



Versa Drives Private Limited

Energy Challenge of VDPL

CASE STUDY

Summary

We design and produce Variable frequency drives that save money by reducing energy consumption in pumps, fans, compressors, or any other motor loads that may be found in a typical building. We also produce super-efficient ceiling fan which consumes less than 50 per cent of electricity when compared to normal ceiling fans. In future, we intend to produce many such energy efficient appliances. We produce our product with low manufacturing cost and using less energy. We have also aimed to follow several energy saving measures within our organization.

Objective of Intervention

To become an ideal energy efficient manufacturing facility

Type of Intervention and Location

We at Versa Drives Private Limited want to prove ourselves as a best energy efficient company. We have also developed super-efficient motors and drives that have the potential to change the energy consumption at Indian homes in a significant way. As a start-up we have made a super-efficient ceiling fan which consumes less than half the energy of the ordinary ceiling fans by delivering more or same air. Similar to this super-efficient ceiling fan we have plans to make more energy-efficient appliances.

- Design and manufacture BLDC/PMSM motor based super-efficient appliances.
- Construct a green building
- Use LEDs for lighting system
- Use green packing that is free of polythene bags and thermocole in all our products.

Description of Intervention



Studies reveal that the global energy consumption is growing rapidly with 2.5 per cent every year, and the appliances are contributing to half of this consumption. Hence, we targeted to implement this technology in the other appliances also. Similar to Superfan when other appliances also adapt this innovation there will be huge impact in reducing the energy consumption. We also intend to produce these energy-efficient appliances as an eco-friendly green product. Hence, to strengthen the development of new products and features we have initiated plans to enhance our R&D and production through a newly built eco-friendly green factory. We intend to produce our product with ROHS electronics, VoC -free paints and green packing that is free of polythene bags and thermocole.

Intangible or Tangible Benefit

Being a manufacturing facility we always target to use less amount of energy. In the last decade we have reduced 1,410 units in our energy consumption by following the energy saving measures and replacing the normal ceiling fans of our factory with our own designed Superfan. If user makes an affordable investment of ₹3,500, maximum to buy a Superfan, then by using it for about 12 hours every day when running at medium speed user can save the electricity charge of ₹108 every month and ₹1,314 every year, hence can earn back the investment within 30 months.

About Versa Drives

Versa Drives Private Limited (VDPL) specializes in custom designed motor control solutions for original equipment manufacturers. We are backed by a strong and dedicated team of engineers who have experience in hardware & software development, BLDC & PMS motor design & development, simulation, testing and manufacturing. Our factory Versa Drives Private Limited (VDPL) is located in Coimbatore, an industrial city of India. VDPL is certified with ISO9001:2008 for design and manufacturing of motors & drives. VDPL has manufactured and supplied more than 50000 drives till date that are working successfully in the field. Now VDPL has also achieved a breakthrough in fan technology with Superfan, a Super-efficient ceiling fan which consumes 50% less electricity than normal fans. We developed super-efficient motors and drives that have the potential to change the energy consumption of the world in a significant way. After the technology was developed we did not stop at the concept stage or at the prototype. As a first step, we took the risk ourselves to show that super-efficient ceiling fans are a possibility and opened a new avenue for energy savings. Ceiling fans have now changed forever with energy saving, remote control, consistent speed, immune to supply changes and so on. All these are achieved at an affordable increase in the cost. Now we intend to supply the motor with energy saving potential to large companies that have interest in energy saving appliances while we will continue to make energy efficient appliances.