

KELSEY-HAYES COMPANY
BRAKE DYNAMOMETER TEST

Sheet No. 5 of
DynaTest No. 79-7
Date: 1-16-79

BRAKE: V, W, 40MM LINING: DELCO 8032 DRUM (ROTOR) SOLID

Step 6 Pressure Sensitivity

Cycles - 2 applications at each pressure.
Speed - 80 KPH to 0 KPH (804 rpm to 0 rpm).
Hyd. Pressure Control - 290 PSI (20 Bar), 530 PSI (40 Bar), 870 PSI (60 Bar), 1160 PSI (80 Bar), 1450 PSI (100 Bar)

Initial Rotor Temperature-140°F (60°C) at beginning of each stop.

Cooling Air - ON

0 Km/h
of R.P.M.

alt. Rotor
emp. 140°F
(60°C)

Stop No.	Press PSI	Stop Time Sec.	Revs to Stop	Avg. Decel M/Sec ²	μ	Torque Lb Ft			Torque No.Fl. Avg.
						Init	Sust	Final	
1	290	12.4	87.7	1.79	.373	150	225	200	190
2	290	12.6	81.6	1.85	.385	175	225	200	197
1	580	5.9	41.1	3.76	.392	300	450	400	401
2	580	5.8	40.6	3.83	.398	300	400	450	408
1	870	3.9	26.9	5.70	.395	500	650	625	607
2	870	3.7	26.5	6.07	.416	500	675	700	640
1	1160	2.9	20.8	7.66	.397	650	875	900	816
2	1160	2.8	20.4	7.93	.411	700	875	925	845
1	1450	2.4	17.4	9.25	.385	800	1075	1125	987
2	1450	2.4	17.3	9.25	.385	800	1100	1150	987

Step 7 Temperature Sensitivity (Heat Behavior)

Cycles - 2 applications at each temperature.
Speed - 80 KPH to 0 KPH (804 rpm to 0 rpm).
Hyd. Pressure Control - 870 psi (60 Bar)
Initial Rotor Temperature - 86°F (30°C), 212°F (100°C), 392°F (200°C), 572°F (300°C), 752°F (400°C), 932°F (500°C)
Cooling Air - OFF. Record average torque, stop time, and deceleration.

0 Km/h
of R.P.M.

Hyd. Press
870 PSI
(60 Bar)

Stop No.	Rotor Temp °F °C	Stop Time Sec.	Revs to Stop	Avg. Decel M/Sec ²	Torque Lb.Ft.			Torque LB.FT. Avg.	μ
					Init	Sust	Final		
1	86 30	3.8	26.6	5.84	500	600	675	623	.405
2	86 30	3.8	27.1	5.84	500	650	625	623	.405
1	212 100	3.6	24.9	6.17	525	675	625	657	.428
2	212 100	3.6	24.3	6.17	525	700	650	657	.428
1	392 200	3.6	23.4	6.17	600	700	675	657	.428
2	392 200	3.3	22.8	6.73	675	700	725	717	.467
1	572 300	3.8	24.6	5.84	675	600	500	623	.405
2	572 300	3.6	24.6	6.17	650	625	550	657	.428
1	752 400	3.9	25.4	5.70	625	600	400	607	.395
2	752 400	3.9	25.6	5.70	625	600	450	607	.395
1	932 500	4.2	26.2	5.29	500	600	300	564	.367
2	932 500	4.2	26.4	5.29	500	600	300	564	.367

Note: Cooling air blower on for step 7 at 200 Ft/Min velocity to remove brake dust.

TEST CONDUCTED BY: R. B. [signature]

DATE: 1-16-79