



ELEVATION

VIEW FROM -X

MAJOR DATA	
1. ESTIMATED TARE	23.0 tonnes
2. PAYLOAD (CEMENT/FLY ASH)	64.3/51.26 tonnes (BULK DENSITY OF FLY ASH 0.91/m <sup>3</sup> )
3. MAX AXLE LOAD	21.82 tonnes
4. TRACK DENSITY (GROSS)	0.8-1.4 t/m
5. VOLUMETRIC CAPACITY	70-80 m <sup>3</sup> (APPROX.) (67 m <sup>3</sup> FOR LOADING PURPOSE)
6. WHEEL & AXLES SET	IR STR NO.-WD-74-WL-02 / 22.94 AXLE LOAD WHEEL & AXLE ASSEMBLY 10 LATEST CAST STEEL 22 H.S. CASINUS BOGIES WITH FRICTION DAMPING
7. BOGIES	IR STR NO.-WD-74-WL-02 / 22.94 AXLE LOAD WHEEL & AXLE ASSEMBLY 10 LATEST CAST STEEL 22 H.S. CASINUS BOGIES WITH FRICTION DAMPING
8. BEARINGS	AAR CLASS 'E' (6X11) CARTRIDGE TYPE TAPER ROLLER BEARING WITH NARROW JAW ADAPTOR TO IR STR NO. AB/RB-35-91. (REV-5)
9. COUPLER AND DRAFT GEAR	HIGH TENSILE CENTRE BUFFER COUPLER TO IR STR NO. 48-80-02 WITH HIGH CAPACITY DRAFT GEAR TO IR STR NO. 49-80-02
10. BRAKES	SINGLE PIPE GRADUABLE RELEASE AIR BRAKE SYSTEM WITH AUTOMATIC LOAD SENSITIVE DEVICE & SLACK ADJUSTER (IRSA-600)
11. BRAKES EQUIPMENTS	BRAKE EQUIPMENT ARE IN ACCORDANCE WITH IR STR NO. 02-ABR-02 & 04-ABR-02 AND SIMILAR TO BOXN WAGON.
12. CONSTRUCTION	ALL WELDED INTEGRAL DESIGN USING MOSTLY PLATES, SHEETS, PRESSING & ROLLED SECTIONS.

SPECIAL FEATURES	
1. MATERIAL TO BE TRANSPORTED	CEMENT IN LOOSE CONDITION HAVING DENSITY VARYING FROM 0.80 t/m <sup>3</sup> TO 1.10 t/m <sup>3</sup>
2. NOS. OF INLET HATCHES	3 NOS. HAVING 500mm DIA OPENING.
3. NOS. OF DISCHARGE OUTLETS	2 NOS. HAVING 350mm DIA OPENING.
4. AERATION OPERATING TEMPERATURE	150°C (MAX.)
5. AERATION PRESSURE DESIRED	0.270 BAR.
6. AERATION FRAME ANGLE	15° & 17°.
7. METHOD OF DISCHARGE	AIR ASSISTED GRAVITY DISCHARGE THROUGH 350mm DIA BUTTERFLY VALVES OPERATED MANUALLY FROM EITHER SIDE OF WAGON.
8. AERATION MEDIUM	POLYSTER FILAMENT WOVEN.
9. TIME OF COMPLETE DISCHARGE	5 MINUTES AFTER OPENING OF ALL VALVES.
10. GEAR REDUCTION RATIO	30:1 (14" (350mm) DIA BUTTERFLY VALVE).
11. NOS. OF COMPRESSED AIR PUS IN PORTS	4 NOS. (TWO ON EITHER SIDE).
12. VENTING AND SAFETY	BEFORE STARTING THE UNLOADING PROCESS CENTRAL HATCH- BE OPENED & CONNECTED TO THE GROUND BY SHORT LEAD. THIS IS TO AVOID ANY OVERPRESSURE AND RELIEF VALVE TO AVOID ANY UNDERPRESSURE.
13. PAINTING & SURFACE PREPARATION	EPOXY PAINT CAPABLE TO SUSTAIN CEMENT TEMP 100°C SUPER STRUCTURE INTERIOR AND EXTERIOR BY SHORT BLASTING U/F INCLUDING SLOP BY MANUAL CLEANING.

