

Central Railway

Work Study of Points man of Ghorpadi Diesel Loco Shed, Pune Division.

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Synopsis of the Study

Study Number	: WSCR/OPTG/PA/1/18-19
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Name of Study	: Work Study of Points Man of Ghorpadi Diesel Loco Shed, Pune Division.
Approved by	: AGM
Department	: Operating
Division	: Pune
Date of Commencement	12.12.2018
Date of Completion	21.12.2018
Date of Submission	26.12.2018
No. of Recommendations	01
Sanctioned Strength	12
No. of Men studied	13
No. of vacancies	+1
No. of posts identified surplus	Nil

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Acknowledgement

The work-study teams express its deep gratitude to Shri. Gaurav Jha Sr.DOM/PA whose valuable guidance provided a successful conclusion to this study and whose productive suggestion enhanced the enthusiasm of the team.

The team is very thankful to Shri.P P Gosavi ALF/GPR Diesel Shed and Shri.A K Sharma ALF GPR Diesel Shed and operating staff working in Ghorpadi Loco Shed in Pune division for their useful guidance rendered to the work-study team for the “Work Study of Points Man of Ghorpadi Diesel Loco Shed, Pune Division”. The work-study is also grateful to the staff working under SR. DOM/PA office who provided necessary information /records required for the study.

Authority and Term of Reference

The work-study on “Work Study of Points Man of Ghorpadi Diesel Loco Shed, Pune Division” has been included in Annual work-study programme 2018-19 with No. WSCR/OPTG/PA/1/18-19.

The term of reference for the given work-study is “Work Study of Points Man of Ghorpadi Diesel Loco Shed, Pune Division”.

Methodology

The work-study team has adopted the following technique to completion of the study.

1. Collection of data of details of existing staff strength, workload, allotment of duties.
2. Discussion of details with coordinating officer / supervisors & other staff.
3. Critical analysis of the data collected.
4. Assessment of the need based requirement of Points man staff by making various recommendations for improvement.

Summary of Recommendations

Sr. No	Recommendations	Page No.
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1.	Recommendation: Present utilisation of Points man staff at GPR loco shed it found justified according to available workload.	10
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Chapter 1

Introduction

Diesel Loco Shed homes Diesel Electrical Locomotives of various types. The shed carries out preventive maintenance of locomotives by following various preventive maintenance schedules. All maintenance related data is preserved in shed for its health monitoring.

Locomotives after turning out from shed carries out various train movements and after stipulated Kms. visits the shed again for checks and schedules.

The Diesel Loco Shed is located in Ghorpadi area of Pune between the Miraj Mainline and Pune – Daund line. The shed was functional on 13.8.81. The initial homing capacity of shed was 60 locos which further extended to home 100 locos. The shed is presently homing 176 locos of different types viz. WDM 2, WDM3A, WDG3A, WDM3D, WDG4 & WDM2S. The shed has Mail/Express link of 83 locos and the freight target outage is 50.6. The shed locos have prestigious trains like Pune-Secunderabad Shatabdi Express, Jhelum Express, Mahalaxmi Express, etc..

The shed is headed by Senior Divisional Mechanical Engineer(Diesel) who is assisted by Divisional Mechanical Engineer(Diesel, Assistant Divisional Mechanical Engineer I,II, II, in day to day working and administration of shed.

Brief of Diesel Loco Shed Ghorpadi :

Sr.No	Utilization of Loco	No of Loco's
1	On Pass Service	60
2	On Shunting service	26
3	Goods target outage	50.6
4	Loco Holding	202

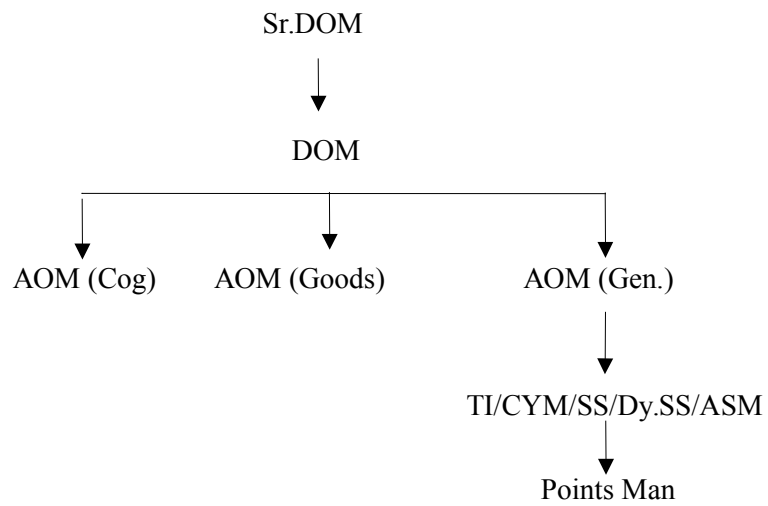
Type wise Holding of Locomotives at GPR Loco Shed.

Loco Type	WDP4 D	WDM3 A	WDM3 D	WDG3 A	WDG 4	WDG4 D	ILF	ACC	Total
No. of Loco	30	10	33	23	72	18	16	05	202

Chapter II

Existing Procedure

2.0. Organization set up of Operating Staff in Pune Division



2.1. Brief Introduction of Ghorpadi Diesel Shed Pune.

Diesel Loco Shed, Pune is an important shed of the Central Railway in Pune Division spread over 59,825 Sq. meter area. Initially it was planned to home 60 locos and was further extended to home 100 locos under WP 1981 – 82. The loco shed became functional from

13/08/1981. Now it has a holding of around 205 locomotives with around 63 locos operating in mail express links. The shed is headed by Sr. DME (D).

