From 2D Sketches to 3D Models

Technology Challenge for Start-Ups

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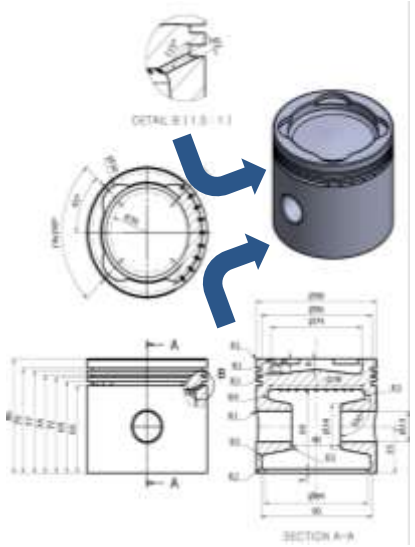
Developing New Solutions for Customers Around The World

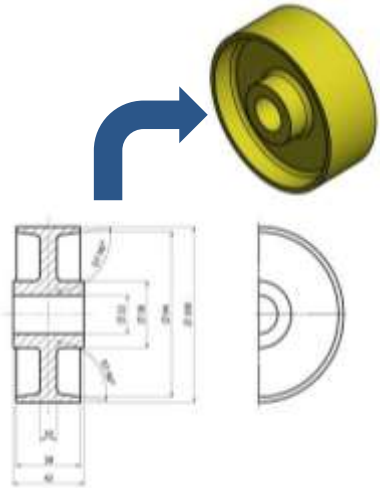
Close Collaboration with Costumers

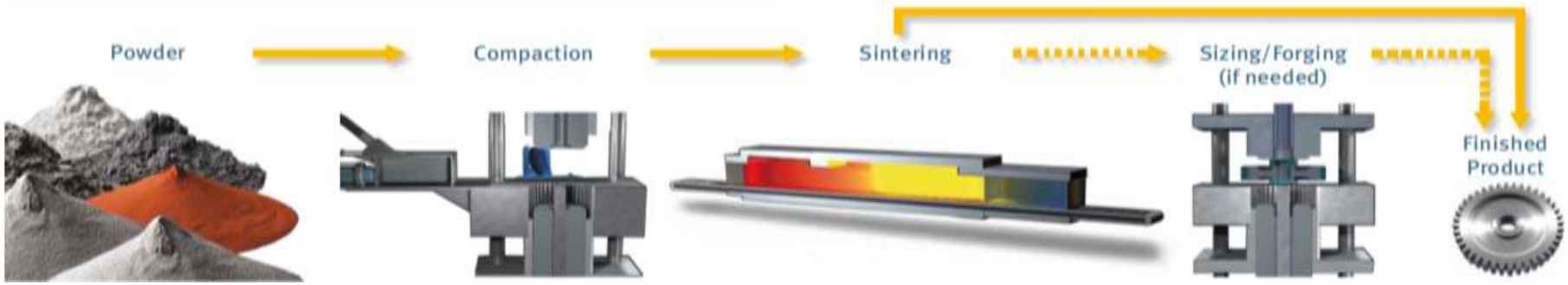
- Share data and knowledge
- Work towards a common goal
- Daily business
- Global company

Calculate Quotation

- Start with technical drawings (2D sketches)
- Relay on huge expertise of our engineers
- Compare to already completed orders
- Estimate:
  - Work steps
  - Machines
  - Production speed
  - Cost/benefits







The Challenge

Make Excellent Quotation

- Fast response
- Outstanding cost vs. benefits ratio
- Find similar parts and best in class examples

Impediments

- Global company
- Several 1.000 products
- Information “stored” in human head
- Huge legacy
- Often only 2D sketches

