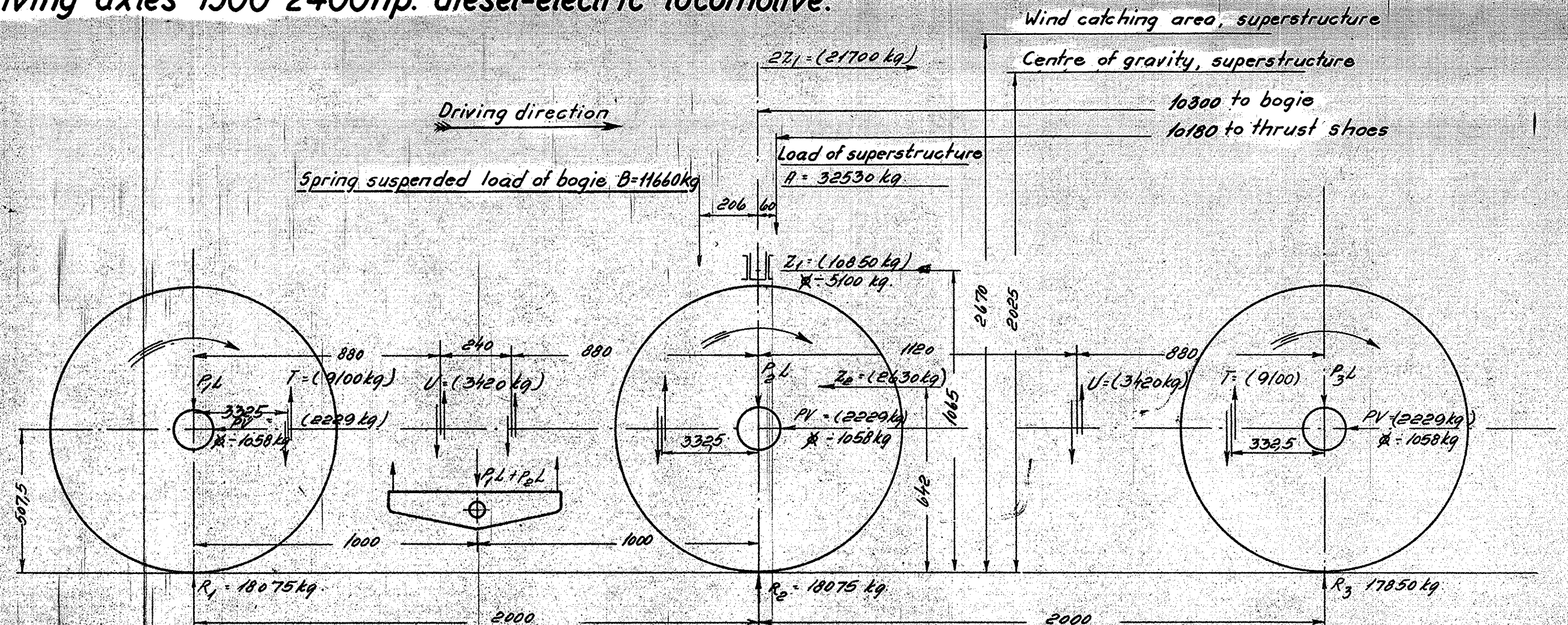
