

# Supplier Systems Engineering Course; Assignments

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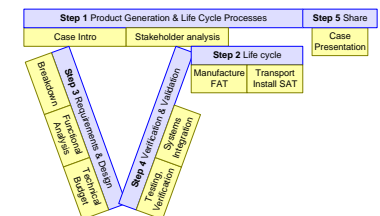
## Abstract

This course focuses on systems engineering in companies that are supplying to an OEM company. The assignments use a case and guide the participants through the V-Model for that case.

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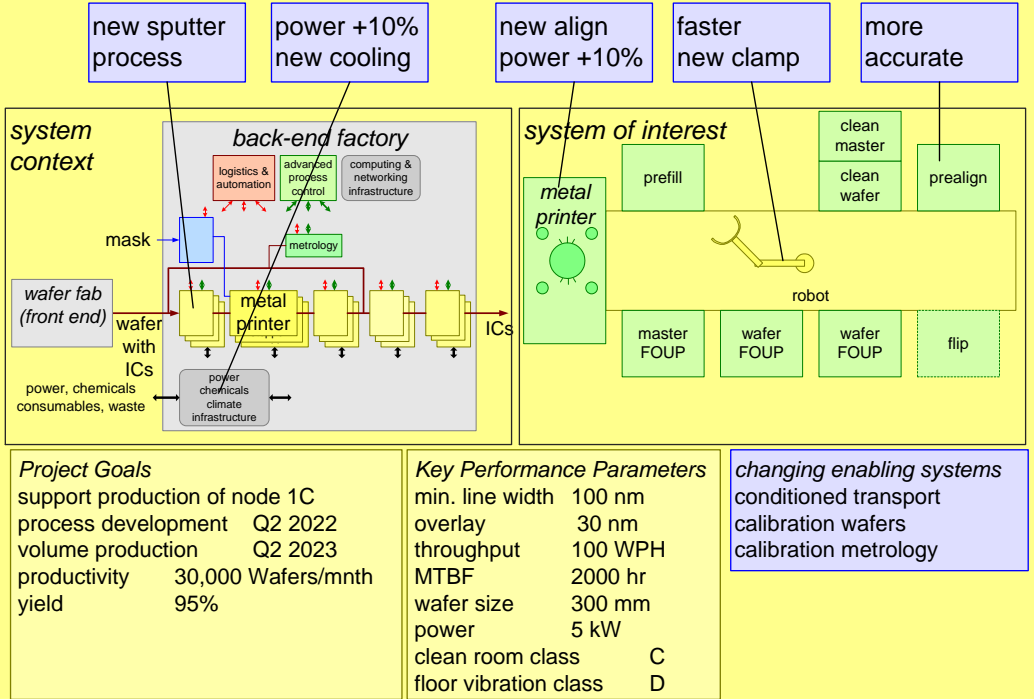


# Case Introduction

Discuss the Project Overview

What are the most relevant project goals?

Sketch the project master plan (the main milestones and their timing)



