

Alias and VRED for Heavy Machinery Design

Mike Turner

Senior Industrial Designer

DG Design

INTRODUCTIONS

Mike Turner – Career Bio



- 86-92 Voluntary placements at JCB as Industrial Designer throughout GCSE & A Level – meets Gary Major
- 92-96 Coventry University – Transportation Design BA (Hons)
- 1997 Adtranz (Bombardier) – Senior Designer, Learns Alias whilst working in Berlin.
- 2001 Renfrew Group - Design Consultancy. (Triumph Daytona & Flymo surfacing)
- 2002 Joins JCB – Introduces 3D Industrial Design workflow (Alias) to organisation. Digital development expands, as does capacity – all product range covered, including JCB Dieselmex land speed car.
- 08-10 MT Freelance – VW, Bloodhound SSC, Nokia, HotWheels, Terex, Triumph, IVT etc
- 2010 MT Rejoins JCB
- 2011 GM leaves JCB to set up LiuGong UK Studio - MT promoted to JCB Global Head of Design.
- 11-16 MT development of JCB Innovation Centre & ID studio: collaborative working, advanced visualization, digital stakeholder reviews, rapid prototyping, ergonomics & HMI - Full product range & NPI process overhaul – disruptive innovation. (Hydradig)
- 2016 MT joins DGGESIGN – Transportation Design consultancy with Rail bias. (DG prior colleague of GM)
- 2017 MT & GM re-establish working partnership - Alias definition and vRED visualisation.
- 2020 Red Dot Design Award - Product Design winner (LiuGong Dressta TD-16N)

DGDESIGN – Brief history



DAVID GORDON
DESIGNER DIRECTOR



JON WOODWARD
SENIOR DESIGNER

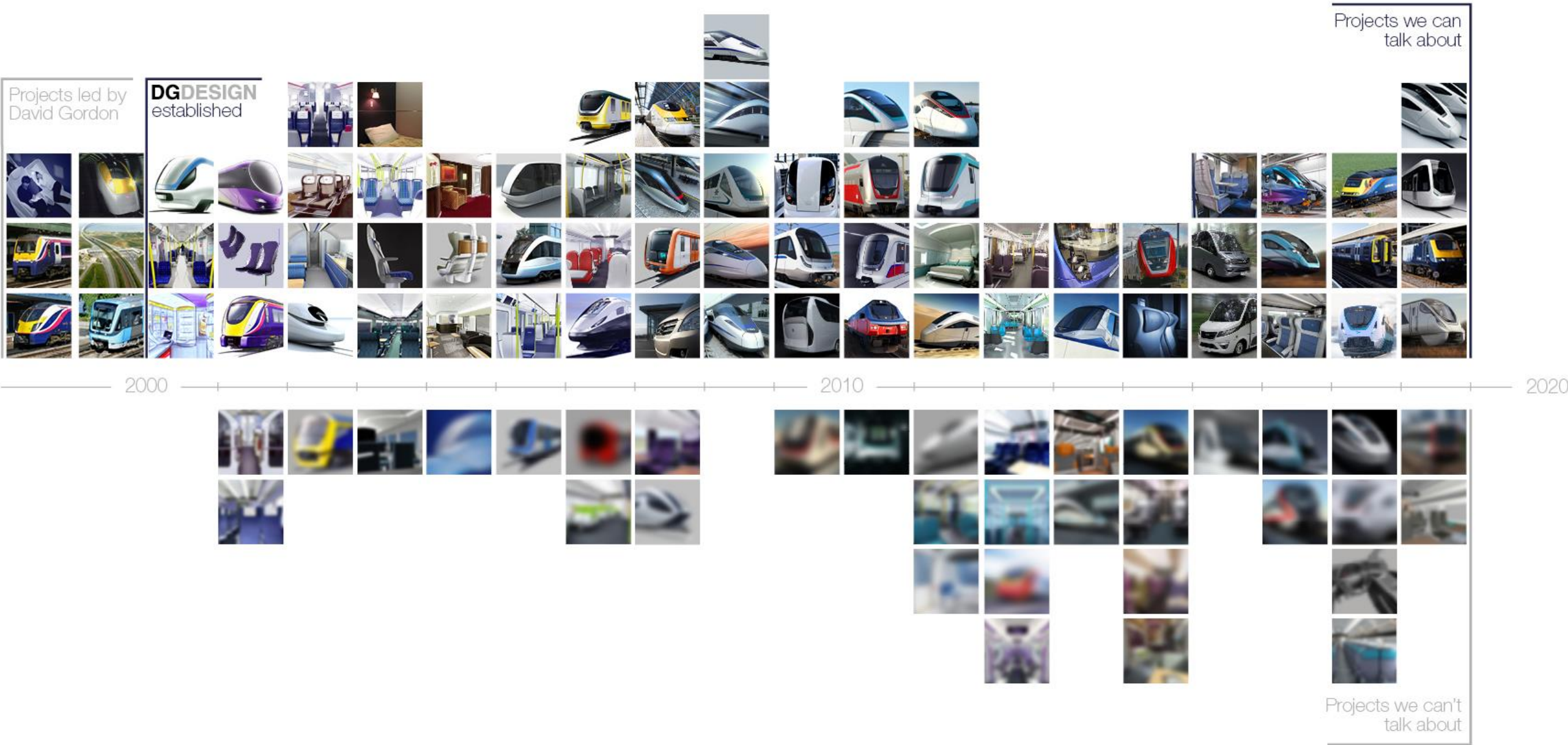


MIKE TURNER
SENIOR DESIGNER



ANDY SYKES
SENIOR DESIGNER

- Est. 2000 by David Gordon (Former work Colleague of both Gary and Mike from Rail Industry)
- Transportation design specialists (Passenger Rail Vehicles, Bus and Coach, Off Highway Machinery, Commercial vehicles.)
- Four creatives; 80+ years of combined design experience
- UK based but operating globally
- A proven record of delivering successful, award-winning projects for leading transport businesses around the world.
- Established Autodesk users – Alias, vRED (visualization, animation and VR) and 3DStudio Max



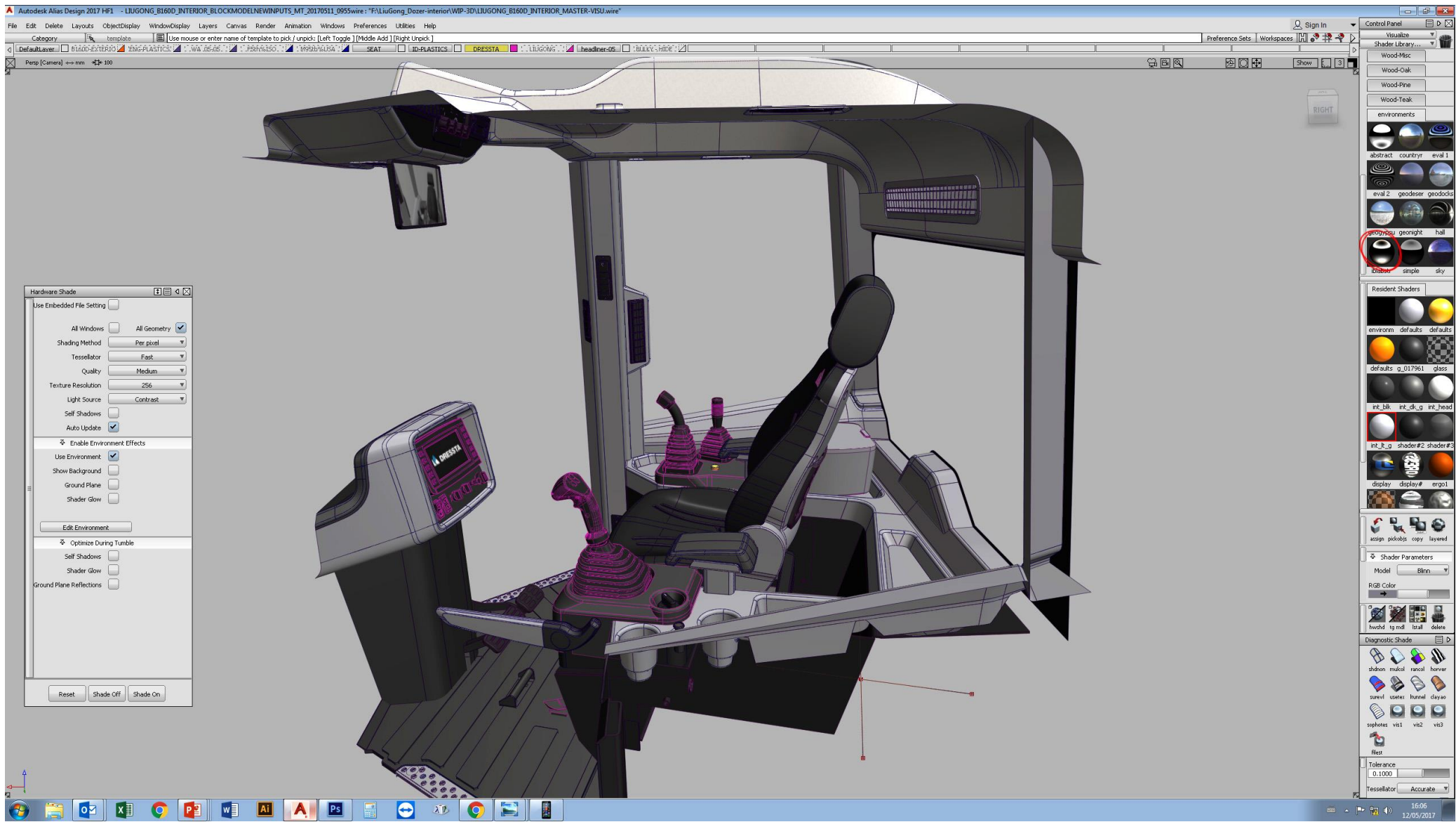
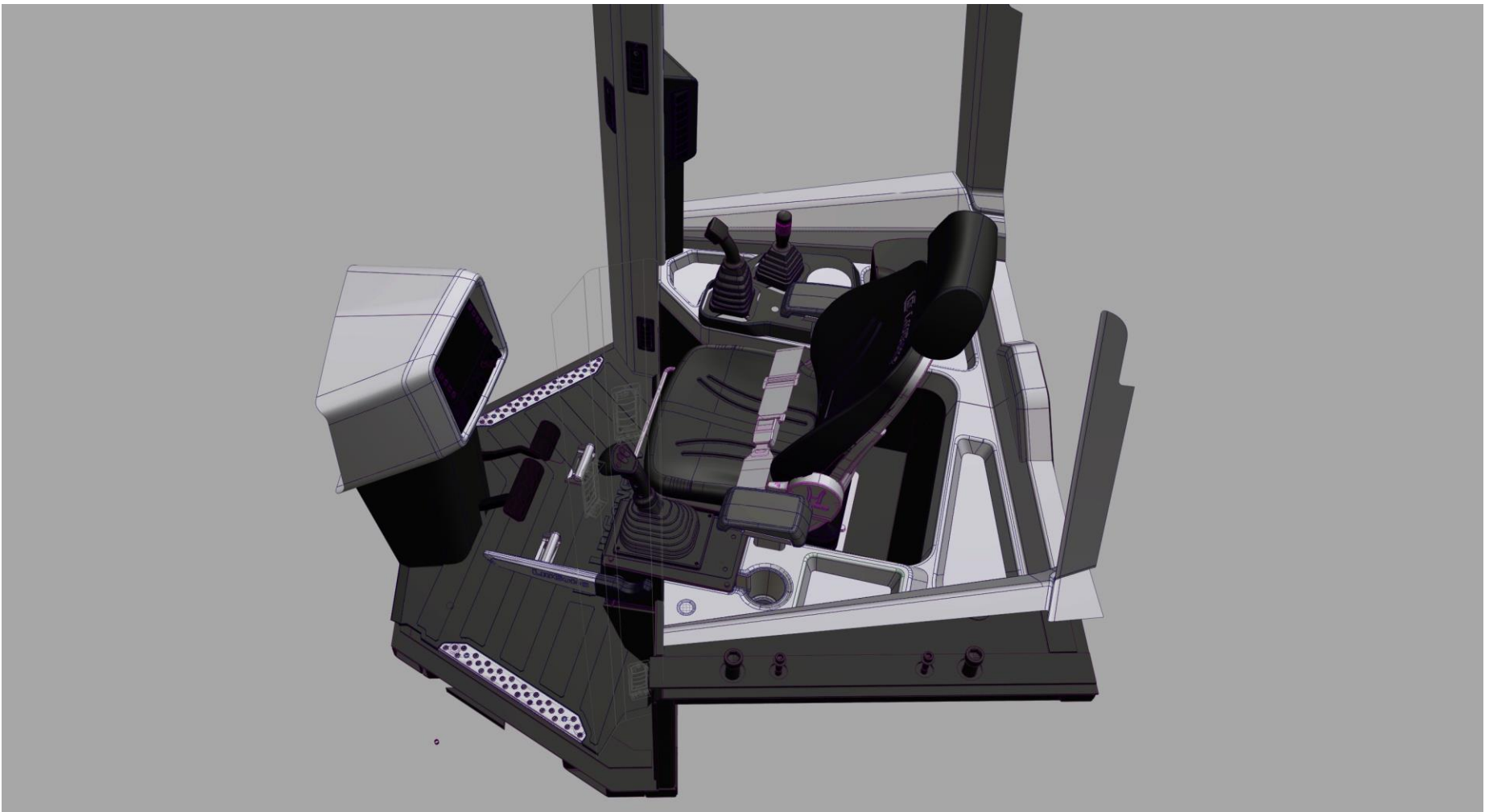
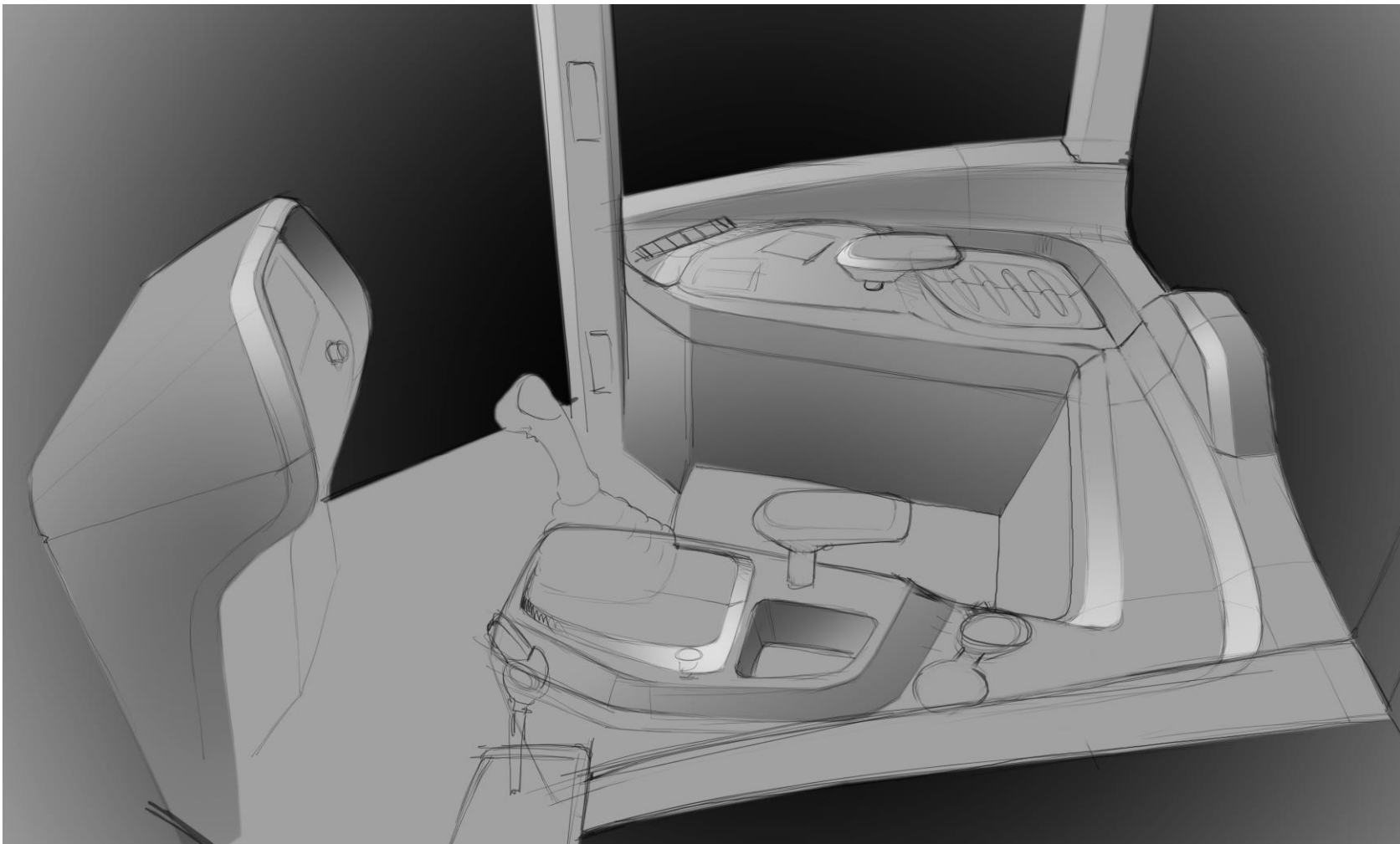
Research and Analysis | Concept Design | Design Development | Design Delivery | Manufacturing Support



