

## SPRĘŻYNY SKRĘTNE

| NAZWA | ŚREDNICA DRUTU | ŚREDNICA WEWNĘTRZNA | WYSOKOŚĆ ZWIJKI | DŁUGOŚĆ CAŁKOWITA | DŁUGOŚĆ RAMION | RODZAJ DRUTU   | cena  |
|-------|----------------|---------------------|-----------------|-------------------|----------------|----------------|-------|
|       | d              | Dw                  | Lh              | Lo                | Lr             |                |       |
| S128  | 0.5            | 3.45                | 2.50            | 13.80             | 4.60/11.40     | czarny węglowy | 12.00 |
| S23   | 0.6            | 3.30                | 4.25            |                   |                | ocynk          | 2.00  |
| S122  | 0.6            | 9.50                | 1.80            | 47.00             | 24.00          | ocynk          | 3.00  |
| S46   | 0.8            | 3.50                | 7.50            |                   | 9.80/15.15     | czarny węglowy | 3.00  |
| S94   | 0.8            | 7.40                | 2.40            | 12.20             | 7.15           | czarny węglowy | 15.00 |
| S137  | 0.8            | 16.20               | 3.20            | 21.20             | 9.00           | ocynk          | 7.00  |
| S90   | 0.85           | 9.20                | 7.50            | 11.90             | 7.16           | ocynk          | 15.00 |
| S136  | 0.9            | 18.15               | 2.70            | 60.60             | 50.88/11.90    | nierdzewny     | 15.00 |
| S84   | 1.0            | 7.30                | 4.00            |                   | 22.80          | nierdzewny     | 8.00  |
| S95   | 1.0            | 9.40                | 2.00            | 13.00             | 7.38           | ocynk          | 15.00 |
| S101  | 1.0            | 11.10               | 6.00            | 65.00             | 32.00          | nierdzewny     | 20.00 |
| S85   | 1.00           | 7.00                | 3.00            |                   | 22.00          | ocynk          | 8.00  |
| S134  | 1.1            | 14.46               | 3.30            | 39.60             | 16.80/19.00    | czarny węglowy | 7.00  |
| S10   | 1.2            | 4.62                | 2.53            |                   | 26.70          | nierdzewny     | 20.00 |
| S22   | 1.2            | 6.60                | 4.84            |                   |                | czarny węglowy | 3.50  |
| S86   | 1.2            | 7.00                | 5.00            |                   | 24.00          | nierdzewny     | 8.00  |
| S87   | 1.2            | 6.90                | 5.00            |                   | 3.60           | nierdzewny     | 8.00  |
| S112  | 1.2            | 10.60               | 6.00            | 57.50             | 13.20/43.00    | ocynk          | 3.50  |
| S121  | 1.2            | 12.50               | 2.4             | 31.43             | 23.60/26.70    | ocynk          | 3.00  |
| S129  | 1.2            | 19.80               | 4.80            | 43.10             | 13.00          | nierdzewny     | 12.00 |
| S83   | 1.3            | 6.50                | 5.25            |                   | 24.24          | nierdzewny     | 8.00  |
| S132  | 1.3            | 5.10                | 3.98            | 36.70             | 24.20/20.50    | nierdzewny     | 10.00 |
| S32   | 1.4            | 7.20/10.35          |                 | 43.60             |                | czarny węglowy | 6.00  |
| S34   | 1.4            | 4.40                | 12.50           |                   |                | nierdzewny     | 8.00  |
| S35   | 1.4            | 4.20                | 8.70            |                   |                | czarny węglowy | 4.00  |
| S110  | 1.4            | 9.40                | 7.00            | 57.00             | 18.00/50.70    | czarny węglowy | 3.00  |
| S24   | 1.5            | 11.00               | 41.50           |                   |                | czarny węglowy | 6.00  |
| S31   | 1.5            | 20.60               | 6.04            |                   |                | czarny węglowy | 3.00  |
| S41   | 1.5            | 8.70                | 3.05            | 33.80             | 30.22          | czarny węglowy | 18.00 |
| S120  | 1.5            | 9.20                | 4.50            | 28.60             | 17.00/15.50    | ocynk          | 7.00  |
| S21   | 1.55           |                     |                 | 47.35             |                | nierdzewny     | 2.50  |
| S130  | 1.55 para      | 17.30               | 4.75            | 31.50             | 11.30/17.20    | nierdzewny     | 36.00 |
| S49   | 1.6            | 26.68               | 3.28            |                   | 13.29          | czarny węglowy | 13.00 |
| S93   | 1.6            | 9.30                | 8.20            |                   | 22.40/45.30    | czarny węglowy | 3.50  |
| S107  | 1.6            | 8.90                | 6.40            | 58.50             | 17.60/52.80    | czarny węglowy | 3.00  |
| S131  | 1.6            | 5.70                |                 | 97.80             | 46.00          | nierdzewny     | 8.00  |
| S125  | 1.6 lewa       | 10.00               | 6.50            | 55.00             | 10.20/48.50    | czarny węglowy | 8.00  |
| S126  | 1.6 prawa      | 10.00               | 6.50            | 55.00             | 10.20/48.50    | czarny węglowy | 8.00  |
| S17   | 1.7            | 15.80               | 5.12            |                   | 40.50/35.80    | czarny węglowy | 5.00  |
| S17a  | 1.7            | 15.80               | 5.12            |                   | 40.50/35.80    | czarny węglowy | 5.00  |
| S114  | 1.7            | 8.35                | 5.12            | 33.50             | 14.00/27.00    | czarny węglowy | 5.00  |
| S115  | 1.7            | 8.35                | 5.12            | 33.50             | 14.00/27.00    | czarny węglowy | 5.00  |
| S133  | 1.7            | 10.30               | 8.50            | 61.90             | 18.90          | nierdzewny     | 15.00 |
| S127  | 1.8            | 9.00                | 5.60            | 68.20             | 53.00          | czarny węglowy | 7.00  |

