

Dumarey Hydrocells, based in Turin in the “Cittadella Politecnica”, is the answer by Dumarey Group to the energetic transition and the decarbonization challenge.

Our Hydrogen solutions covers the entire value-chain of hydrogen ecosystem:

- Hydrogen Engines
- Fuel Cell Solutions
- Hydrogen Production

We make **hydrogen power**
a practical proposition

Dumarey Propulsion Solutions Srl

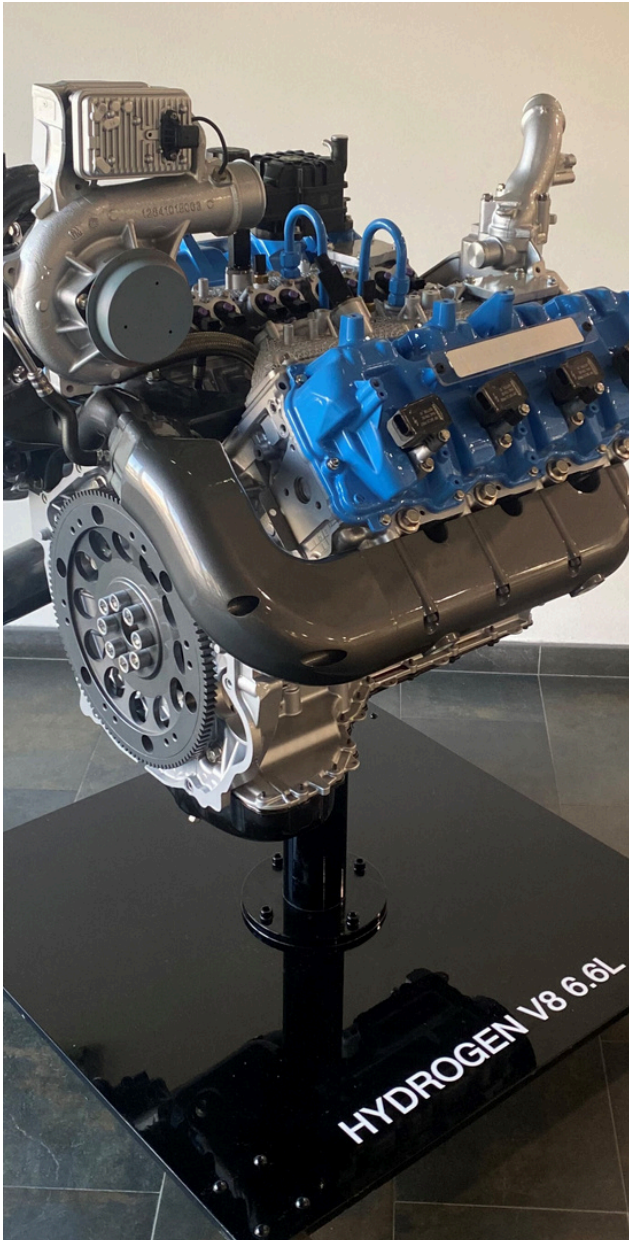
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**Hydrogen Engine
V8 6.6l PFI**

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Technical Sheet

TYPE	V8 6.6 litres
DISPLACEMENT	6600 cc
DRY WEIGHT	450 kg (exhaust aftertreatment line excluded)
DIMENSIONS (LXWXH)	907 x 900 x 992 mm (exhaust aftertreatment excluded)
FUEL SYSTEM	Hydrogen Port Fuel Injection (Spark-Ignited)
FUEL TYPE	H2 (Type I Grade A ISO 14687 - 98% H2 fuel index)
H2 FUEL CONSUMPTION (KG/H)	5.1@25% - 10.3@50% - 16.8@75% - 22.9@100%
SPECIFIC FUEL CONSUMPTION	79 g/kWh
MAXIMUM BRAKING SPEED	4800 rpm
MAX POWER / TORQUE	190 kW @ 2300 rpm / 900 Nm @ 2000 rpm
STAND BY POWER AT 50-60 HZ	100 kW @ 1500rpm (50 Hz) –110 kW @ 1800rpm (60 Hz)
NOISE	Max 105 dB at rated power (Total Sound Power level)
AIR FLOW	Max air induction flow: 1600 kg/h
HEAT REJECTION	Max coolant heat rejection: 150 kW; Max CAC: 65 kW
EMISSION LEVEL	Stage V / Tier III

About the Hydrogen Engine

Dumarey developed zero CO₂ Hydrogen Engine technologies for Non-Road Mobile Machinery applications and implemented them in a V8 6.6 litre hydrogen engine. NRMM has high demands for durability, efficiency and dependability - and hydrogen engine is a very attractive proposition for decarbonization in NRMM. It keeps the efficiency and convenience of existing Diesel engines, including their wide industrial footprint, servicing network and existing skilled workforce, while reducing carbon emissions to zero. Starting from a proven **V8 6.6L Diesel engine**, Dumarey Hydrocells adapted it to run on **100% hydrogen**. The engine provides a nominal power of 100kW @1500 rpm (50Hz) and up to 190kW @ 2300rpm with high efficiency.

Applications

Off-highway



Construction



Reach Staker

Stationary



Power Generation



Compressor

Marine



Marine