

Product & Performance Evaluation e

Company: Koppert do Brasil Holding LTDA / Piracica SP - Brasil

Product: NanoXD Nanocarbon Treatment for: 40 liter

Volume Applied: 4 lt.

Data of Application: March 24th 2022

Equipment Used

Make: Stamac Grupos Geradores

Model: GMG Auto DSE8610

Year: 2017

Output: 400kVA

Fuel: diesel

Lubricant Info

Lubricant: 100NC

Frequency of Oil Change: 190 days (note no motor: 40 liter)

Lubricant capacity: 40 LT

Usage Data

Average Fuel Consumption: 58 L/h

Fuel Capacity: 4,170 L.

Refuel Frequency: Weekly (every 7 days)

Daily Usage: > 3:40 hrs. / day

Operation Hours: from ~17:27 hrs. to ~21:09 hrs.

Peak Hours: from 18:00 à 21:00 hrs.

Results

Weekly Comparison of Fuel Consumption

	Number of Days	Number of Hours (Weekly)	Start Date	End Date	Weekly Consumption (L)	Average Consumption L/H	Savings
Before	7	26	18/03/22	24/03/22	1,500	58.5	
After	7	26	07/04/22	28/04/22	1,185	46.3	21%

Notes

- After the treatment it was noticed a clear reduction on engine in vibration and noise
- No noticeable difference or degradation was observed in the lubricant oil after 105 hours of operation.

Technical Evaluation Team

Grabiel Lazari Vieira – Maintenance Technician / Koppert do Brasil

Marcos Gravatim - Mechanical Engineer – Inkube Tech Technologies

Leonardo Nishi – Power Generator Consultant – Gera Geradores Consult

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