



CASE Bio Fuel 2 stroke / Brake Germany

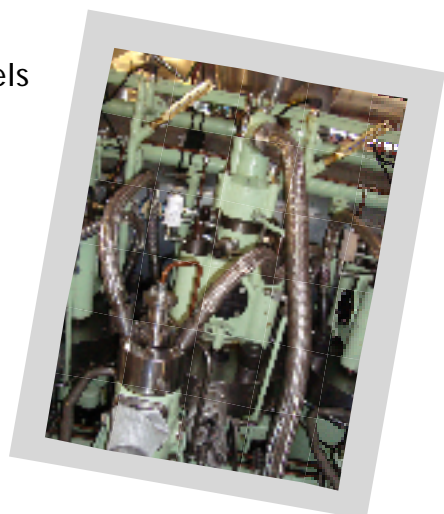
## Cutting the NOx Emissions ! SCR SYSTEM FOR BIO FUEL ENGINES

Bio fuel plant in Brake is a combined heat and power plant (CHP) supplying 4.2 MWeI to the national grid and 3.6 MWth to a palm-oil refinery nearby. The engine is two-stroke low-speed engine fired by palm oil. The plant was equipped with PCA NOxMASTER™ SCR system to fulfil the strict German TA-Luft air-emissions legislation.

Bio fuels as well as two stroke engines both represent a special challenge to NOx reduction technology. The chemistry of bio fuels differs from fossil fuels so that the exhaust gas includes e.g. phosphorus that need to be taken into consideration. Two stroke diesel engines on the other hand result very low exhaust temperatures demanding particular design for reliable operation of NOx reduction.

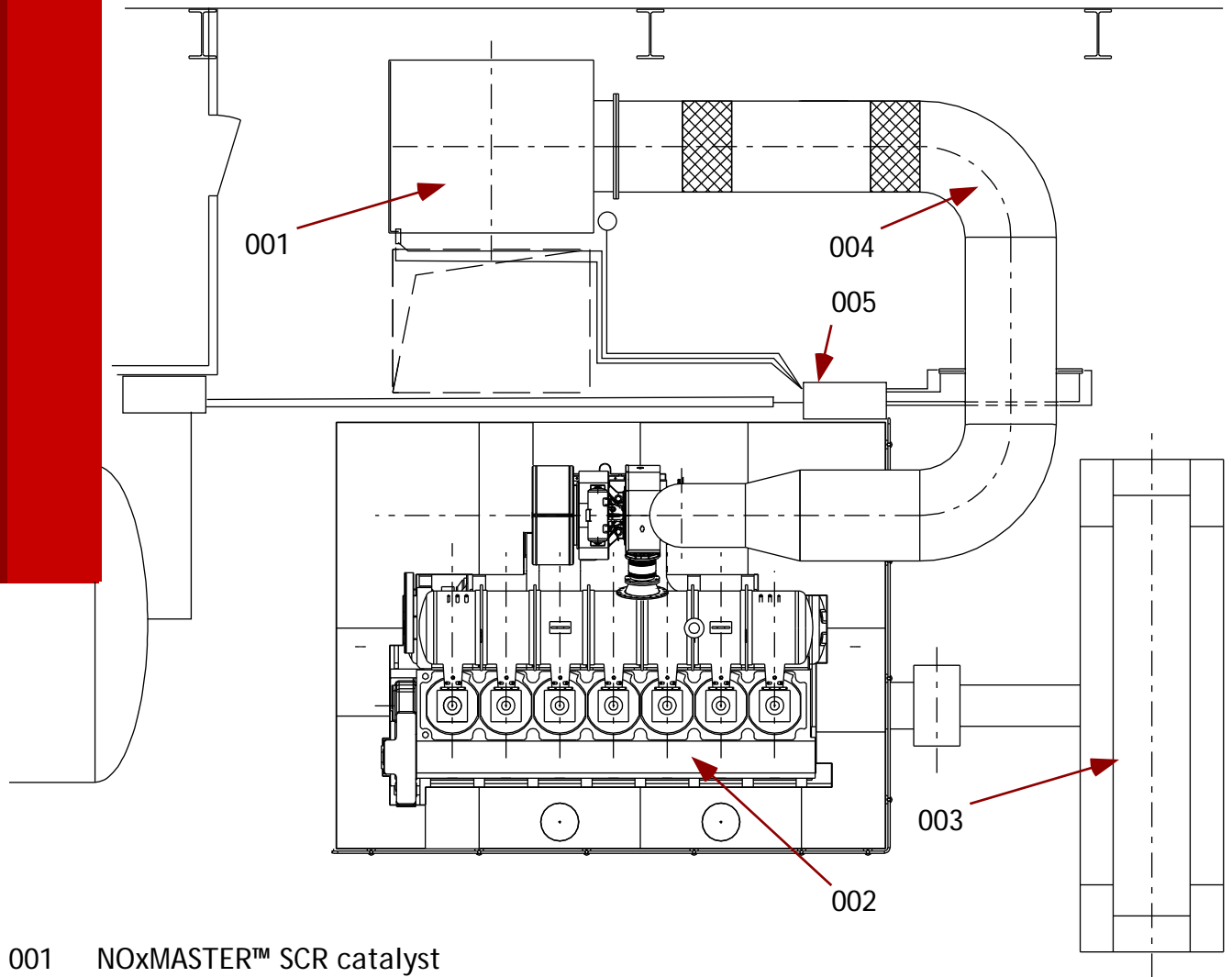
PCA's experience of bio fuelled engines and expertise on SCR systems with sophisticated control system with simple and user friendly self-diagnostic helps to reduce NOx emissions efficiently. Making Brake plant environmental friendly.

PCA delivered complete NOxMASTER SCR Oxi system including commissioning





Engine, Generator and NOxMASTER™ arrangement



- 001 NOxMASTER™ SCR catalyst
- 002 Engine
- 003 Generator
- 004 Catalyst control
- 005 Urea dosing and mixing

Engine: MAN 7L35MC-S  
 Engine power: 4.5 MW  
 NOx reduction : 92 %

