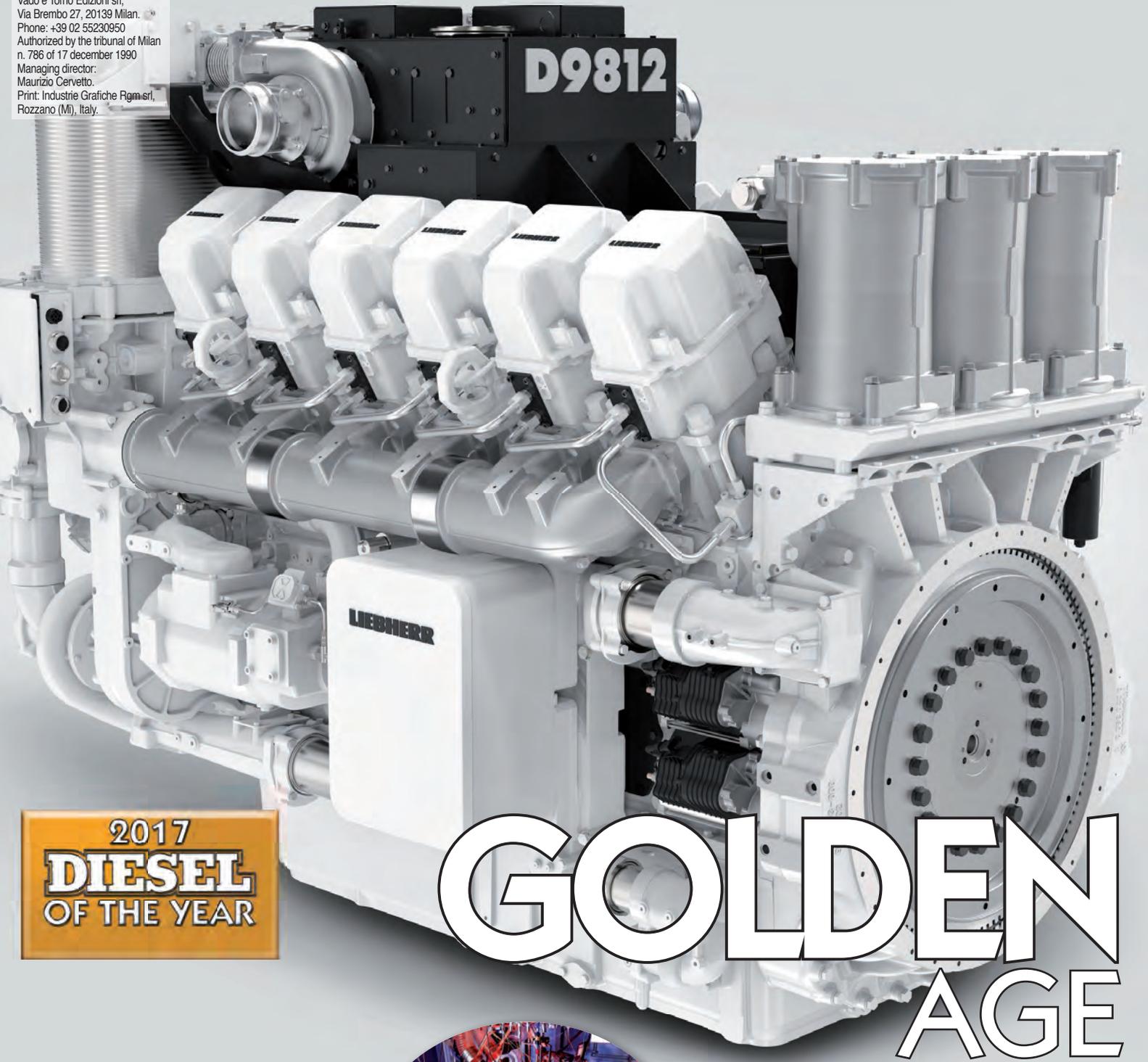


# DIESEL

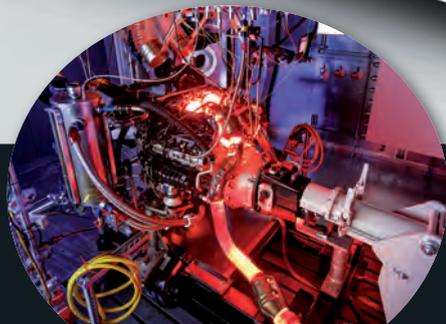
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2017  
**DIESEL**  
OF THE YEAR

