



CENTER FLOW® PRESSUREAIDE® COVERED HOPPER CAR SPECIFICATION

LOT NO. 12-19558

LOT SPECIFICATION: CF 5001 Pressureaide

DATE 4-21-95

CUSTOMER: FMC Corporation

NUMBER OF CARS 51

REPORTING MARKS: FMLX 50001-50051

GENERAL ARRGT. DWG.: 6-U-1142

STOCK LOT: None

SALES ARRGT. DWG.: S6-U-0756

GENERAL INFORMATION

VOLUME: -----	5000 cu. ft.	NEGOTIABILITY:	
NO OF COMPARTMENTS: -----	4	HORIZ. CURVE UNCOUPLED -----	150 ft.
LENGTH OVER PULLING FACE: -----	59'-6 1/2"	HORIZ. CURVE COUPLED LIKE CAR -----	215 ft.
TRUCK CENTERS: -----	46'-3"	HORIZ. CURVE COUPLED TO AAR BASE CAR	213 ft.
HEIGHT (RAIL TO TOP OF HATCH) 15'-4 13/16"		VERT. CURVE UNCOUPLED -----	490 ft.
WIDTH OUTSIDE BODY: -----	10'-6"	VERT. CURVE COUPLED TO AAR BASE CAR -	522 ft.
CLEARANCE DIAGRAM: -----	C		
EXTREME WIDTH OUTSIDE: -----	10'-8"		
HEIGHT-RAIL TO EXTREME WIDTH- 3'-10"			
WIDTH-UPPER EAVES (RUNNING BOARDS) - 8'-0"			
HEIGHT-RAIL TO UPPER EAVES -- 15'-1"			
CENTER OF GRAVITY - EMPTY: ---	61.8"		
CENTER OF GRAVITY-LOADED: ---	96.8"	SLOPE-TRANSVERSE SLOPE SHT.-----	50° & 45°
CARBODY WEIGHT EST.: -----	47,400	SLOPE-SIDE SLOPE SHEET -----	45°
TOTAL WEIGHT CAR EST.: -----	68,400	SLOPE-END FLOOR SHEET -----	50° & 43
REMARKS: Car is designed for a GRL of 286,000#			

EQUIPMENT

HATCHES: -----	(8) 20" w/aluminum cover
OUTLETS: -----	Integral part of car, 5" discharge tube @ center line of car
SCAFFOLD BRACKETS: -----	None
RUNNING BOARDS/END PLATFORMS -----	Pre-galvanized
LIFT HOLES: -----	4 x 6 oval holes in side sill
BULKHEAD CUTOUTS:-----	Yes
DRAFT GEAR: -----	AAR M-901E
CENTER PLATE: -----	Gr. "B" 16" low profile
STRIKER: -----	Fabricated
REAR LUGS: -----	Gr. "B" Cast Steel
COUPLER: -----	SBE60DE, bottom shelf
YOKE: -----	SY40AE Gr. "E"
COUPLER CARRIER WEAR PLATE:-----	Manganese
AEI TAGS: -----	2 per car
REMARKS:	

CAR DESCRIPTION

BODY MATERIAL

SIDE SHT -----	7/32" 50,000 yield
SIDE SLOPE SHEET -----	.178 50,000 yield
ROOF SHEET -----	.178 33,000 yield
END FLOOR SHEET -----	.178 50,000 yield
INTERIOR BULKHEADS -----	.178 50,000 yield
INTERIOR FLOOR SHEET -----	.178 50,000 yield
OUTLET MOUNT. FRAME -----	Fabricated 4" x 3 1/2" x 3/8" angle ASTM A-572 Gr. 50 Ty. 2



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MISCELLANEOUS

MANIFOLD ARR'G'T.:

DWG.:6-U-5150

Fluidizing air is supplied to the permeable membranes thru 2" aluminum pipes which are connected to a 4" aluminum pipe manifold. A 4" male quick-connect fitting is located on each side of the car for air hookup to the manifold. 2" fluidizing air lines are equipped with a 2" plug type valve having integral check valve for each compartment. For regulation of bypass air, each end has a 4" butterfly valve and a 4" check valve.

A 5" aluminum discharge pipe from each compartment is connected to a 5" aluminum pipe manifold equipped with 5" male quick-connect fittings located for product line hookup from either side of the car. Each compartment is also equipped with a 4" butterfly valve for regulation of product flow.

Valves and caps have white FDA food grade seats and gaskets.

SAFETY EQUIPMENT

- Pressure relief valve-----2" Kunkle No. 337 set @ 15 1/2 - 16 1/2 psig in inlet manifold and a 2" Kunkle No. 215-V set @ 13.5-15 psig in the roof.
- Rupture Disc-----2" rupture disc assembly per ACF Dwg. 3-J-5612.
- Pressure Gauges-----Two (2) 0-30 psig pressure gauges mounted at "AL" corner of the car. One (1) connected to inlet air manifold and one (1) connected to carbody.
- Vacuum Relief Valve-----ACF Dwg. 3-J-2077-1 set @ .25 psig max.
- Blowdown Valve-----3" Butterfly Valve located on "A" end bulkhead with shaft extension for operating from ground. Valve has white FDA food grade seats.
- Clean-out ports-----5" quick-connect fitting with cap, one per compartment opposite product discharge. Cap has a white FDA food grade gasket.