# Stakeholder Analysis

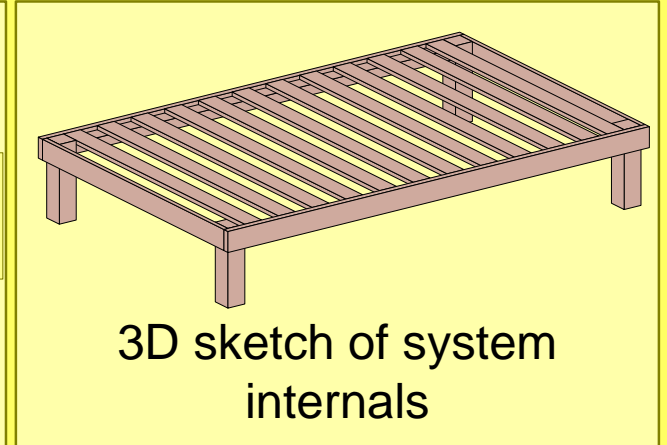
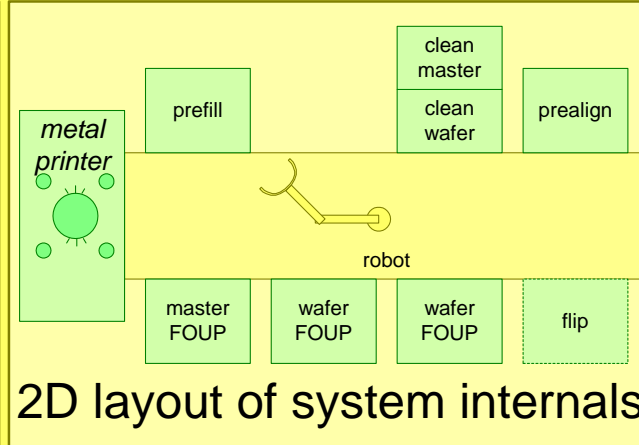
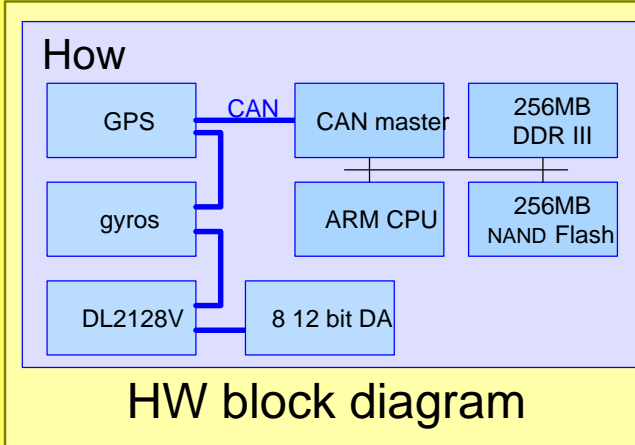
Identify ~10 stakeholders of the project

Determine per stakeholder their ~3 main concerns

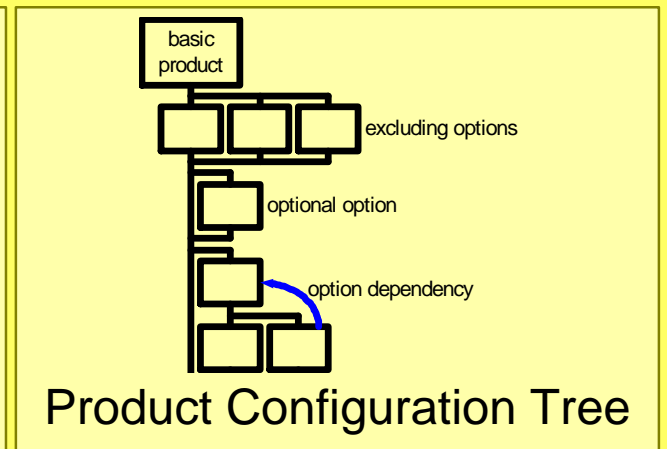
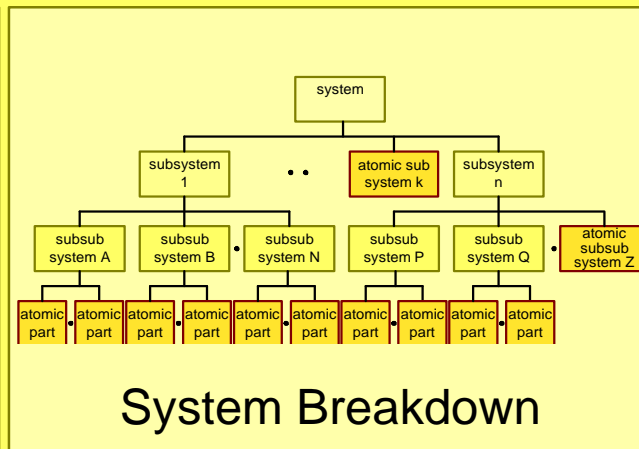
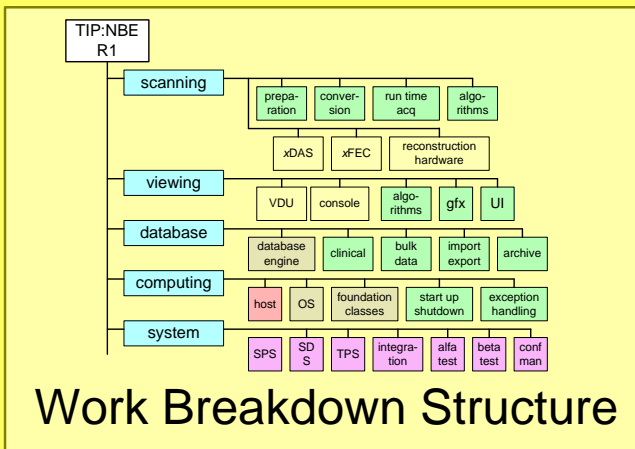
sales manager	price, margin, value proposition
purchaser	purchasing price, delivery date
project leader	delivery date, resources, budget
developer	
integrator	
operator	
maintainer	
...	