➔ **3D models required to use AI and ML**

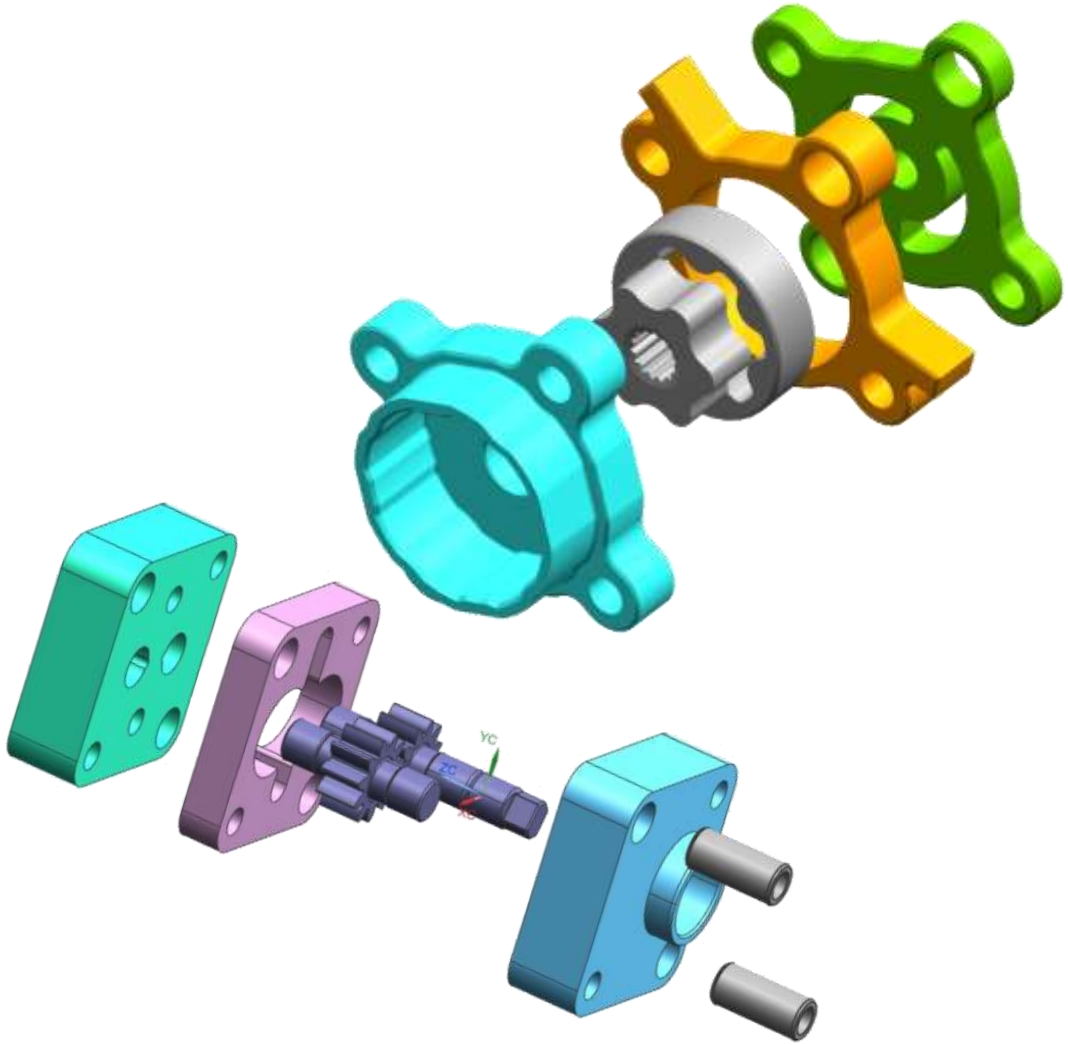
Your Contribution (The Solution ;->)

Generate 3D Models out of 2D Sketches

- Technical drawings
- Fuse single views to one model
- Extract dimensions from drawings
- Parametrize model
- Consider tolerances

SW-Workflow (tentative)

- Fully-automatic generation of 3D models out 2D sketches (highly desirable)
- Semi-automatic generation (tolerable, minimal user interaction, low skilled people)
- Confidence value (to select fully-automatic/semi-automatic)