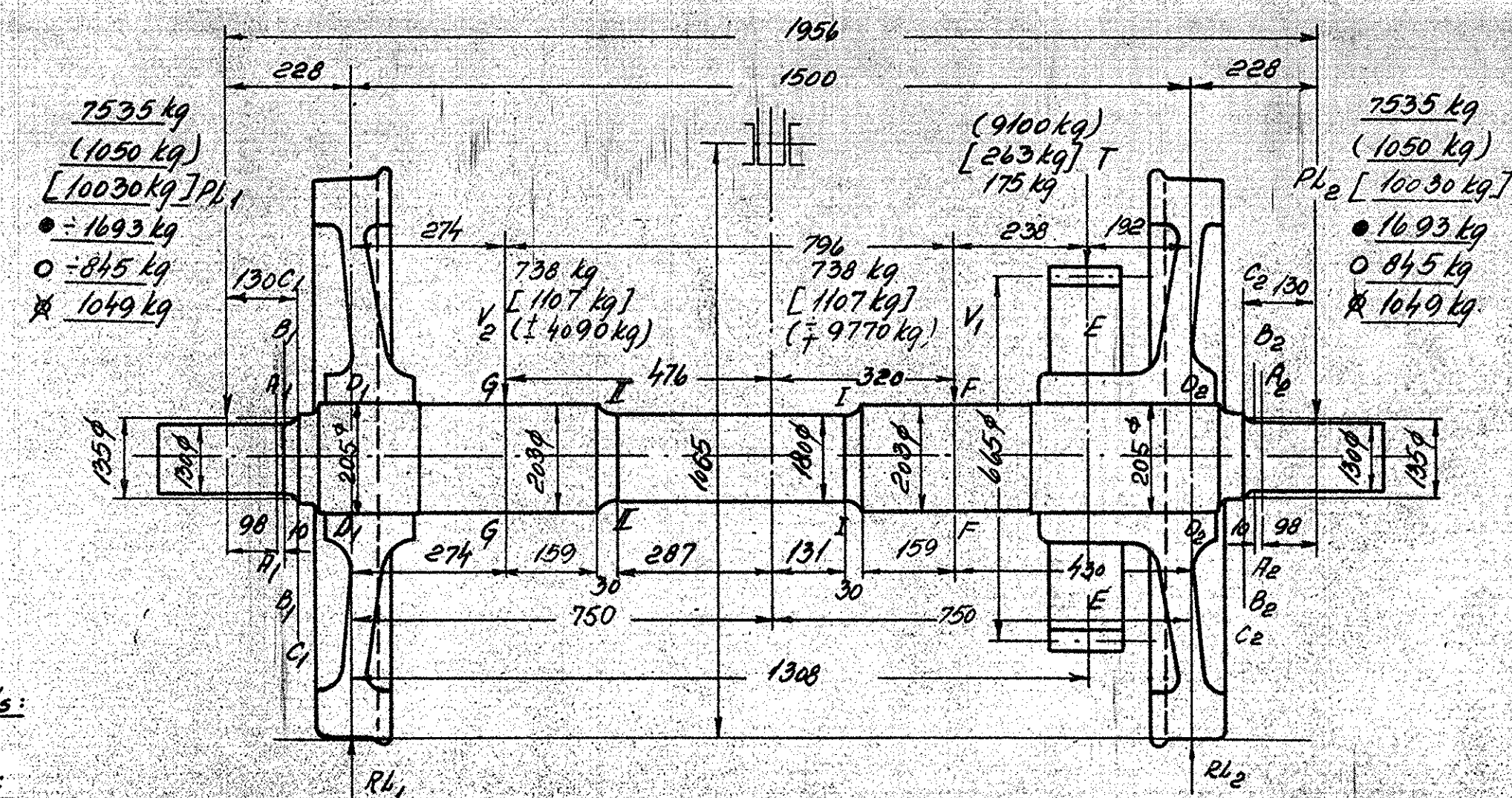


