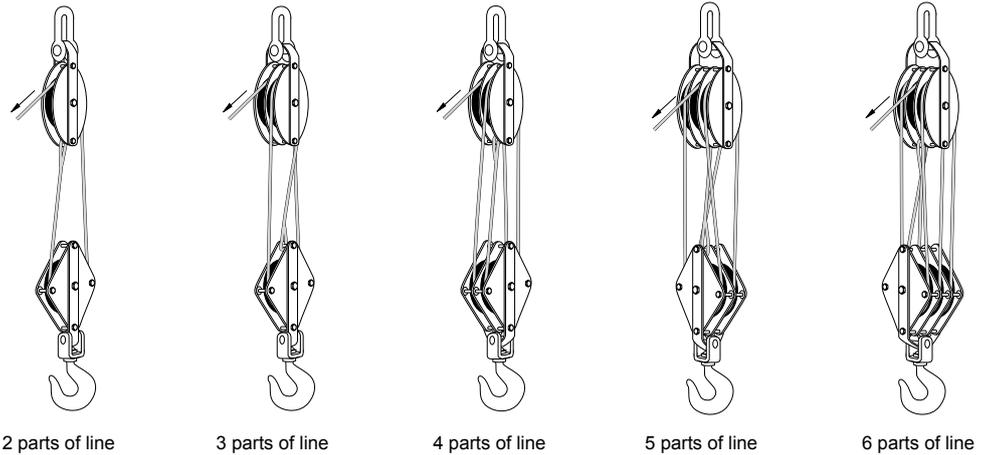


## Lifting With Multiple Line Parts



Method of reeving tackle blocks will vary with the application.

With heavy lifting systems where blocks with multiple sheaves are needed the number of blocks has to be determined. This is done for a given load that needs to be lifted, by calculating the number of parts of a line as follows:

L = load to be lifted in tons

P = single line pull in tons

R = ratio

$$R = \frac{L}{P}$$

number of parts of line	bronze bushed sheaves	roller bearing sheaves
1	0.96	0.98
2	1.87	1.98
3	2.75	2.88
4	3.59	3.81
5	4.39	4.71
6	5.16	5.60
7	5.90	6.47
8	6.60	7.32
9	7.27	8.16
10	7.91	8.98
11	8.52	9.79
12	9.11	10.6

Table 2

Example:

P = 3 tons

How many parts of line are needed?

$$R = \frac{L}{P} = \frac{16}{3} = 5.3$$

Refer to ratio 5.3 in table 2 or the next larger number nearest to it, and then check the column under the header "number of parts of line" For blocks with roller bearing sheaves this results in 6 parts of line that should be used to lift a 16 tons load with a line pull of 3 tons.