B170D / TD25 – Concept Definition

2017

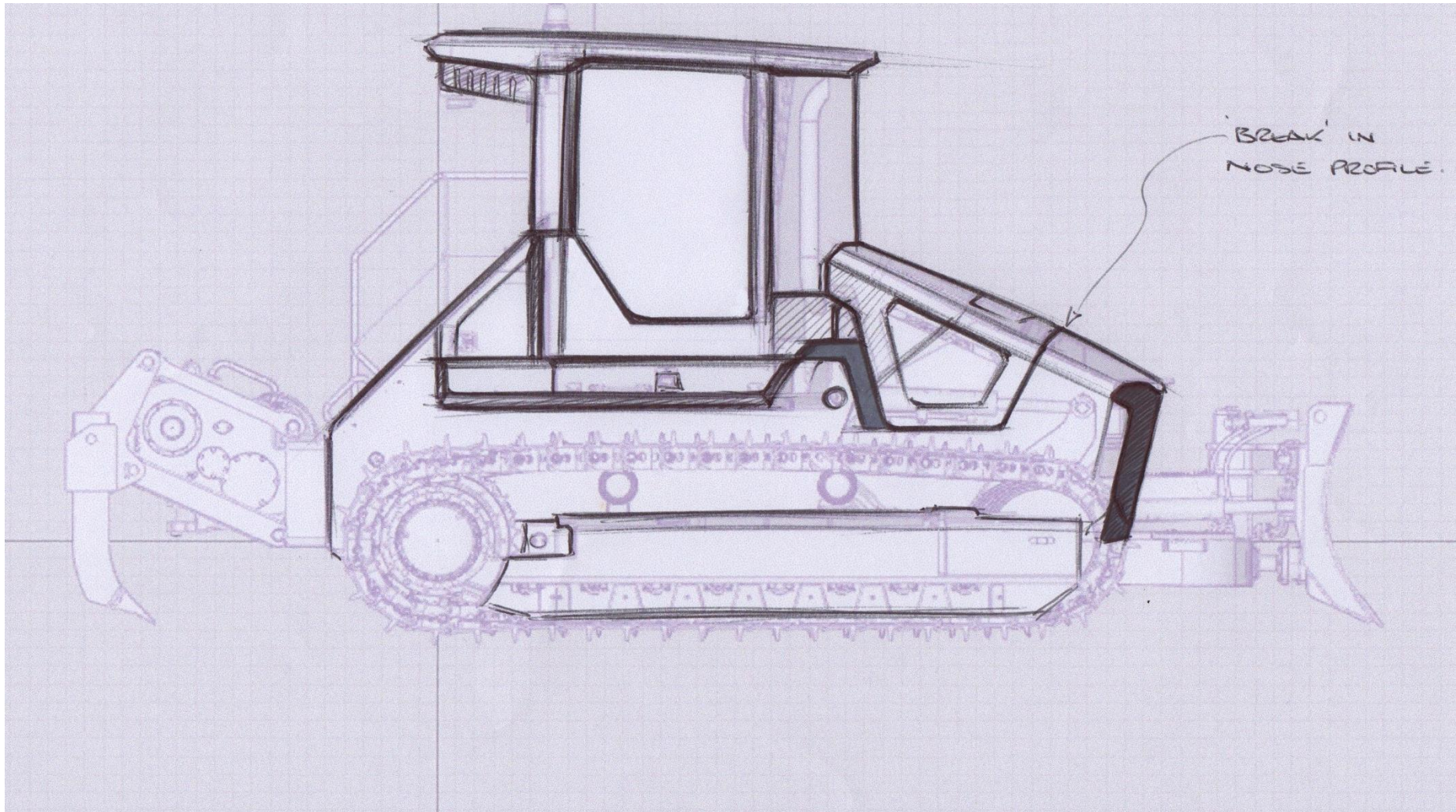
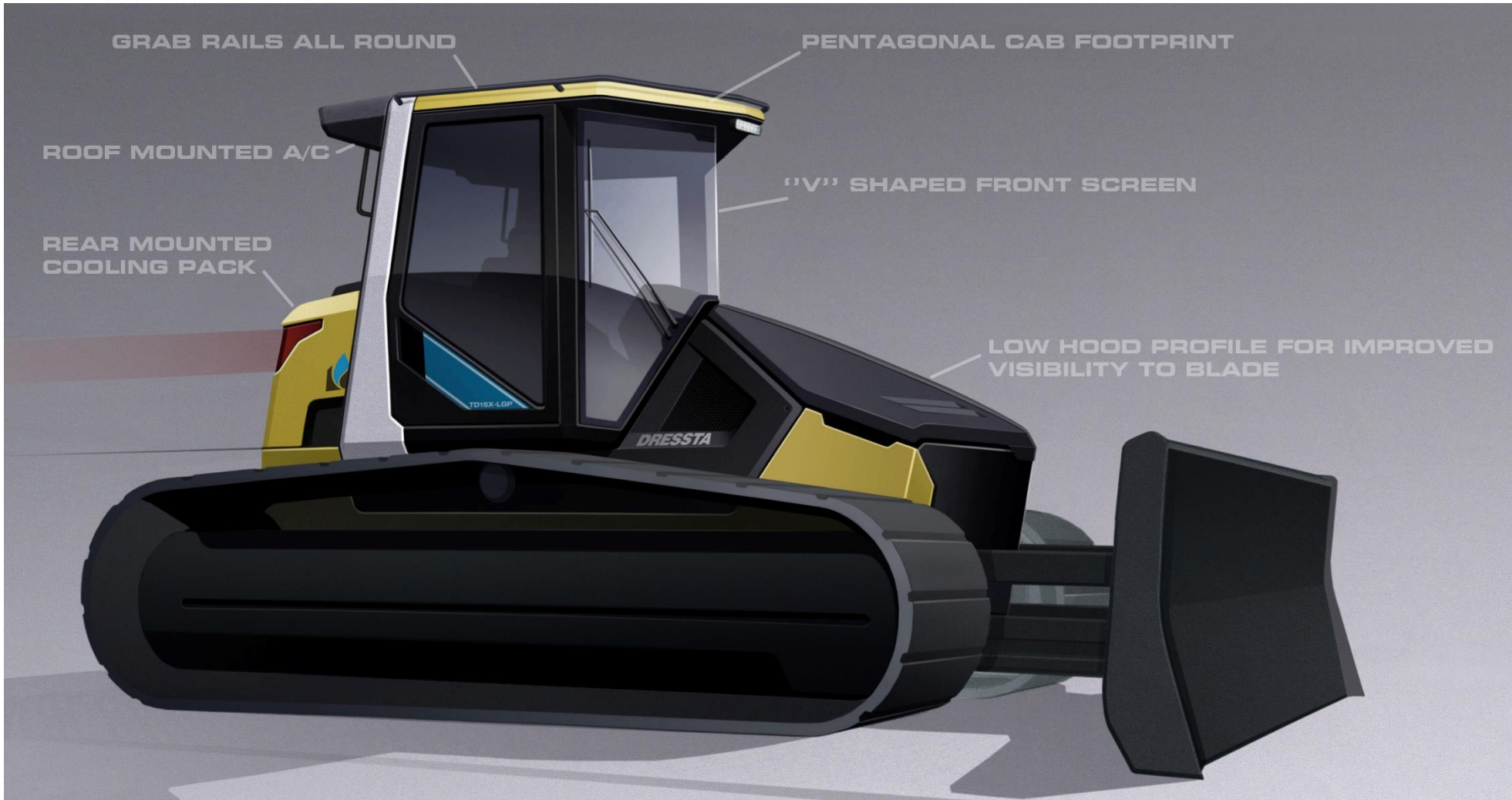
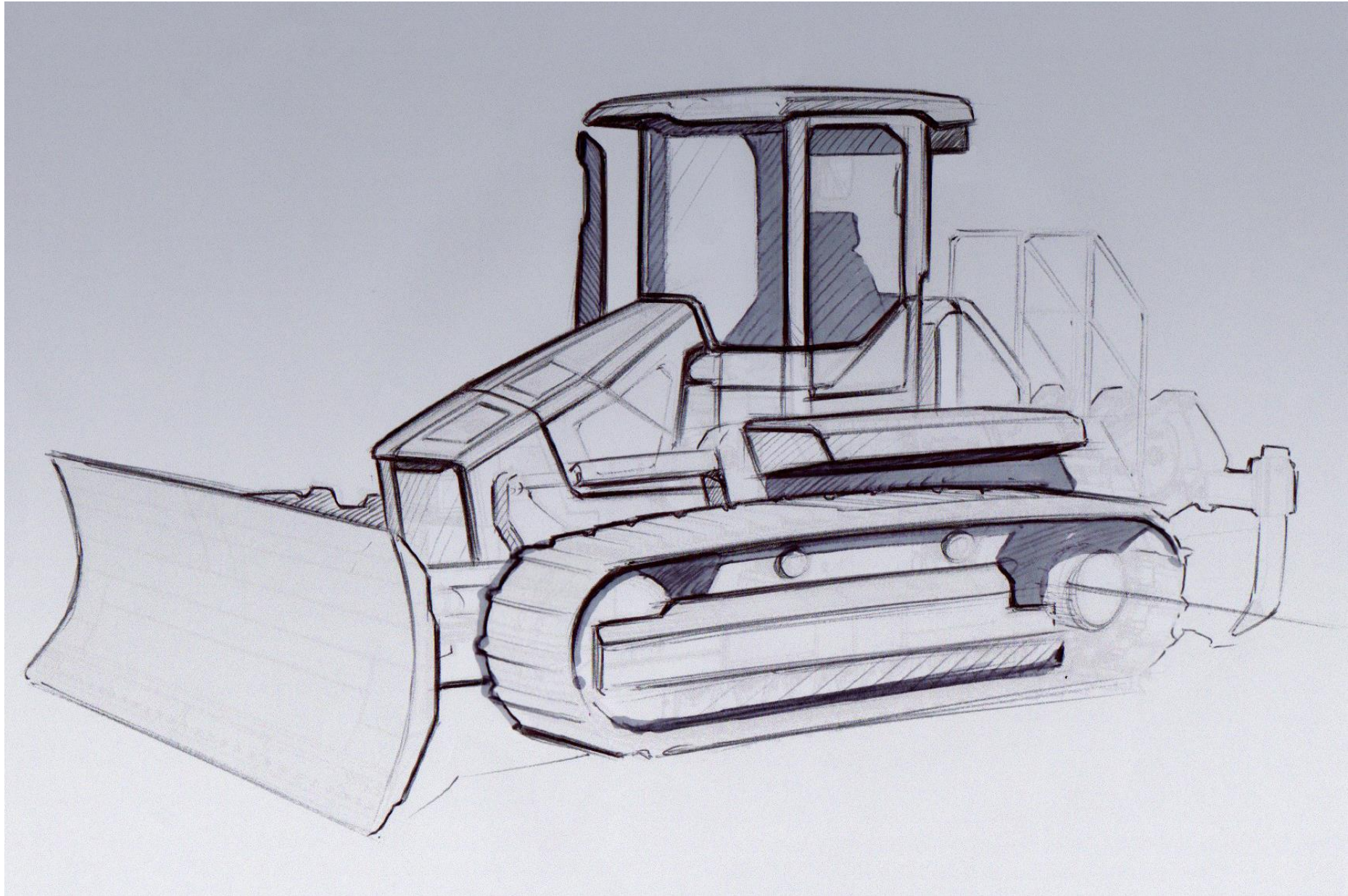
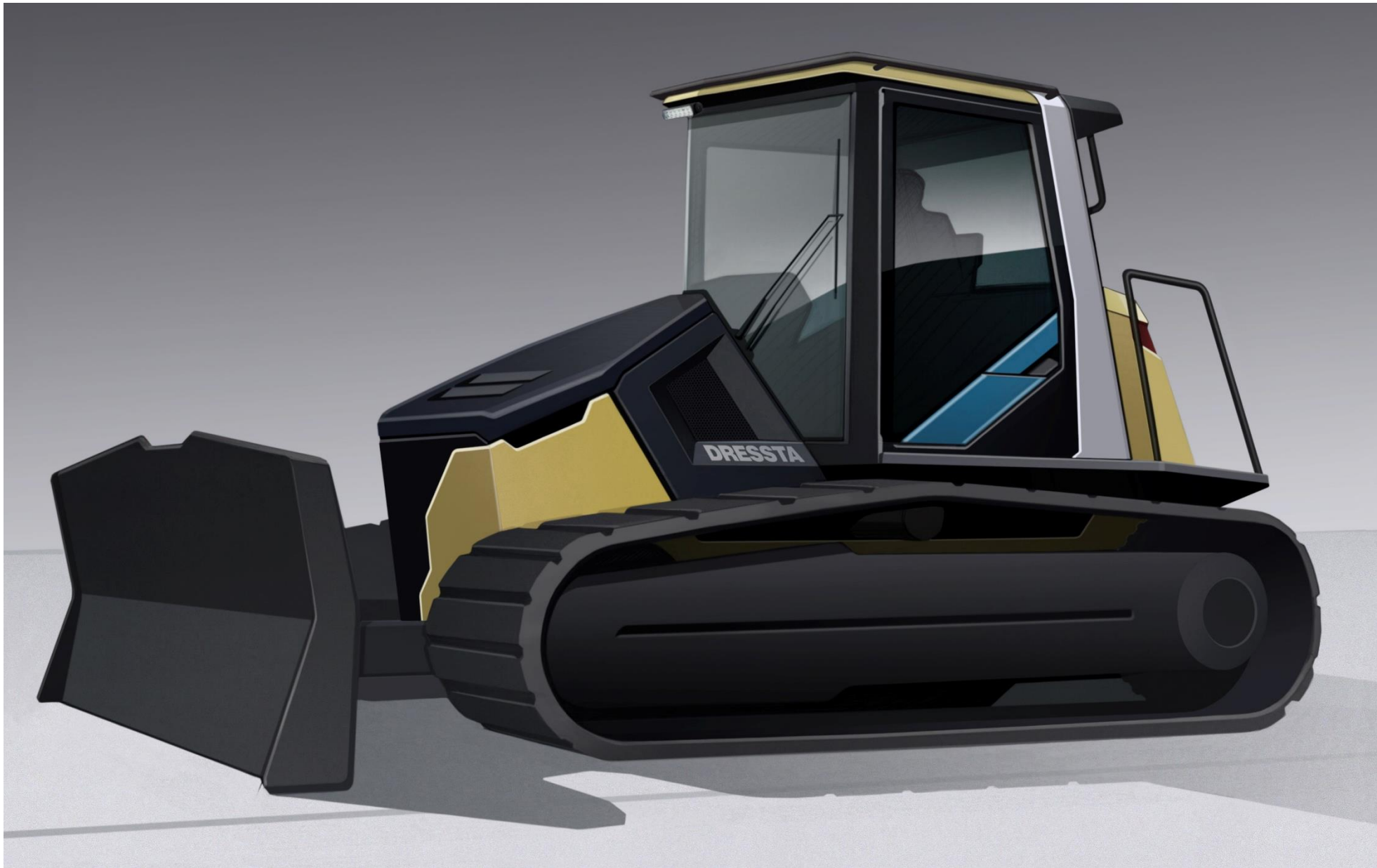
B170D / TD25 - interior concept definition (2017)