Calculation of driving axles 1500-2400hp. diesel-electric locomotive.

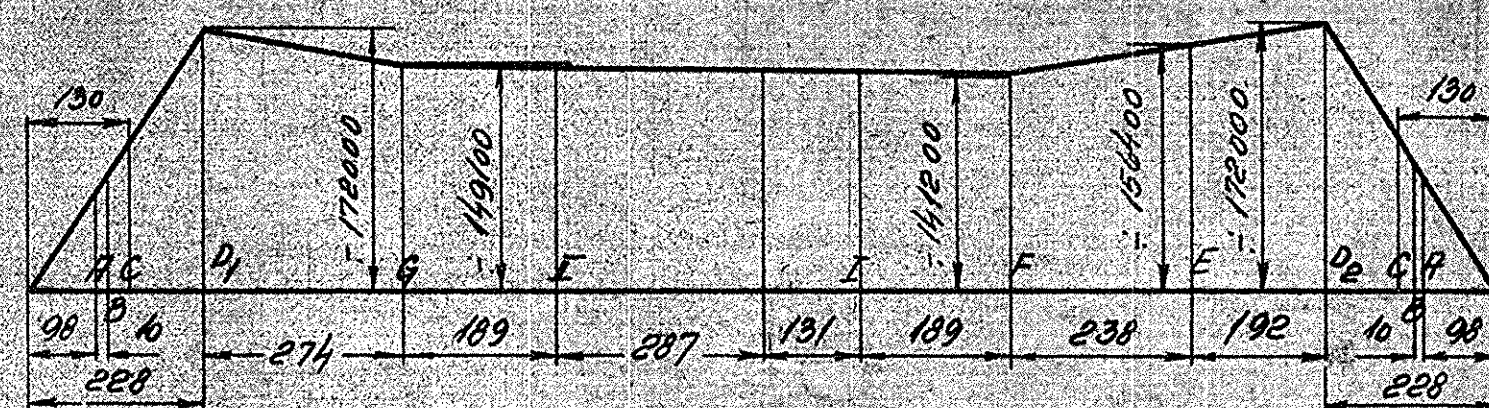


- 1) Figures without brackets: static loads
- 2) Figures in brackets (...): loads arising from the starting current
- 3) Figures in square brackets []: vertical loads + impact loads
- 4) Figures marked \circ : loads arising from wind pressure
- 5) Figures marked \bullet : loads arising from the centrifugal force
- 6) Figures marked \times : loads arising from the braking force.

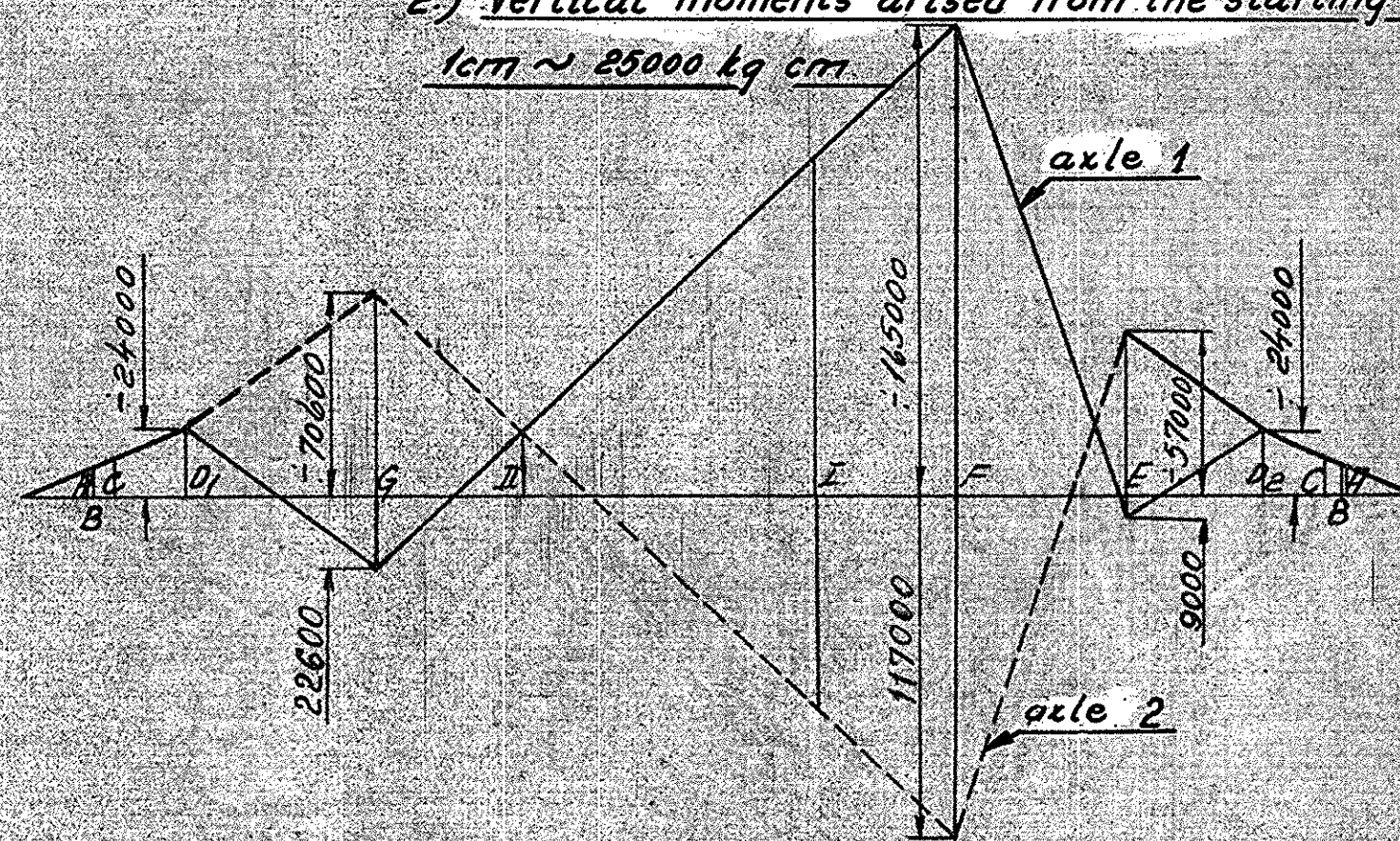
I. Static loads.