# Breakdown

Make a breakdown of your system. Choose 1 representation from below



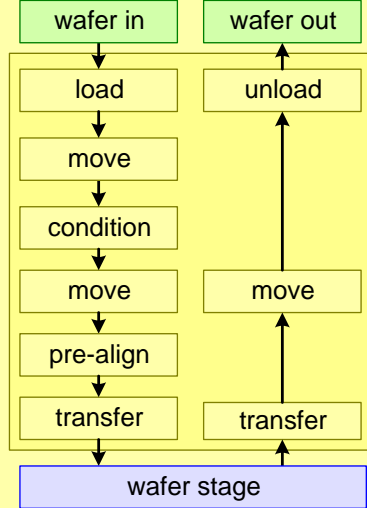
and select 1 representation from below



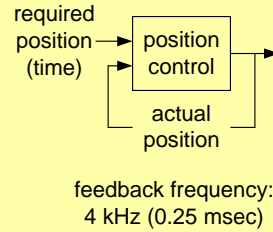
# Functional Analysis

Make ~3 functional diagrams showing the behavior of part of the system

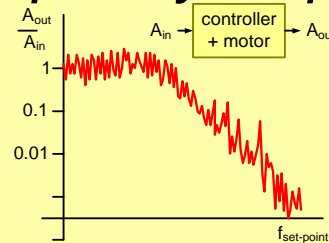
*sequence diagram*



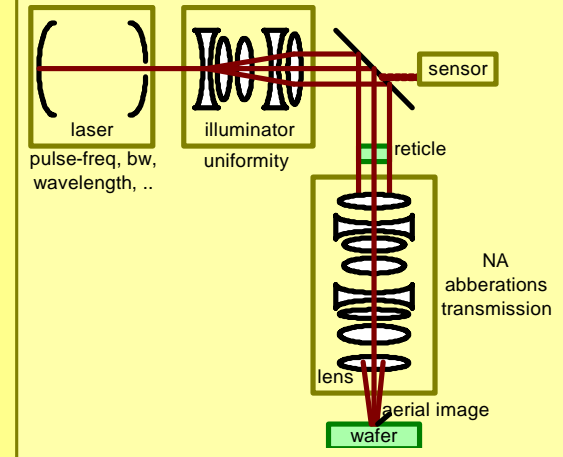