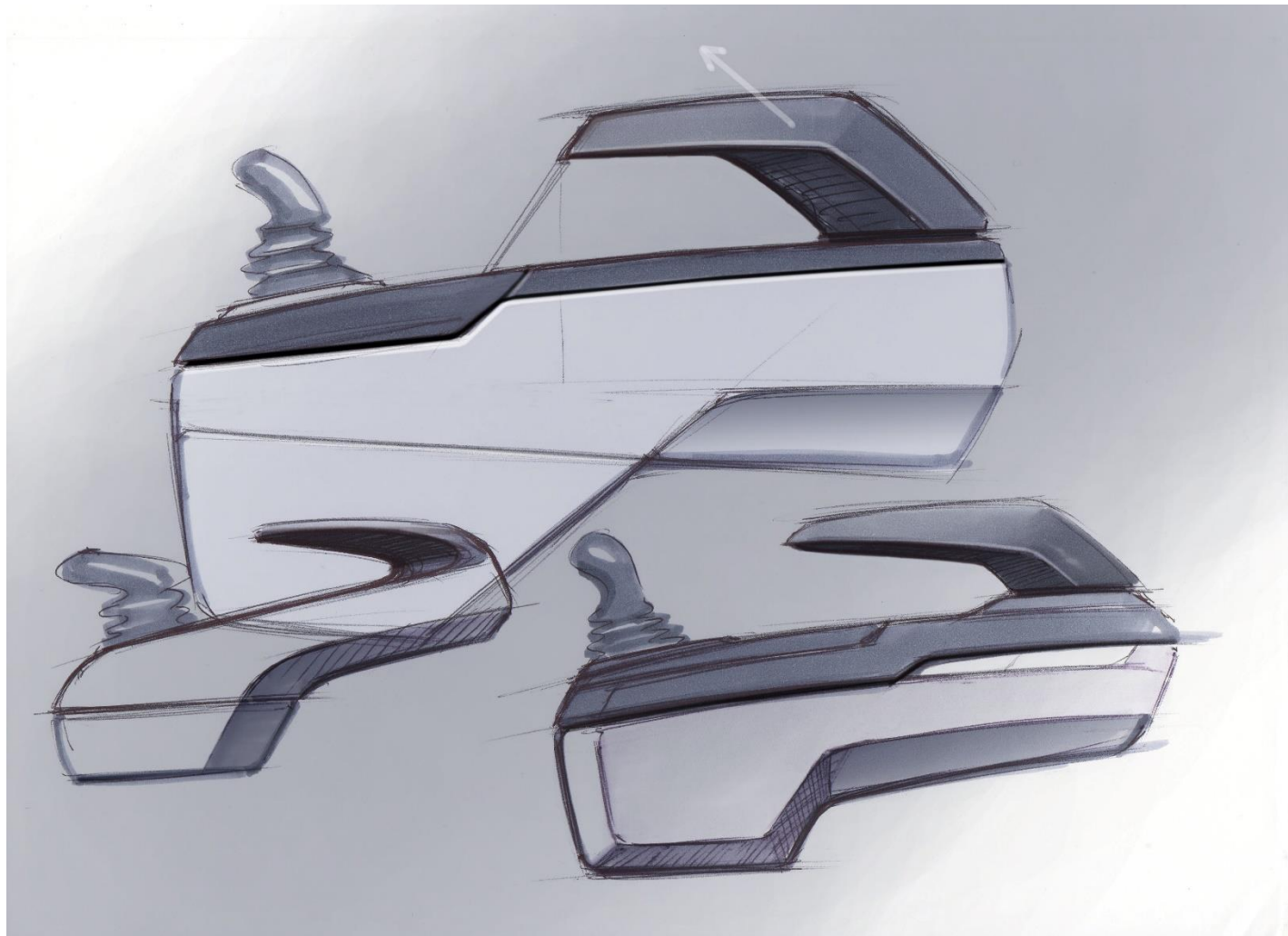
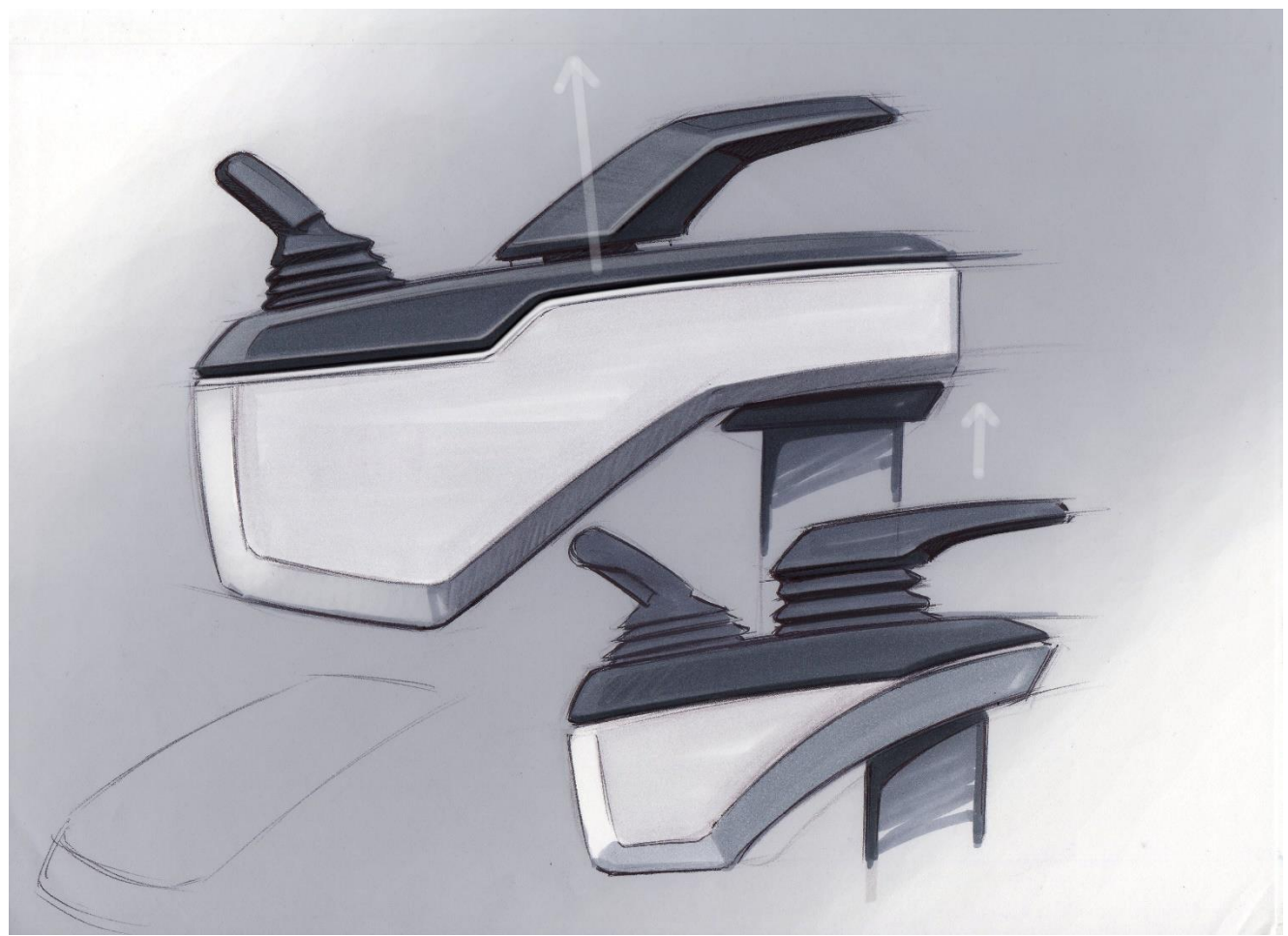
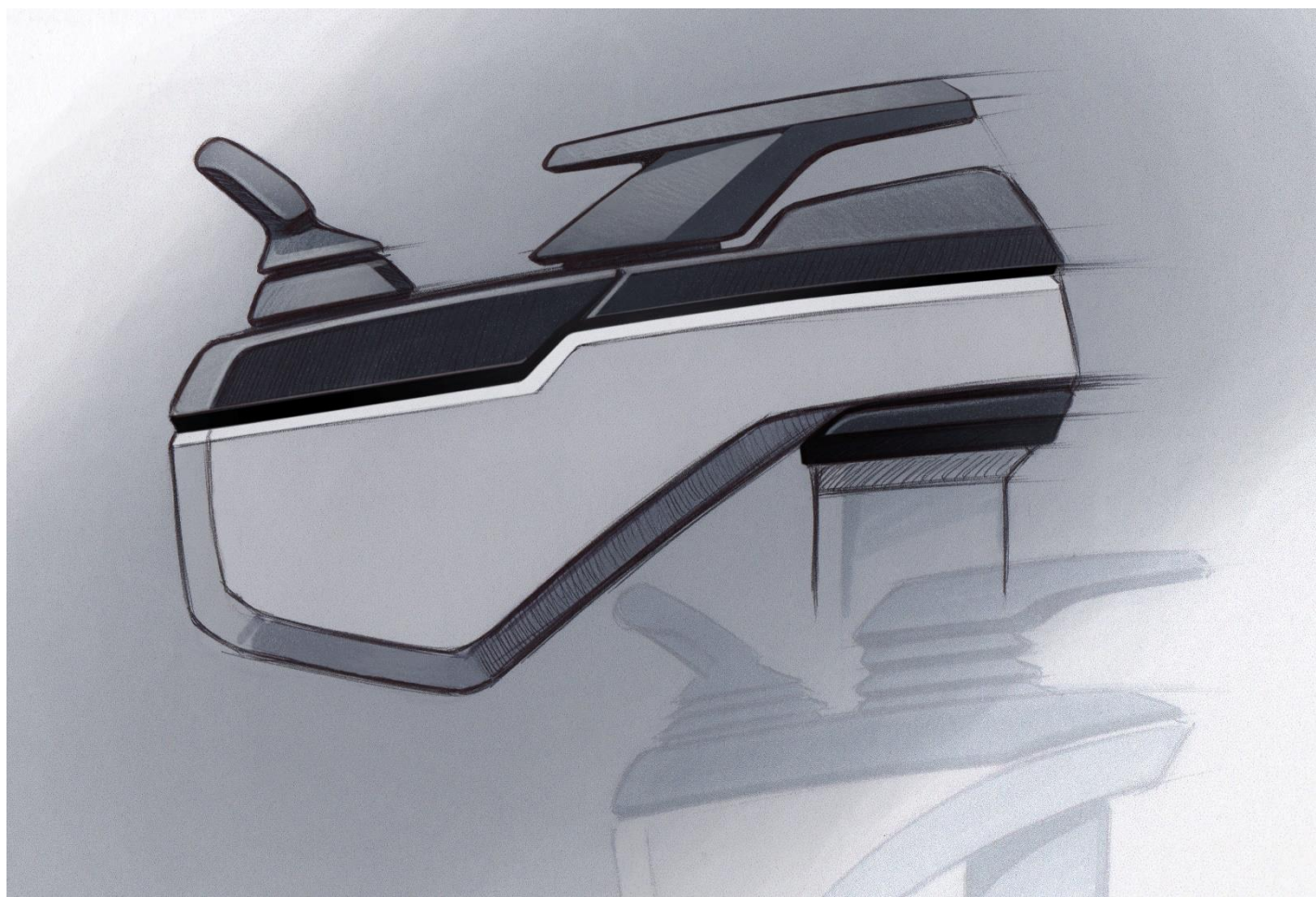
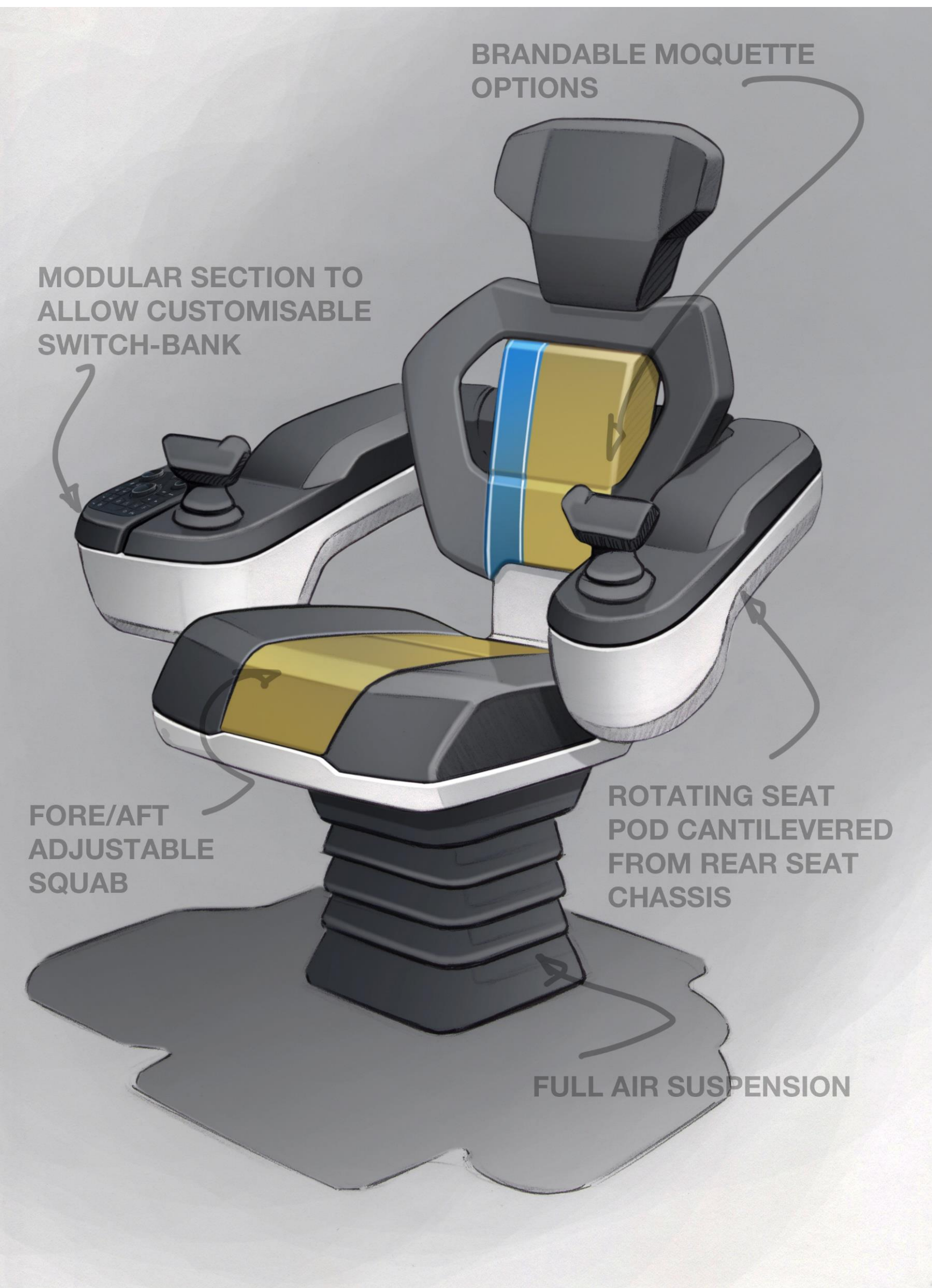
Mid Cab – Concept Definition

