

A large white ABB ProInvent robotic arm is the central focus, positioned diagonally across the frame. It has multiple joints and a complex end effector with many thin metal rods. The background shows a factory setting with other machinery and a blue-tinted overlay at the bottom. The ABB logo is visible on the upper arm, and 'ProInvent' is written on the main arm section. Other labels like 'OMRON' and 'adept' are visible on the base and other parts of the machinery.

Automatikmessen 2020

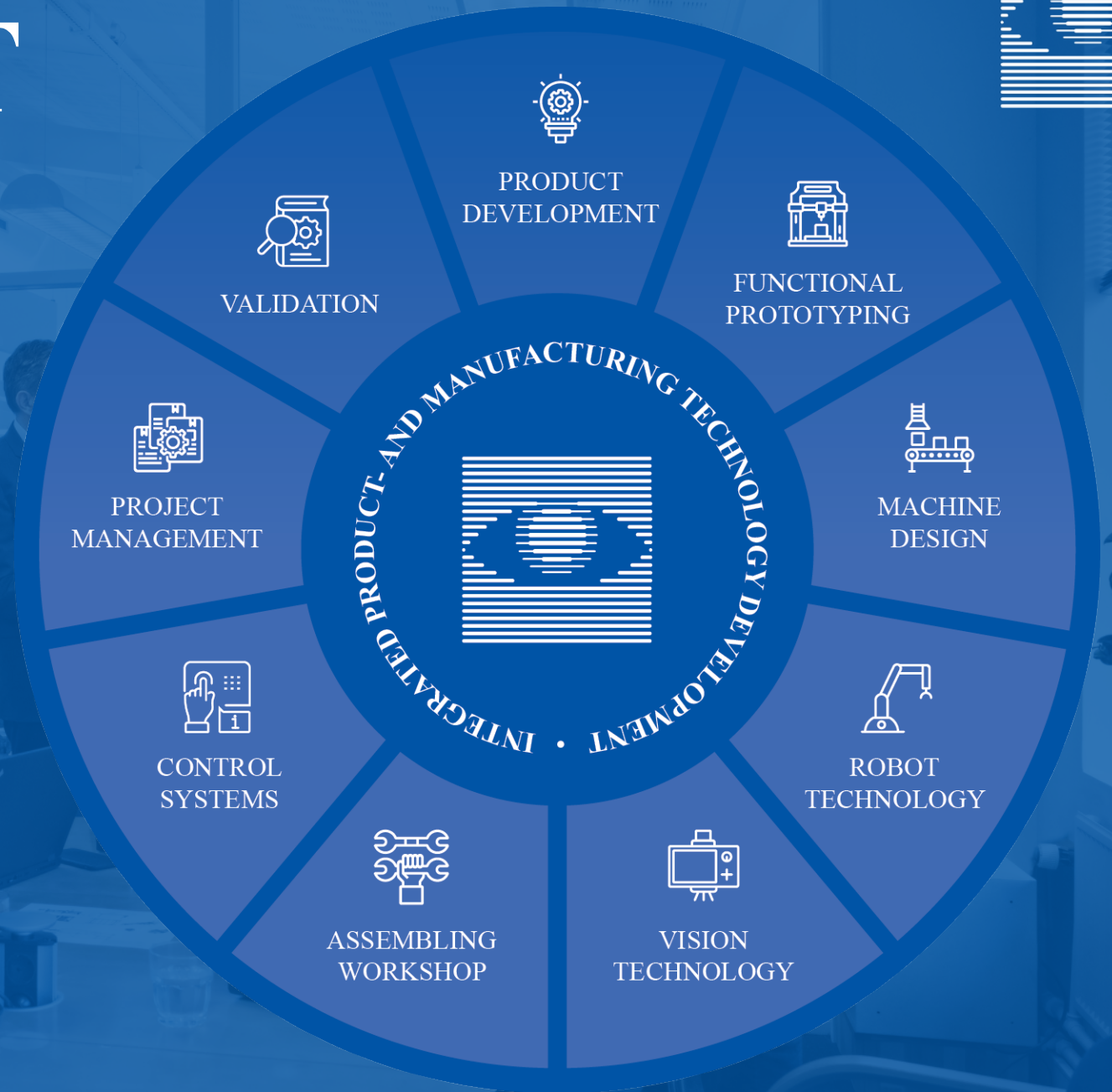
Mennesker og robotter, v/ Peter Ahlberg, CSPO



PROINVENT

– A One-Stop-Shop...

