

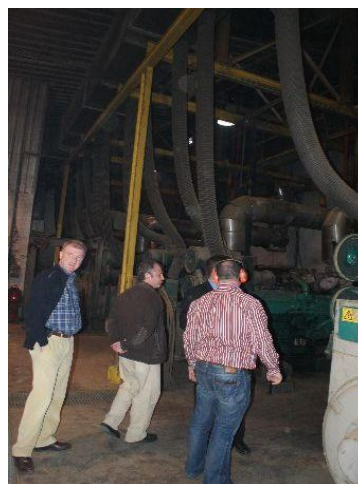
RESURS TESTING ON DIESEL GENERATORS

Country: Spain
Start: November 2010
Finish: January 2011
Engine: Diesel Generator

*In 2010 our partner Alejandro Mocho from **Eco Combustion Europea** (Madrid) has started **RESURS** application in electric power generators with fuel consumption of 200 liters per hour. The main purpose was to achieve fuel economy. Remetalizer **RESURS** was applied in the percentage of 3.3%. The results of fuel economy was up to **3.6%**.*

ELECTRIC POWER GENERATOR (12 years)

Engine potential - 57 000 hours
Oil volume : 180 liters
Fuel Consumption: 200 l per hour
Fuel tank volume: 10 000 liters
4 stroke engine, 16 cylinders
Oil: 15W40
Filters: 5 filters with pump, 2 with injector
Carter – aluminium



RESULTS

Product: RESURS DIESEL

Used: 15 liters (3,3%)

Working hours after application: 567 hours

Purpose: fuel economy

GAS MEASUREMENT SAMPLE N ° 1			
Focus: internal combustion generator 28/10/10 Time: 11:38-11:41	measurement		
	1	2	3
gas outlet temperature (°C)	481,7	482,0	481,7
O ₂ (%)	8,89	8,88	8,88
CO ₂ (%)	8,94	8,94	8,94
CO (ppm)	890	834	743
NOx (ppm)	1450	1460,1	1329,5
SO _{2(ppm)}	0	0	0
efficiency	70,3	70,4	70,5

GAS MEASUREMENT SAMPLE N ° 2			
Focus: internal combustion generator 18/01/11 Time: 15:40-15:50	measurement		
	1	2	3
gas outlet temperature (°C)	440,7	453,7	448,6
O ₂ (%)	10,36	10,17	10,05
CO ₂ (%)	7,85	7,99	8,08
CO (ppm)	709	729	711
NOx (ppm)	1297,6	1349,2	1362,2
SO _{2(ppm)}	116	56	46
efficiency	69,4	68,6	69,6

ENGINE 1000 KVA ALFALFAS OSES SAMPLE 13

Start (G)	Finish (G)	Consumption	Start (kw)	Finish (KW)	Kwh	Start (H)	Finish (H)	Hours	Kwh	Kwh/liter	liter/Kwh	liter/hour	efficiency
606937	643199	36262	28108600	28239000	130400	4290,83	4457,66	166,83	781,63	3,5961	0,27808282	217,359	36,262699
643199	646747	3548	28239000	28252100	13100	4457,66	4474,33	16,67	785,84	3,6922	0,27083969	212,8374	37,23248
646747	650304	3557	28252100	28265100	13000	4474,33	4490,91	16,58	784,08	3,6548	0,27361538	214,5356	36,854776
650304	653836	3532	28265100	28278100	13000	4490,91	4507,58	16,67	779,84	3,6806	0,27169231	211,8776	37,115639
653836	657363	3527	28278100	28291200	13100	4507,58	4524,25	16,67	785,84	3,7142	0,26923664	211,5777	37,454165
657363	660880	3517	28291200	28304200	13000	4524,25	4540,91	16,66	780,31	3,6963	0,27053846	211,1044	37,273937
660880	664393	3513	28304200	28317300	13100	4540,91	4557,58	16,67	785,84	3,7290	0,26816794	210,7379	37,603427

Results: % Kwh/liter – 3,697% % liter/hour – 3,046

Characteristic	Result	
CO2	decrease	positive
NOX	decrease	positive
FUEL	decrease (up to 3,6%)	positive