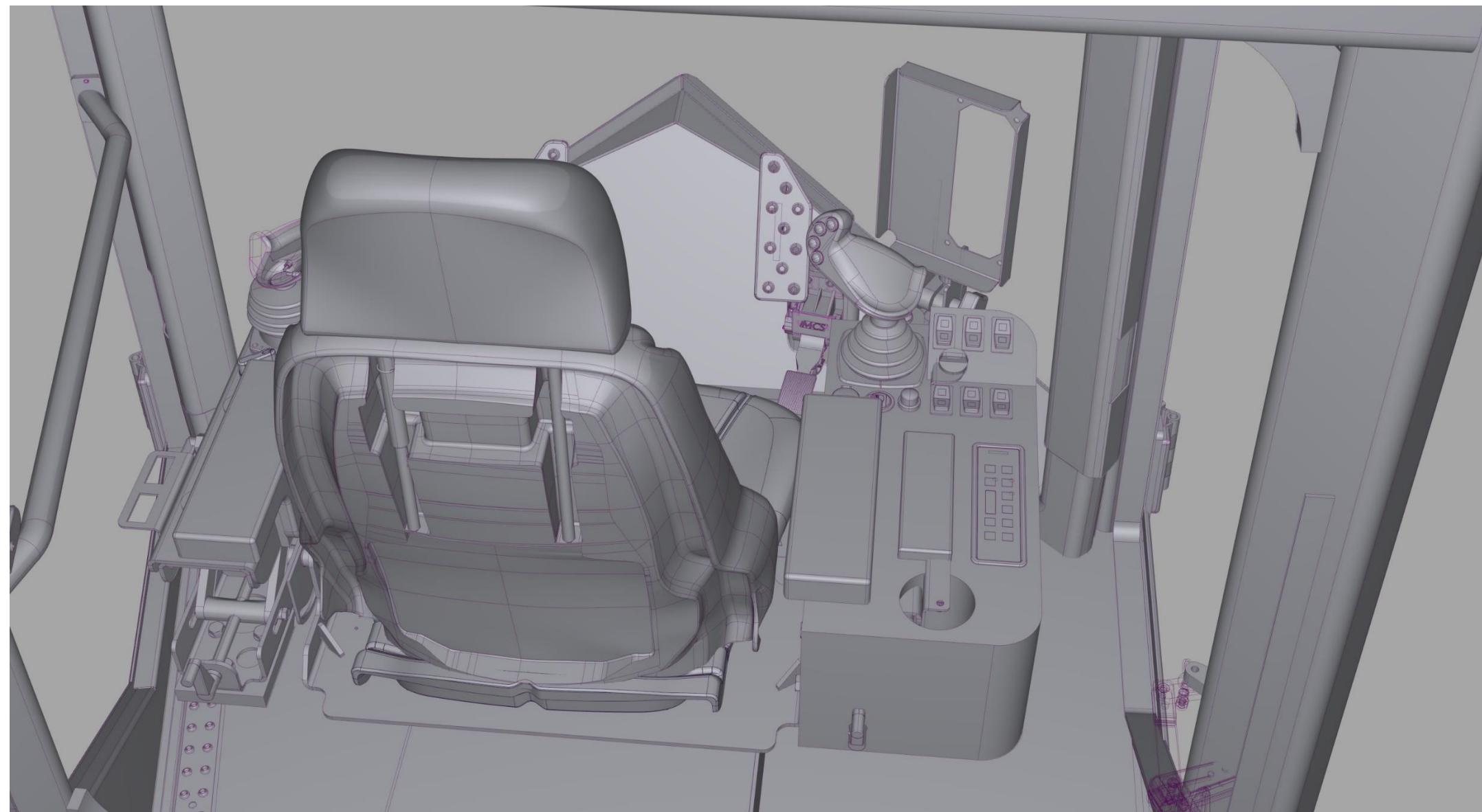
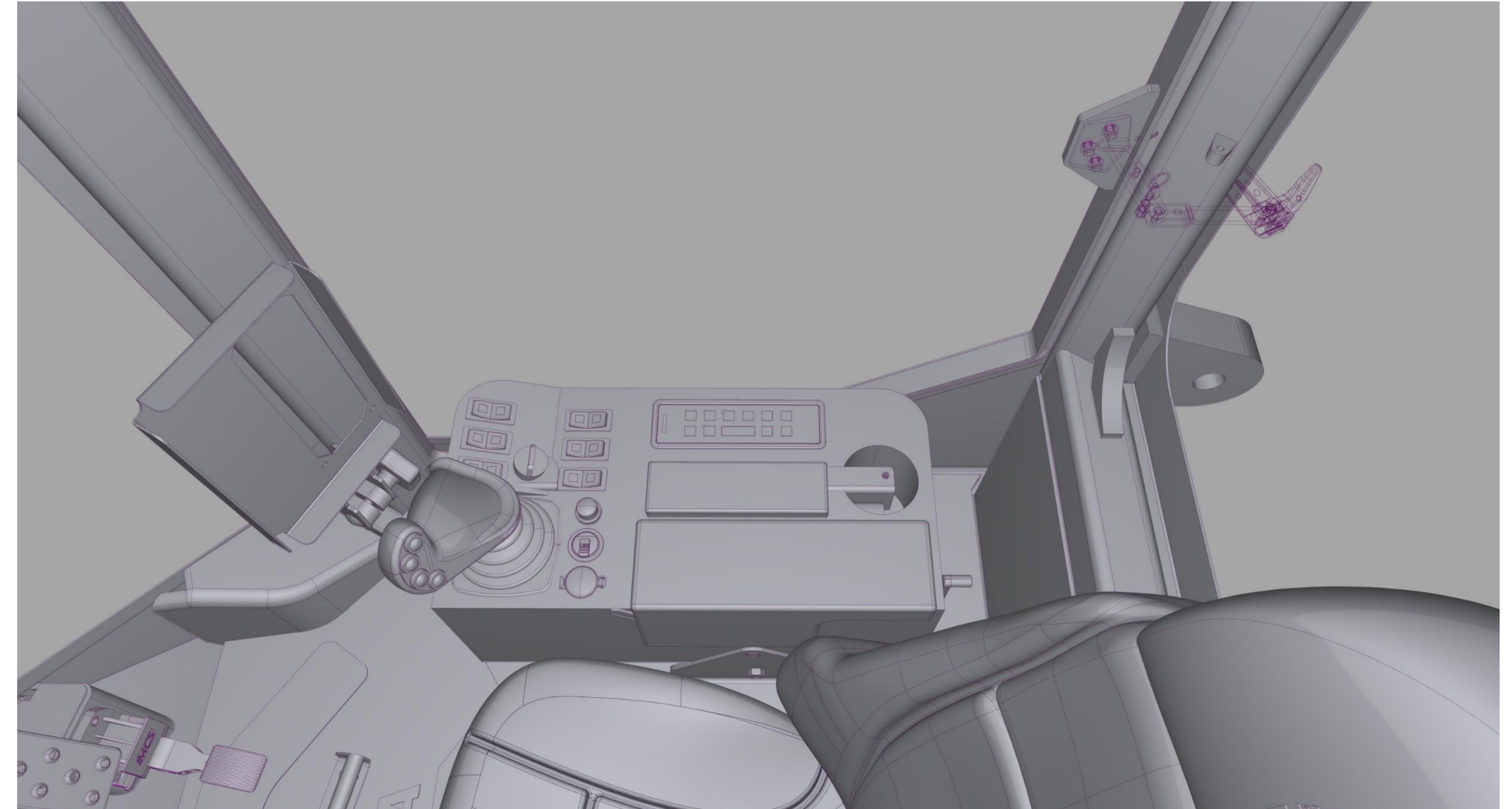
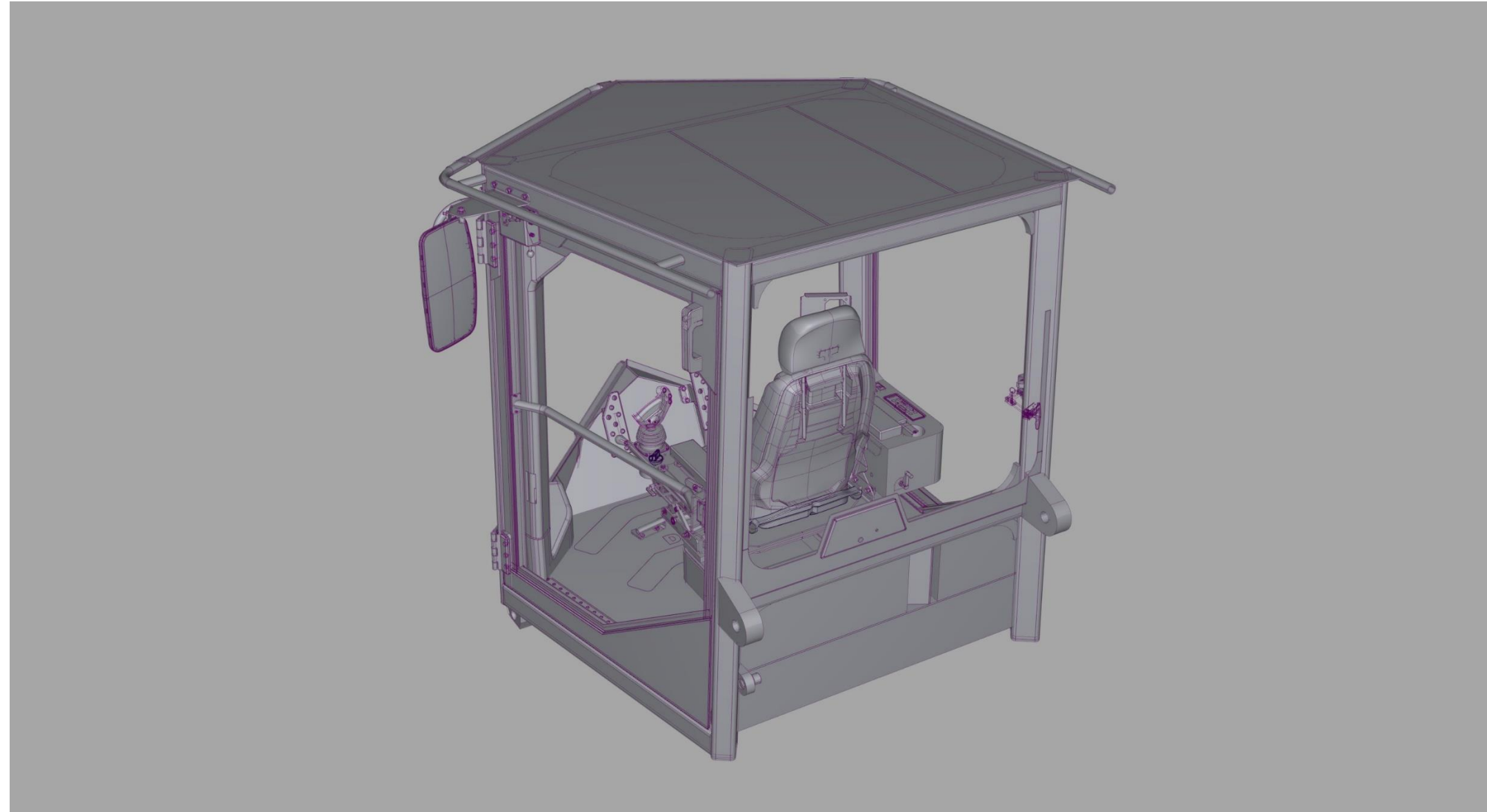
August – October 2018

