (transparency) through a global and flexible asset insight in real time</td>
<td>Reduction of costs due to the ability to react quickly to changes of key figures</td>
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<td>Reduction of costs due to less time and personnel needed to locate bottlenecks</td>
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<th>WHERE</th>
<th>POTENTIAL FOR IMPROVEMENT LOCALIZE</th>
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<td>EFFICIENCY</td>
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**BENEFITS**

- Increase of availability at line and station level
- Increase in output by avoiding standstills
- Efficient use of existing assembly line capacity
- Increase in the quality of production
- Reduction of costs by avoiding rejects or increasing the OK rate
- Avoidance of rework and thus increase in assembly line profitability
- Increase in efficiency, output and thus assembly line profitability
- Reduction of cost through earlier production start (short ramp-up phase)
- Support of optimisation measures during operation

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* Basic package: Basis for the use of the analysis tools
PIA BRANCHES

PRODUCTION, MEASUREMENT AND TESTING SYSTEMS FROM A GLOBAL AUTOMATION SPECIALIST

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