



## 3285cf 2-Bay 286K Covered Hopper

**#14-12002**

### **GENERAL SPECIFICATIONS**

Exterior dimensions.....	37'2"	Capacity.....	3,285cf
Length over pulling faces.....	41'10.5"	Light Weight est.....	52,985
Center Sill Design.....	Through	Gross Rail Load.....	286,000
Length between truck ctrs.....	27'4"	Capacity in Tons.....	116
Width, extreme.....	10'71/8"	Plate .....	C
Height, extreme.....	15'4"		
Year Built.....	2015		
Car Serial Number.....	TBA		
Ref Drawing Number.....	TBA		

**GENERAL SPECIFICATIONS**

COMMODITY Sand//Cement  
General Purpose: YES  
Hazard Class: None  
Commodity Stencil: None (TBD ARR)  
Max Weight:(lbs/gal) TBA LBS per Sand

Remarks: Maximum lading weight of \_\_\_\_\_lbs based on \_\_\_\_\_CF and GRL of 286,000lbs.

**GENERAL INFORMATION**

Extreme Height: 15.4"  
Extreme Width: 10'8"  
Est Lght Weight: 52,985lbs.  
AAR Clearance: Plate C  
GRL: 286,000 lbs  
Curvature: Meets AAR standard Plate C & E Curvature Requirements.  
A) On curve and uncoupled: 150  
B) Coupled to like car – One one Curve & one on Tangent: 185  
C) Coupled Base Car w/car on curve & base car on Tangent:.....1,650

Remarks: Hopper car is designed to meet the AAR M-1001, M-1002, AAR M-1003 Chapter 7 requirements of 1,000,000 miles fatigue life for cars in General Interchange Service. This car is designed for low, medium to high sand/cement materials. This car is specifically designed to meet service environment of unit train and high utilization cars as defined by AAR M-1001 Chapter 7.

**HOPPER**

Stamped Spec: AAR LO  
Drawing: Vertex FD  
Est. Hopper Full: 98%  
Slope Design  
Floors Lower: 44"  
Floors Upper: 40"  
Center Partition: 44"/40"  
Outside Hopper: 54"  
Top loading: Round 30" Diameter  
Hatch Cover Arr: Steel, Duel Hinge Arrgnt.  
Hatch Cover: ATP or TBA  
Hatch Battans: None  
Hatch Cover Gaskets: Compression Type, ATP or TBD  
Hatch Locks: 30149 Ireco or TBD  
Skid Assembly: Two (2) piece cast skid assy; AAR M201 Gr. B+

Remarks: No grinding on Car Longitudinal Welds.

### **FITTINGS**

Outlet Gates: Bolted, Gravity Slide, Capstan  
Outlet Model: MKE-1051 Miner  
Discharge Frame: 63"x27"3/8  
Dist, Frame to Rail: 1'6.5"  
Discharge Opening: 13"x42" nominal  
Vibrator Brackets: Forged brackets, Bolted

### **MOUNTING**

Card Holder Appl color: Black QTY (4)  
Side Handrails: Steel, grey.  
End Assembly, A end: Galvanized Steel 8"x60"  
End Assembly, B end: Galvanized Steel 8"x60" Brake Chain cut out.  
Safety Platform: IMI 2-Level: each end of car. (4) (Plate type)  
Top Walkway: Galvanized Steel, 24", Morton.

Remarks: All gratings galvanized (Plate type)

### **UNDERFRAME**

Sill Type: Through Sill  
Draft gear: AAR M-901E  
Coupler Yoke: AAR SE60EE / AAR SY40AE with 16" low center plates  
Bolster: 126 Degrees 5/8 web weldment. No coil cutouts

Remarks: Lifting provisions at Body Bolsters

### **BRAKES**

Brake: NYAB TMB-60 Truck Mounted Brake System.  
Empty Load System: NYAB TMB-60 Empty Load Device. Slope Sheet Mounted.  
Slack Adjustor: AAR Group E Mechanical double acting automatic  
Brake Levers/Beams: NYAB TMB Truck Mount System.  
Hand Brake: NYAB CMI AAR Verticle Wheel w/66 Bell Crank-Long Handle  
Remarks: high mileage brake system.