A. Vertical moments

1) Vertical moments arising from static loads. $1\text{cm} \sim 500000 \text{ kg cm}$

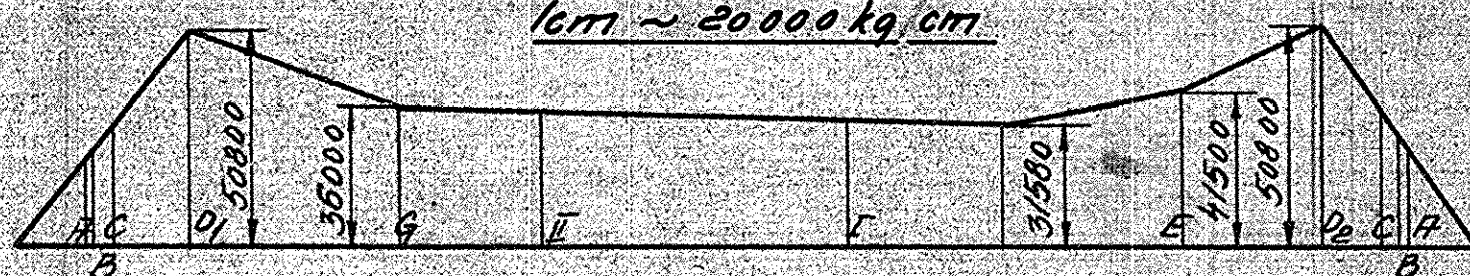


2) Vertical moments arising from the starting current. $1\text{cm} \sim 25000 \text{ kg cm}$



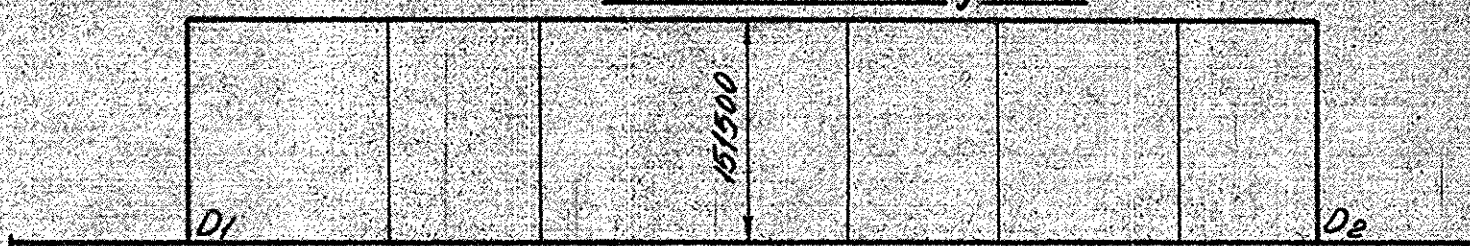
B. Horizontal moments

1) Horizontal moments arising from starting. $1\text{cm} \sim 20000 \text{ kg cm}$



C. Torsional moments

1) Torsional moments arising from starting. $1\text{cm} \sim 50000 \text{ kg cm}$

