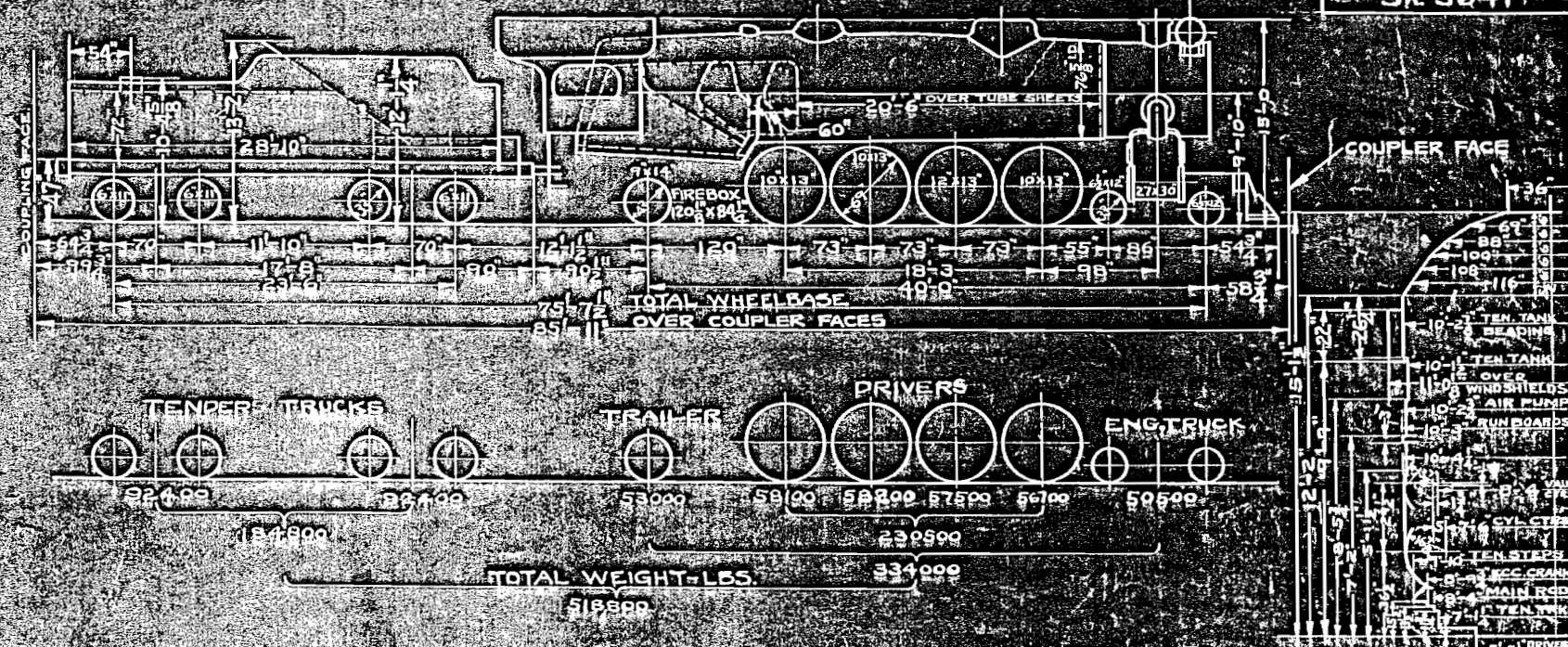


APRIL 17 1928  
SYNOPSIS OFFICE OF MECHANICAL ENGINEER

TENDERS, W-10-C. ENGS. 3313-24, 26, 28, 3331 - 3336  
FEED WATER HEATERS  
CRUCIAL TENDERS  
COSSR-1-B  
DIAGRAM  
SK 5641



ALL WEIGHTS FOR ENGINE AND TENDER IN WORKING ORDER CORRECT APPROVED  
*James C. ...*  
 A.M.E. M.E.

ITEM	BOILER	HEATING SURFACE	LENGTH OVER SHEETS	DIA	GAUGE OR THICK	DESIGN DATA	GENERAL DATA
1	BOILER TUBES 216 SPACING 4 1/8"	2587	20'-6"	2 1/2"	12 MIN	CALCULATED EVAPORATION LBS/HR	BOILER PRESSURE 200 LBS
2	BOILER FLUES 40 SPACING 3 1/4"	1176	20'-6"	5 1/2"	10 MIN	TUBES @ 8.82 LBS 22130 LBS	TRACTIVE EFFORT 53900 LBS
3	TOTAL TUBES 2 FLUES	3773				FLUES @ 9.86 LBS 11600 LBS	FACTOR OF ADHESION 4.27
4	FIREBOX PROPER	214				FIREBOX @ 55 LBS 11770 LBS	MAX CURVATURE 19'
5	COMBUSTION CHAMBER	106				COMBUSTION CHAMBER @ 55 LBS 5830 LBS	ENGINE TRUCK SWING 4 1/4"
6	SYPHONS 2 FIREBOX 1 COMB. CHAMBER	95				3 SYPHONS @ 55 LBS 5225 LBS	TRAILING TRUCK SWING 5 1/4"
7	TOTAL FIREBOX	415				TOTAL EVAPORATION 56555 LBS/HR	COAL CAPACITY 16 TONS
8	TOTAL EVAPORATING HEATING SURFACE	4168				STEAM CONSUMPTION (2624 X 220) 54580 LBS	WATER CAPACITY 10000 GALS
9	TOTAL SUPERHEATING HEATING SURFACE	1009				BOILER FACTOR 104%	STOKER L-T CONVERSION
10	TUBE SHEETS FT. 5 1/8" BK 1/2"					FIREBOX H.S. TO GRATE AREA 590	VALVE GEAR BAKER
11	GRATE AREA					TOTAL EVAP. INTO FIREBOX H.S. 10,090	FEED WATER HEATER ELES CO
12	WEIGHT WATER 2 1/2 GAUGES					TOTAL EVAP. TO SUPPLY H.G. 4.15	THROTTLE CHAMBERS-DOME TYPE-INSIDE CONN.
13						ASH PAN AIR AREA 2000 SQ. IN.	MAX CUT OFF 82.9%
14						FRAME STRS 4" FRAME WIDTH 6"	
15							