### **TRUCKS**

Type: 110 ton capacity. 5'10" wheel base.  
Wheel Type: 36" DIA. One - Wear, H-36 or CH-36 Class C  
Axle: 61/2" x 9" AAR M-101  
Roller Bearings: AAR Standard Class "K" (pending)  
S.F. & Bolsters: Cast steel grade "B+" Narrow Jaw Pedestal S.F.'s  
Side Bearings: Stucki CCSB Metal Cap extended

Remarks: Column wear plates bolted only (pending)

## **PAINT & LINING**

Cleaning Interior: Interior surfaces to be free of visible oil, dirt, dust, loose mill scale and loose rust.

Lining, Interior: TBD

Exterior Prep: Grot Blast completed car exterior

Paint System: One (1) coat DTM Grey Epoxy 4-6 mills dft min. SSPC-SP6

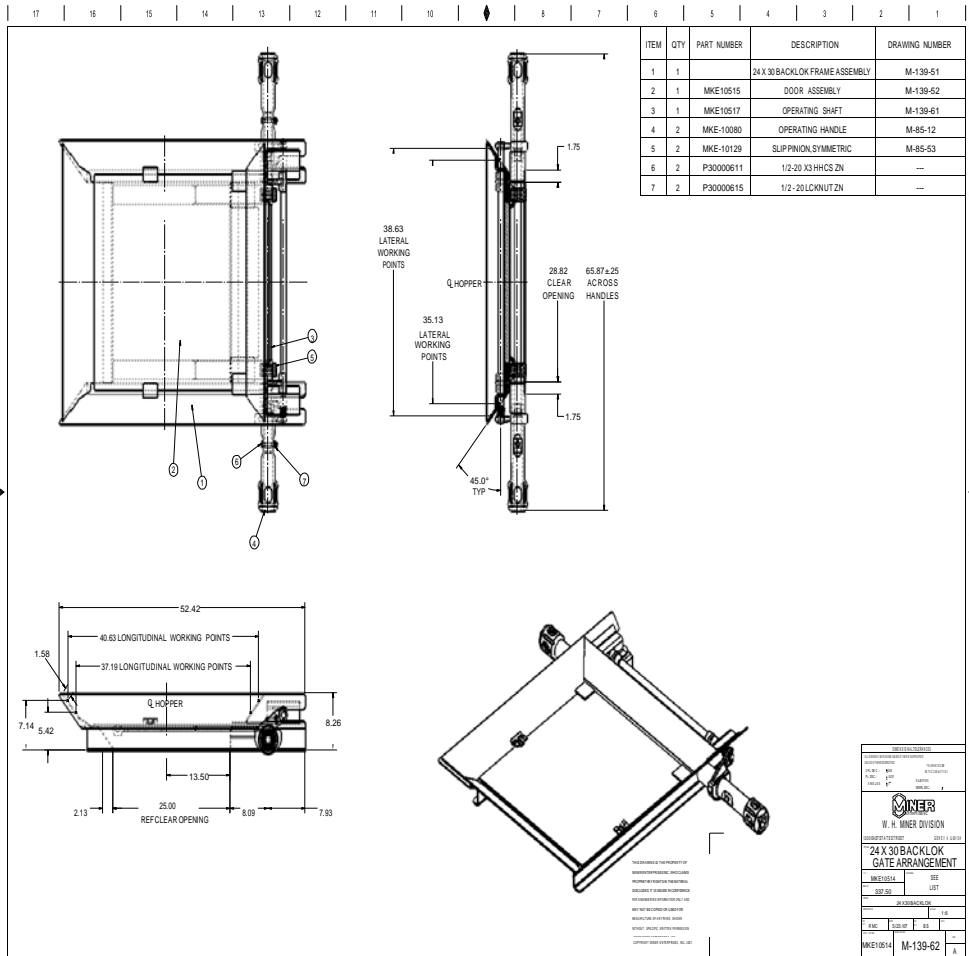
Stenciled Spec: see above.

Stencil requirements: required DOT stencil & required AAR reporting marks  
DATA BLOCK

Remarks: Riveted or bolted connections to have faying surfaces painted prior to assembly. All markings to be decals.  
Anti-Skid coatings applied to tank within platform area. Gratings galvanized and not painted.