*feedback control*



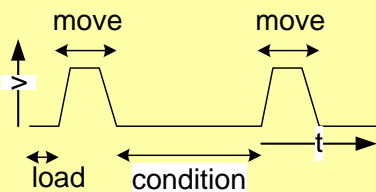
*frequency response*



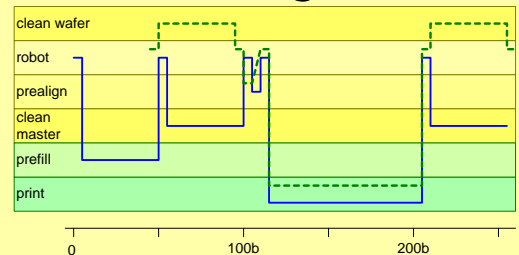
*light path*



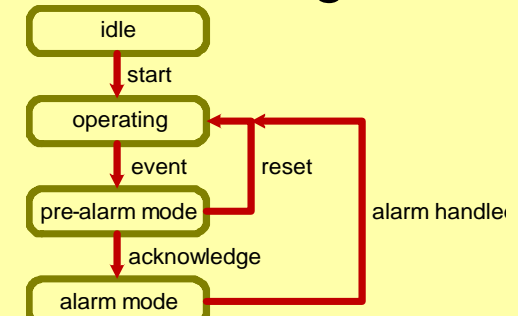
*parameter as function of time*