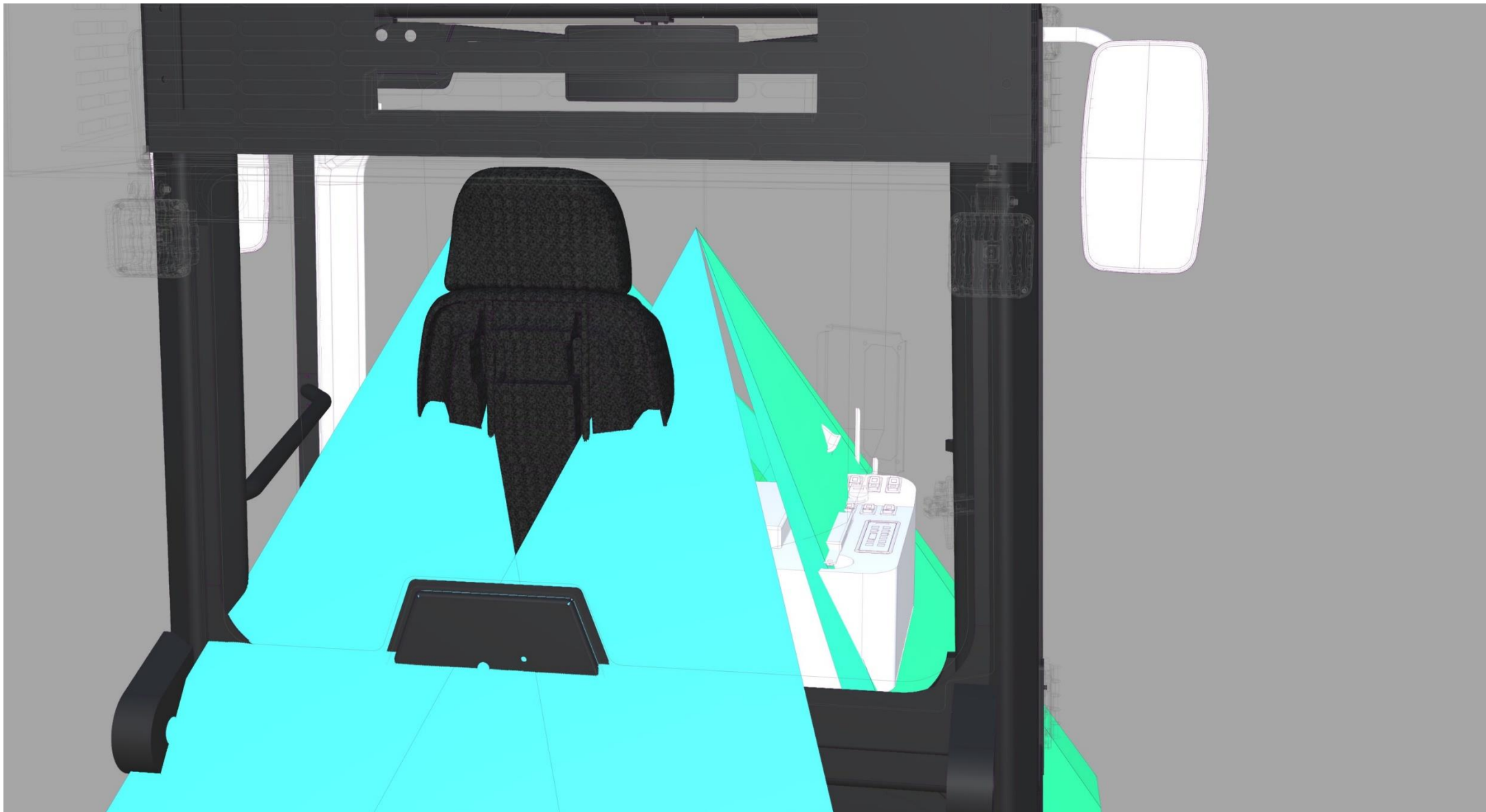
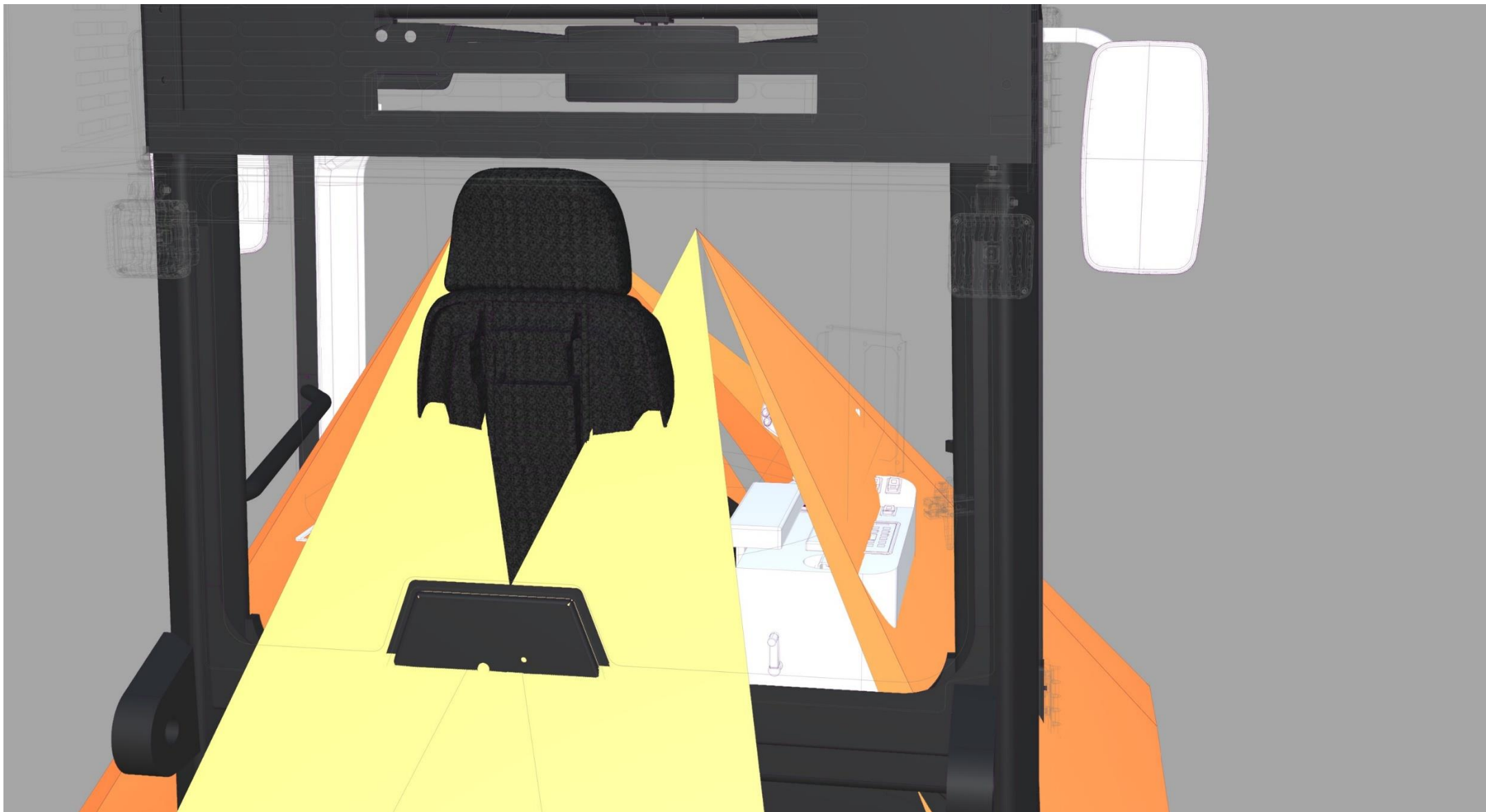
Mid Cab concept – exterior preliminary sketches overview – 2018

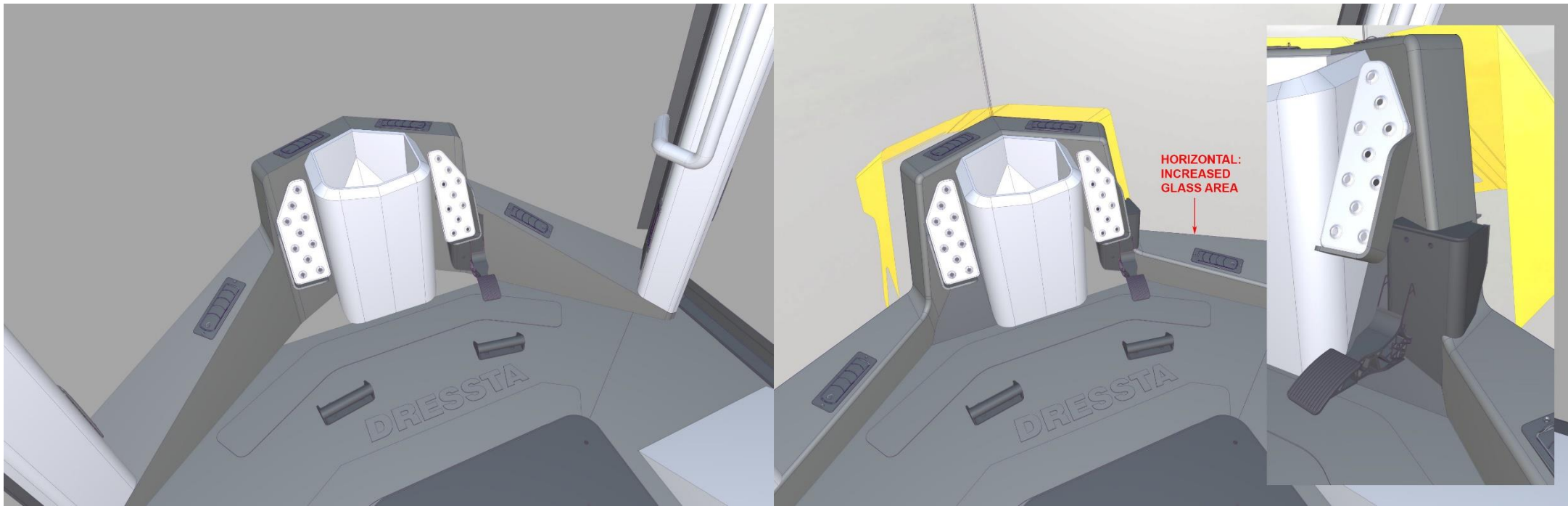
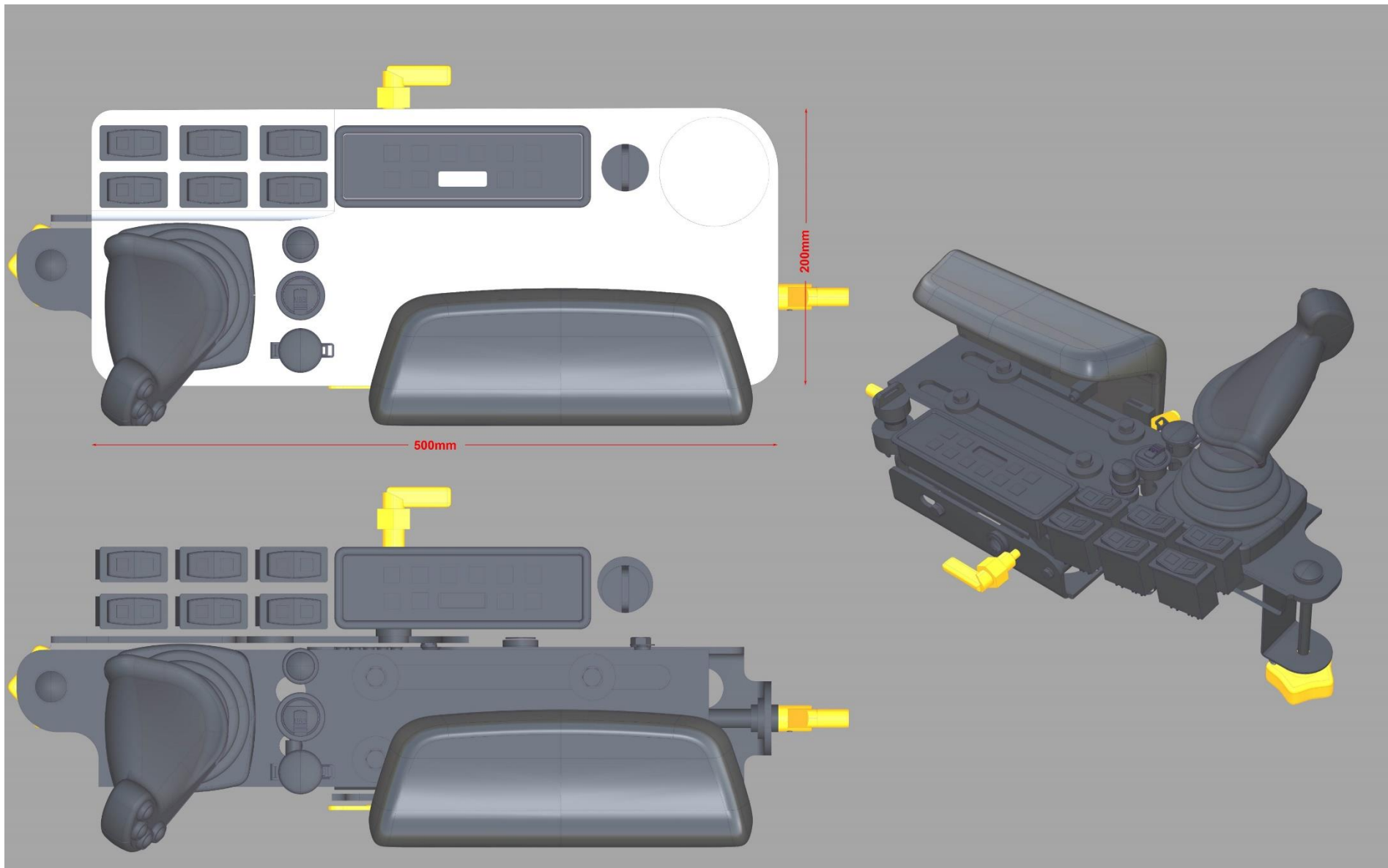


Mid Cab concept – interior preliminary sketches overview – 2018











INITIAL CAD CONCEPT

PAUL CAPPER INPUTS

Ed Wagner feedback:
"I think the horn near the key is nice since about the only time you use a horn on a dozer is when you start."

"I can't remember ever using a horn on a dozer on a jobsite."



