

# Chapter:6 Conclusion & Scope for Future Work

## 6.1 Conclusion:

After getting the positive result in actual trial run in the plant it was concluded that for all motor mounted blowers with small motor ratings the choice for steel base frame will be channel (ISMC) grouted on the RCC foundation. A second trial operation was done on a similar blower at the same area and there too positive result was obtained.

The frame (Fig: 6.1) was standardised with ISMC with an SOP (standard operating procedure) :

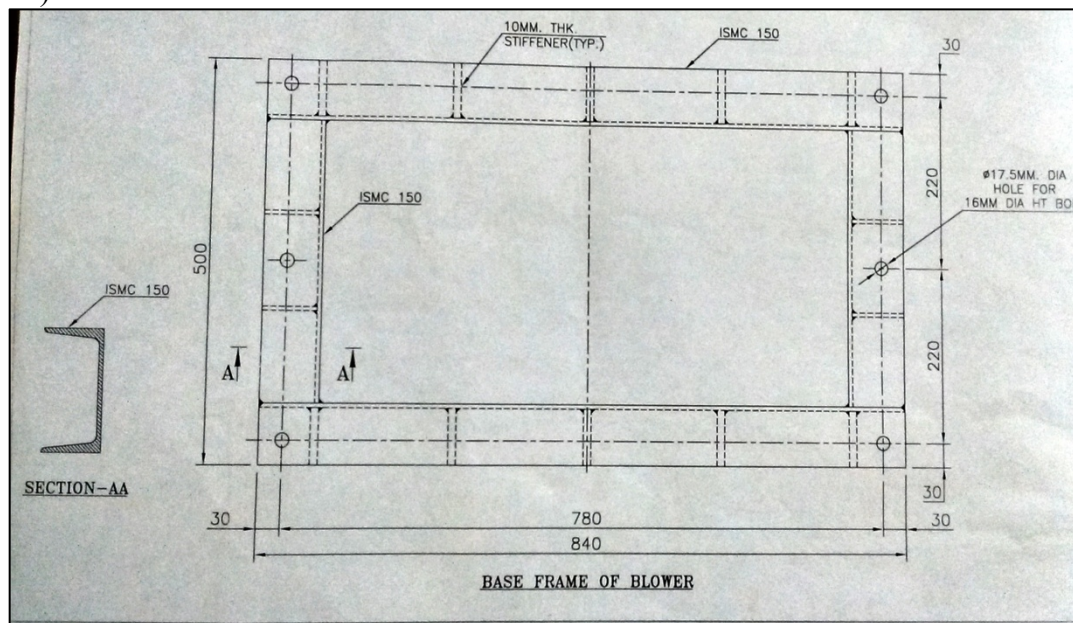


Fig:6.1 Standard ISMC frame to make to suit the common base of the motor mounted blower

## 6.2 Standard Operating Procedure:

1. Use always a ISMC structural to fabricate any base of motor mounted blower with motor rating 37kW or below.
2. Frame to fabricate as per the common base dimension of the blower - motor.
3. At each base hole stiffeners on either side of it to be welded as shown in the drawing.

4. Welding of joints should be done as per standard practices.
5. After fabrication the frame has to be stress relieved as per the procedure.
6. The frame height should be as per the standard ISMC available in the market. Details shown in Fig:6.2

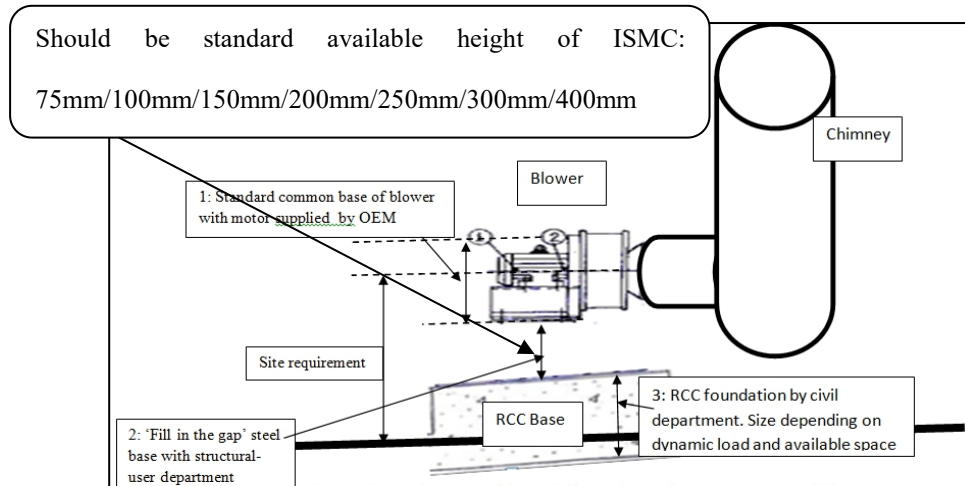


Fig:6.2 Specify the height that base frame should match

This is a very good example of an industry getting the benefit of the research carried out totally by the shop floor persons and with active support from academics.

### 6.3 Future Scope of Work:

As mentioned in Chapter 4 that at one stage a mathematical model with 2 degrees of freedom (Fig:6.3) was developed and it was planned to find the stiffness of the different structural base frame mathematically and validate the findings by the experimental method.

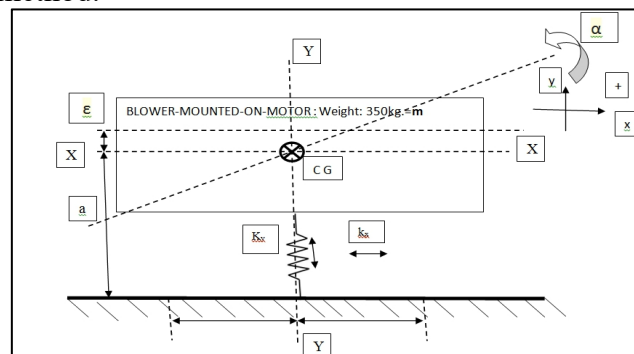


Fig:6.3 A mathematical model with 2 DOF

Knowledge resource in core industry to solve this type of mathematical model is not always available and such problems should be better left to persons from the academic sphere.

In future, research scholars can take up this model and develop on it further and re-validate our findings which was achieved entirely by an experimental method.