

ENERGY SAVING PROJECT – INDUCTION LAMP

A CASE STUDY OF DALS AUTO, CLAREMONT, CAPE TOWN

November 2012



DALS CLAREMONT – Eskom Energy Saving Solution

The layout.

DALS auto clinic is a high precision motor repair facility. It has a large workshop floor area with an added bonus of extra ambient lighting to assist the mechanics with their work.

The business used 400W Mercury Vapour High Bay lamps without reflectors. The result was that high power consumption was being used with little benefit – the loss of light because no reflectors were used was noticeable.

Due to the uncertainty of vehicle placements when repair work was being done, it was decided to use a wide-angle reflector to cover as much of the floor area as possible.

The Econolight™ XGC 60 degree induction lamp was used which also improves the *quality* of light being emitted from the lamp source. This improved Ra is important for inspections under light – particularly useful in the paintshop.

The long lifespan of the induction lamp system will ensure reduced operational costs over potential operational period of 20 years!



The Eskom Standard Product rebate model was used for the rebate process. The efficiency of the induction lamp system was good enough to allow the client to purchase additional units to improve

lighting in previously underlit areas.

What was converted?



400W Mercury Vapour lamps were exchanged for the Econolight™ Wide Angle, low ceiling 120W lamp. Besides the obvious saving in energy of over 70% (taking ballast consumption into account), the Induction lamp offers improved Ra as well as an unmatched longevity.

In addition, DALS auto also converted their offices to the Econolight™ T5 fluorescent systems.

The Results.

INITIAL POWER CONSUMPTION: NEW POWER CONSUMPTION:

18.83 KW 8.05 KW

NET POWER REDUCTION:

57%

ESKOM REBATE CONTRIBUTION:

60%

PRODUCT USED: T5 Fluorescent, Induction

