

PROJECT Vorschlag Nr. 3

Arbeitstitel

Determination and TCO Evaluation of Production Output Improvements @ Electronics Production with the minimum of resources

Ausgangssituation / Randbedingungen

The need to reduce the quantity of resources used while increasing production output is key. Therefore we need to improve the productivity of resources (Material & Energy).

As result we want manufacture as much as possible from the use of a given quantity of raw materials and energy.

A paradigm change is needed to achieve this:

Instead of “maximum profit from the minimum of capital” we need to achieve “maximum profit from the minimum of resources”.

Whatever waste or heat there is in a process must be determined and evaluated within the different manufacturing process.

The specific final energy consumption in manufacturing industries in Germany was reduced by 64 % between 1960 and 2000.

Prerequisites for these increases in resource efficiency were and still are technological innovations.

Companies that are acquiring a cost advantage today through efficiency technologies will further consolidate this advantage in the future.

Arbeitspakete: Determination and TCO Evaluation of Production Output Improvements @ Electronics Production the minimum of resources

Evaluation Points:

- Evaluation of current state of Production and Material flow at Electronic LED Driver production. Time study evaluation, Value add analyze & Production Layout analyze
- Determination of possible Production Output Improvements: Automation Concepts, Bottleneck elimination, Machine up time improvements, Planned Maintenance strategy,
- Benchmark of Different solutions with dedicated TCO calculation (based on volume, stock costs, operator costs)
- Define together with global Manufacturing responsible the final Project implementation strategy
- Implement evaluated measures at production line at Bulgaria
- Finalize Output Improvement Calculation and Saving overview
- Prepare Management Presentation

Lösungsansatz / Aufgabenstellung

Phase 1

Define and Analyze Current State at Electronic LED Drivers production

Phase 2

Define & implement of measures for Production Output Improvements with the minimum of resources, Saving calculation

Standort

OSRAM Garching

OSRAM Bulgarien

Besondere Anforderungen

MS-Produkte (vor allem Excel, Powerpoint)

Gute physikalische Grundkenntnisse

Verständnis Technischer Zusammenhänge & Lean Manufacturing

Ideale Teamgröße: 2-3 Studierende