

“The Company OSRAM “

OSRAM is a multinational lighting manufacturer with headquarters in Munich, Germany. It is one of the world’s two leading light manufacturers in the world. The company covers the entire value chain from components to electronic control gears as well as complete luminaires, light management systems and lighting solutions.

OSRAM was founded on July 1, 1919 by the merger of the incandescent lamp manufacturing activities of AEG, Siemens & Halske AG and Deut.Gasglühlicht-Anstalt (Auer - Gesellschaft).

The OSRAM brand was registered on April 17, 1906 in Berlin by the Auer-Gesellschaft.

At that time, Osmium and Wolfram were needed to produce filaments. The company name: OSRAM Werke GmbH was created combining the names of these two materials. The company logo is a symbolized lamp, which is not only the universal symbol for light but also represents good ideas.

On July 8, 2013, OSRAM was spun off from Siemens and listed on the Frankfurt Stock Exchange.

More than 70% of OSRAM revenue comes from energy efficient products. The company’s business activities have been focusing on light for over 100 years.

OSRAM is a leading player across for classic lighting as well as new technologies.

With LED-based products making up a share of about 46 percent of the total turnover, the company is setting trends with regard to technological changes in the lighting market.

The expenditure for research and development is at approximately 7 % of the turnover.

OSRAM is the world’s number one supplier of automotive lamps and LEDs for vehicles.

OSRAM is also one of the market leaders in the field of electronic control gear for lamps and Electronic Drivers for LED systems.

Business with optical semiconductors is growing rapidly and has taken on major strategic importance.

At their site in Garching / Munich, OSRAM develops electronic ballasts to dim fluorescent lamps , electronic Drivers for LED Systems and components for light management systems. The daughter Company Siteco, a leading producer of technical indoor- and outdoor lighting and client oriented lighting solutions, is stationed at the site in Traunreut.



Figure 1 OSRAM company logo

PROJECT Vorschlag Nr. 1

Arbeitstitel

Evaluation of Prototyping production line for Light Engines (ready for implementation)

Ausgangssituation / Randbedingungen

There are many options to setup a new prototype production line for Light Engines.

Fast " Time to market" is important, even with a high part of Project business with Customers. A Region for Region setup is definite. The Product focus is to put on Electronic Light Engines "LE" for the European Market,

Prototyping is evaluated as a huge opportunity for new business creation.

Aim is to deliver prototypes to customers by provided design with short lead time of 2 weeks.

The technology within the Prototyping line is already evaluated within an IPA17 Project and results are the baseline.

Risk Evaluation of different setups is mandatory: financial, timeline, legacies (e.g. existing products and EHS risks)

Arbeitspakete:

Evaluation of Prototyping production line for Light Engines (ready for implementation)

Project Milestones and Working Packages:

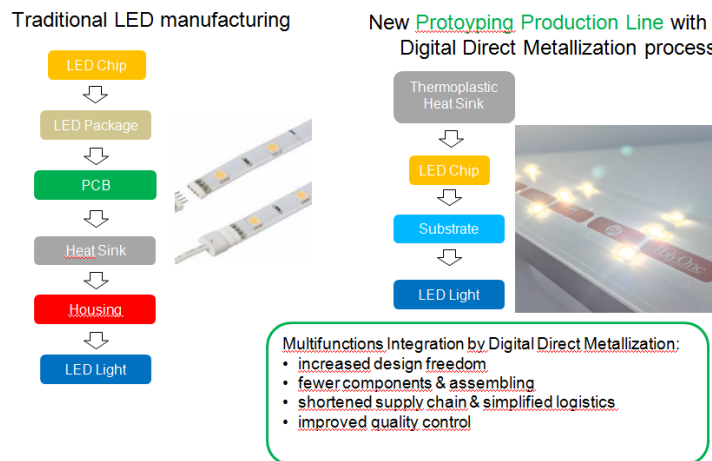
Product Definition	<ul style="list-style-type: none">• Product Roadmap (3-5 year view)• Customer Location(s)• Business Plan
Process Definition	<ul style="list-style-type: none">• Production Strategy (MTO, ATS, ...)• Technical Requirements
Complete Site Survey	<ul style="list-style-type: none">• Supplier Requirements• Customer Requirements
Establish Site Requirements	<ul style="list-style-type: none">• Resource and Expertise Determined• Product Line Layout
Determine Site & Location	<ul style="list-style-type: none">• Supply Chain Planning• Resource Loading
Develop Implementation Plan	<ul style="list-style-type: none">• Project Plan• Capital Requirements

Basic Requirement & Assumptions:

- Knowledge of Plasma technology (DDM by Plasma Innovations) and SMT assembly processes
- Basic economic knowledge: TCO calculation, Product Calculation scheme
- Knowledge of MS Office tools (Word, Excel, PowerPoint)
- Located within in the European Community for easy transporting and customs clearance (pre-material and finished products) Possibility to extend production (space and personnel)

Evaluation Points:

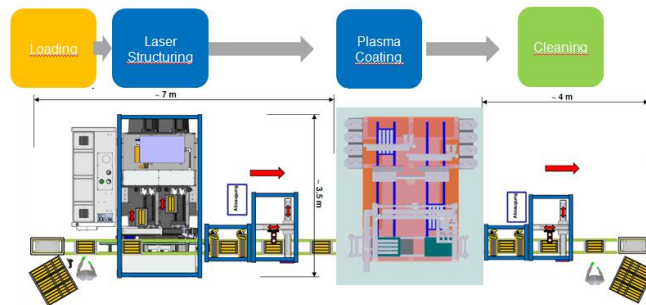
- A) Benchmark value benefit of quick samples production for customer
- B) Define manufacturing steps of prototyping production line with technology provider /suppliers



- C) Evaluate and define required OSRAM capacities (manpower, required space, costs...)

D) Calculate Product Cost and Product delivery time out of Prototyping Line

Example Setting:



E) Prepare Investment Proposal for Set up production line for prototyping

F) Evaluate plasma processing and SMT assembly directly on luminaire casings

Lösungsansatz / Aufgabenstellung

Phase 1

Analyze, Benchmark & Define processing technology based on final Product Cost, Cycle time and Delivery time.

Phase 2

Prepare for Investment & Set up prototyping production line

Standort

OSRAM Garching bei München

Dienstreisen zu unterschiedlichen Lieferanten

OSRAM Bulgarien

Besondere Anforderungen

MS-Produkte (vor allem Excel, Access)

Gute physikalische Grundkenntnisse

Verständnis Technischer Zusammenhänge & Lean Manufacturing

Ideale Teamgröße: 2-3 Studierende