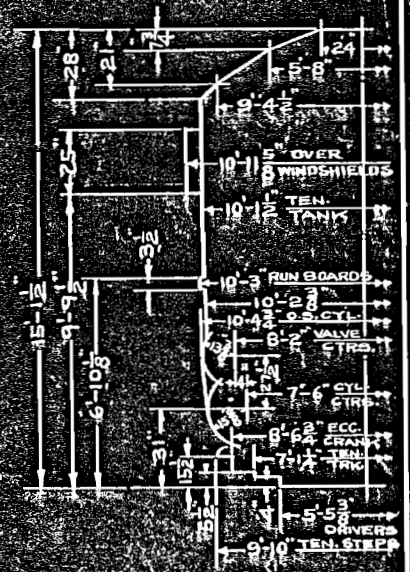
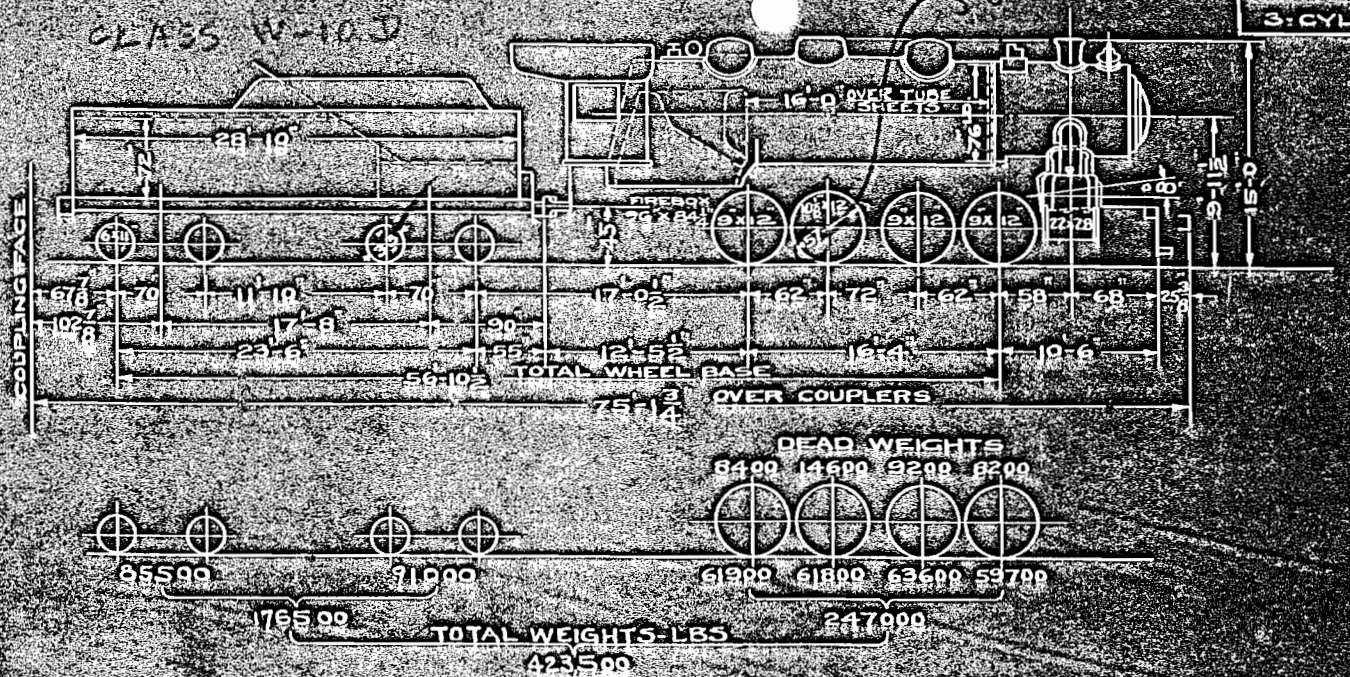


N.Y.C.H. & H.R. CO. OFFICE OF MECH. ENGR. JAN. 3. 1929

ENGS. 3610-3615 CLASS Y-4-A
 3-CYLINDER GRAM
 SKETCH 5979



ALL WEIGHTS FOR ENGINE AND TENDER IN WORKING ORDER

CORRECT

APPROVED

[Handwritten Signature]

A.T.E.

M.E.

ITEM	BOILER	HEATING SURFACE	LENGTH	DIA.	GAUGE OR THICK.	DESIGN DATA	GENERAL DATA
1	BOILER TUBES 228 SPACING 3/4	1908	16'-0"	2 1/2	12 MIN.	CALCULATED EVAPORATION LBS/HR.	BOILER PRESSURE 200 LBS.
2	BOILER FLUES 38 SPACING 1 1/2	871	16'-0"	5 1/2	10 MIN.	TUBES @ 9.60 18320 LBS.	TRACTION EFFORT 60600 LBS.
3	TOTAL TUBES & FLUES	2779				FLUES @ 11.23 9780 LBS.	FACTOR OF ADHESION 4.08
4	FIRE BOX PROPER	1861				FIRE BOX @ 55 10230 LBS.	MAX. CURVATURE 25°
5	COMBUSTION CHAMBER					COMBUSTION CHAMBER	ENGINE TRUCK SWING
6	ARCH TUBES 2	11	8'-3 1/2	3 1/2	7 1/2 MIN.	ARCH TUBES @ 55 605 LBS.	TRAILING TRUCK SWING
7	SYPHONS 2	55.5				SYPHONS @ 55 3050 LBS.	COAL CAPACITY 13 TONS
8	TOTAL FIRE BOX	252.5				TOTAL EVAPORATION 41980 LBS.	WATER CAPACITY 10000 GAL.
9	TOTAL EVAPORATING HEATING SURFACE	3041.5				ST. CONSUMPTION (208 x 2618) 54500 LBS.	STOKER
10	TOTAL SUPERHEATING HEATING SURFACE	740				BOILER FACTOR 77.1	VALVE GEAR WALSCHAERT
11	TUBE SHEETS FT. 9/16 BK. 1/2					FIRE BOX H.S. TO GRATE AREA 4.5	SUPERHEATED THROTTLE AMERICAN
12	GRATE AREA		56'136. FT.			TOTAL EVAP. H.S. TO FIREBOX H.S. 12.05	MAX. CUTOFF 84.1%
13	WEIGHT WATER 2 GAUGES					TOTAL EVAP. H.S. TO SUPHTG. H.S. 4.12	
14	ASH PAN AIR OPENING					ASH PAN AIR OPENING 106.7	

DR TR CK IN
 H.E. H.E.A.S.