*swimming lanes*



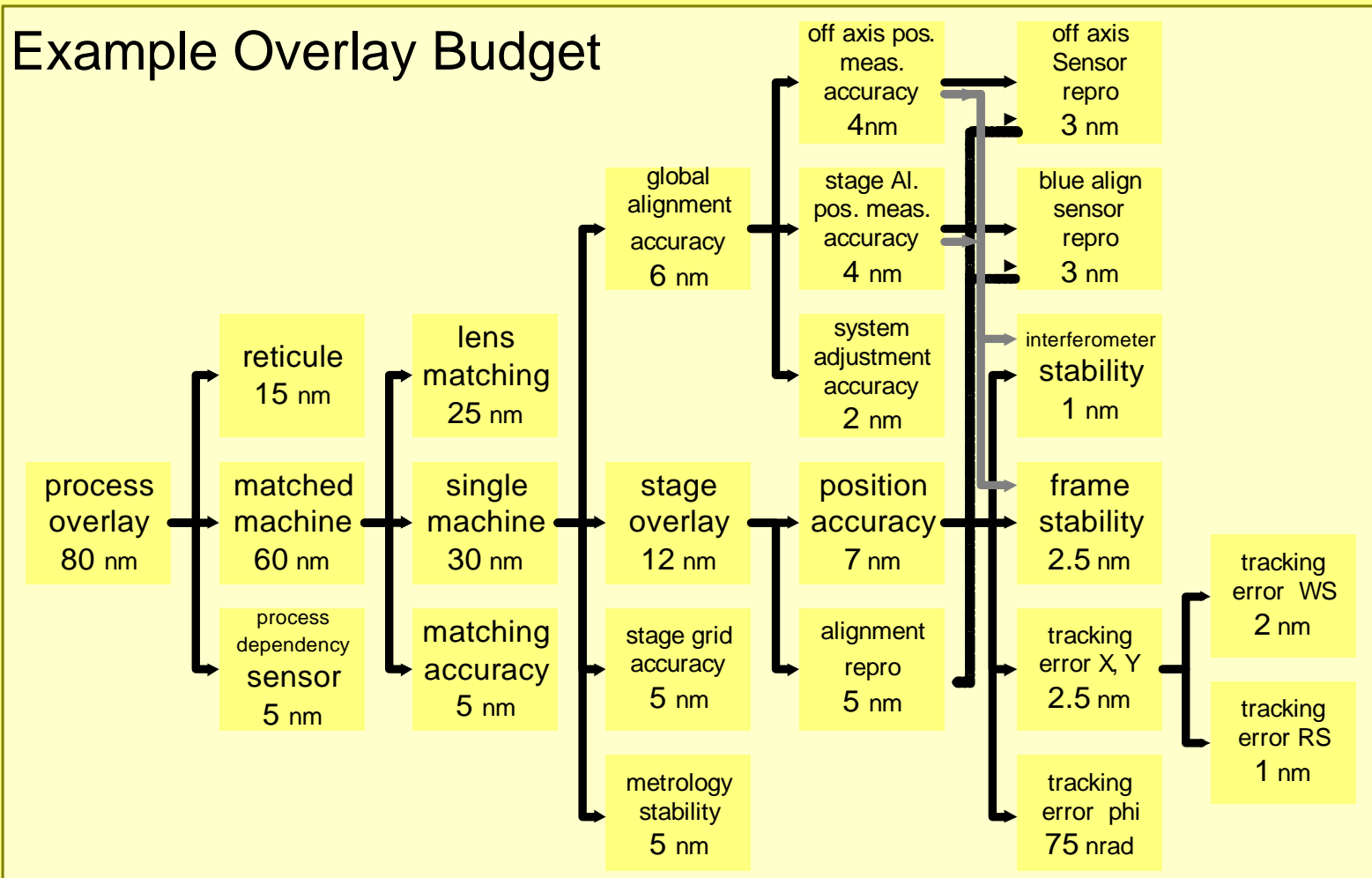
*state diagram*



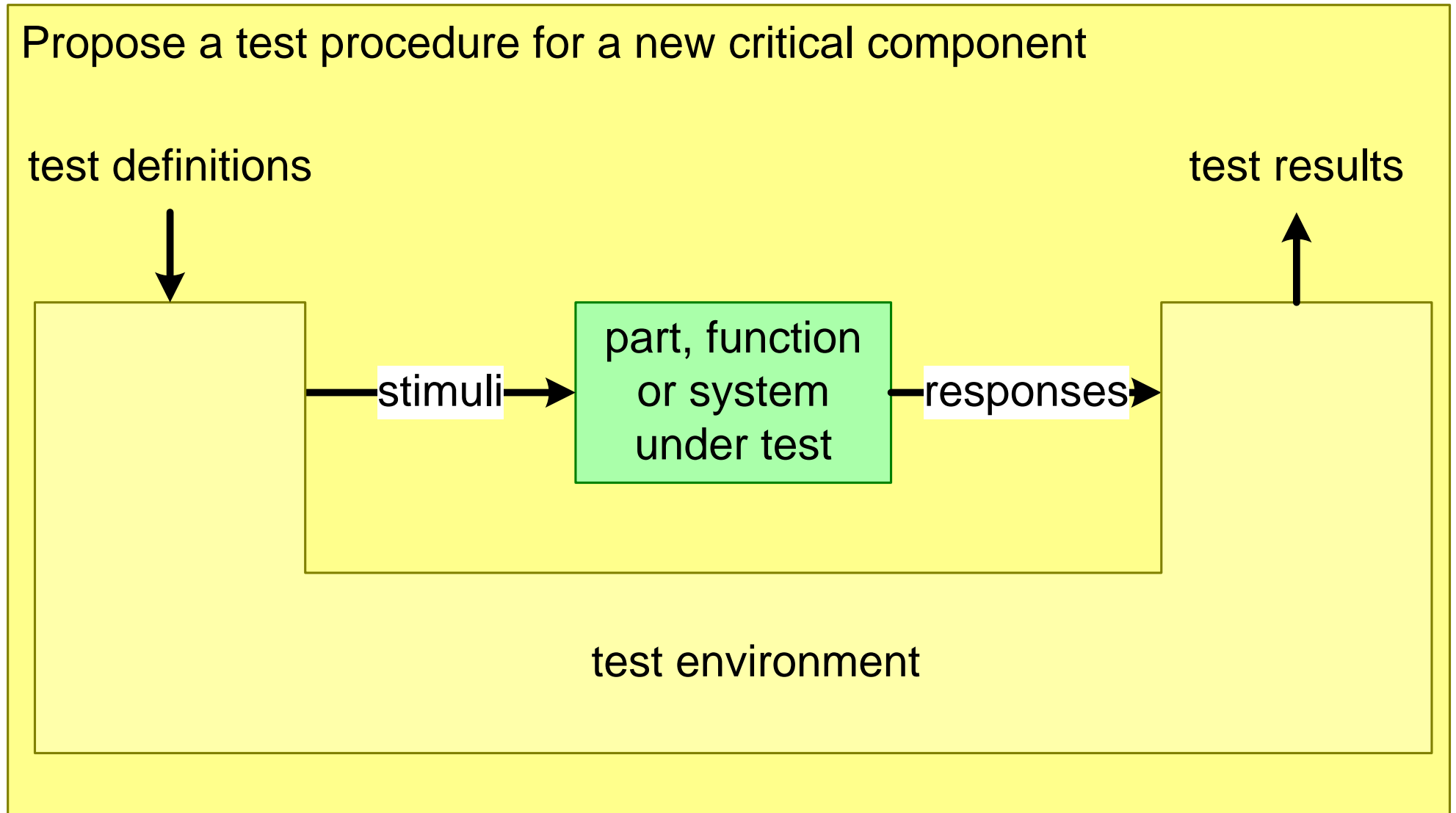
# Technical Budget

Make a technical budget, a breakdown of contributions, for one KPP