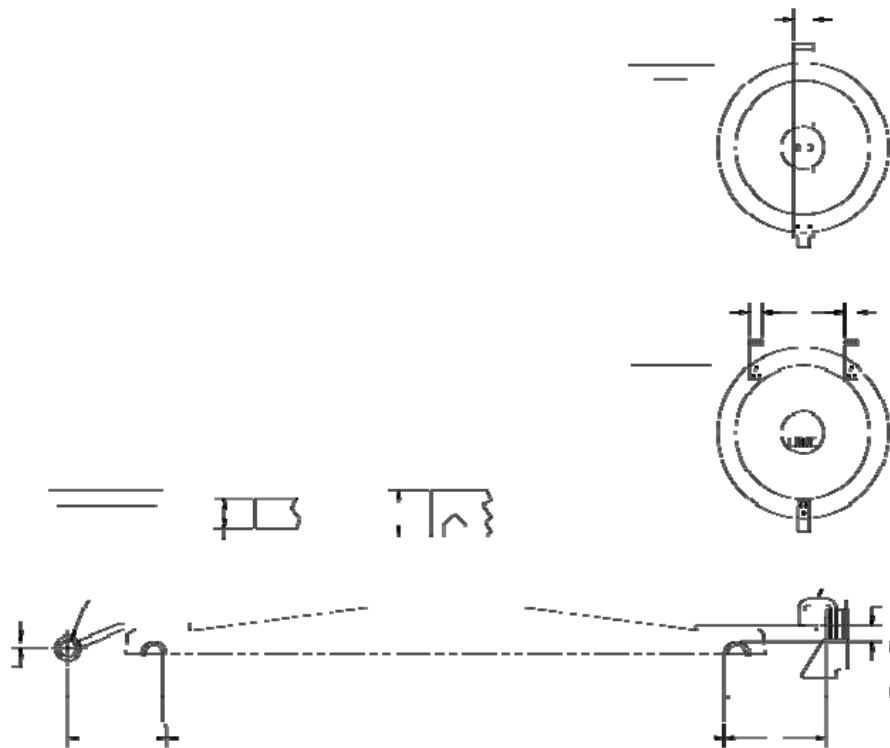
# FITTINGS

## Bottom outlet gate



## **HATCH COVERS**

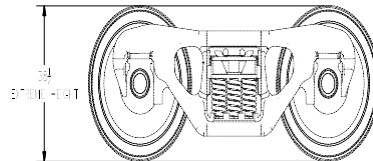
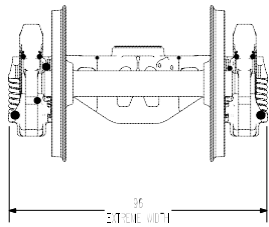
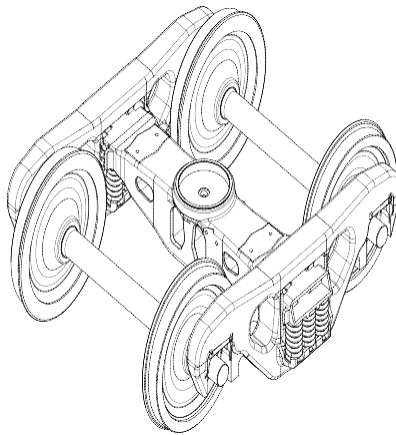
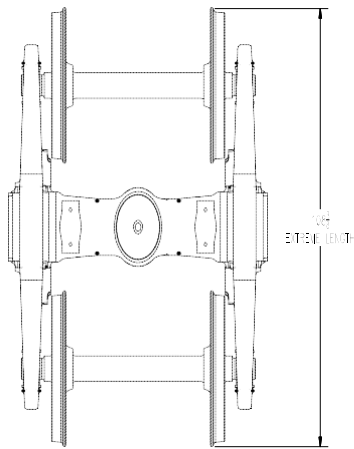
[http://www.aerotransportation.com/site/en/identification\\_drawings](http://www.aerotransportation.com/site/en/identification_drawings)



# TRUCKS 110TON, 286,000 GROSS RAIL LOAD

**NOTES:**

1. DEBURR, MAX CORNER R-REAM OF 0.0157.
2. CLEAN PART, REMOVE ALL LUBRICATION.
3. PROTECT PART TO PREVENT SCRATCHES AND DAMAGE DURING HANDLING AND SHIPPING.











