

## Options for Glass Processing Industries (Tempered Glass Units):-

Intervening Technique	Optimise the Electric Power at Washing Machine in Tempered Glass Industry (Fuel: Electricity)
Before CP	<p>Plant is operating 3 nos. washing machine having air blower of 22 kW on 2 nos. machine while 7 kW on one machine. These blowers are running continuously even though the frequency of glass on conveyor is varying, also frequent ON/OFF of the blower motor is not practical as it will generate frequent and sudden load increment which is not advisable.</p>
After CP	<p>Thus it is advisable to install the Variable Frequency Drive (VFD) on these motors with speed variation feedback through material movement sensor on the conveyor. This intervention will save approximately 71400 kWh per annum.</p>
Environmental	<ul style="list-style-type: none"> <li>• Per Day reduction in the Natural Gas consumption: 198 KWh</li> <li>• Per Year reduction in the Natural Gas consumption: 71400 KWh</li> <li>• Per Day reduction in Greenhouse Gas (CO<sub>2</sub>) emission: 0.17 MT of CO<sub>2</sub></li> <li>• Per Year Reduction in Greenhouse Gas (CO<sub>2</sub>) emission: 61.40 MT of CO<sub>2</sub></li> </ul>

Economical

Investment: Rs. 1,00,000/- per Annum (for 3 nos. of VFD)

Annual Savings: Rs. 5,35,000/- per Annum

Payback Period: 3 months