

# **SOUTH EASTERN RAILWAY**

# REVIEW OF STAFF STRENGTH IN THE UNITS UNDER DY.CME(PROD)/ KGP W/s.



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STUDY NO. EFF/916

# SYNOPSIS

| 1. | Name of the work study                       | Review of the Staff strength in the units under Dy.CME(Production) consequent to closure of shops and outsourcing of activities in KGP workshop.                             |  |  |  |  |
|----|--|--|--|--|--|--|
| 2. | Terms of reference                           | The study has been taken up as per the approval of the competent authority.  |  |  |  |  |
| 3. | Aim  | To make a comparative study of the present sanctioned staff strength and the available workload of as well as associated factors at the various units under Production shop. |  |  |  |  |
| 4. | Projected manpower re-deployment/ surrender. | Surrender- 153 posts,  |  |  |  |  |
| 5. | Anticipated/projected savings                | Rs 1412 lakhs per annum (approx)   |  |  |  |  |
| 6. | No of recommendations made                   | One.   |  |  |  |  |
| 7. | Critical analysis & observations             | Analysis done on the basis of field assessment made by the study team for conducting the study.  |  |  |  |  |
| 8. | Brief note on recommendations                | Rec-I – To surrender 153 vacant posts with immediate effect, considering the closure of shops and outsourcing of activities.   |  |  |  |  |
| 9. | Department concerned                         | Mechanical.  |  |  |  |  |

# $\underline{C\ O\ N\ T\ E\ N\ T\ S}$

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## CHAPTER-I

### 1.0. **INTRODUCTION**

Indian Railway is rapidly proceeding towards modernization in all fields. The need of the day is to devote basically on the transportation part. Kharagpur Workshops was envisaged with a view to maintain the different types of rolling stock. During the initial stage of establishment of the Workshop, the different types of materials required for routine maintenance purposes were not readily available in the local markets. Hence, different ancillary shops like foundry, smithy, machine, millwright etc. were established as per the then requirement for supplying, maintenance and repair/ refurbishing of the different spare parts and components required for day to day maintenance.

The modern trend is to increase the speed of the Rolling Stock which simultaneously requires higher braking power. At the same time, different casting items being manufactured are presently available in trade and that too at a lesser cost than the shop costing. Side by side, there is a critical requirement for reducing the material cost/production cost/pilferage (especially of non-ferrous items) through induction of composite materials and reduction of production costs. Certain composite materials have replaced the conventional materials due to high strength to weight ratio, superior physical properties/ performance and finally for cost reduction.

In view of the above, composite brake blocks have been introduced in place of Cast- iron brake blocks, Roller bearings in place of plain bearings, Helical springs in place of LB springs. RDSO has also identified a number of parts for replacement with composites that include FRP loco gear case, axle box cover, brake gear bushes, toilet modules, luggage racks, canopy end of EMU/DEMU coaches, sliding/flush doors etc.

The average repair cost per VU of the shop is directly proportion to the manufacturing cost of spare parts and rolling-stock components in the finishing shop and process shop.

The review on the requirement of manpower has been taken up considering the procurement of materials through trade resulting in closure of some shops and also merging of some shops with the other one. Due to closure of the shops and outsourcing of activities, the direct involvement of Stage Inspectors under PCO has drastically reduced.

# $\underline{C\ H\ A\ P\ T\ E\ R-II}$

# 2.0 **STAFF STRENGTH**

The staff strength of the units which have been taken up for the purpose of this study are as follows :

| Shop No     | <b>Sanctioned Strength</b> | On roll | Vacancy |
|-------------|----------------------------|---------|---------|
| 1,2         | 62                         | 54      | 8       |
| 7           | 141                        | 84      | 57      |
| 9           | 65                         | 38      | 27      |
| 11          | 42                         | 29      | 13      |
| 13          | 36                         | 15      | 21      |
| SSE/JE      | 166                        | 105     | 61      |
| PCO Loco \$ |                            |         |         |
| PCO         | 156                        | 118     | 38      |
| TOTAL       | 668                        | 443     | 225     |

## CHAPTER-III

### 3.0 EXISTING SYSTEM OF WORKING

- 3.1 The Production shop consists of the following units viz. Smithy (repair of LB Springs), Machine (Machining and finishing of components), Plate (Plate work and fabrication), Wheel (Repair of wheel sets), Loco Bogie (Repair of diesel and electric bogies). In addition, this section has been entrusted with the incentive & inspection of the different shops PCO. Millwright shop is entrusted with the maintenance and daily running of all the M&P items.
- 3.2 **Previous activities of Foundry Shop:** The iron foundry earlier used to manufacture small CI rollers, CI chill body set, Brake set, Bevel pinion for BOXN(CI), BD valve for BOXN, Gate assembly, BD valve locking bush, CI cow catcher for EMU, Distance piece of top roller, Piston head, Piston valve, White metalling of suspension bearing, Demantling of white metal, Suspension bearing, all round bar, Metalling of axle bearing bush, Top & Bottom bush, Roller carriage bush, Bronze oil seal turbine end, Thrust bearing, ICF bush, Diesel loco/ Electric loco & Shatabdi coach models, PB solid bars of different sizes, Steel shell suspension bearings & Bronze bearing for H/shaft etc.

Presently these shops have been totally closed and merged with Heat Treatment Shop No 13. The existing staff on roll are now engaged in heat treatment shop.

3.3 **Previous activities of Smithy Shop:** Hanger block forging, ICH & EMU draft gear, Side bearer, All LB spring buckles, LB spring key manufacturing, Chainless cutter, Drop stamp item, Buffer plug, all types of buckles, Ball pin hammers, Offset machine items like rivets & pins, Buffer spindles, NL bogie pins, Hexagonal bolts, LB springs, 9 plated, 10 plated, 20 plated (crane springs), Tower wagon springs, Coiled springs(ICF) were being manufactured and tested here.