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## SPRING & JOURNAL PACKAGE

Freight Car Truck Springs, Recommended Groups For 2 $\frac{1}{2}$ ", 3 $\frac{1}{16}$ ", 3 $\frac{1}{2}$ " and 4 $\frac{1}{4}$ "  
Travel Springs With Load Carrying Snubber Springs

**Alternate Standard S-342-81**

TABLE NO. 3 DOUBLE SIDE SPRINGS				
SPRING TRAVEL	2 $\frac{1}{2}$ "	3 $\frac{1}{16}$ "	3 $\frac{1}{2}$ "	4 $\frac{1}{4}$ "
FREE HEIGHT (CENTER GROUP)	9 $\frac{1}{16}$ "	9 $\frac{5}{16}$ "	10 $\frac{1}{4}$ " (OUTER COIL)	10 $\frac{3}{16}$ " (OUTER COIL)
SOLID HEIGHT	6 $\frac{9}{16}$ "	6 $\frac{9}{16}$ "	6 $\frac{9}{16}$ "	6 $\frac{9}{16}$ "
6" X 11" JOURNALS				
* WEIGHT PER CAR SET 4-GROUPS (LBS)	549	622	639	
SOLID CAPACITY (LBS)	83865	84124	83836	
6 $\frac{1}{2}$ " X 12" JOURNALS				
* WEIGHT PER CAR SET 4-GROUPS (LBS)	657	746	732	693
SOLID CAPACITY (LBS)	96709	97856	96448	101190
6 $\frac{1}{2}$ " X 12" JOURNALS  BARBER HEAVY DUTY				
* WEIGHT PER CAR SET 4-GROUPS (LBS)			685	
SOLID CAPACITY (LBS)			97304	

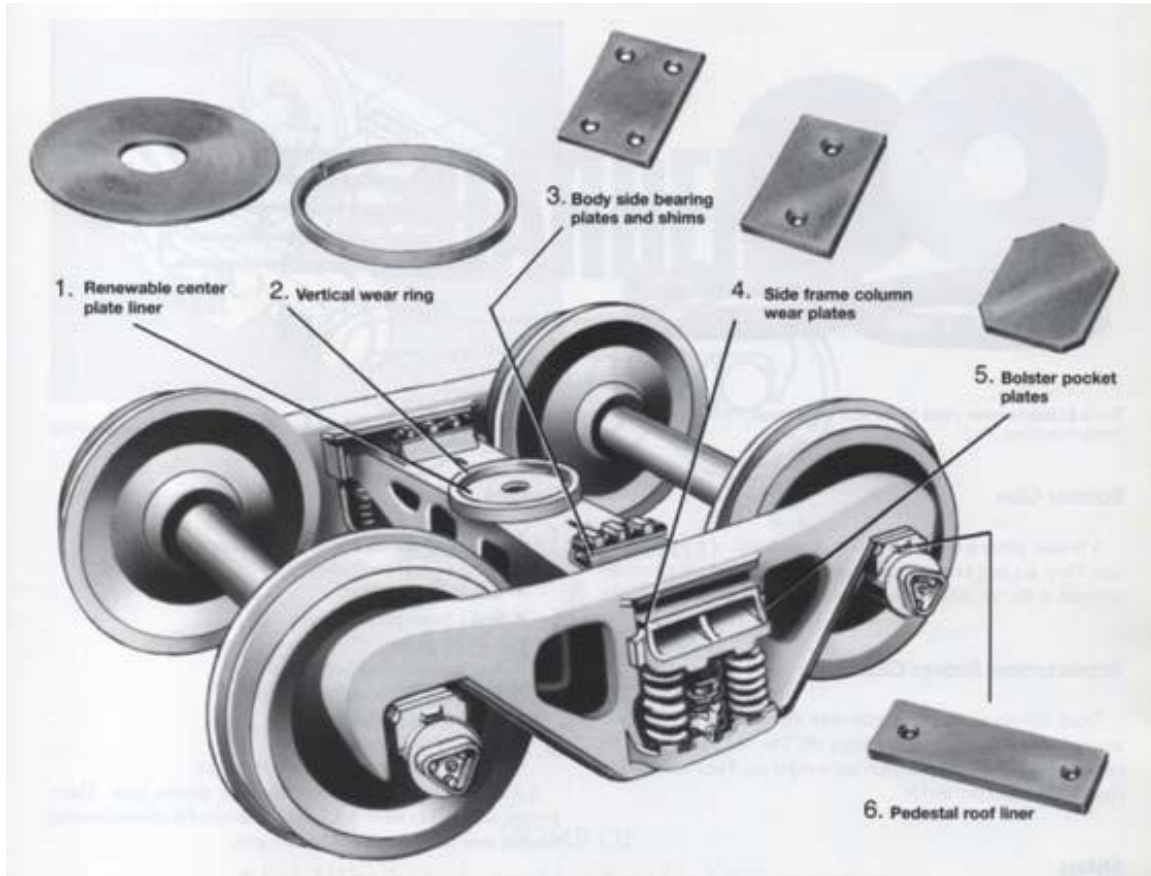
\* THE WEIGHT PER CAR SET IS EXCLUSIVE OF SIDE SPRINGS WHICH ARE A PART OF THE FRICTION DEVICE.



