## Technology roadmap and investment needs for the internal tool shop of Böllhoff

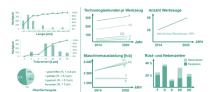
## **Approach**

- Analysis of work pieces and the manufacturing data as well as strategic decisions concerning tool production
- Investigation of future developments within the product portfolio and the related production requirements
- Evaluation and selection of the suitable manufacturing technologies for future tool production
- Development of suitable manufacturing concepts for the internal tool shop in consideration of possible production strategies
- Derivation of a technology roadmap for the selected manufacturing concept including investment decisions for technologies and associated machines

## BOLLHOFF

Joining together!

Work piece and manufacturing analysis



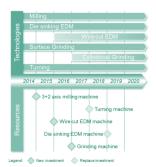
Milling
Art: 3-Achs-Frisen
Genauigkeit: 10 µm
Art: 3-2-Achs-HSC-Frisen
Genauigkeit: 5 µm
Art: 3-2-Achs-HSC-Frisen
Genauigkeit: 5 µm
Art: 3-2-Achs-HSC-Frisen
Genauigkeit: 5 µm
Art: Senkerodiermaschine
Genauigkeit: 3 µm
Wire cut EDM
Art: Drahterodiermaschine
Genauigkeit: 0.8 µm

Art: Art. (Hart) Orehmaschine
Genauigkeit: 2 µm

Strendths

Weaknesses

Selection of the most suitable concept



Derivation of a detailed investment roadmap

## Result

► Comprehensive technology roadmap including investment decisions regarding technologies and associated manufacturing resources to achieve the company specific manufacturing concept



