

OPTION CHECKLIST NO. 2: FANS & BLOWERS

<ul style="list-style-type: none">• Use smooth, well-rounded air inlet cones for fan air intake.
<ul style="list-style-type: none">• Avoid poor flow distribution at the fan inlet.
<ul style="list-style-type: none">• Minimize fan inlet & outlet obstructions.
<ul style="list-style-type: none">• Clean screens, filters and fan blades regularly.
<ul style="list-style-type: none">• Minimize fan speed.
<ul style="list-style-type: none">• Use low slip or flat belts for power transmission.
<ul style="list-style-type: none">• Check belt tension regularly.
<ul style="list-style-type: none">• Eliminate variable pitch pulleys.
<ul style="list-style-type: none">• Use variable speed drives for large variable fan loads.
<ul style="list-style-type: none">• Use energy-efficient motors for continuous or near continuous operation.
<ul style="list-style-type: none">• Eliminate leaks in duct works.
<ul style="list-style-type: none">• Minimize bends in duct works.
<ul style="list-style-type: none">• Turn fans & blowers off when not needed.
<ul style="list-style-type: none">• Reduce the fan speed by pulley dia modifications incase of oversized motors.
<ul style="list-style-type: none">• Adopt inlet guide vanes in place of discharge damper control.
<ul style="list-style-type: none">• Change metallic / Glass reinforced plastic (GRP) impeller by more energy efficient hollow FRP impeller with aerofoil design.
<ul style="list-style-type: none">• Try to operate the fan near its best operating point.
<ul style="list-style-type: none">• Try to adopt Option of energy efficient flat belts, or, cogged raw edged V belts, in place of conventional V belt systems, for reducing transmission losses.
<ul style="list-style-type: none">• Minimizing system resistance and pressure drops by improvements in duct system.
<ul style="list-style-type: none">• Ensure proper alignment between drive & driven system.
<ul style="list-style-type: none">• Ensure proper power supply quality to the motor drive.
<ul style="list-style-type: none">• Regularly check for vibration trend to predict any incipient failures like bearing damage, misalignments, unbalance, foundation looseness etc.