# GOLDEN AGE



**DIESEL OF THE YEAR 2017:**  
Liebherr D98: 62, 83 and 103 liter  
for the 'Biggest One'

**AND...**  
Exhibitions (Conexpo, Mee, Samoter, Sima,  
Omc), Energy report, News, Interviews,  
Power Generation, Comparisons



**OMC: OIL&GAS GATHERS IN RAVENNA**

This intense first quarter of the exhibition season will end with the Offshore Mediterranean Conference in Ravenna, 29 - 31 March. DIESEL and DIESEL International also will attend this conference, which totaled 18,923 visitors, 1,285 operators and 688 exhibitors in 2015. Strongly penalized by the collapse of Brent, Oil&Gas could take advantage of oil price increase even as regards engine market, mainly marine engines for PSV, tugs and other work ships, UPS and emergency genset, fire-fighting pumps. The Stars of boating are Fincantieri and Rosetti Marino shipyard. The edition 2015 protagonists were Caterpillar, MTU

and Wärtsilä, while this year such brands as Cummins and Yanmar will make their debut. The Americans launched at Bauma the Stage V Platform, which is a candidate as global scale solution, without recirculation, in order to modulate the responses to workload, sulfur content and regulations without after-treatment unit. Also regarding power generation Cummins is able to provide solutions up to 2,750 kWe (diesel) and 1 MW (gas) equipped with Stamford alternators. Yanmar focuses on marine propulsion and several power generation applications participating at Ravenna Omc and Mee in Dubai.

INTERPUMP HYDRAULICS

**Three for trucks**

Interpump Hydraulics completes its range adding to Efp2 two other calibrations, the EFP-1 for engines up to 720 HP (529.4 kW), the EFP-3 for engines up to 220 HP (161.7 kW). Each model is available in three versions with different torque and ratio

**I**nterpump Hydraulics renovated its range of hydraulic PTOs for trucks and commercial vehicles. This dynamic company based in Bologna, at the very heart of Emilia Romagna Motor Valley, in Italy, introduced the new EFP-2 (Sae 2) designed for vehicles up to 397 kW (540 HP). A few months after its older and younger brother have been officially introduced: the EFP-1 (Sae 1) for engines up to 529.4 kW (720 HP) and the EFP-3 (Sae 3) for engines up to 161.7 kW (220 HP). While the EFP-1 is implemented since January 2017 as original equipment in some

of the main truck manufacturers, the actual debut EFP-3 has been slightly delayed to perfect adaptation to different flanging geometries as its typical for this market. The three **different models, marked with different power tags**, are available in three versions each based on speed ratio (1: 1.02 - 1: 1.27 - 1: 1.56) and torque output. At the top of the range the EFP-1 delivers a maximum output of 392 kW at 1: 1.02 ratio and 2,500 Nm maximum torque (2,000 Nm at 1: 1.27 and 1,600 at 1.56). The same logic, with torque inversely proportional to the same speed ratio,

applies to Efp-2 and Efp-3 models, delivering 127 kW and 63 kW maximum power. Focusing on Efp-1, designed for heavy trucks, its 'fast' 1: 1.56 ratio (PTO at 1,560 rpm, engine at 1,000 rpm) is a solution specifically intended for applications such as water pumps feeding

on fire trucks. On the contrary, the 'slow' ratio is typically intended for applications such as mixing trucks or trucks for waste collection. In all three new models the internal pump uses for clutch engagement the lubrication oil, without engaging the compressed air system of the vehicle. Efp-1, Efp-2 and Efp-3 don't use the recently patented "silent Iph" technology: noise reduction is guaranteed by low-play gears and a damper capable to reduce rotational vibrations between engine flywheel and PTO. **The three new units made by Interpump Hydraulics** further provide an output brake to eliminate the remaining clutch torque. Such solution is implemented as standard on fast ratio versions, generally used in low inertia circuits.