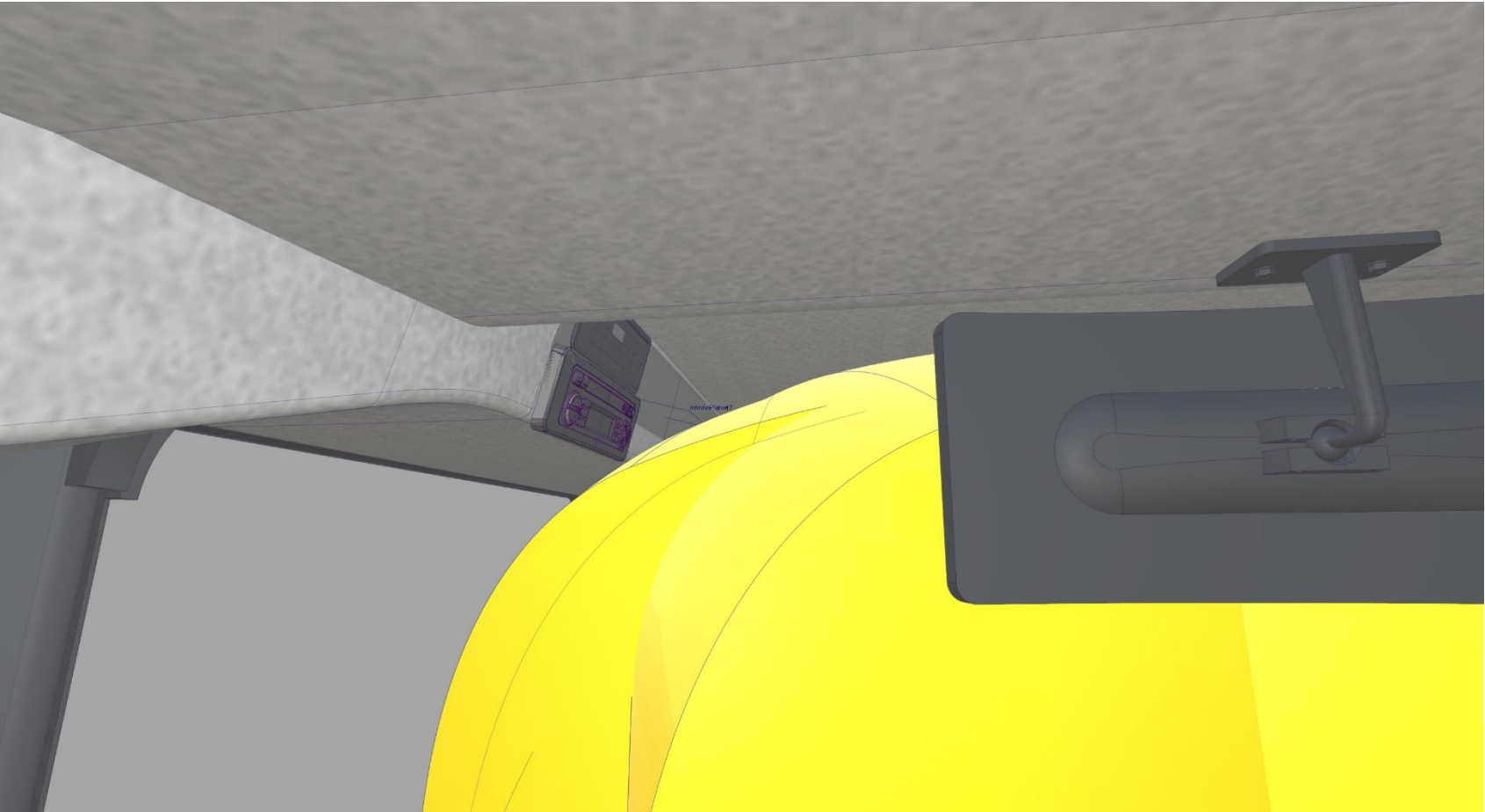
CAD concept - ID response

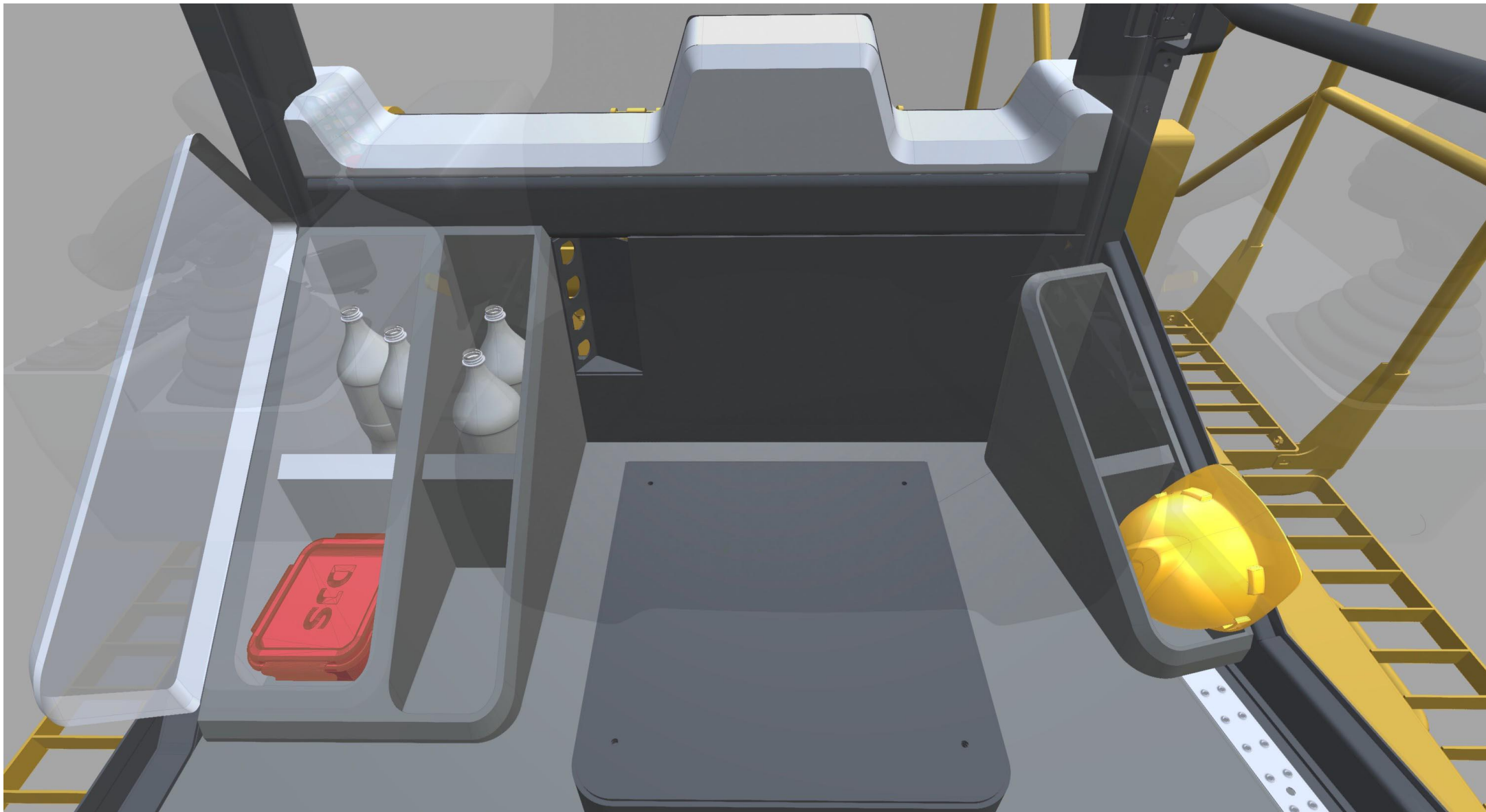
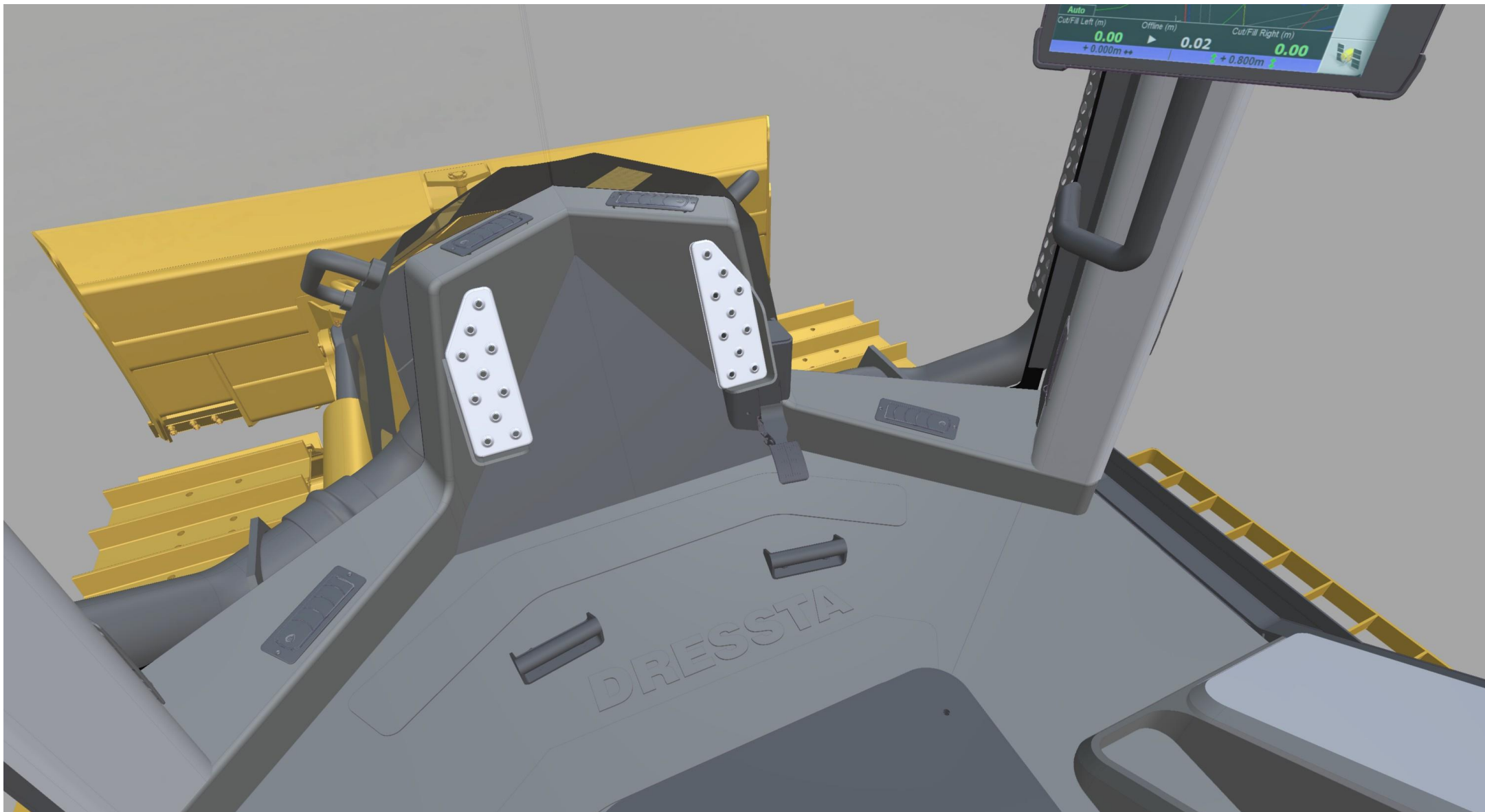
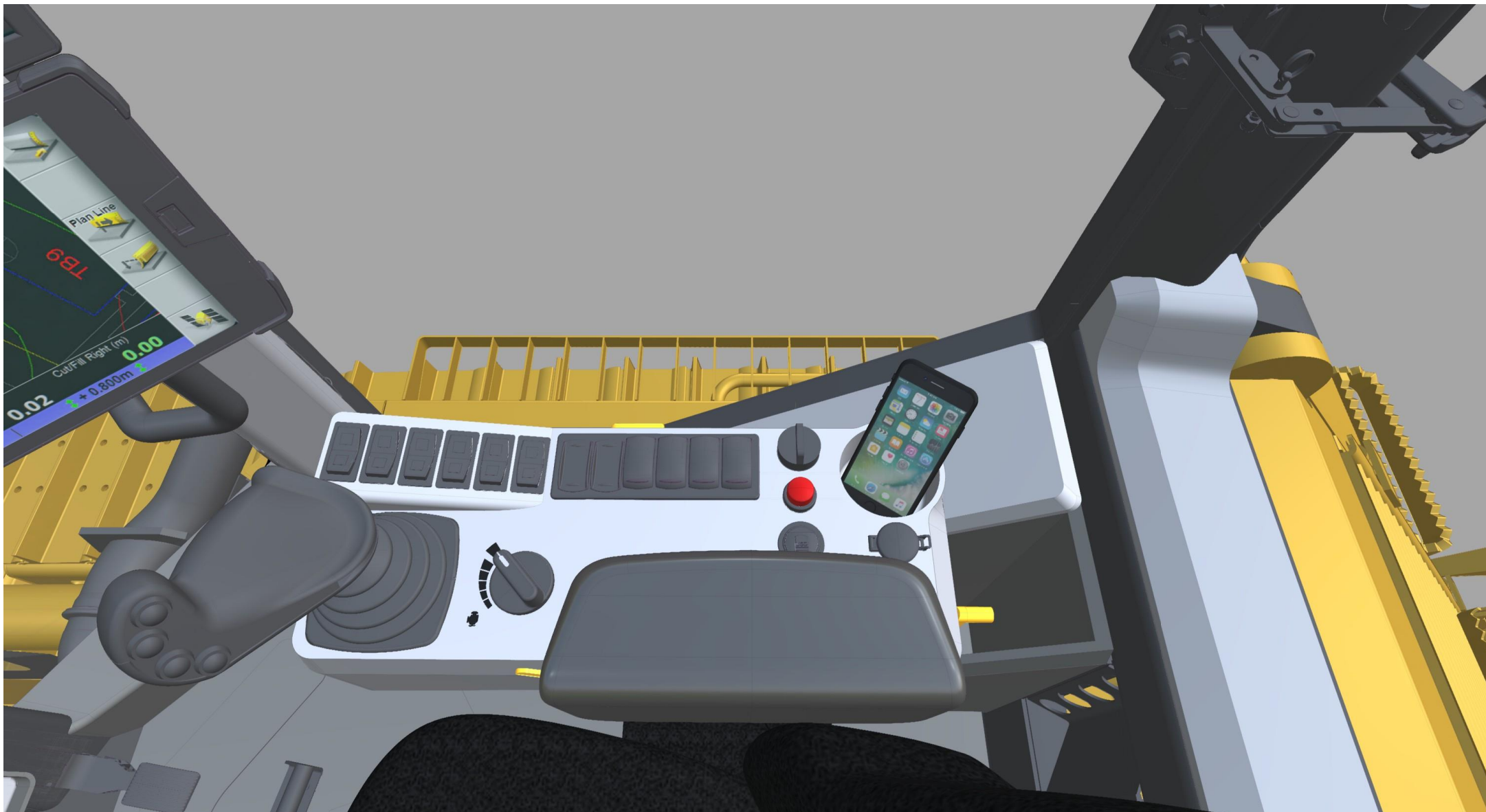
Horn moved to rear - adjacent to keys.

Space left clear for icons around engine RPM.

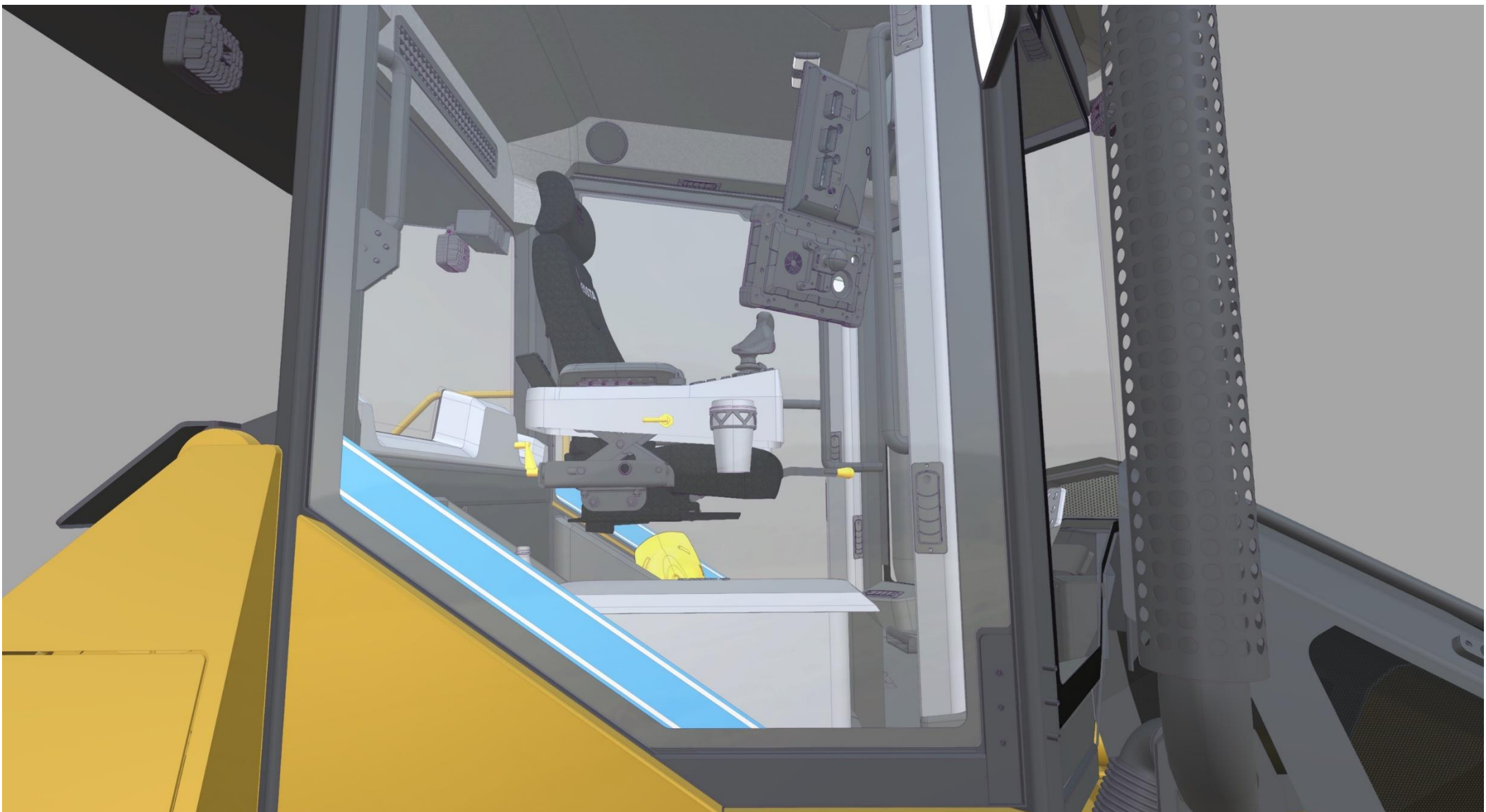
Could switches all be in same orientation?

