How CastLab and the Dutch Railways lower maintenance costs with digital part manufacturing

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31st of March – Railtech Europe '21 – Tech Stage

RailTech EUROPE '21 LIVE
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2019 RailTech innovation winner

2021 Spare parts solution provider

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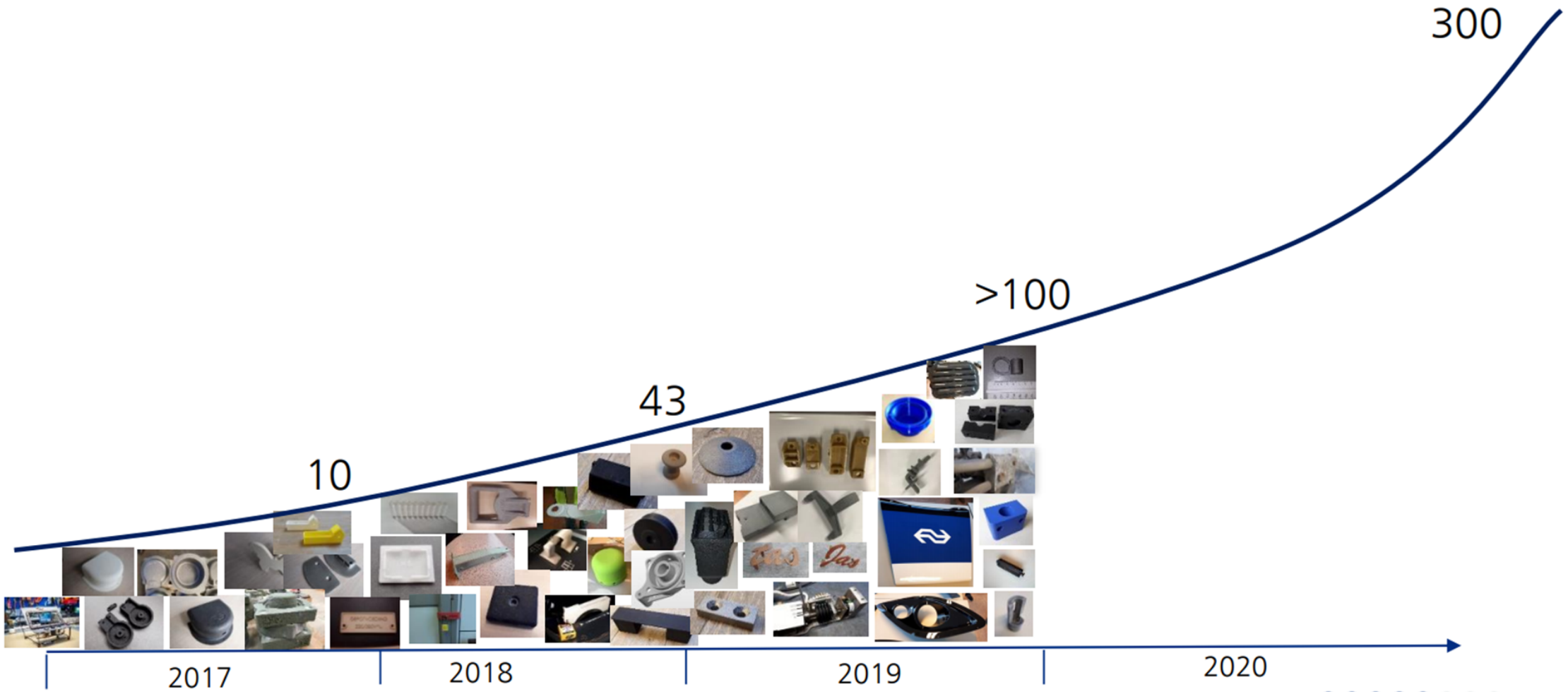
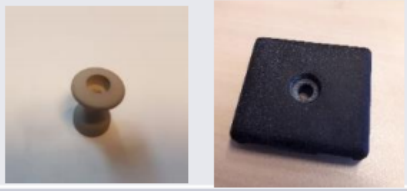
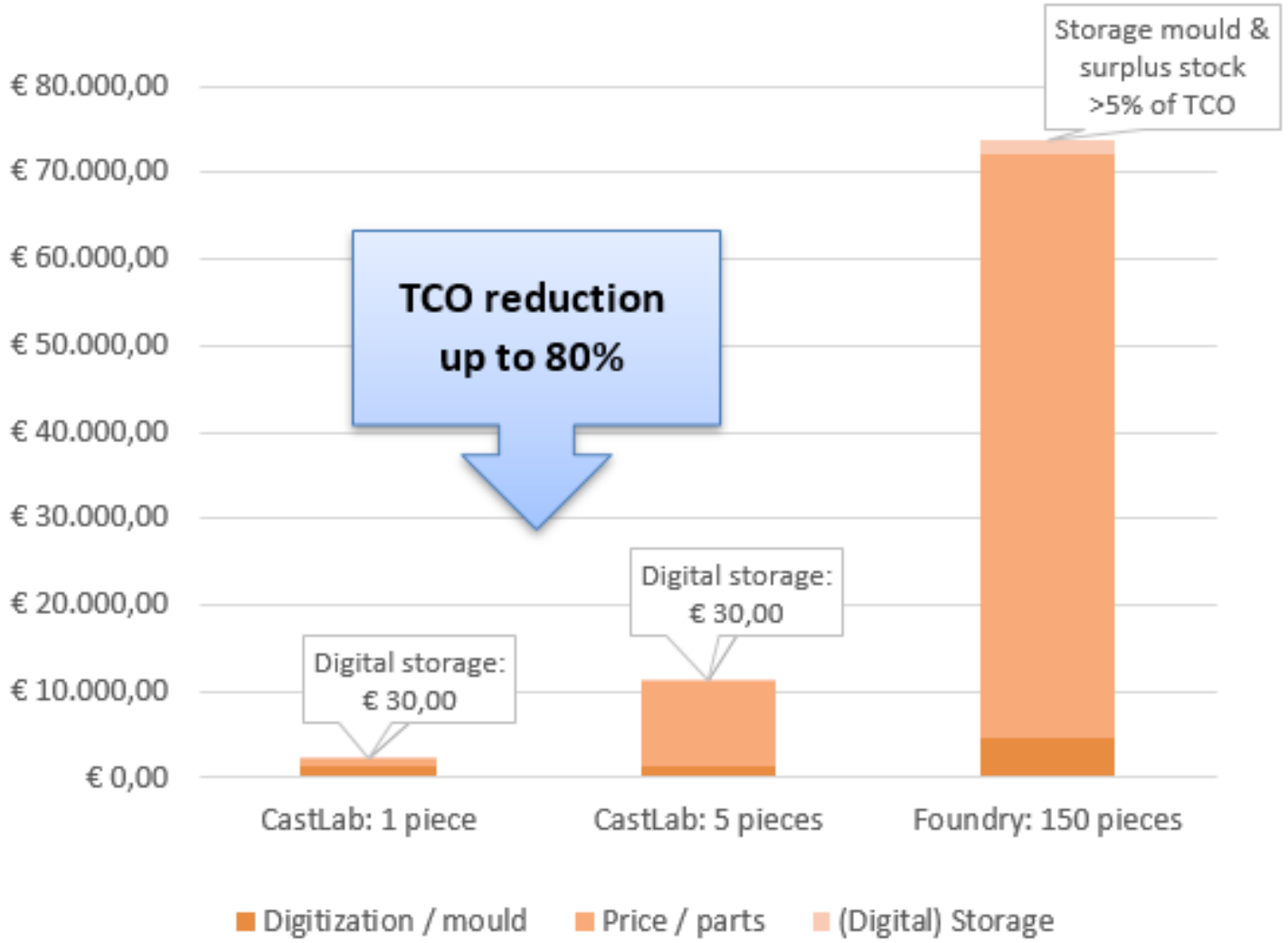
NS business case:
Growing in the supply chain of spare parts with CastLab