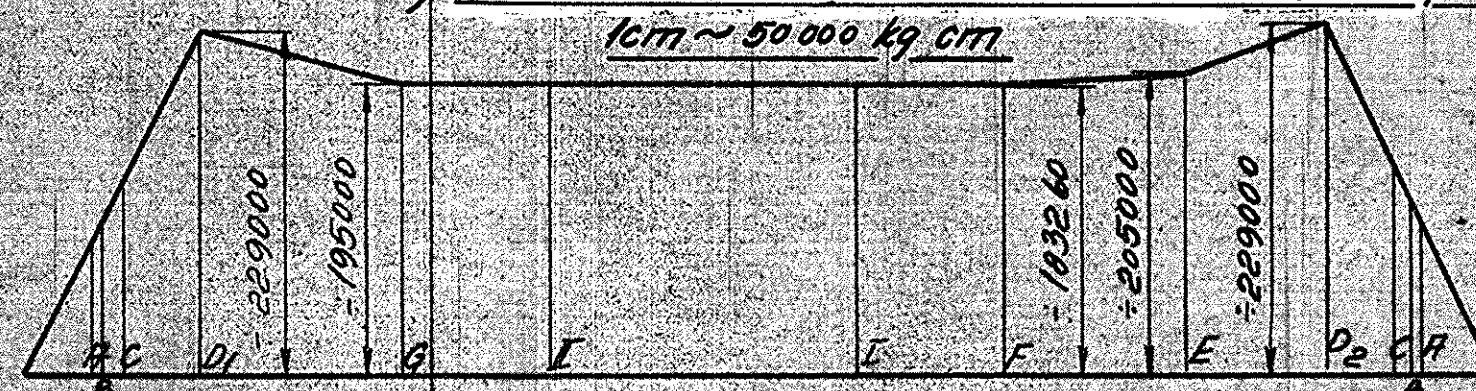


Moment curves

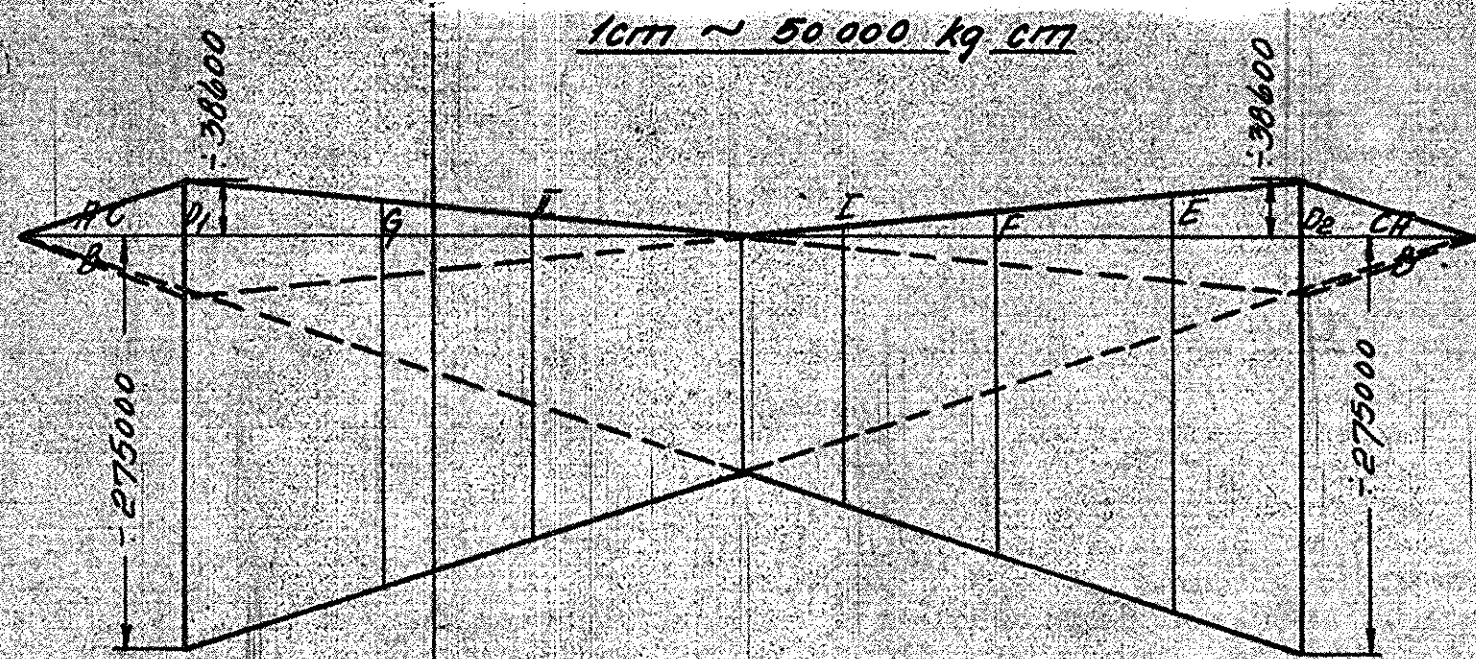
II. Static and dynamic loads

A. Vertical moments

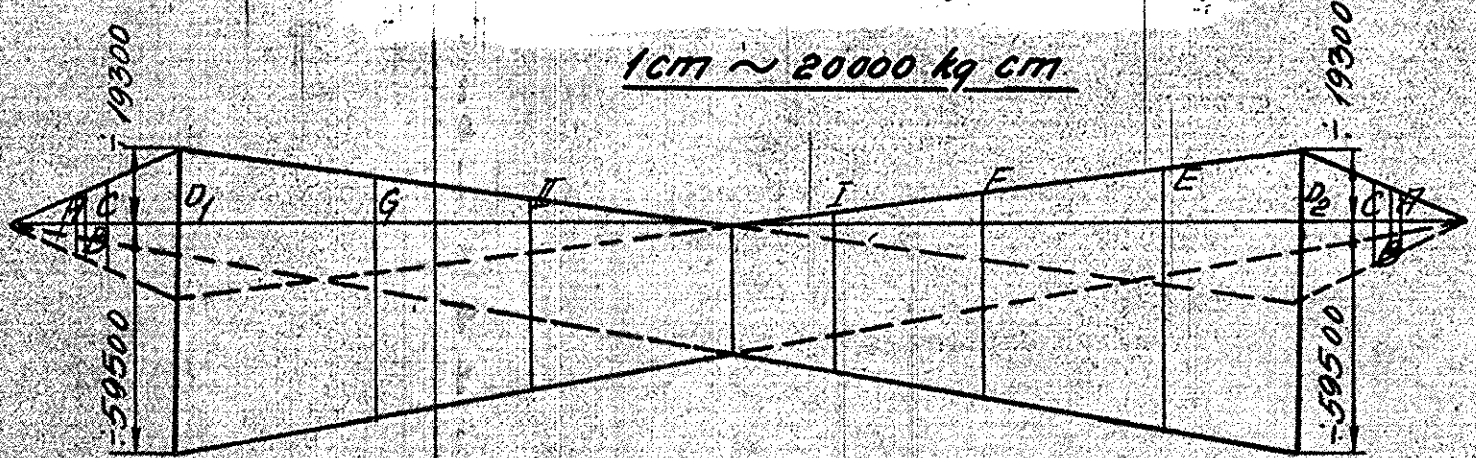
