

RWF PRODUCT MIX-WHEEL, AXLE& WHEELSETS

I. WHEELS

A) Loco Application:

| Gauge | Description | Drawing Number | Fully developed | Under Trial | Under development | Remarks |
|-------|--|----------------|-----------------|-------------|-------------------|--|
| BG | 1098 mm dia BG Loco (Rough) - WDM2, WDM3A, WDM3D, WCG2, WCAM1, WCAM3, WCAG1, WAP1, WDP1, WDP2, WDG3A, WAM4, WAG7, WAG5, WAP4 Locos. | WAP/SK/M-336 | Yes | --- | --- | Drg. Approved in 2002 for regular use and 1666 wheels were monitored by RDSO since 2012 - TTCI validated the design in 2002. |
| | 1098 mm dia for ABB Loco (Rough) | WAP/MISC/M-944 | --- | --- | YES | Drawing along with FEA report sent to RDSO for comments during December 2012 |
| | 1098 mm dia for GM Loco (Rough) - WDG4 Loco | RWF-W-106 | --- | --- | YES | |
| MG | 970 mm dia MG Loco (Rough) | WAP-W-032 | Yes | --- | --- | Drawing approved by RDSO in 2002 |

B) Freight Application:

| Gauge | Description | Drawing Number | Fully developed | Under Trial | Under development | Remarks |
|--|---|-----------------------|------------------------|--------------------|--|---|
| BG | 840 mm dia Container Flat Wagon - 20.3 t axle load. | WAP-W-004 | Yes | --- | --- | RWF fully developed and RDSO approved |
| | 915 mm dia BG Defence | WAP-W-058 | Yes | --- | --- | -- do -- |
| | 915 mm di BG Wagon | WAP/SK/M-152 | Yes | --- | --- | -- do -- |
| | 1000 mm dia BOX-N | WAP/SK/M-153 | Yes | --- | --- | -- do -- |
| | 1000 mm dia BG BOX | WAP/SK/M-154 | Yes | --- | --- | -- do -- |
| | 1000 mm dia – 25t axle load wheel | WD-07012-S-03 | ---- | Yes | ---- | 4 wheelset were sent to SCR during 2009 for trials due to infringement in bogie fitment trial not concluded with RDSO. TTCI validated the design in 2010. |
| | 840 mm dia for 25t axle load wheel (Developed based on FEA done by RWF) upgraded to 25t axle load. | WAP-W-004 | ---- | Yes | ---- | RDSO vide letter No. MW/WA/25T, Dated 25/6/2015 approved for using these wheels for 25t axle load wagon for K class CTRB wagons. |
| 1090 mm dia wheel for Milk Tank for RMT | RWF/SK/M-155 | ---- | ---- | Yes | Geometry modified under Alt. d and product is being tested for compliance of geometry – drawing approval yet to be done by RDSO. | |
| MG | 725 mm dia MG Wagon | WAP/SK/M-151 | Yes | ---- | ---- | RWF developed and RDSO approved. |

C) Passenger Applications:

| Gauge | Description | Drawing Number | Fully developed | Under Trial | Under development | Remarks |
|--------------|--|-----------------------|------------------------|--------------------|--------------------------|---|
| BG | 958 mm dia EMU wheel (TC) (Rough) | RWF-W-111 | Yes | ---- | ---- | EMU trialer coaches drawing approved in 2014 for regular use. TTCI validated the design in 2010 for 21.5t axle load. |
| | 958 mm dia EMU wheel (Rough) (MC) | RWF-W-111 | ---- | Yes | ---- | Trial is underway since 2012, 1500 Nos are being processed for trial in SR and ER. |
| | 958 mm dia EMU wheel (Rough) for Milk Tank use | RWF-W-111 | ---- | YES | ---- | RDSO approved for usage of these wheels in Milk Tank wagon in 2015. |
| | 921 mm dia BG Coaching (Rough) | WAP/SK/M-343 | Yes | ---- | ---- | RWF developed and RDSO approved |
| | 915 mm dia LHB | RWF-W-101 | ---- | Yes | ---- | 84 Nos. under trial in Karnavathi Express, Western Railway since September 2014. |
| | 866 mm dia for Kolkata Metro | RWF-W-102 | ---- | ---- | Yes | RDSO has approved the drawing and proto type development under progress. Trial wheel to be cast in this month. |
| MG | 731 mm dia MG Coaching (Rough) | WAP-W-031 | Yes | ---- | --- | RWF developed and RDSO approved. Nilgiri wheels (NMR) 100 nos supplied during March 2015 |
| | 844 mm dia DEMU MG | WAP-W-062 | ---- | ---- | Yes | RWF developed these wheels for customer order through RITES and sent these to Senagal in 2010. Subsequently RDSO advised to modify the drawing with groove in hub for fitment of TM guard. Accordingly, RWF modified the drawing and sent to the RDSO approval in July,2010 RDSO approval is awaited. |
| NG | 513 mm dia for NG Coaching for Kalka-Shimla section | NW/WL-9801 | ---- | ---- | Yes | Equivalent cast wheel drawing based on NW/WL-9801. Proto type under development. Another wheel of MG coaching is 590 mm dia.in NR is also available. Not developed. |

