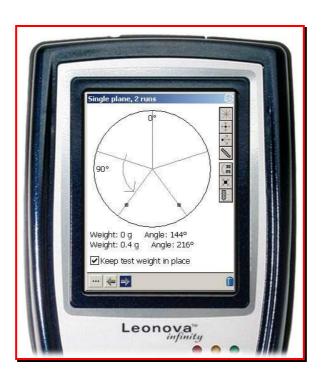
# **KEY PMR'S**

## **DYNAMIC BALANCING IN SPM**

## **DETAIL PROCEDURE**



### **PURPOSE**

1 - To reduce the fan vibration due to unbalanced mass on the rotor

### **SAFETY**

 $1\,{-}$  The process involves running and stopping the equipment for intermediate jobs like welding initial mass . final mass , & intermediate reading for corrected mass required , so for all these jobs the electrician needs to be present till end of the balancing and a format indicating power to on and off to be maintained with signature of electrician and the job owner .The format is attached here , at the time of job a copy to be attaché din the work order to carry out the process .

			Sign	Sign	
	Time	Reason	Job owner	Electrician	
1st start					
1st stop					
2nd start					
2nd stop					
3rd start					
3rd stop					

#### STEPS: DYNAMIC BALANCING OF A FAN IN LEONOVA INFINITY.

- 1. Run the fan, take the reading, and check the vibration at 1 x rpm & over all horizontal vibration contributing to 1 x rpm.
- 2. Put the sticker at shaft with one line number the impeller vanes in the direction of rotation run the fan. get vibration from the machine.
- 3. Put appropriate weight on the impeller starts 0 or 1 i.e. 1<sup>st</sup> impeller vane you numbered.
- 4. Run the fan again & get v. and final weight in fix with removal of trial weight.
- 5. After welding the final weight, run the fan & take reading.
- 6. If it is not decreased to the extent you desire repeat it.

Before doing dynamic balancing, make sure the bolts are lightened & there is no axial & vertical vibration.

$$0 = 360/8 = 45$$
  
If final w1 = x gm & degree b = 135 it will be on 4<sup>th</sup> line.