1) Vertical moments arising from static loads + impact loads. $1\text{cm} \sim 50000 \text{ kg cm}$



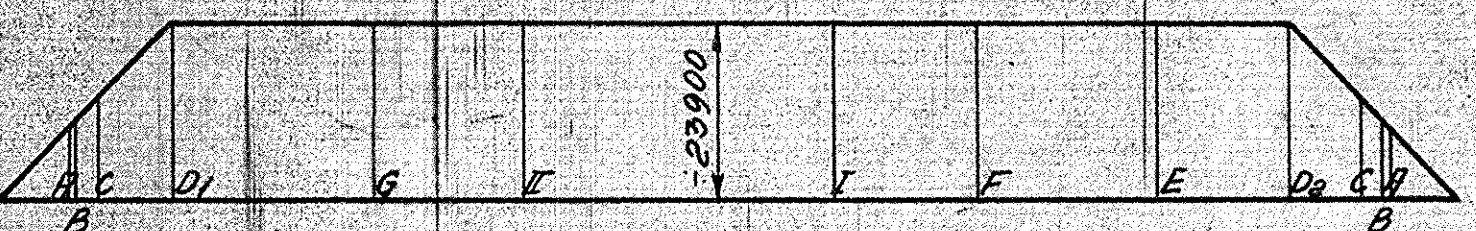
2) Vertical moments arising from the centrifugal forces. $1\text{cm} \sim 50000 \text{ kg cm}$



