Our services in the field of production organization

Our services

- Planning, design and optimization of production and material flows
- Portfolio of methods like lean, six sigma as well as own tools for the optimization of your production
- Systematic development of specification sheets for investment decisions on machines and measurement systems
- Support with market analysis and selection of measurement systems and production facilities
- On request: Engagement of further technology experts

Your benefit

- High quality planning and design of your production
- Prevention of misinvestments concerning machines

We look forward to discuss your individual challenges!

Design of production and quality assurance processes

Selection of machines and measurement technology with IDENT

Value stream analysis
Working schedule of a exemplary project

Entire production and quality planning

**WP1 Requirements analysis**
- Product analysis
  - annual output
  - alternatives
  - quality requirements
  - tolerances
  - target costs
- Analysis of existing resources
  - technologies
  - machines
  - employees and competencies
  - capacities

**WP2 Process chain development**
- Development and assessment of process chains
  - alternatives
  - assessment criteria
- Layout planning
  - production
  - assembly
  - quality assurance
  - warehousing
  - logistics
- Derivation of technical risks

**WP3 Basic concept**
- Definition of process flows
- Definition of quality assurance steps
- cost-benefit-analysis
  - investment costs
  - running costs
  - Utility values

**WP4 Detailed production planning**
- Production
  - machines
  - logistics
  - warehousing
  - material flow
  - quality assurance
  - measurement and testing systems
  - work scheduling
- Assembly
  - assembly stations
  - material flow
  - quality planning
  - measurement and testing systems
  - work scheduling

**WP5 Quality assurance**
- Measurement systems
  - selection
  - measuring strategy
  - schedule and description
  - estimate of costs
- End-of-line testing
  - selection
  - estimate of costs

**WP6 Implementat. & procurement**
- Specification sheets
  - machines
  - Assembly stations
  - warehousing
  - logistic systems
  - Further equipment
- market analysis
- Query and assessment of offerings

**WP7 Project management**

© WZL/Fraunhofer IPT
Schedule of an exemplary project

Entire production and quality planning

<table>
<thead>
<tr>
<th>Kick-off-workshop</th>
<th>MS1: Intermediate presentation</th>
<th>MS2: Final presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>WP 1</td>
<td>WP2: Process chain development</td>
<td>WP3: Basic concept</td>
</tr>
<tr>
<td>WP 2</td>
<td></td>
<td>WP4: Detailed production planning</td>
</tr>
<tr>
<td>WP 3</td>
<td></td>
<td>WP5: Quality assurance</td>
</tr>
<tr>
<td>WP 4</td>
<td>WP6: Implementation and procurement</td>
<td></td>
</tr>
</tbody>
</table>

- WP 1: Requirements analysis
- WP 2: Process chain development
- WP 3: Basic concept
- WP 4: Detailed production planning
- WP 5: Quality assurance
- WP 6: Implementation and procurement

April May June 20XX July August