## Fan Start-Up Checklist

|    |   | YES | NO | REMARKS |
|----|---|-----|----|---------|
| 1. | General Condition of Fan: Is General condition of fan good? (Free of damages, rust, etc.)   |     |    |         |
| 2. | Foundation Flat and level? Inertial block on ground? Inertial block on structure? Inertial block appears adequate? Shaft level?                             |     |    |         |
| 3. | Duct connections:  Duct turn near fan inlet or outlet?  Expansion or flexible joints?  Open inlet?  Inlet bell on open inlet?                               |     |    |         |
| 4. | Housing: Proper housing-to-shaft alignment? Proper shimming? Grouted properly (visual)? Connecting hardware tight?  |     |    |         |
| 5. | Suppors and soleplates: Bolts tight? Proper shimming? Grunted properly (visual)?  |     |    |         |
| 5. | Bearings:  Mounting bolts tight?  Locked properly to shaft?  Oil rings free and undamaged?  Total bearing clearance  (specify)                              |     |    |         |
|    | Seals properly installed and undamaged? Cooling means operating properly? Retainer and Adapter installed and adjusted properly? Oil rings rotating properly |     |    |         |

|    | (sleeve bearing)?                   | YES | NO | REMARKS |
|----|-------------------------------------|-----|----|---------|
|    | Bearing housing doweled?            |     |    |         |
|    |                                     |     |    |         |
| 7. | Wheel:                              |     |    |         |
|    | Hub setscrews tight?                |     |    |         |
|    | Proper running clearance?           |     |    |         |
|    | Free or material deposit?           |     |    |         |
|    | Free or wear, corrosion, or damage? |     |    |         |
|    | Proper rotation?                    |     |    |         |
|    | Correct blade setting?              |     |    |         |
|    | All blades at same setting?         |     |    |         |
|    | Blade setscrews tight?              |     |    |         |
|    | Nose spinning fastened properly?    |     |    |         |
|    |                                     |     |    |         |
| 8. | Dampers, I.V.C. or CP Control?      |     |    |         |
|    | Properly installed?                 |     |    |         |
|    | Prespin direction correct?          |     |    |         |
|    | Free of binding?                    |     |    |         |
|    | Blades open and close properly?     |     |    |         |
|    | Proper blade excursion?             |     |    |         |
|    | CP mechanism greased?               |     |    |         |
|    | Proper linkage alignment?           |     |    |         |
|    | Proper control signal?              |     |    |         |
|    | Proper blade set indicator?         |     |    |         |
|    | Compressed air lines installed      |     |    |         |
|    | properly?                           |     |    |         |
|    | Feedback signal wire installed      |     |    |         |
|    | and working properly?               |     |    |         |
|    | Pilot positioner piped properly?    |     |    |         |
|    |                                     |     |    |         |
| 9. | V-Belt Drive or Coupling:           |     |    |         |
|    | Proper belt tension?                |     |    |         |
|    | Fan and motor sheaves aligned?      |     |    |         |
|    | Proper coupling alignment?          |     |    |         |
|    | Coupling lubricated?                |     |    |         |
|    |                                     |     |    |         |
| 10 | . Vibratin Isolation:               |     |    |         |
|    | Provided?                           |     |    |         |
|    | Installed correctly?                |     |    |         |
|    | Proper deflection?                  |     |    |         |
|    | T                                   | 1   | 1  | 1       |

Thrust Restraints?

|                                   | YES | NO | REMARKS |
|-----------------------------------|-----|----|---------|
| 11. Vibration Detection:          |     |    |         |
| Provided?                         |     |    |         |
| Installed correctly?              |     |    |         |
| Proper deflection?                |     |    |         |
| Thrust Restraints?                |     |    |         |
|                                   |     |    |         |
| 12. Temperature Detection:        |     |    |         |
| Provided?                         |     |    |         |
| Installed correctly?              |     |    |         |
| In working order?                 |     |    |         |
|                                   |     |    |         |
| 13. Lub System:                   |     |    |         |
| Provided?                         |     |    |         |
| In working order?                 |     |    |         |
|                                   |     |    |         |
| 14. Variable Frequency Drive:     |     |    |         |
| Provided?                         |     |    |         |
| Start-up by drive mfr. Completed? |     |    |         |
| Resonant frequency avoidance      |     |    |         |
| procedure completed?              |     |    |         |
| Maximum Hz/RPM set?               |     |    |         |
| Acceleration and deceleration     |     |    |         |
| time set?                         |     |    |         |
| Number of cycles per day?         |     |    |         |