

DESCRIPTION

A rectifier is a device which converts the Alternating Current (AC) to Direct Current (DC). From energy use and technology audit studies it was observed that presently a majority of electro plating units are using conventional rectifier for electro plating purpose. Energy efficient rectifiers are the rectifiers which consumes half the power when compared to conventional rectifiers. Hence it is recommended to replace conventional rectifier with energy efficient rectifier.

TECHNICAL DETAILS

High frequency technology offers numerous advantages when compared to traditional rectifiers which function on the basis of output adjustment by motor control or thyristor technique. Switch mode technology is a reliable, recognized and robust technology and is perfectly suited for deployment in the electroplating industry. Air or water cooled rectifiers are easily integrated into automated control systems.



Source: Compact air cooled bench top rectifier / Ajay Metal Finishing Industry

CASE STUDY

Compact air cooled bench top rectifiers are used in a zinc plating company in Chennai which does jobs of various sizes. Use of this rectifier has reduced the energy consumption by 50% when compared with the conventional rectifier.

Company Profile

Location	Chennai
Employees	14
Annual turnover	INR 60,00,000
Main products	Zinc plating job works
Annual production capacity	1500 tonnes

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TECHNICAL BENEFITS

1. Reduction in energy cost
2. More energy efficient
3. Improved power factor
4. Compact in size

ENVIRONMENTAL BENEFITS

1. Energy conservation

FINANCIAL BENEFIT OF CASE STUDY

Investment amount	INR 1,00,000
Payback period	2 Years
Net savings per unit of output	50% reduction in power consumption compared to conventional rectifiers
Lifetime of investment	10 Years

FURTHER INFORMATION AND CONTACT

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