- Established in 1994
- 800+ projects
- 65+ Progressive Inventors
- 80+ mio DKK annual turnover in 2020
- 1200+ m² assembly workshop and offices in Hørsholm





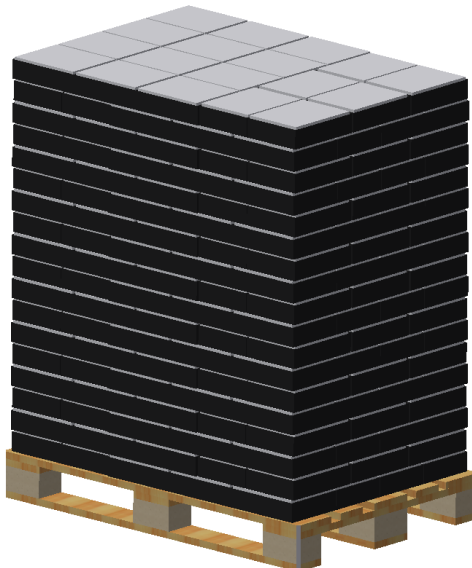
CASE: Cartridge feeding robots

CARTRIDGE FEEDING ROBOTS

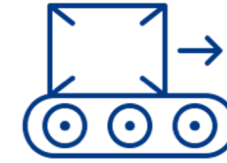
Process description



Pick a box from a
pallet



Look at the bottom of the
cartridge in the box and check
for damages



If cartridges are OK –
load to washing
machine's buffer



CARTRIDGE FEEDING ROBOTS



- There are nearly 400 cartridges in a box
- Check for all kinds of cartridge damage
- There is only 2,5 x 2,5 m space available at the shop floor
- Don't breach validation of equipment in the room
- Don't obstruct other ongoing operations in the room
- Ideally, do not put any equipment in the room

