ENLIGHTEN® AWARD 2018 PRESENTED BY ALTAIR



Future of Lightweighting Entry



Valentin Technologies, LLC Ingocar Hydraulic Hybrid

The advanced hydrostatic drivetrain with energy storage is highly efficient and very light. It solves problems related to fuel consumption, emissions, dependency on foreign sources of energy and materials, costs for transportation, and the effects of accidents. The Hydraulic Hybrid 'Ingocar', based on this technology, achieves 190 MPG and weighs 1,174 lbs. An average reduction of 2,000 lbs. of mass to be moved.

CO2 emissions are reduced by >70%. Well-to-Wheel efficiency and CO2 emissions are lower than for electric cars. (www.valentintechnologies.com) Oil imports are reduced by 74%. No dependency on foreign sources of materials for batteries and electric motors (Lithium, Cobalt, Nickel, Rare Earth). New infrastructures for supplying electric power and recycling batteries are not required. The cost of ownership (10 years) is 48% lower (15,000 miles, \$3.00) Active hydraulic bumpers on all four sides double the distances for absorbing crash-energies, automatically adjusting their resistance to the object (pedestrian, vehicles, concrete structures).

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