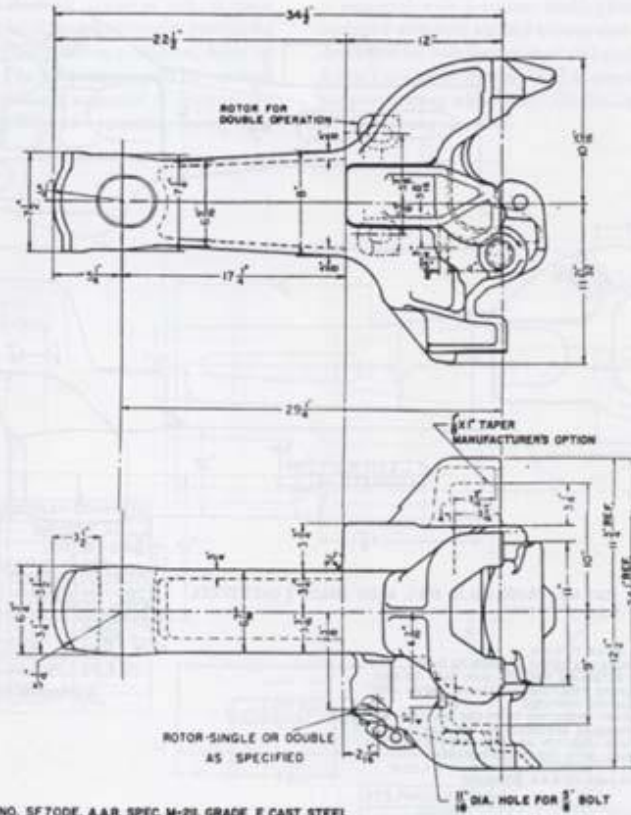
## **CCSB CONSTANT CONTACT LONG TRAVEL SIDE BEARINGS**



## TRUCK, WEAR PLATE PACKAGE



## TYPE E DOUBLE SHELF COUPLERS



CAT. NO. SF70DE, A.A.R. SPEC. M-2H, GRADE E CAST STEEL

PARTS	COUPLER COMPLETE	
	SINGLE ROTARY OPERATION	DOUBLE ROTARY OPERATION
BODY	SF70DE	SF70DE
KNUCKLE	FSIAE	FSIAE
LOCK	FAIAE	FAIAE
THROWER	F3I	F3I
KNUCKLE PIN & COTTER	CI0 & CI1	CI0 & CI1
ROTARY LOCKLIFT	F7	F7
SINGLE ROTOR	F8A	—
DOUBLE ROTOR	—	F12

SF70DE double-shelf coupler (illustration courtesy of the MCSCM)

**NYAB TMB-60 AIR BRAKE PACKAGE**

**36" WHEEL SETS, BEARING & JOURNALS**  
**AAR SPEC FOR 110TON TRUCKS**

COATINGS, WILLIAMS-HAYWARD, DECALS FROM REIDLER

Water based Gray.