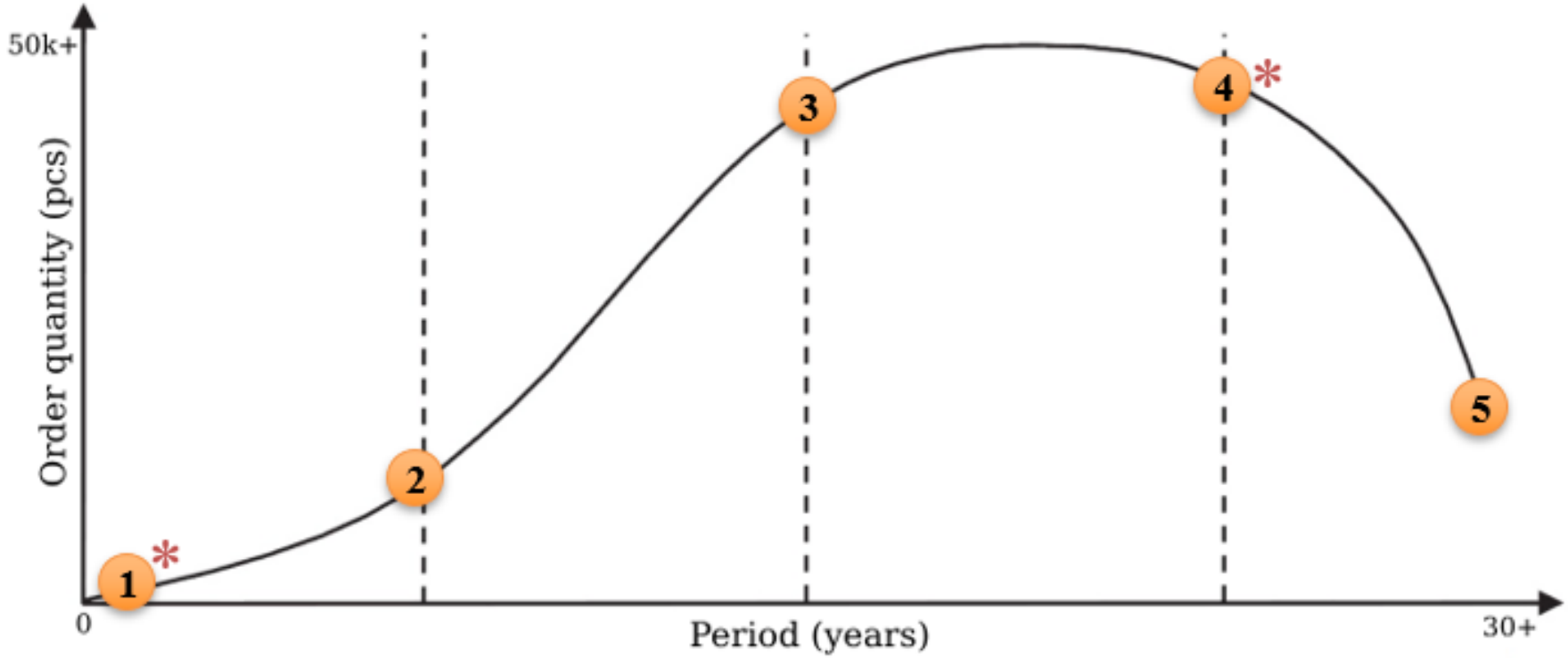
NS business case:
Benefits of working with CastLab

