



D6.3 - E-Axle Detail Design

Innovation Action

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Publishable summary

Project partners Ford Otosan and FEV will design and implement an e-axle to the baseline truck within this work package, in order to reach the project targets of at least 10% energy saving and zero emission drive.

In the previous “Layout Design” stage, the e-axis system was modeled in 3D and all necessary analyzes were made to ensure the reliability of the entire system. Suppliers and manufacturers have been identified for the parts and components of the system.

In the detailed design phase, analysis and verification of the subsystems continued and technical drawings of the parts to be manufactured were prepared. In this phase, gear microparameters were determined, gearbox body was optimized with FEA analysis, detailed BOM was prepared, tolerance stack up analyses were made, and technical drawings were prepared. The output of the phase is the technical drawing set and the detail level BOM, which includes both newly designed and off the shelf components.

6 Acknowledgement

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Project partners:

#	Partner	Partner Full Name
1	FEV	FEV EUROPE GMBH
2	DAF	DAF TRUCKS NV
3	FPT	FPT INDUSTRIAL SPA
4	FORD	FORD OTOMOTIV SANAYI ANONIM SIRKETI
5	IRIZAR	IRIZAR S COOP
6	IVECO	IVECO S.p.A.
7	VOLVO	VOLVO TECHNOLOGY AB
8	VDL	VDL ENABLING TRANSPORT SOLUTIONS BV
9	ABEE	AVESTA BATTERY & ENERGY ENGINEERING
10	AVL	AVL LIST GMBH
11	EATON	EATON ELEKTROTECHNIKA SRO
12	GARR	GARRETT MOTION CZECH REPUBLIC SRO
13	IDIADA	IDIADA AUTOMOTIVE TECHNOLOGY SA
14	IFP	IFP Energies Nouvelles
15	AVL	AVL MTC MOTORTTESTCENTER AB
16	NESTE	NESTE OYJ
17	PRIMA	PRIMAFRIO SL
18	SHELL	SHELL GLOBAL SOLUTIONS (DEUTSCHLAND) GMBH
19	SIE	SIEMENS INDUSTRY SOFTWARE SAS
20	TECHNA	FUNDACION TECHNIALIA RESEARCH & INNOVATION
21	TOTAL	TOTAL MARKETING SERVICES
22	UMIC	UMICORE AG & CO KG
23	UNR	UNIRESEARCH BH
24	JRC	JRC -JOINT RESEARCH CENTRE – EUROPEAN COMMISSION
25	CHALM	CHALMERS TEKNISKA HOEGSKOLA AB
26	RWTH	RHEINISCH-WESTFAELISCHE TECHNISCHE HOCHSCHULE AACHEN
27	TU/e	TECHNISCHE UNIVERSITEI EINDHOVEN
28	TUG	TECHNISCHE UNIVERSITAET GRAZ
29	UNIAQ	UNIVERSITA DEGLI STUDI DELL'AQUILA
30	VUB	VRIJE UNIVERSITEIT BRUSSEL

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