

# APPLICATION CASE STUDY



DOC.NO. : AMTCS-2

CONDUCTED AT M/s. MADHUSUDAN INDUSTRIES LTD. AHMEDABAD.

APPLICATION : **INDUCED DRAFT FAN OF BOILER**

BOILER TYPE : **COAL FIRED**

PRESENT METHOD OF CONTROL : **DAMPER CONTROL**

**POWER CONSUMPTION BY PRESENT METHOD OF DAMPER FOR EQUIRED STEAM PRESSURE.**

CONSUMPTION	DAMPER OPENING
27.3 KW / HR.	60%

**ACTUAL POWER CONSUMPTION USING AC VARIABLE SPEED DRIVE & DAMPER FULLY OPEN FOR THE REQUIRED STEAM PRESSURE.**

CONSUMPTION	DAMPER OPENING
15.2 KW	100%

\* **NET POWER SAVING** : 27.3 KW - 15.2 KW = 12.1 KW/HR.

\* **ENERGY SAVING PER DAY** : 12.1KW X 24HR./DAY = 290.4 KWH

\* **ENERGY SAVING PER YEAR** : 290.4KWH X 365DAY = 105996 KWH

\* **ENERGY SAVING PER YEAR** : US \$ 8833

40 HP DRIVE SUGGESTED FOR THE ABOVE LOAD