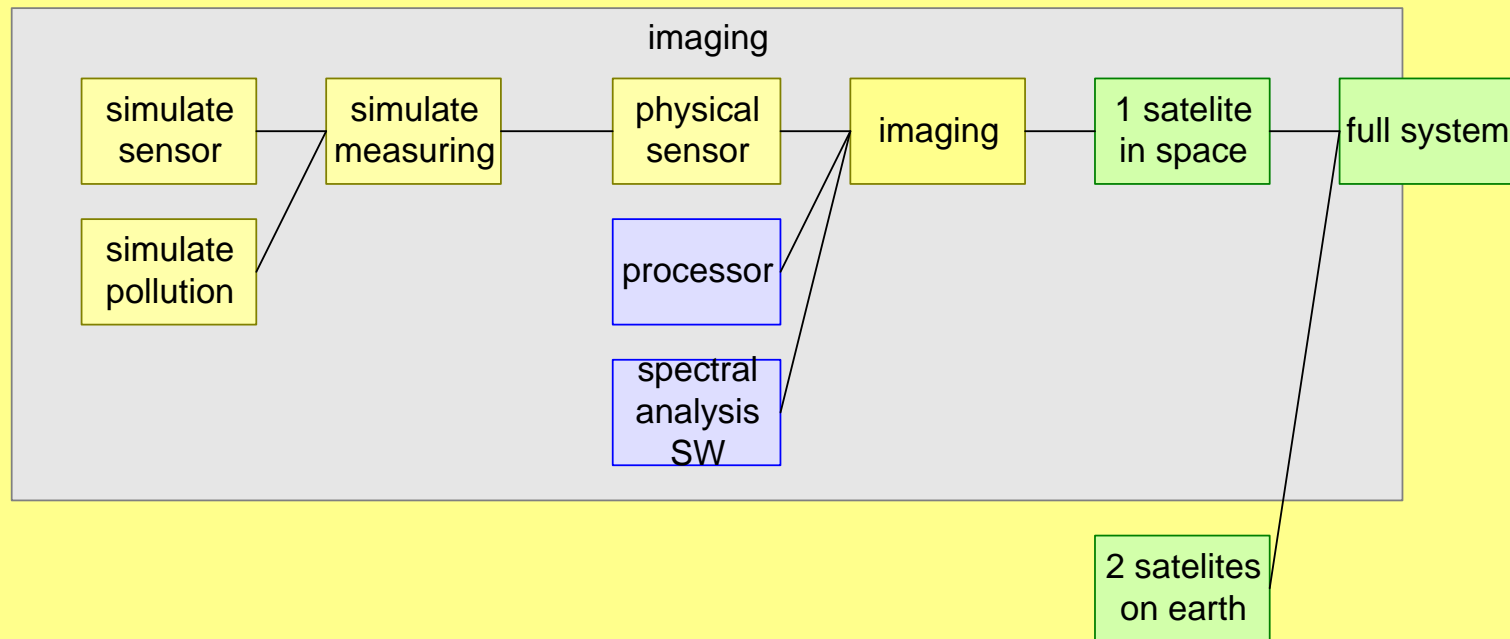
## Example Overlay Budget



# Testing and Verification



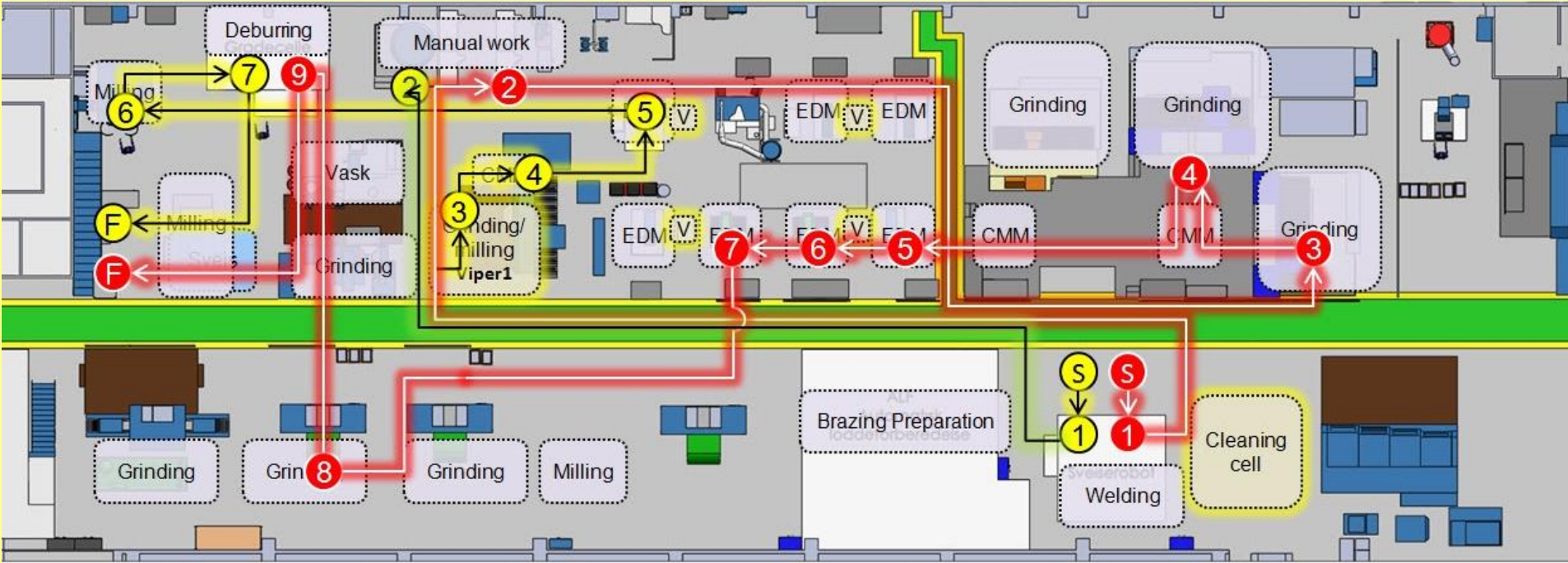
Propose an integration sequence that shows the KPP early