Maintenance including Major and minor schedules of various types of Diesel Locomotives such as – WDM2, WDM 3A, WDG 3A, WDM 3D, WDM 2S, and WDS 6 is carried out in this shed.

The shed is ISO 9001:2000, ISO 14001:2004 and OHSAS 18001:2007 certified.

The shed is divided into Light Schedule Repair Section, Heavy Schedule Repair Section, Heavy Repair (Mechanical), Heavy Repair (Electrical), Bogie Section, Machine Shop and Training Centre. The shed is located near Ghorpadi Railway Station and entrance of the shed is between a railway crossing gate.

2.2. The general duty list of Points man is as given below:

1. To attend duty in time in prescribed uniform.
2. To remove any obstruction lying in the yard fouling any running line, points and crossover.
3. To perform shunting as per instructions given by Station Master on duty and under the supervision of the guard of the train, secure wagon / vehicle in yard,
4. To deliver warning notices / caution orders and other memos including T-369 (3b) etc. to Driver / Guard and obtain their signatures.
5. To clean H.S. lamps/ S. P. Dubbers and other lamps used at the station.
6. To watch signals take “OFF” for the reception and dispatch of the trains are showing correct aspects and to ensure that all signals are returned to normal after passage of every train.
7. To attend Station in case of accident or emergency.
8. To close / open Level crossing when Gateman is off duty or no gateman is available and that everything is kept at its appointed place.
9. To keep the station premises clean and to wash it at usual intervals.
10. To do any other Railway work allotted by Station Master on duty.
11. To watch trains from off side to detect defective sick / damage or unsafe wagon/ vehicles on the running through trains.
12. To ring up station bell as per prescribed bell code for UP/DN trains for line clear / train entering section, arrival/ departure of a train. In other cases he shall ring station bell as directed by Station Master on duty. He should call out station name for stopping passenger train at night time.

2.3. The sanctioned strength, Man on Roll and Vacancy Position of Points man at GPR Diesel Loco Shed is as below:

Sr. No.	Category	SS	MOR	VAC
1	Points man	12	13	+1

2.4. Present deployment of Points Man Staff in Ghorpadi Diesel Shed is given in ensuing table.

- I. Presently 03 gangs of Points man staff (01 gang consisting 03 points man) are operated in 03 shifts and 01 separate gang of 03 points man is utilised for RG/LR.
 - II. 02 shunters per shift are also deployed round the clock duty for internal shunting of receiving loco at entry point and despatch to exit point as well as placement and removal of locomotives in various sections presently 01 points man each is attached with these shunters, 01 points man is deputed for piloting with incoming loco at entry point and for dispatching diesel as well as Electrical Locomotives.
- The major loco movements includes:
 1. Placement of incoming loco in LSR(loco Schedule Repair)
 2. Removal of ready loco from LSR to washing pit.
 3. After washing pit activity placement movement for fueling/Lp checking & departure either to PA end of MRJ end exit gates of shed.
 4. Placement of/Removal of locos in boggie shop for lifting/lowering.
 5. Placement of/Removal of locos in yearly schedule.
 6. Placement of/Removal of locos in new electric loco shed.
 7. Placement of/Removal of locos and coaches in wheel lathe for tyre turning & removal.
 8. Placement of/Removal of locos for stabling(Loco overage/major repair/accidental etc.)
 - Daily average of incoming Locos =15 locos.
 - Daily average outgoing loco = 15 Locos.
 - Per Shift average loco movement in shed = 40-45 movements.
 - No of Trains daily Arrival/Dept Trains at PA having locomotive link at GPR Shed: 24 trains.

Critical Analysis

Work study team during the course of conducting work study at diesel loco shed at GPR found that the shed has only two lines i.e. single in and single out towards Pune end and same on Miraj end, which is further divided in to branch lines to various shops/sections. The shed platform has birthing capacity of 4 locos in line and movement are done from one direction only. Shunting involves with coupling three

to four dead locos with one working loco to remove or place the locos on platform. There are around 40 movements in each shift on an average and involving operation of hand points, due to Z type shunting nearly 30 manual hand points are to be operated for placement and removal of loco placed for major repair schedule and number of movements are to be carry out for locomotives in trip inspection as daily average 16 diesel locomotives are to be spared for mail express link, for this activity 2 shunters are deployed in every shift and 01 points man is attached to each shunter for carry out shunting activity, 01 points man is deputed to receive and dispatch locomotives at entry/exit point to pilot locomotives to loco shed and electric loco shed which is recently being functional in this shed having berthing capacity of 5 locos at Pune end of GPR Loco shed. hence 3 points man X 3 shifts = 09 points man in 03 shift and 03 point man reserved for RG/LR, i.e. 12 Points man are found presently utilised in Diesel shed GPR. These points man are utilised as per the daily schedule of movement received to SSE Line and accordingly shunting is carried out, work study team has practically involved in the said activity and found that present utilisation of points man is found justified comparing to the workload.

Recommendation: Present utilisation of Points man staff at GPR loco shed it found justified according to available workload.