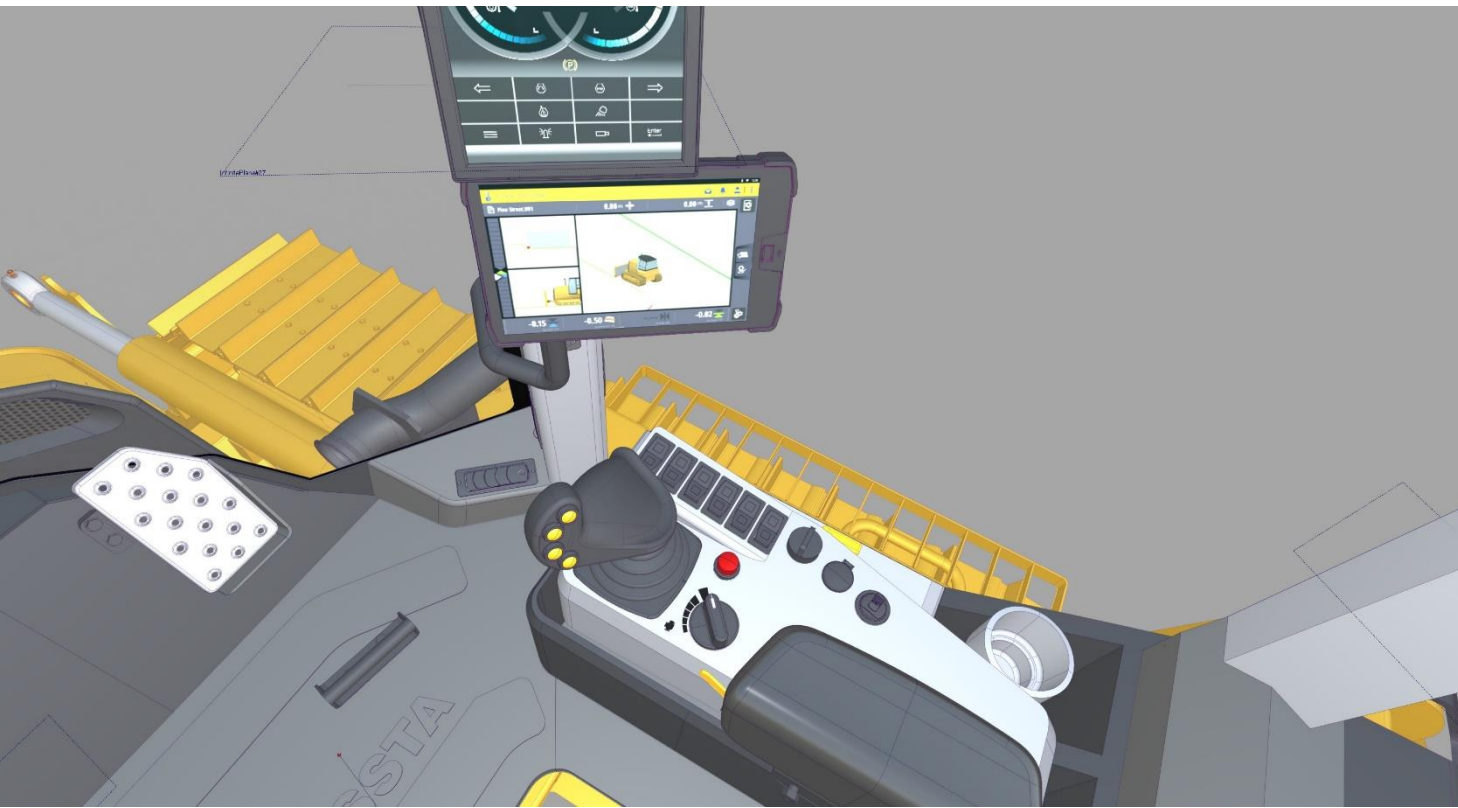
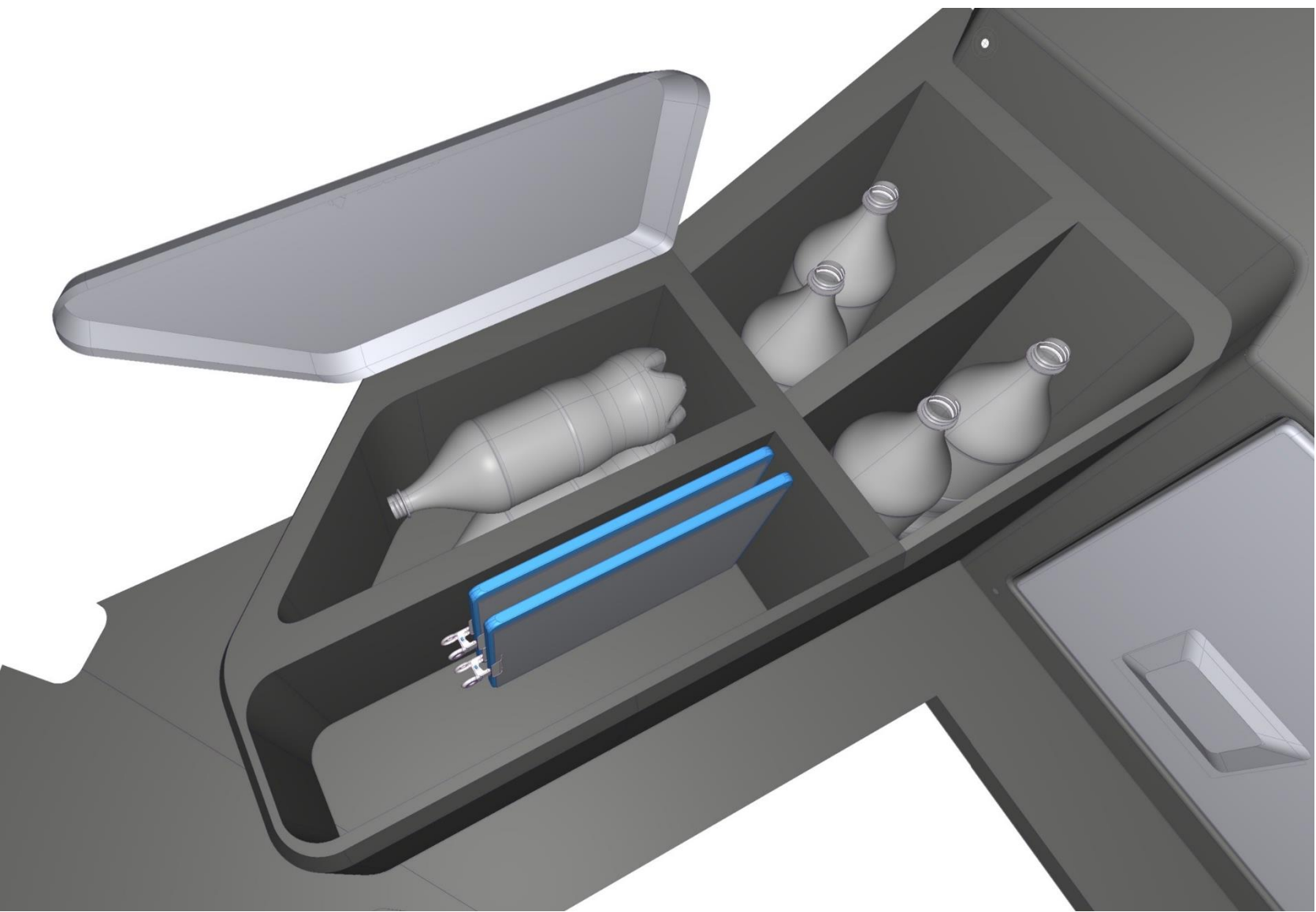
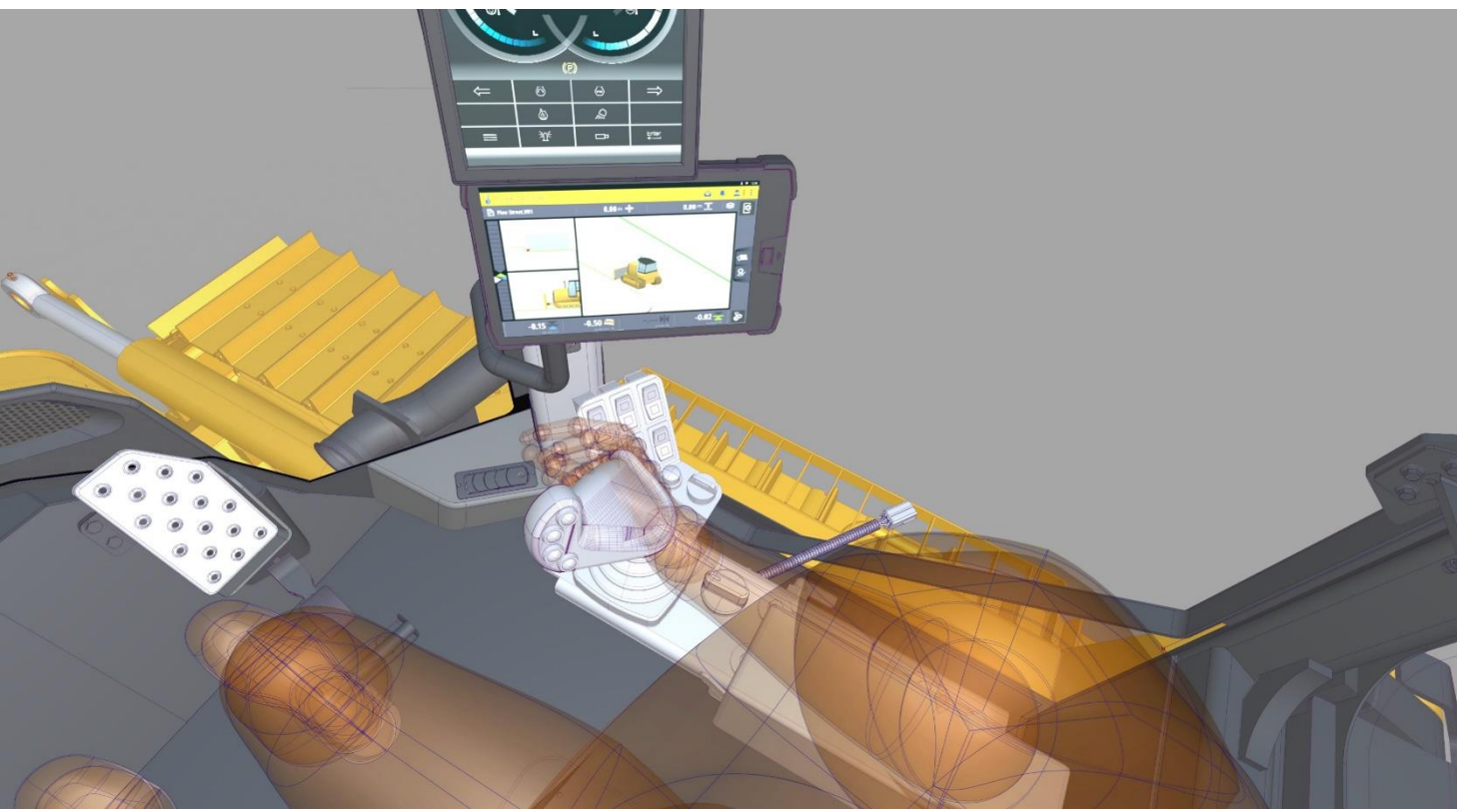
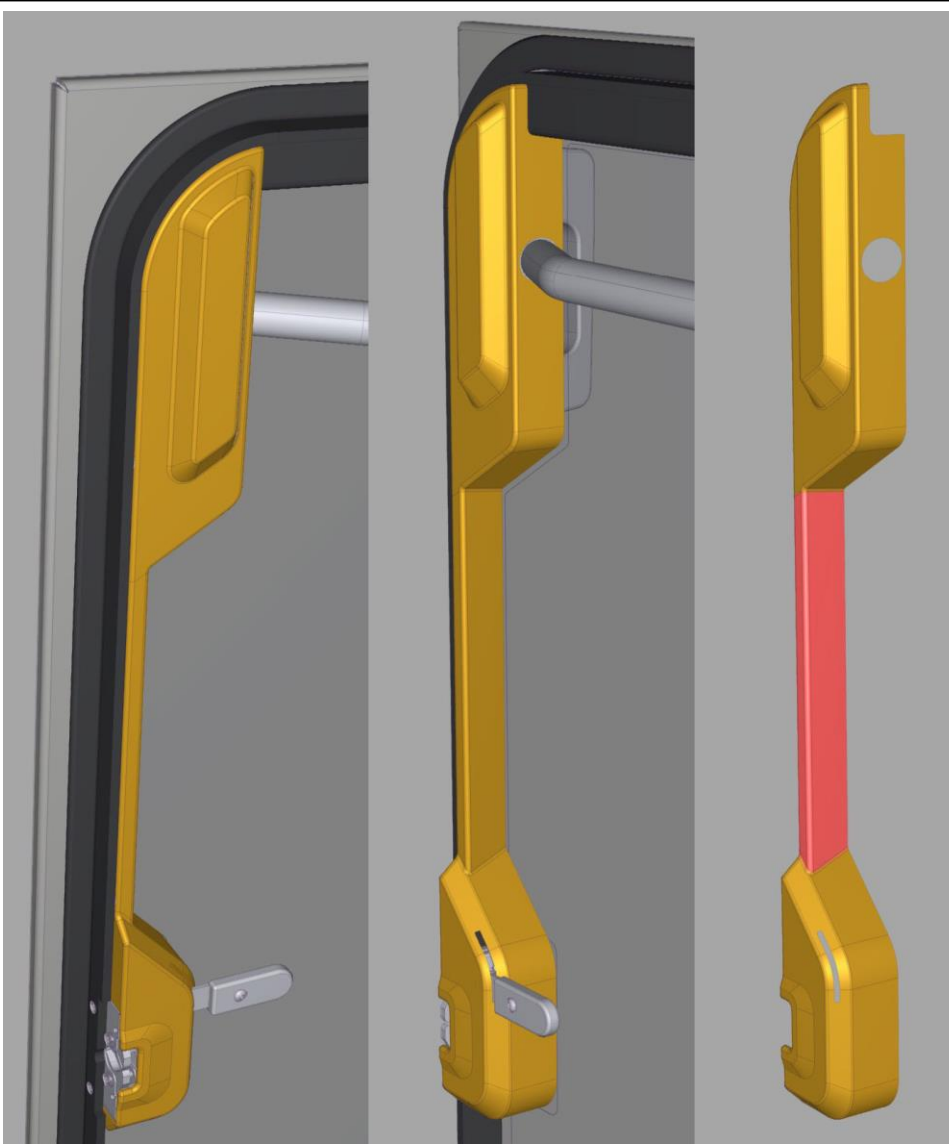
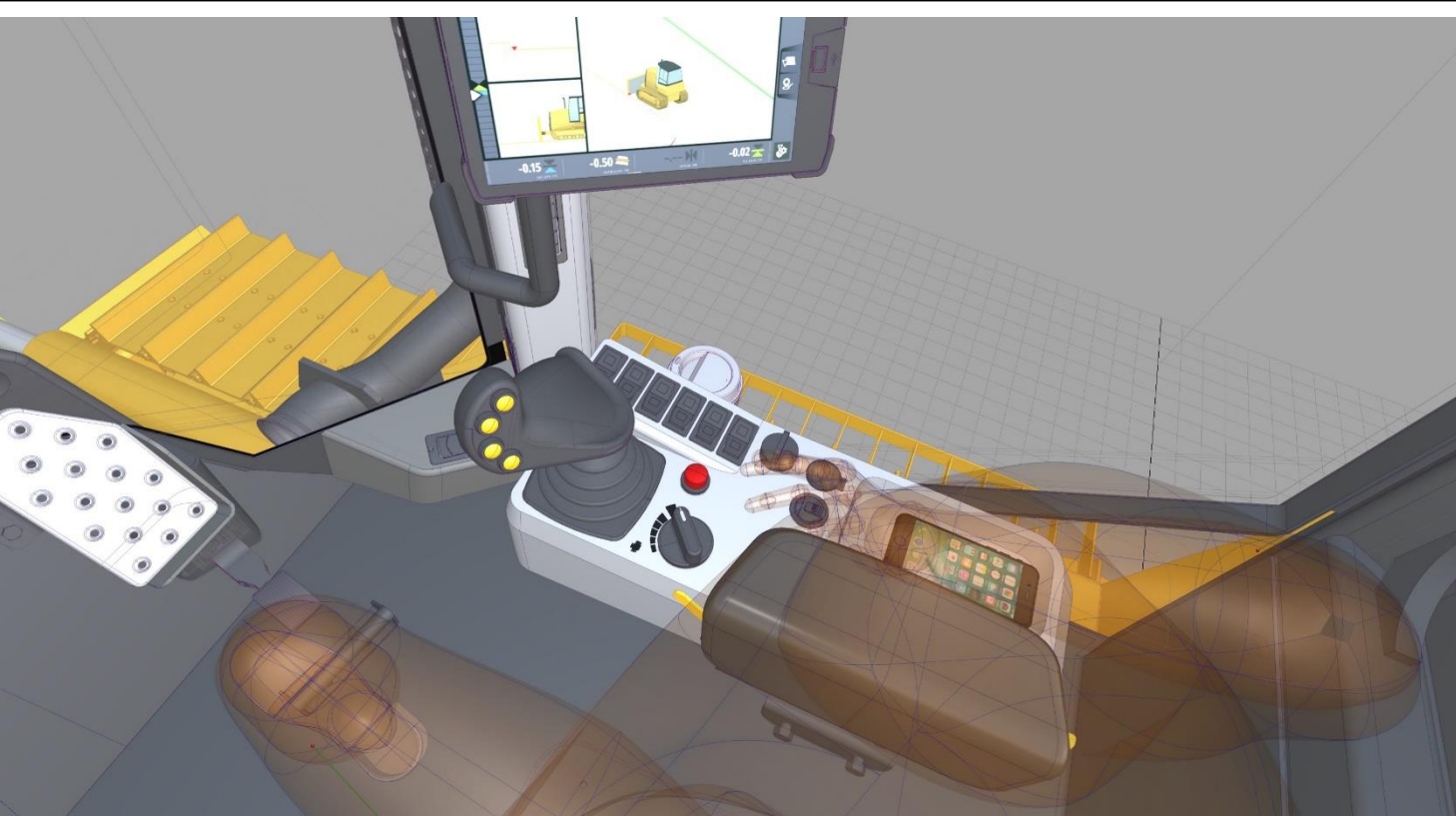
Shouldn't switches all be same type?
(ones at front currently different to wipers)





