“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 Deutsche 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 39 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 5.5% 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.
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 and components for light management systems. In the past, OSRAM produced electronic control gear for modern light sources at the site in Traunreut. In 2009, the company relocated the production to sites in Treviso, Italy and Panyu, China.
Mass production was relocated to China because of cost pressure.
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

OSRAM Call for Projects „IPA 2015"

Projektskizze IPA17/J

Arbeitstitel

Evaluation of setup new Electronics Manufacturing location;
Benchmark of Brownfield & Greenfield Approach
Define Production Setup Requirements to get full LEAN Manufacturing

Ausgangssituation / Randbedingungen

There are many options to setup a new manufacturing location. Fast " Time to market" is important, even with a high part of Project business with Customers. A Region for Region setup need to be considered. The Product focus is to put on Electronic LED Drivers "Optotronic" and Light Engines for the European Market,

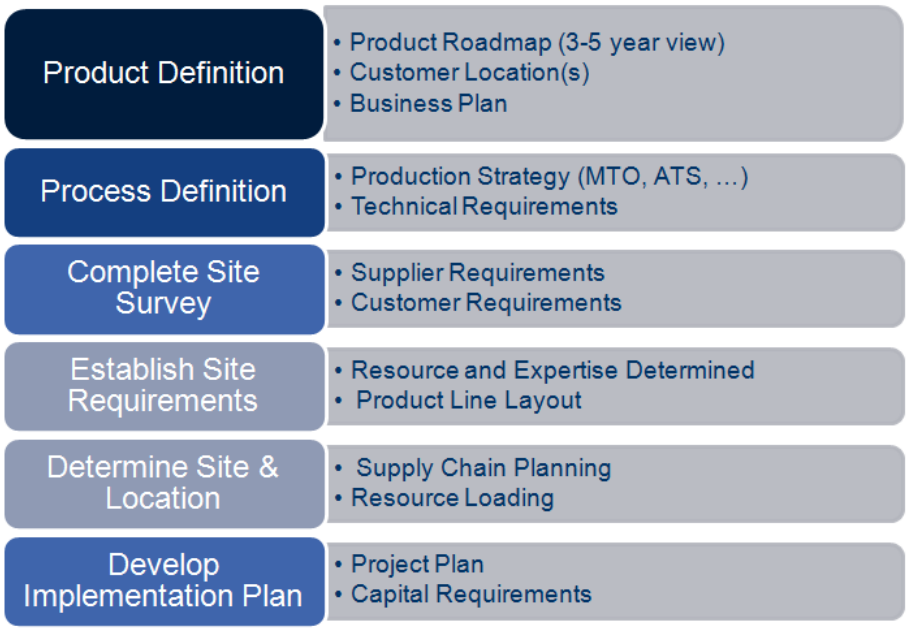
Supporting R4R approach (Reduce lead time, improve cash flow) Evaluation of Setup of a new in-house electronics manufacturing plant for the EMEA market is needed

The OSRAM BU- LLS is seeking for a new low cost EEU in-house production setup to support R4R strategy EMEA.
Therefore a Benchmark of a Brownfield solution (rent, buy) and a full Greenfield solution is requested.

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

Arbeitspakete: Evaluation of setup new Electronics Manufacturing location;

- **Project Milestones and Working Packages:**



Basic Requirement & Assumptions:

- Goal of Short Lead Time (2 weeks) on Products with Short Life Cycle (6 month – 2 years)
- Evaluation of Customer interaction models CIM: Target with MTO as a modification of a MTS,ATO or ATS
- Electronics production knowledge and experience within the target company; Availability of operators for a maximum wage level (operator) to be competitive; Availability of Engineers (Production, Process, Quality) need to be confirmed
- Located within in the European Community for easy transporting and customs clearance (pre-material and finished products) Possibility to extend production (space and personnel)
- Target product volume and space requested for 2016

Evaluation Points:

- Define together with Marketing and global MF responsible the Production strategy
- Benchmark of Brownfield & Greenfield approach with dedicated TCO calculation (based on volume, stock costs, customs)
- Analyze possibility to use Standardized Components & Equipments
- Define Flexible Line Design for High Mix and Low volume products by same Value Add performance
- Define a ready for 6-sigma/LEAN style Production Setup
- Finalize Capacity Calculation Tool based on different CIM Models (MTS, MTO, ATO)
- Propose Input to R&D for Tool-less Assembly/Design

Problemstellung.

Lösungsansatz / Aufgabenstellung

Phase 1

Define and Analize Production strategy; Benchmark Brownfield & Greenfield approach TCO

Phase 1

Define Production line setup with Layout planning and Capacity calculation; Propose input for R&D on Design improvements.

Standort

OSRAM Garching bei München

Besondere Anforderungen

MS-Produkte (vor allem Excel, Access)

Verständnis Technischer Zusammenhänge 'Electronic Production' & Lean Manufacturing

Ideale Teamgröße: 2-3 Studierende