

Annexure - IV

**Haulage capacity of three phase WAG9H locomotive
(Without acceleration reserve)
GR- 15:77(5.133), TM-6FRA 6068 (Three Phase)**

Service		Compensated grade	Tonnes at kmph								Start	
			20	30	40	50	60	70	80	90		100
GOODS	*WAGONS (BOXN)	Level	Up to 10800						10275	8070	6490	Up to 10800
		1/500	8310				7575	6135	5005	4140	3495	8310
		1/200	5475	5340	5200	5050	4035	3340	2785	2355	2025	5495
		1/150	4235	4150	4060	3970	3185	2650	2220	1885	1630	4615
		1/100	2895	2855	2810	2765	2225	1860	1565	1330	1155	3485
		1/50	1445	1430	1420	1405	1130	940	790	670	580	1975

- *Train resistance has been computed as per RDSO report No. M-422 August, 1984 by using formula.
 $R = 0.6438797 + 0.01047218V + 0.00007323V^2$ Kg/ton, where V is speed in KMPH and Starting train resistance has been taken as 4 kg/ton.
- The load chart is based upon maximum load of 2 X 59 BOXN (CC+8+2 t).
- Actual permissible loads should be worked out based on load trial.

Tractive effort Vs Speed of Single WAG9H locomotives											
Tractive Effort	Starting	Continuous Tractive Effort at Speed in KMPH									
		10	20	30	40	50	60	70	80	90	100
In Tons	50.97	33.1	33.1	33.1	33.1	33.1	27.5	23.7	20.7	18.3	16.6
In kN	500	325	325	325	325	325	270	233	203	180	163