The existing staff on-roll are now engaged in heat treatment shop.

3.4 **Previous activities of Tool Room:** The Tool room was previously required for Sharpening and Reconditioning of Tool bits, Grinding mill and Nozzle of blow torch.

Presently this shop has been totally closed and merged with Heat Treatment Shop No 13. The existing staff on- roll are now engaged in heat treatment shop. The activity of this shop has been closed because the entire work of sharpening and reconditioning has been outsourced through AMC.

- 3.5 **Previous activities of Brass Shop:** The work of brass shop was finishing of all brass items such as bush, bearing etc. The work of this shop has now been totally closed and there is no activities related to this shop that are to be carried out. The existing staff onroll are now engaged in Machine shop.
- 3.6 **Previous activities of Fitting Shop:** The activity of fitting shop was to manufacture all those items which are occasionally required for repair works. Since this job is not on a regular basis the shop has been closed and merged with Bogie shop.
- 3.7 **Production Control Organisation**: The Stage Inspectors in the PCO are entrusted with the inspection and preparation of job sheets of the jobs at different Load centers. Due to outsourcing of activities and closure of shops, the requirement of stage inspectors in the PCO has automatically reduced.
- 3.8 **Millwright shop**: The Technicians in the Millwright shop are engaged in maintaining all the Machinery and Tool & Plants. These staff are operating the different equipments, machinery and motor vehicles like fork lifter, lister, Over head cranes, etc. Due to outsourcing of activities and closure of shops, the requirement of this group of technicians has diminished.

#### **CHAPTER-IV**

#### 4.0 CRITICAL ANALYSIS WITH RECOMMENDATIONS:

- The production of the Iron as well as Brass Foundry is Nil due to closure of the foundry. The major portion of the smithy shop has also been wound up due to closure of activities and presently these Shops have been merged with Heat Treatment Shop No. 13 and the existing on-roll staff are also utilized in this shop. Brass shop has been merged with Machine Shop and Fitting shop has been merged with Bogie Shop. Their incentive of 33.1/3 % is calculated under their allotted load centre. However the existing man on roll should continue their work as they are doing now. Permanent re deployment in this case to the other merged shop is not possible due to policy matter. As and when these posts get vacant on their retirement or else these may be surrendered. Due to closure of activities and resultant merging with other shops the requirement of the sanctioned posts has diminished.
- **4.2** The following posts have been proposed to be in excess operation which can be reduced without detriment to the normal working:-

| Designation      | GP /Level      | Sanct | On roll | Vacancy | Surrender Proposed |  |
|------------------|----------------|-------|---------|---------|--------------------|--|
| Stage Inspectors | Rs. 2800, L-5  | 156   | 118     | 38      | 38                 |  |
| under PCO        |                |       |         |         |                    |  |
| SSE              | Rs. 4600 , L-7 | 111   | 75      | 36      | 36                 |  |
| PCO (Loco)       | Ks. 4000 , L-7 | 111   | 7.5     | 30      | 30                 |  |
| JE               | Rs. 4200, L-6  | 50    | 26 24   |         | 24                 |  |
| PCO (Loco)       | 113, 1200, 20  |       |         |         |                    |  |
| Tech – I,        | Rs. 2800, L-5  | 45    | 35      | 10      | 10                 |  |
| (Shop 1,2)       |                |       |         |         |                    |  |
| Tech - I         | Rs. 2800, L-5  | 67    | 42      | 25      | 25                 |  |
| (Shop 7)         |                |       |         |         |                    |  |
| Tech – I         | Rs. 2800, L-5  | 6     | 0       | 6       | 6                  |  |
| (Shop 9)         |                |       |         |         |                    |  |
| Tech – I         | Rs. 2800, L-5  | 19    | 16      | 3       | 3                  |  |
| (Shop 11)        |                |       |         |         |                    |  |
| Tech – I         | Rs. 2800, L-5  | 17    | 6       | 11      | 11                 |  |
| (Shop 13)        |                |       |         |         |                    |  |
| TOTAL            |                | 471   | 318     | 153     | 153                |  |

4.3 Recommendation -I: These existing 153 vacant posts as proposed above to be immediately surrendered ensuring that the promotional aspects are not affected.

# **CHAPTER-V**

# 5.0 Financial Evaluation

In reference to the recommendations made in the study report the financial evaluation on the basis of surrender of 153 posts is as under:-

| SI | Desgn              | No. of posts | Level | Pay              | Avg.<br>Pay | DA @<br>9% | Monthly<br>cost per<br>staff | Total cost<br>per month |
|----|--------------------|--------------|-------|------------------|-------------|------------|------------------------------|-------------------------|
| 1  | SSE                | 36           | 7     | 44900-<br>142400 | 93650       | 8429       | 102079                       | 3674844                 |
| 2  | JЕ                 | 24           | 6     | 35400-<br>112400 | 73900       | 6651       | 80551                        | 1933224                 |
| 3  | Tech-I             | 55           | 5     | 29200-<br>92300  | 60750       | 5468       | 66218                        | 3641990                 |
| 2  | Stage<br>Inspector | 38           | 5     | 29200-<br>92300  | 60750       | 5468       | 66218                        | 2516284                 |
| ,  | TOTAL              | 153          |       |                  |             |            |                              | 11766342                |

The annual savings on account of surrender of 153 'vacant' posts = Rs. 117,66,342/- x 12 = Rs.1411,96,104 /- Say 1412 lakhs per annum approx.

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