II. AXLES

A) Loco Application:

| Gauge | Description | Drawing Number | Fully developed | Under Trial | Under development | Remarks |
|---------|---------------|---------------------------|-----------------|-------------|--|---|
| BG | WDM-2C | D/WL-5058/R | Yes | --- | --- | Drawings provided by RDSO, RWF manufactured these axles on regular basis. |
| | WDM-2 | WAP/SK/MA-245 | Yes | --- | --- | RWF developed as per RDSO drawing. |
| | WAG-7 | 06/2/11/2 | Yes | --- | --- | CLW drawing manufactured by RWF. |
| | WDP-2 | TPL-6687 | Yes | --- | --- | DLW drawing manufactured by RWF. |
| | TAO-659 | SKEL-4516, WAP-A-085 | Yes | --- | --- | -do- |
| | WDP-1 & WDG-2 | TPL-5868 | Yes | --- | --- | -do- |
| | WDG2 & WDG3 | TPL-6292, WAP-A-109 | Yes | --- | --- | -do- |
| | WAP-1, WAP-4 | 03/2/11/55, WAP-A-090 | Yes | --- | --- | CLW drawing, manufactured by RWF. |
| | WAG-9 | 1209-01-11-054, WAP-A-016 | Yes | --- | --- | -do- |
| | WAP-5 | 1210-01-311-025 | Yes | --- | --- | -do- |
| | WDP-4 | 40088369, WAP-A-120 | Yes | --- | --- | DLW drawing, manufactured by RWF. |
| | WDG-4 | WAP-A-065 | Yes | --- | --- | -do- |
| X Class | RWF-A-161 | Yes | --- | --- | Supplied to GOC in the year 2009 & 2011. | |
| MG | VDM-4 | RWF-A-145 | Yes | --- | --- | RDSO drawing ,manufactured by RWF. |

B) Freight Application:

| Gauge | Description | Drawing Number | Fully developed | Under Trial | Under development | Remarks |
|--------------|---|-----------------------|------------------------|--------------------|--------------------------|--|
| BG | BOX N - 22.9t | WD-89025-S-02 | Yes | --- | --- | Drawings provided by RDSO, RWF manufactured these axles on regular basis. |
| | 25T axle suitable for k class CTRB | WD-15020/S-02 | --- | YES | --- | RDSO vide letter No. MW/WA/25T, Dated 25/6/2015 approved for using 25t axle load wagon for K class CTRB wagons. These axles are used in 25t wheelset WD-15020/S-01. Supplied in 2015-16. |
| | 25t axle load axle | WD-07012-S-02 | --- | Yes | --- | 4 wheelset were sent to SCR during 2009 for trials due to infringement in bogie fitment trial not concluded with RDSO |

C) Passenger Applications:

| Gauge | Description | Drawing Number | Fully developed | Under Trial | Under development | Remarks |
|--------------|-------------------------------------|-----------------------|------------------------|--------------------|--------------------------|---|
| BG | BG EMU axle (MC) | DC/EMU-M-0-1-005 | Yes | --- | --- | ICF drawing and manufactured by RWF |
| | BG EMU axle (MC) MEMU | EMU/M-0-1-025 | Yes | --- | --- | ICF drawing and manufactured by RWF |
| | BG EMU TC axle | AC/DC/EMU/02-024-001 | Yes | --- | --- | ICF drawing and manufactured by RWF |
| | EMU axle for Milk Tank Wagon | AC/DC/EMU/D2-0-2-205 | --- | Yes | --- | Approved by RDSO for using in Milk Tank in 2015. |
| | 16T BG Coaching | CG-K-6015, WAP-W-091 | Yes | --- | --- | RDSO drawing and manufactured by RWF |
| | LHB axle | LW02149 | Yes | --- | --- | RCF drawing and manufactured by RWF |
| | Kolkata Metro axle (TC) | AAA02062 | Yes | --- | --- | ICF drawing and manufactured by RWF. 36 Nos axles were supplied to ICF in 2016. |
| | Kolkata Metro axle (MC) | AAA02047 | Yes | --- | --- | ICF drawing and manufactured by RWF. 36 Nos axles were supplied to ICF in 2016. |

III. WHEELSETS

A) Freight Application:

| Gauge | Description | Drawing Number | Fully developed | Under Trial | Under development | Remarks |
|-------|--|----------------|-----------------|-------------|-------------------|---|
| BG | Box_N | WAP/WA/W-1 | Yes | --- | --- | RDSO approved and manufactured by RWF |
| | 840 mm dia container flat wagon wheelset | WAP-W-003 | Yes | --- | --- | - do - |
| | 840 mm dia for 25t axle load wheelsets | WD-15020/S-1 | --- | Yes | --- | RDSO vide letter No. MW/WA/25T, Dated 25/6/2015 approved for using 25t axle load wagon for K class CTRB wagons. 4 Nos and 12 Nos wheelsets were supplied to Braithwaith and GOC workshop in 2015 respectively. Further 395 No of wheel sets supplied to Braithwaith so far. |

B) Passenger Applications:

| Gauge | Description | Drawing Number | Fully developed | Under Trial | Under development | Remarks |
|-------|---|----------------|-----------------|-------------|-------------------|---|
| BG | BG Coaching | WAP/WA/011 | Yes | --- | --- | RDSO approved. |
| | 958 mm dia EMU wheelset for Milk Tank Wagon | WAP-WA-W-022 | --- | Yes | --- | RDSO has approved the drawing in the year 2015. 184 Nos order from RITES - to be given to Braithwaith and Texmaco (80+104). Work in progress. |