

Formulas.

- Dried Apricots
- Evaporated Apples
- Beef Extract
- Chocolate
- Gelatine
- Graham Flour
- Barley
- Canned Peas
- " String Beans
- " Asparagus
- Split peas
- Soda Crackers
- Sea Biscuit
- Cream of Wheat
- Hominy
- Canned Salmon.

American Railway Eng. Assoc. Formula.

131.60

Resistance in lbs. of train behind tender

Resistance in tons.

Resistance in train.

Notice of modern equipment in good condition.

Resistance in feet per mile x 20

Resistance in lbs. per ton.

Power of locomotives:

Roughly 1/3 of weight on drivers

Draw bar pull cannot be greater than

30% of weight on drivers at starting

25% " " 5 m.p.h.

20% " " 10 " "

Force developed in cylinders

$$T = \frac{2.85 P d^2 S}{D}$$

T = Tractive force in lbs.

P = Boiler steam pressure in pounds

d = diameter of cylinder in inches

S = stroke in inches

D = diameter of drivers in inches

The draw bar pull is the Tractive Force less

resistance of the locomotive.