CAR HYBRID PROPULSION STRATEGY USING AN ULTRA-LIGHT GDI TWO STROKE ENGINE

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THE FUTURE URBAN CAR: REQUIREMENTS AND DEVELOPMENT WAYS

CONFIGURATION OF THE HYBRID VEHICLE

DESIGN AND PERFORMANCES OF THE GDI SYSTEM

OPTIMIZATION OF MIXTURE FORMATION AND COMBUSTION

VEHICLE TESTS AND RESULTS

CONCLUSIONS
CHALLENGE MICHELIN - 1000 km
Clermond Ferrand - Paris
(Urban Cycle and long distance tests)

- Autonomy: 340 km

- Energy consumption corresponding to 2.4 lt. fuel / 100 km
- Global CO$_2$ emission reduced with 60% -----> 60 g/km

- All parameters of the series electric car, also car weight, dimensions and available space are maintained
- Additional costs for the charging module (two stroke engine with electronic controlled GDI) are not significant in rapport with the price of the series electric vehicle

CONCLUSIONS