Business case	Realized examples	Traditional production	CastLab method	Benefits
Obsolete parts		Extent life cycle with minimum cost		
Lower batch cost (MOQ)		50 pieces 10 pieces	10 pieces 1 piece	No surplus stock
Lead time reduction for parts with high demand variation		>200 days >60 days	10 days 10 days	Less stock required (>€65.000)

Total Cost of Ownership reduction with CastLab



CastLab in all stages of the product life cycle

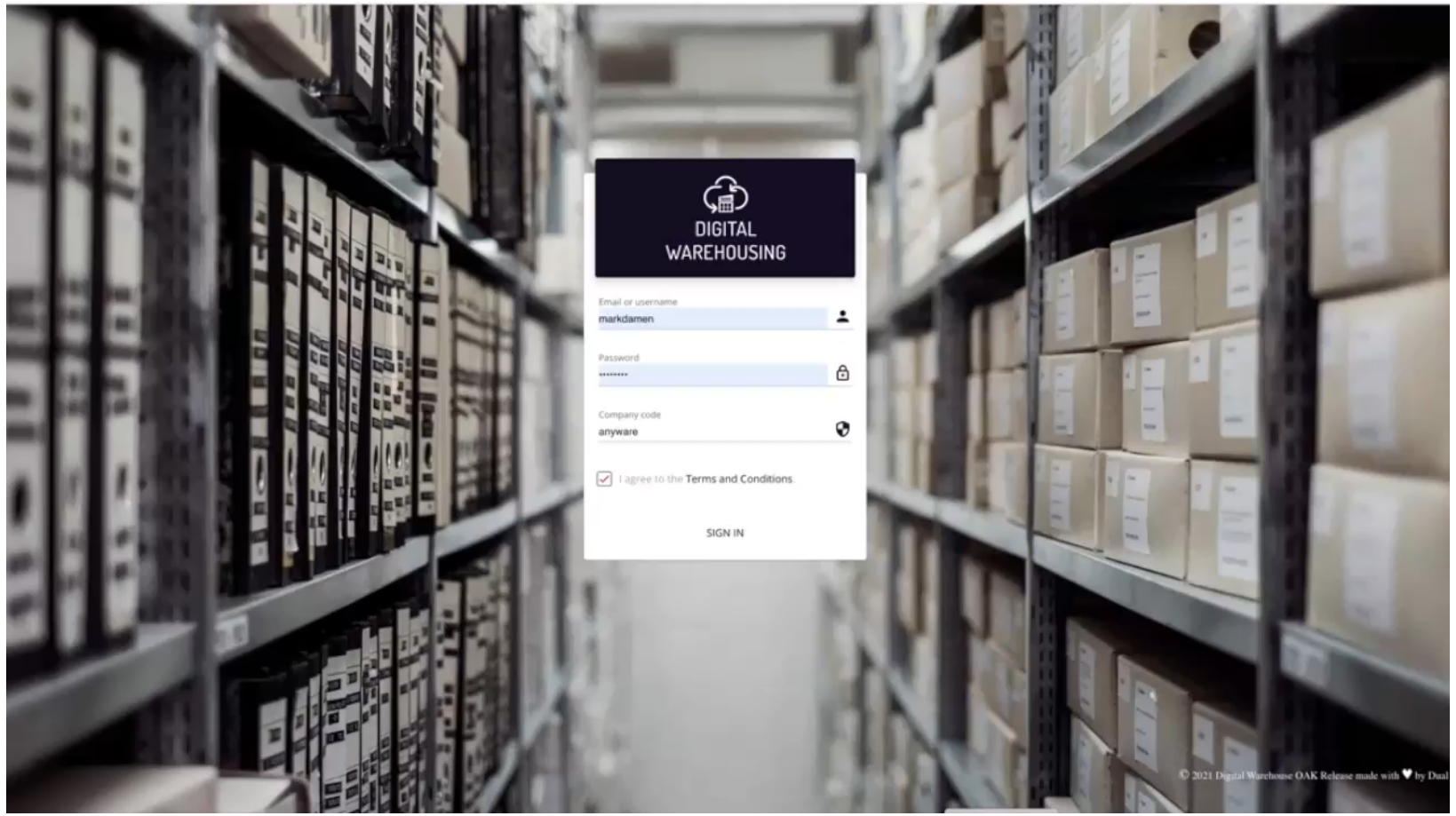


1: Advisory design *(product development)*
2: Prototyping *(introduction phase)*
3: Production in all desired quantities (small, medium, large series) *(growth phase)*
4: (Re-)production of original parts, test casting (incl. certification) *(maturity phase)*
5: (Re-)production of original and obsolete parts in single pieces or small series with short delivery times *(legacy phase)*
*: Predictive maintenance with the integration of sensors in metal parts

CastLab method – How do we work?

1. **Digital Intake** (Online intake with instant quotation)
2. **Ready to Cast** (Engineering of digital twin)
3. **Casting on Demand** (Rapid casting in all quantities)
4. **Digital Library** (Spotify of the metal industry)

Digital Library



Thank You.
Any questions?

- **Koen Melis**
- Book your 1-on-1 meeting!
- www.castlab.nl
- www.castlabproeftuin.nl