ProInvent A/S
teknologudvikling

RA
Automated with
Rockwell Automation



Vision: pallet

Vision: QC

Large robot

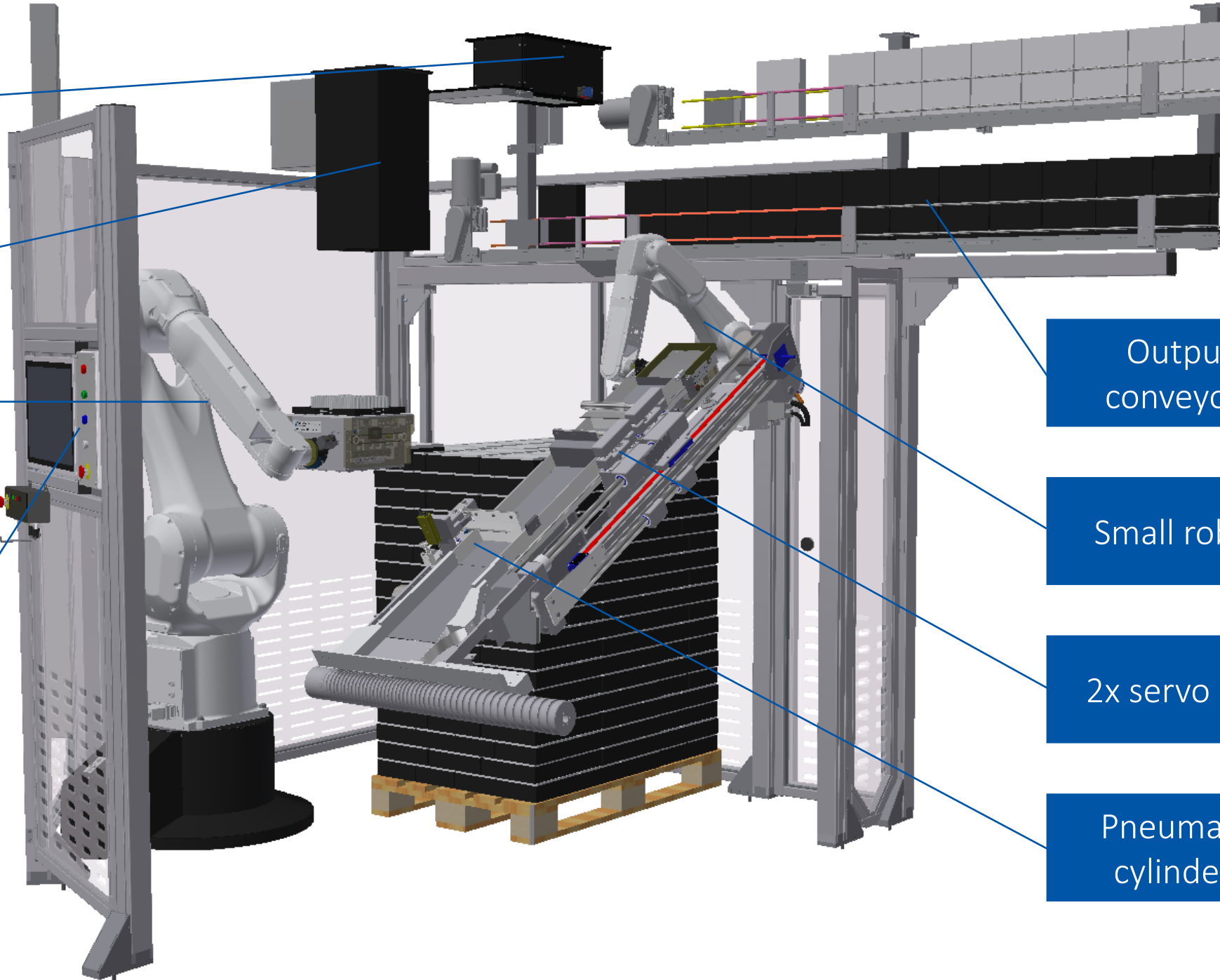
HMI

Output
conveyors

Small robot

2x servo axis

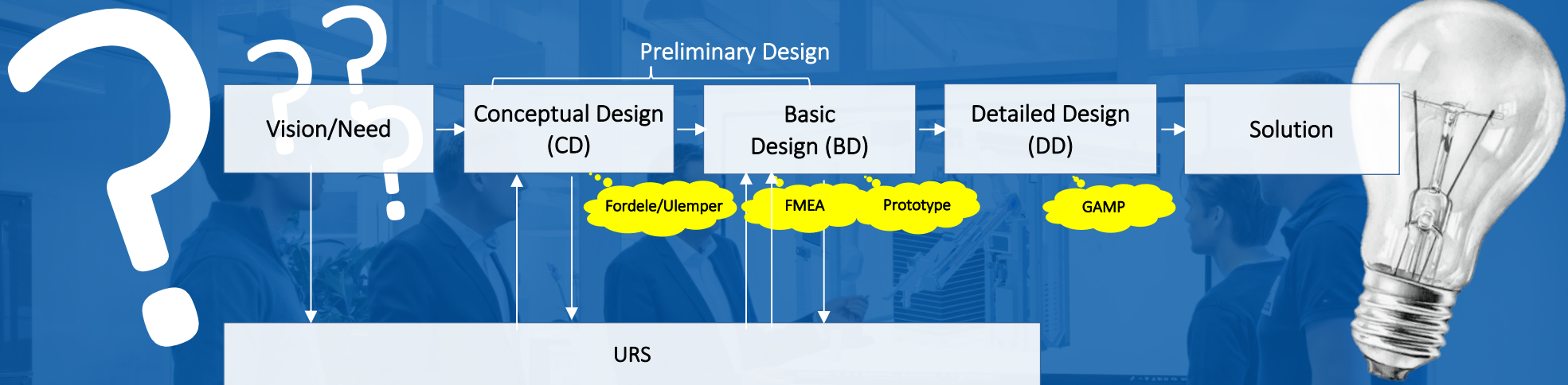
Pneumatic
cylinders



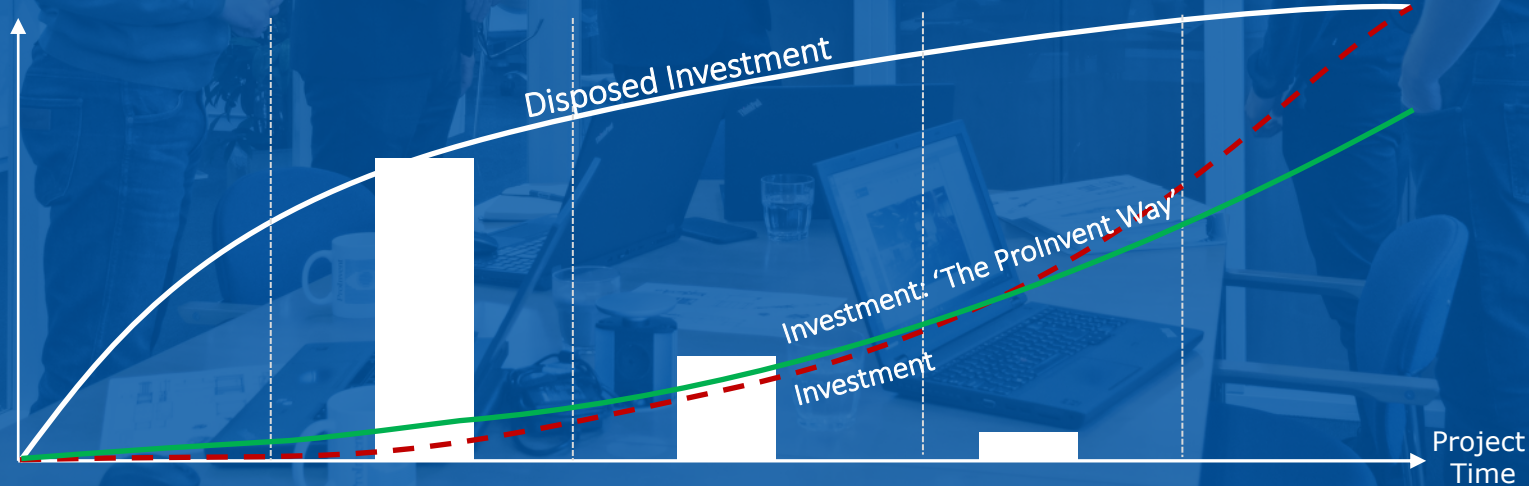


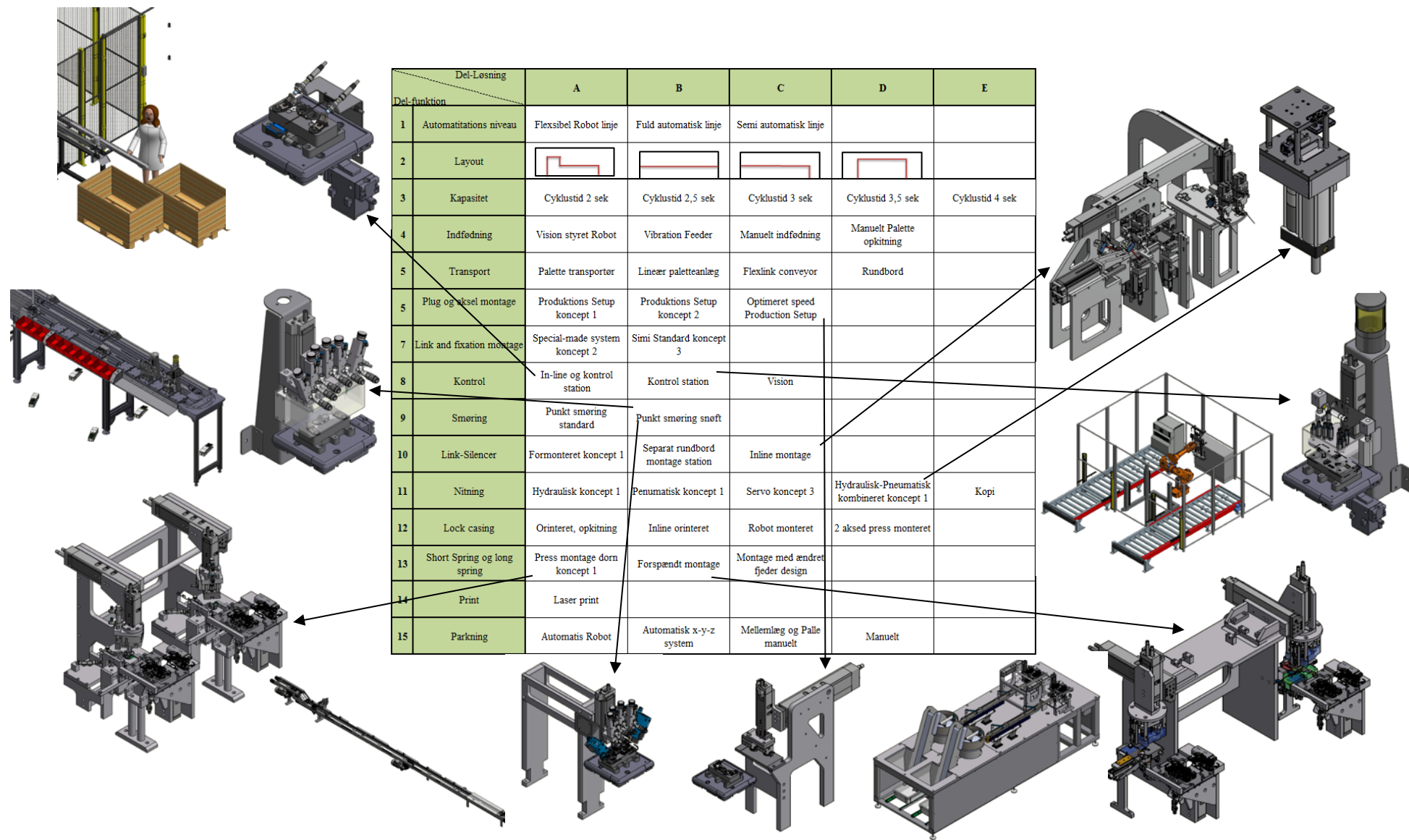
COST OPTIMIZATION IN PROJECTS

The ProInvent way...



Resources & Investment







<i>Bedømmelsesskalaen er 1-5, hvor 1 er dårlig og 5 er god</i> <i>Bedømmelsesværdien ganges med vægtninger, for at få det endelige resultat</i>	Bedømmelsesparametre:	Proces		Konstruktion				Økonomi	Arbejds miljø		Miljø	Total:	Vindere:
		Takttid	Driftsikkerhed	Simplicitet/service	Størrelse/volumen	Rengøringsvenlighed	Robusthed	Anskaffelsesomkostninger	Støj	Adgangsforhold	Energiforbrug		
Vægtning:		Høj	Høj	Middel	Lav	Høj	Høj	Middel	Lav	Middel	Lav		
Løsninger:													
Flexibel Robot linje		10	12	6	3	12	10	6	4	8	5	76	
Semi automatisk linje		10	9	10	4	15	3	15	2	9	3	80	X
Fuld automatisk linje		15	12	6	3	12	12	6	4	8	3	81	X

Kommentar: Lav = 0-5, Middel = 0-10, Høj 0-15



proinvent.dk



**THANK YOU FOR
YOUR TIME**
– please, reach out.

Peter Rico Ahlberg

Chief Sales- and Project Manager

Senior Partner

pra@proinvent.dk

+45 2290 5230