3) Vertical moments from 90 kg/m^2 wind pressure. $1\text{cm} \sim 20000 \text{ kg cm}$



Either 4) Vertical moments arising from braking. $1\text{cm} \sim 10000 \text{ kg cm}$



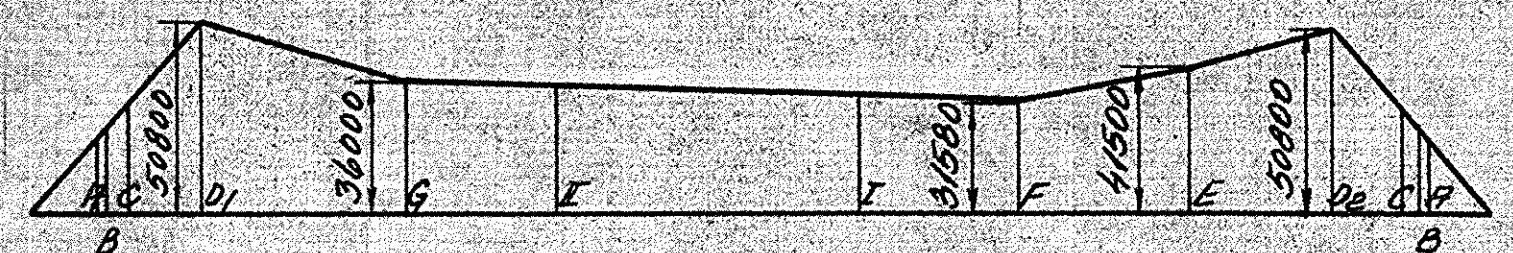
Or 5) Vertical moments arising from starting. Curve as under I-A-2)

B. Horizontal moments.

1) Horizontal moments arising from braking. $1\text{cm} \sim 10000 \text{ kg cm}$

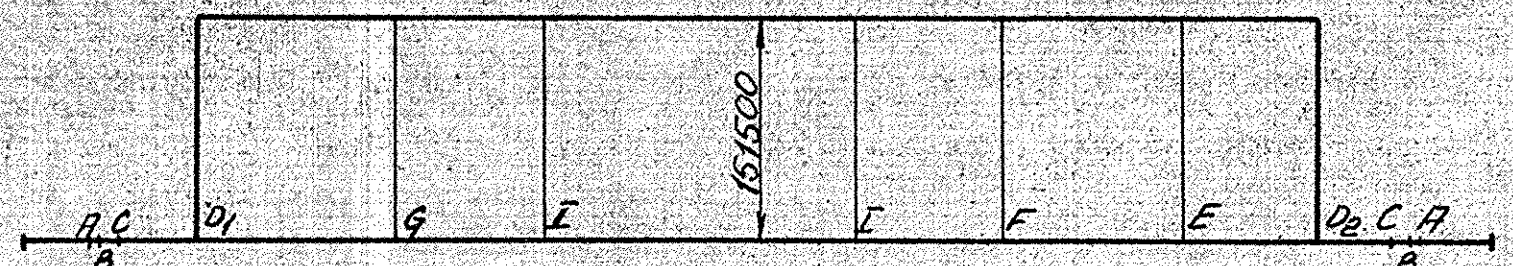


2) Horizontal moment arising from starting. $1\text{cm} \sim 20000 \text{ kg cm}$



C. Torsional moments

1) During starting. $1\text{cm} \sim 50000 \text{ kg cm}$



Tegn. <i>G.H.</i>		Rev.	Ald. <i>H.L.</i>	Målestok: ~
Kalk. <i>G.B.</i>	Norm.	Date	15/5 - 54	Indeks
Amendment of axle from 203 and 160 to 203 and 180				Q
Anvendelse		Stykliste nr.		
Diesel-electric 1500-2400hp. lokomotiv				Tegningens benævnelse
Calculation of driving axles.				Tegningens nummer E 305L - 1.113
FRICHS nr. 147				Indeks: <i>Q</i>