

RAILWAY CARRIAGE WORKSHOP

Jodhpur, Jaipur (Rajasthan)



Unit Profile

The Railway Workshop and Stores at Jodhpur were built in the year 1886 under the aegis of Jodhpur Bikaner Railway (JBR) to cater for all sorts of engineering requirement of the railways.

After Second World War, maintenance of coaches and wagons was taken up on regular basis in addition to locomotive maintenance. At the same time, the level of in-charge of this workshop was raised from Chief Foreman to Chief Mechanical Engineer. In 1952, on merging of the State Railways with Indian Railways, this workshop was allotted to Northern Railway and placed under Works Manager. The shop was headed by Dy. CME since 1969, which has further been upgraded as Chief Workshop Manager.

In the year 1992, this workshop has started POH of MG steam locos, wagons and coaches. POH of BG coaches started in 1995 with facilities setup under gauge conversion project.

A number of pioneer works were carried out by Jodhpur Workshop. Some of these areas under:

- Jodhpur Workshop pioneered in Train Lighting, started on experimental basis by Jodhpur Bikaner State Railway in 1897. In 1902 the system was extended to all main line trains.
- This workshop manufactured Arms and Defense spares during World Wars I and II, Indo-China and Indo-Pak wars.

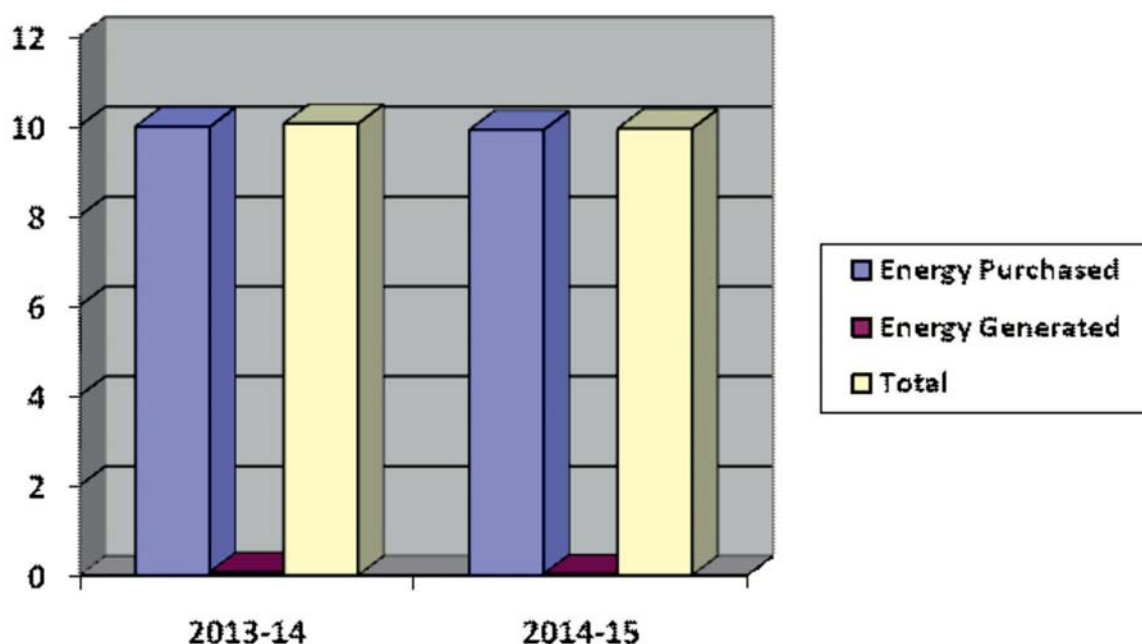
- Jodhpur workshop introduced VISTODOM roofing in Narrow Gauge Coaches for tourists.
- The coaches of the “Joy Ride Train”, being run in the Zoological Park at Delhi were manufactured by this workshop.

Core activity of Workshop is Periodical Overhauling (POH) of Non-Air Conditioned and Air-conditioned coaches. After introduction of 18 months periodicity for POH of coaches, Intermediate Over-hauling (IOH) of Bogies is also being done. The Workshop is also carrying out re-furbishing work of AC and Non-AC coaches. Along with these core activities, Workshop is also carrying out POH of Rail Bus running between Merta Road and Merta City. This Workshop is also building Special Coaches i.e ART, Camping Coaches etc.

Energy Consumption

The source of Electrical Energy for Jodhpur Group of Workshop is 11 kV supply received from Jodhpur Vidhyut Vitran Nigam Limited at Railway Power house thereafter transmitted to 03 nos. 11 kV substations i.e. SS- No-1, 2 & 4 respectively.

The Electrical consumption during last 02 years is as under: -



Electrical Energy consumption in Lac kWh

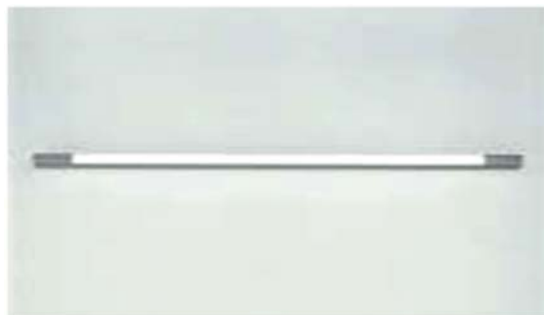
S. No.	Year	Energy purchased (in lac kWh)	Energy Generated (in lac kWh)	Total
1	2013-14	9.97700	0.07310	10.05010
2	2014-15	9.90660	0.02980	9.93640

Due to various measures, the energy consumption of Railway Carriage Workshop has reduced. During 2014-15 the energy consumption was 993640 kWh as compared to 1005010 kWh in 2013-14 i.e. a decrease of 1.13 % energy consumption in 2014-15 as compared to 2013-14.


Energy Conservation

Due to adoption of energy efficient designs and technology and above measures the workshop has been able to reduce the demand of electricity. The following major Energy conservation measures taken during 2014-15 :

a) PROVISION OF ENERGY EFFICIENT 28 W, T-5 TUBE LIGHT FITTINGS:

<ul style="list-style-type: none"> ➤ 66 nos. Energy efficient 28W, T-5 tube light fittings have been provided. 	
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b) PROVISION OF ENERGY EFFICIENT 3 STAR RATED SPLIT AIR-CONDITIONERS:

<ul style="list-style-type: none"> ➤ 10 nos. Energy efficient 3 star rated split Air-conditioners have been provided. 	
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c) USE OF NON CONVENTIONAL ENERGY:

<ul style="list-style-type: none"> ➤ 1 no. Solar Water Heater (Cap.-1000 LPD) has been provided in staff canteen. 	
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- d) MEASURES TAKEN TO REDUCE FURNACE OIL CONSUMPTION:
Saving in Furnace oil has been achieved by clubbing various forging activities, arresting leakage in pipe lines, upkeep burners & proper air supply and reducing heavy forging activities to bare minimum etc.

Energy Policy

- Adopt Cleaner and Eco – friendly renewable energy (RE) sources on railway
- Striving to reduce specific energy consumption (SEC & SFC) by continuously taking energy efficiency improvement measures & minimizing energy wastages.
- Incorporate energy efficient designs and technology in all future projects complying with Energy Conservation Building Code, 2007.
- To carry out internal and external Energy Audits on regular basis to identify areas for improvement.
- Involvement of employees at all levels in the energy conservation efforts.
- Extensive use of 3 star (***) and above labelled electrical products/ equipments.
- Implementation of Energy Conservation Act, 2001 by involving all stake holders.
- Extensive use of LED based lighting products.