

Project Title

Design of an improved air-hydrogen in manifold engine.

Project Summary:

The heavy-duty trucking industry is a challenging sector to decarbonize. - require long
, have reduced and unreliable nd
-duty to avoid fuel cell stack poisoning.

Hydra Energy has produced an add-on kit for heavy-duty diesel engines to help decarbonize the trucking industry. The kit includes a hydrogen storage reservoir, fuel delivery system, and rail where the hydrogen fuel is injected into the air intake system before being injected into the chamber. Hydra's hydrogen-performance requirements and refueling quickly.

u port injectors and able to remain consistent across varying demands. @ works with the space constraints in between the air intake and the intake manifold.

Project Clients: Hydra Energy, Patrick Steiche) @ k é - U
Gordon McTaggart-Cowan.

Potent al Users: Hydra Energy and their customers.

Project Design Object ves

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- h) How can the fuel rail be improved to ensure adequate each cycle across varying demands?
 - #)
 - CFD model T design improvements.
 - CAD Mode U #7) U concepts. T #V#
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 - h
 - Design of lab experiment to compare prototype to CFD model and to test performance.
 - -truck can be done to compare with their current system



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