NOTES-

- WHILE USING THE DETAILED ENGINEERING DRAWINGS THE USER RESERVES THE RIGHT TO CHANGE THE DRG WITHOUT AFFECTING ANY BASIC PARAMETERS.
- THE BARREL SIDESILL, BARREL SUPPORT AND CENTRESILL AT ENDS ARE WELDED TOGETHER.
- FULL BOTTOM OF BARREL IS COVERED BY AIR SLIDES.
- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED.
- PAINTING & MARKING WILL BE DONE IN ACCORDANCE WITH DRG NO. AGDW-120/B.
- THE WAGON PROFILE INFRINGES THE MAXIMUM MOVING DIMENSION OF 1925, BUT IS WELL WITH IN MOVING DIMENSION OF EDC/T-2202.

REV	DESCRIPTION	DATE	BY	CHKD
1	ISSUED FOR PER USE OF CLIENT TO CHECK AS PER QUANTITIES & ELEMENT TO BE USED. LATEST DATE 20.04.2018	20.04.18	P.R.	M.G.
2	CLIENT HAVE REVIEWED THE DESIGN & APPROVED THE SAME. DATE 20.04.2018	20.04.18	P.R.	M.G.
3	DRAWING REVISED AS MARKED AS PER FITTED WITH 27HS BOGIE AS DESIRED BY M/S ACC LTD.	20.04.18	P.R.	M.G.
4	WORKING SCALE 1:2 & MARKING DRAWING & BOGIE ARRANGEMENT DRG REVISED AS PER USE OF 27HS BOGIE IN PLACE OF 27MB BOGIE.	20.04.18	P.R.	M.G.
5	DRG. NO. OF BARREL & LADDER & PLATFORM ASSEMBLY PLATES & L.I. NO. IS ACT.	20.04.18	P.R.	M.G.
6	APPROVED FOR PRODUCTION OF DRG. AND NO. LADDER IS SHOWN IN PLACE OF ONE OPPOSITE SIDE OF WAGON. RESERVE FOR PRODUCTION. NO. IS SHOWN IN PLACE OF ONE OPPOSITE SIDE OF WAGON.	25.12.18	P.R.	M.G.
7	ITEM-4 IS SHOWN	25.12.18	P.R.	M.G.
8	STEPPING ARRGT. REVISED.	21.03.19	P.R.	M.G.

NO	DESCRIPTION	QTY	REF DRG NO.
12	MARKING DIAGRAM	1	AGDW-120/B
11	UNCOUPLING GEAR	2	AGDW-118
10	ARRGT OF FLY ASH FROM TRANSPORT	1	AGDW-118
9	AIR BRAKE EQUIPMENT & PIPE LAYOUT	1	AGDW-118
8	BRAKEGEAR ARRANGEMENT	1	AGDW-114
7	PIPE LAYOUT FOR AERATION SYSTEM	1	AGDW-118
6	AIR SLIDE ARRANGEMENT	1	BCW-42
5	INLET AND OUTLET ASSEMBLY	1	AGDW-118
4	LADDER AND PLATFORM ASSEMBLY	2	AGDW-110
3	BARREL ARRANGEMENT	1	AGDW-118
2	BOGIE GENERAL ARRANGEMENT (H.S.)	2	WD-04038/5/2
1	UNDERFRAME ARRANGEMENT	1	AGDW-118

Cimmco Birla Limited - BHARATPUR  
AIR ASSISTED GRAVITY DISCHARGE WAGON

APPROVED	DATE	BY	CHKD	DATE	BY
	20/04/18	P.R.	M.G.	20/04/18	M.G.
	25/12/18	P.R.	M.G.	25/12/18	M.G.
	21/03/19	P.R.	M.G.	21/03/19	M.G.

GENERAL ARRANGEMENT

CLIENT: ACC LIMITED  
DRG NO.: AGDW-10/B