# Manufacturing and FAT

Propose a manufacturing workflow and layout

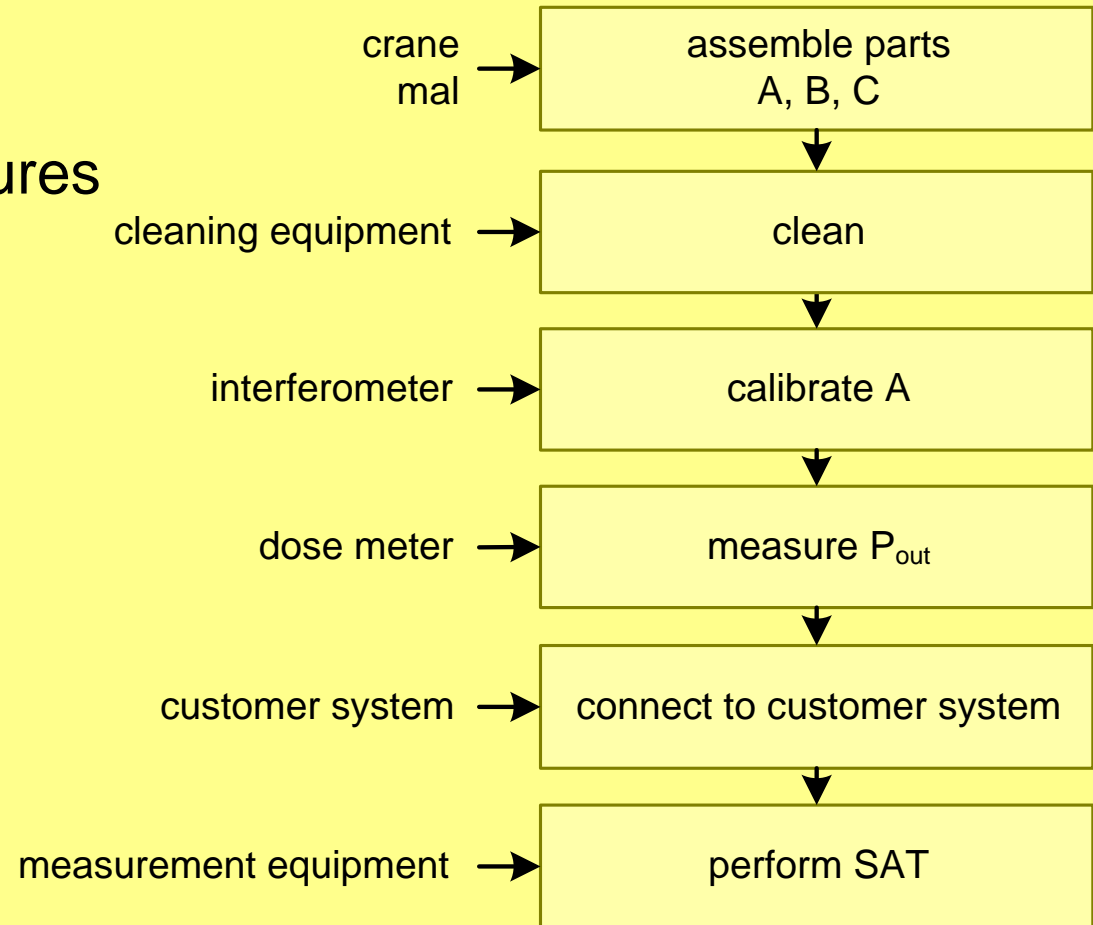


source: [https://gaudisite.nl/INCOSE2014\\_Stalsberg\\_Muller\\_ModelingProductionLine.pdf](https://gaudisite.nl/INCOSE2014_Stalsberg_Muller_ModelingProductionLine.pdf)

# Transportation, Installation, and SAT

Propose an installation workflow at the customer

Identify critical operations and prerequisites like tools and fixtures



# Case Presentation

Make a presentation for the Project Team to explain

- project overview
- master plan
- design
- verification & integration
- life cycle