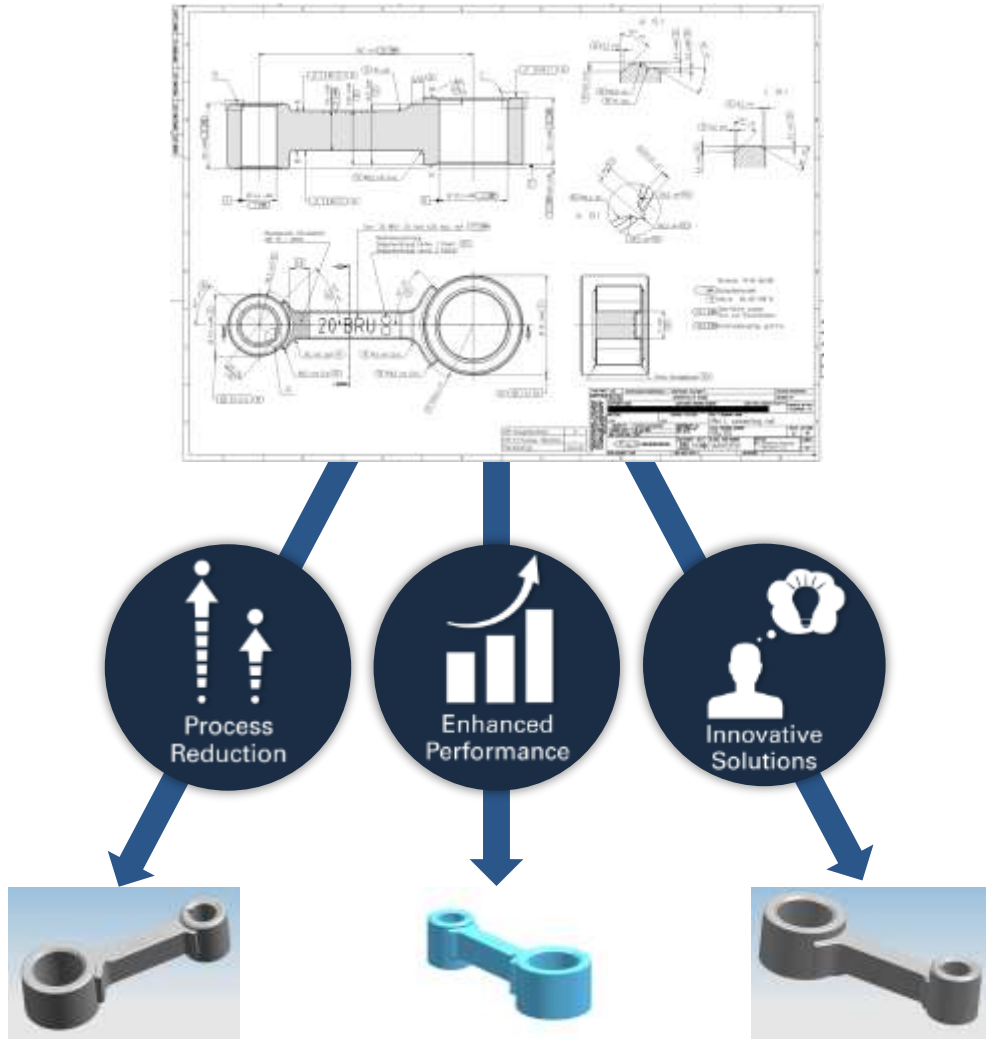


Your Future (Ways of Collaboration)

Ready to Grow with Us?

- Iterative and incremental approach
- Interdisciplinary team
- Open minded
- Ready to tackle new challenges

Possible Collaboration (Depending form the quality of your contribution)

- Contract work
- Long-term collaboration
- Shareholder participation
- Incorporation in our global company

→ Demonstrate your professionality and let us grow together!