

# Belo Jardim Power Station



Built 1997  
for



**Empresa Electricidade dos Açores**

by

**BWSC** 

Burmeister & Wain Scandinavian Contractors A/S

# Ext. of Belo Jardim Power Station Phase 1

Burmeister & Wain Scandinavian Contractor A/S (BWSC) a Danish company, specialized in design, engineering, supply, construction, erection and commissioning of diesel power plants, is proud of having delivered its first plant to EDA - Empresa de Electricidade dos Açores - when the 12,6 MW Extension of Belo Jardim Power Station first phase, Terceira Island, was handed over in february 1997.

The Belo Jardim Power Station is situated in a beautiful and natural environment. During the design and construction of the plant in tight cooperation between the most competent specialists of EDA and BWSC, special high concern was put into such aspect as of operation, reliability, safety of people and machinery and environmental awareness.

First of all the selection of the new generation of energy efficient four stroke engines forms the basis for not only a significant reduction of the running expenses, but also for a reduced

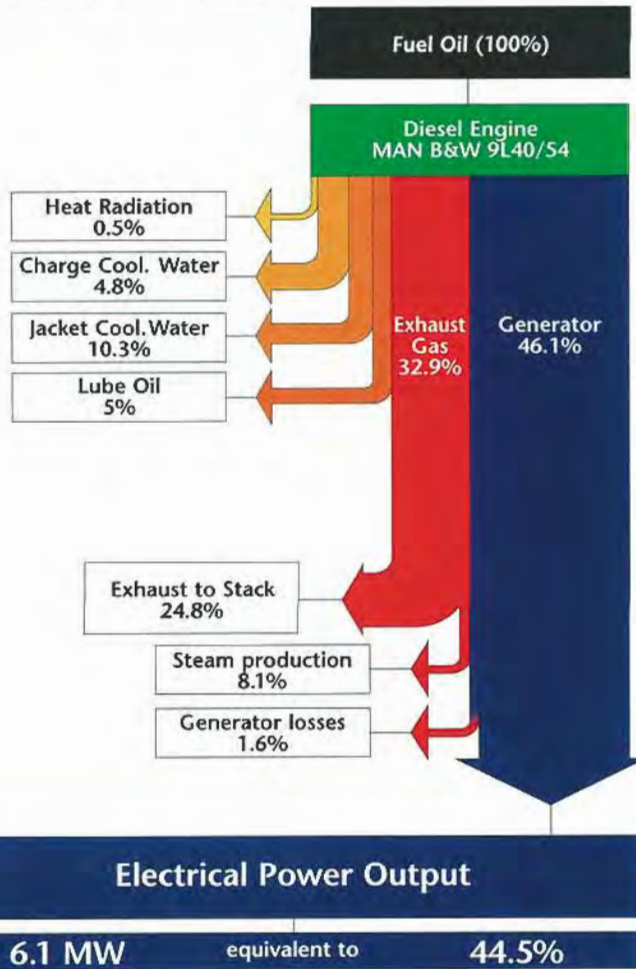
impact on the environment, as a reduced amount of fuel and lubricating oil is consumed per each unit energy produced.

Reliable operation is secured by means of a modern integrated computer based control system, supervising the whole plant and a complex fire fighting system ensures the protection of people and machinery against the hazards.



# The 12.6 MW - 4-Stroke Diesel Power Plant

SANKEY DIAGRAM (reference: ISO conditions)



## Summary

### Contract

Type	Turnkey
Contract award	Aug 1995
Handing over	Feb 1997

## Technical Data

### Diesel Engines

Make	MAN B&W
Type	2 x 9L40/54
Speed	500 RPM
Output 100% load	2 x 6.3 MW

### Alternators

Make	Jeumont Industrie
Type	JISATL 12-10/12 poles
Rating	2 x 7615 KVA
Rated Voltage	6 KV

### Exhaust gas Boilers

Make	Clayton of Belgium N.V.
Steam capacity	4000 kg/h
Steam Pressure	8 bar

### Fuel Treatment

Make	Westfalia Separator AG
Type	2 x OSA 20
Capacity	8400 l/h

### Incinerator

Make	Atlas Incinerator K/S
Type	Maxi 150 SL W/S
Capacity	100 kg/h

### Radiator Coolers

Make	ABB Coiltech AB
Type	Induced Draft
Sound Level	47 dB(A) (100m dist.)

### Power Station Bld

Sub-Contractor	Seth Lda
Area	1350 m <sup>2</sup>
Height	16 m
Overhead Crane	35 ton
Stack	30 m

### Tank Farm

Sub-Contractor	Seth Lda
HFO Tank	1 x 500 m <sup>3</sup>
Buffer Tanks	2 x 80 m <sup>3</sup>
Water Tank	1 x 80 m <sup>3</sup>
HFO Tanks	3 x 50 m <sup>3</sup>



Engine Hall view of the two 9L 40/54 engines and the space for additional two engine foundations.



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