

Table No. 27.—Black-wire-rope Purchases.

TABLE OF SAFE-WORKING LOADS FOR A PURCHASE CARRYING THE LOAD ON SIX PARTS (DIAGRAM NO. 14).

(Ropes are to be equal to the breaking-loads specified in Table 2.)

| Size of Rope. | | Strands and Wires 6/19. | | Strands and Wires 6/24. | | Strands and Wires 6/37. | |
|--|--------------------------------|----------------------------|--------------------------|-----------------------------|--------------------------|-----------------------------|--------------------------|
| Circumference, in Inches. | Diameter, in Inches (approx.). | Working-load, in Tons, &c. | Working-load, in Pounds. | Working-load, in Tons, &c. | Working-load, in Pounds. | Working-load, in Tons, &c. | Working-load, in Pounds. |
| 1 $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$ | $\frac{5}{16}$ | T. cwt. qr. lb. 3 0 0 0 | 6,720 | T. cwt. qr. lb. 2 14 0 0 | 6,048 | T. cwt. qr. lb. 2 18 0 0 | 6,496 |
| | $\frac{13}{32}$ | 4 14 0 0 | 10,528 | 4 10 0 0 | 10,080 | 4 6 0 0 | 9,632 |
| | $\frac{15}{32}$ | 6 14 0 0 | 15,008 | 6 6 0 0 | 14,112 | 6 8 0 0 | 14,336 |
| | $\frac{9}{16}$ | 9 2 0 0 | 20,384 | 8 8 0 0 | 18,816 | 9 0 0 0 | 20,160 |
| 2 $\frac{1}{2}$ $\frac{3}{4}$ $\frac{1}{1}$ | $\frac{5}{8}$ | 12 8 0 0 | 27,776 | 11 10 0 0 | 25,760 | 11 18 0 0 | 26,656 |
| | $\frac{23}{32}$ | 15 12 0 0 | 34,944 | 14 6 0 0 | 32,032 | 15 6 0 0 | 34,272 |
| | $\frac{13}{16}$ | 19 2 0 0 | 42,784 | 17 8 0 0 | 38,976 | 18 2 0 0 | 40,544 |
| | $\frac{7}{8}$ | 22 18 0 0 | 51,296 | 21 12 0 0 | 48,384 | 22 6 0 0 | 49,952 |
| 3 | $\frac{15}{16}$ | 28 18 0 0 | 64,736 | 25 8 0 0 | 56,896 | 26 18 0 0 | 60,256 |

Table No. 28.—Galvanized-wire-rope Purchases.

TABLE OF SAFE-WORKING LOADS FOR A PURCHASE CARRYING THE LOAD ON TWO PARTS (DIAGRAM NO. 10).

(Ropes are to be equal to the breaking-loads specified in Table 3.)

| Size of Rope. | | Strands and Wires 6/12. | | Strands and Wires 6/24. | | Strands and Wires 6/30. | |
|--|--------------------------------|-----------------------------|--------------------------|-----------------------------|--------------------------|-----------------------------|--------------------------|
| Circumference, in Inches. | Diameter, in Inches (approx.). | Working-load, in Tons, &c. | Working-load, in Pounds. | Working-load, in Tons, &c. | Working-load, in Pounds. | Working-load, in Tons, &c. | Working-load, in Pounds. |
| 1 $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$ | $\frac{5}{16}$ | T. cwt. qr. lb. 0 13 1 9 | 1,493 | T. cwt. qr. lb. 0 17 1 9 | 1,941 | T. cwt. qr. lb. 0 17 1 9 | 1,941 |
| | $\frac{13}{32}$ | 1 0 2 19 | 2,315 | 1 9 1 9 | 3,285 | 1 4 0 0 | 2,688 |
| | $\frac{15}{32}$ | 1 12 0 0 | 3,584 | 2 0 2 19 | 4,555 | 1 16 0 0 | 4,032 |
| | $\frac{9}{16}$ | 2 2 2 19 | 4,779 | 2 18 0 0 | 6,496 | 2 10 0 0 | 5,600 |
| 2 $\frac{1}{2}$ $\frac{3}{4}$ $\frac{1}{1}$ | $\frac{5}{8}$ | 2 15 1 9 | 6,197 | 3 14 2 19 | 8,363 | 3 6 2 19 | 7,467 |
| | $\frac{23}{32}$ | 3 12 0 0 | 8,064 | 4 18 0 0 | 10,976 | 4 5 1 9 | 9,557 |
| | $\frac{13}{16}$ | 4 8 0 0 | 9,856 | 5 18 0 0 | 13,216 | 5 1 1 9 | 11,349 |
| | $\frac{7}{8}$ | 5 1 1 9 | 11,349 | 7 0 2 19 | 16,755 | 6 10 2 19 | 14,635 |
| 3 | $\frac{15}{16}$ | 6 4 0 0 | 13,888 | 8 11 1 9 | 19,189 | 7 16 2 19 | 17,547 |