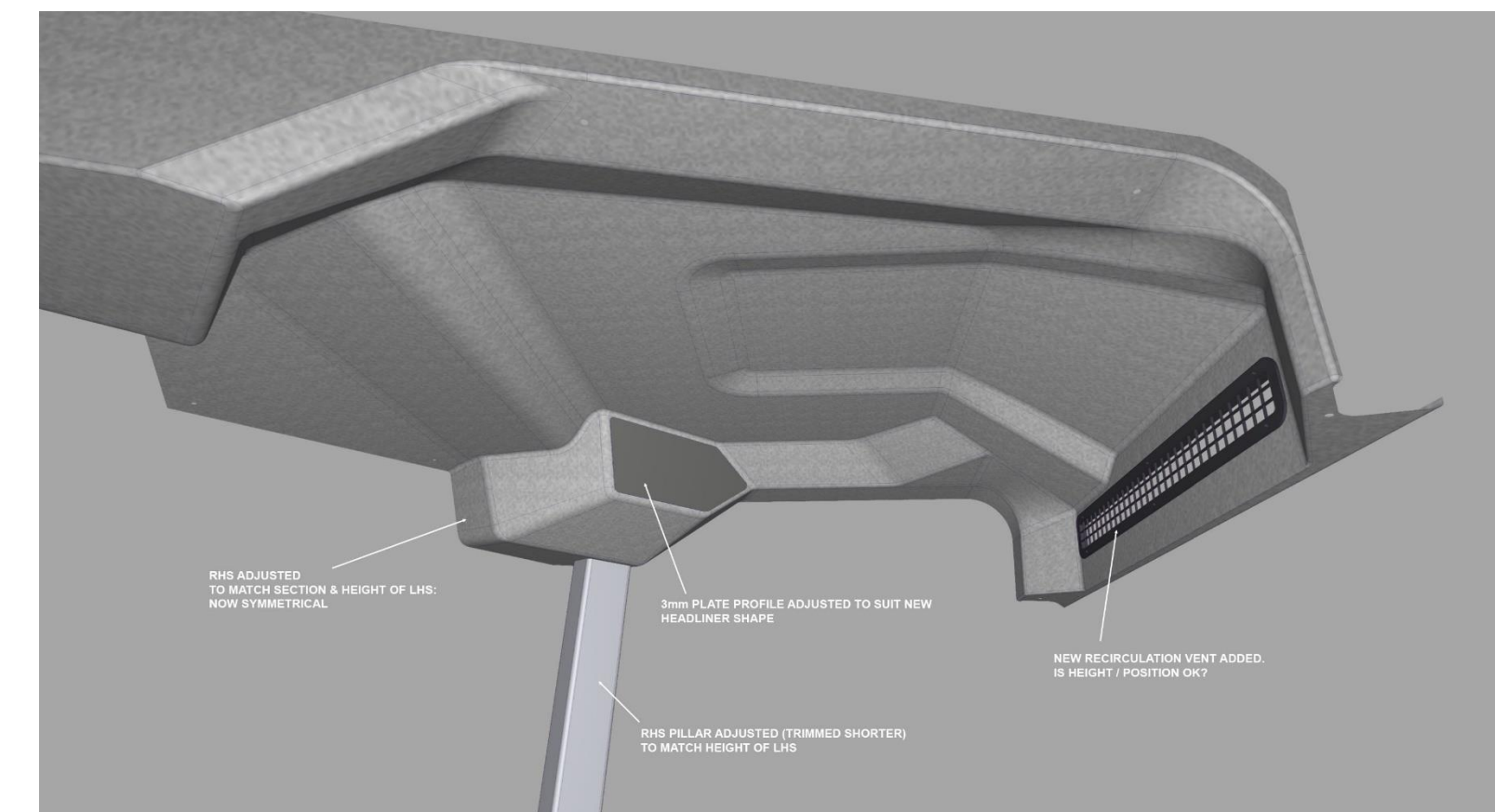
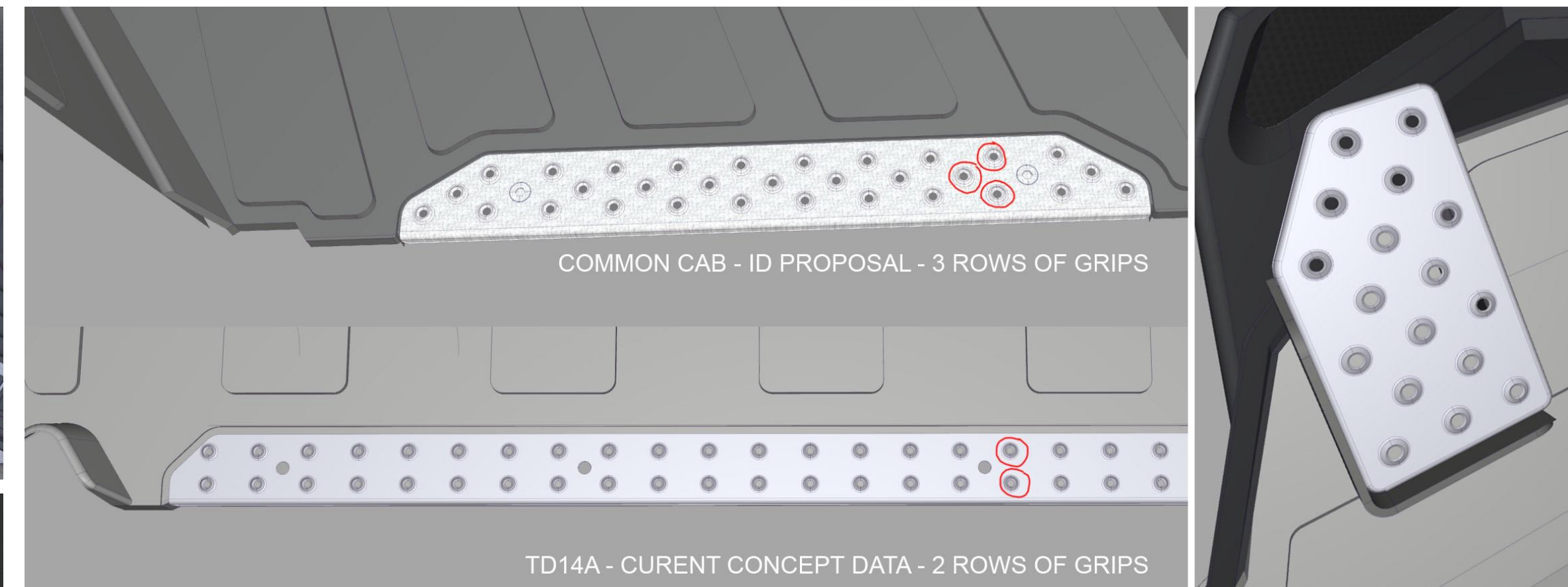






Mid Cab concept definition

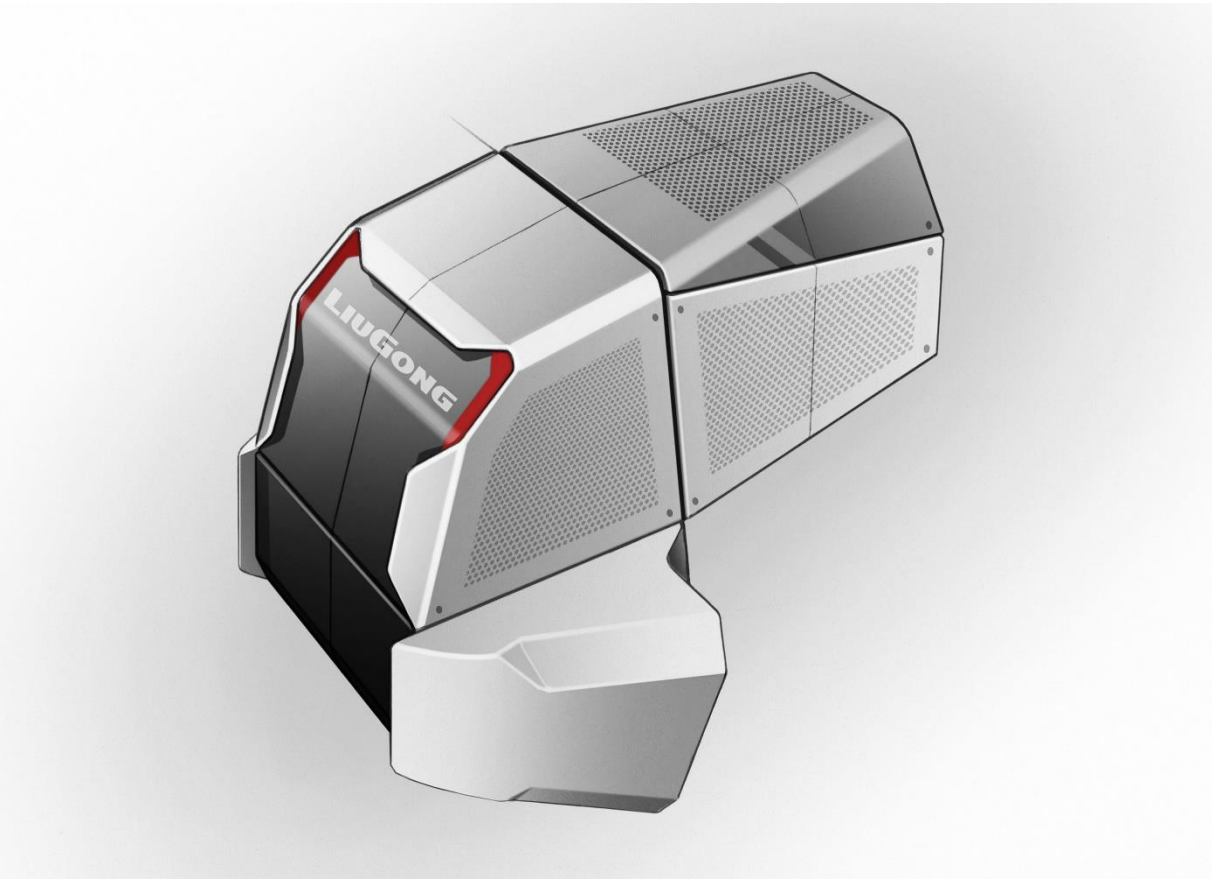
September / October 2018



Ronnie & Reggie – Design & visualisation

January 2019

Ronnie & Reggie development – Jan / Feb 2019



Mid Cab – Visualisation

January / Feb 2020

Mid Cab development – Jan / Feb 2020



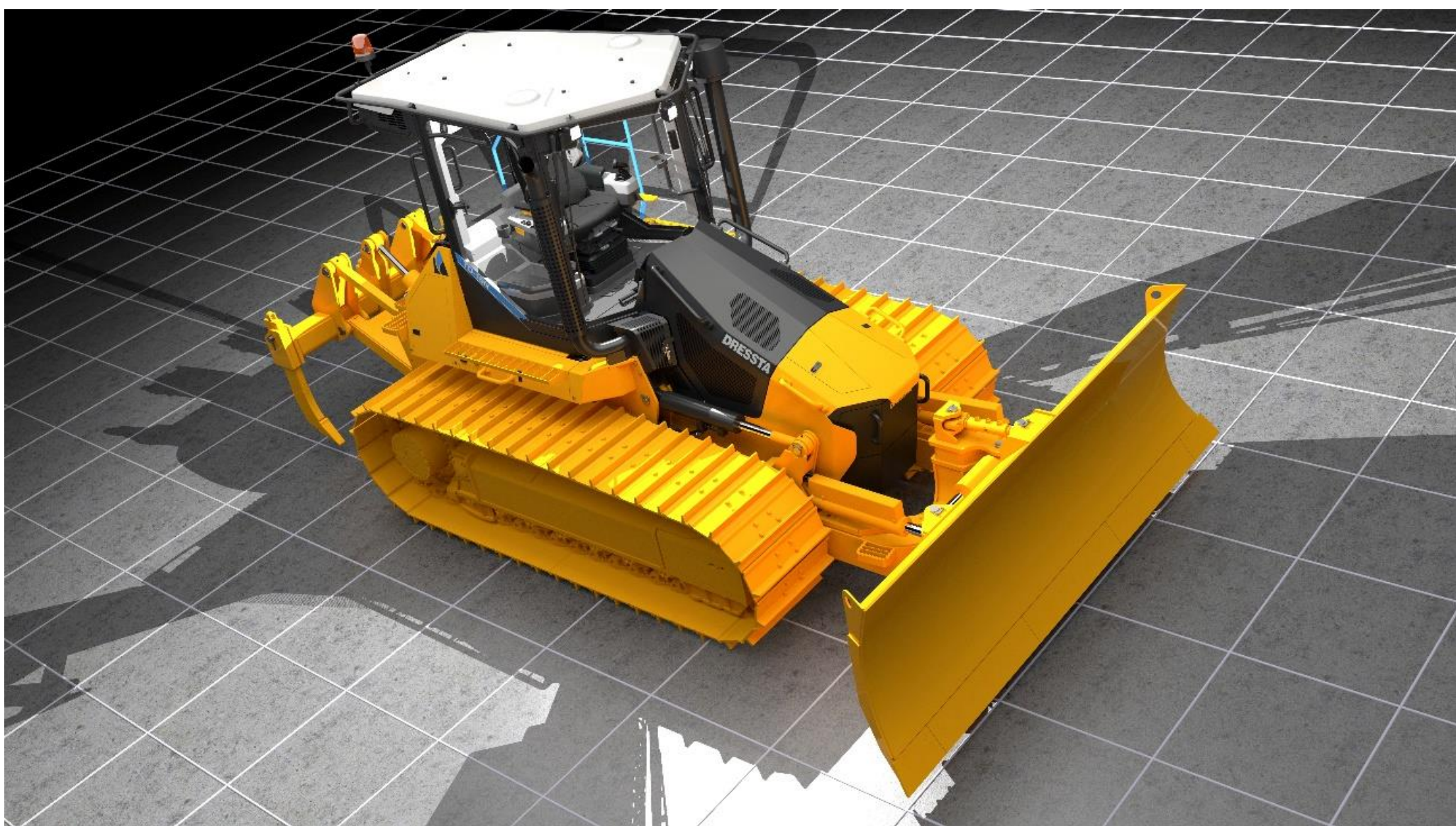
reddot design award
winner 2020

Mid Cab development – Jan / Feb 2020



reddot design award
winner 2020

Mid Cab development – Jan / Feb 2020



Thank you

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