|      |           |             |            |        |             |                |       |
|------|-----------|-------------|------------|--------|-------------|----------------|-------|
| S25  | 1.9       | 8.60        | 5.90       |        |             | czarny węglowy | 6.00  |
| S15  | 2.0       | 10.70       | 6.00       |        | 61.70/42.30 | nierdzewny     | 5.00  |
| S29  | 2.0       | 21.40       | 4.00       |        |             | czarny węglowy | 22.00 |
| S30  | 2.0       | 16.80       | 4.00       |        |             | czarny węglowy | 22.00 |
| S33  | 2.0       | 60.50       |            |        |             | ocynk          | 5.00  |
| S36  | 2.0       | 5.30        | 90.90      | 110.00 |             | czarny węglowy | 7.00  |
| S44  | 2.0       | 11.00       | 10.00      |        | 76.50       | czarny węglowy | 5.00  |
| S45  | 2.0       | 5.96        | 14.20      |        | 40.00       | czarny węglowy | 7.00  |
| S98  | 2.0       | 6.30        | 24.00      | 161.00 | 138.00      | czarny węglowy | 25.00 |
| S97  | 2.0       | 11.50       | 8.00       | 67.00  | 15.00/60.70 | czarny węglowy | 3.50  |
| S99  | 2.0       | 11.50       | 8.00       | 67.00  | 15.00/60.70 | czarny węglowy | 3.50  |
| S102 | 2.0       | 11.00       | 8.00       | 72.70  | 16.70/66.00 | czarny węglowy | 3.00  |
| S103 | 2.0       | 11.00       | 8.00       | 72.70  | 16.70/66.00 | czarny węglowy | 3.00  |
| S106 | 2.0       | 12.20       | 8.00       | 85.10  | 14.70/76.60 | czarny węglowy | 3.00  |
| S104 | 2.0       | 12.20       | 8.00       | 85.10  | 14.70/76.60 | czarny węglowy | 3.00  |
| S100 | 2.0       | 12.50       | 10.00      | 86.00  | 17.70/77.40 | czarny węglowy | 3.00  |
| S116 | 2.0       | 6.00        | 24.00      | 64.40  | 29.00/60.15 | nierdzewny     | 10.00 |
| S117 | 2.0       | 6.00        | 24.00      | 64.40  | 29.00/60.15 | nierdzewny     | 10.00 |
| S135 | 2.0       | 6.00        | 14.00      | 36.25  | 19.70       | czarny węglowy | 8.00  |
| S48  | 2.0 lewa  | 8.00        | 8.17       | 129.66 | 62.30       | czarny węglowy | 5.00  |
| S52  | 2.0 lewa  | 8.00        | 8.00       |        | 87.20       | czarny węglowy | 5.00  |
| S54  | 2.0 lewa  | 8.00        | 6.00       |        | 75.00       | czarny węglowy | 5.00  |
| S55  | 2.0 lewa  | 8.00        | 12.00      |        | 89.00       | czarny węglowy | 6.00  |
| S58  | 2.0 lewa  | 8.00        | 10.10      | 162.60 | 77.00       | czarny węglowy | 5.00  |
| S60  | 2.0 lewa  | 8.00        | 14.13      | 158.16 | 74.90       | czarny węglowy | 6.00  |
| S61  | 2.0 lewa  | 11.00       | 14.12      | 147.70 | 68.30       | czarny węglowy | 6.00  |
| S64  | 2.0 lewa  | 11.00       | 6.10       | 81.90  | 74.70       | czarny węglowy | 5.00  |
| S67  | 2.0 lewa  | 11.00       | 8.15       | 90.60  | 83.30       | czarny węglowy | 5.00  |
| S68  | 2.0 lewa  | 11.00       | 8.10       | 122.60 | 60.30       | czarny węglowy | 5.00  |
| S70  | 2.0 lewa  | 11.00       | 12.00      | 96.12  | 89.50       | czarny węglowy | 5.00  |
| S72  | 2.0 lewa  | 11.00       | 10.00      | 158.00 | 76.00       | czarny węglowy | 5.00  |
| S47  | 2.0 prawa | 8.00        | 8.17       | 129.66 | 62.30       | czarny węglowy | 5.00  |
| S51  | 2.0 prawa | 8.00        | 8.00       |        | 87.20       | czarny węglowy | 5.00  |
| S53  | 2.0 prawa | 8.00        | 6.00       |        | 75.00       | czarny węglowy | 5.00  |
| S56  | 2.0 prawa | 8.00        | 12.00      |        | 89.00       | czarny węglowy | 6.00  |
| S57  | 2.0 prawa | 8.00        | 10.10      | 162.60 | 77.00       | czarny węglowy | 5.00  |
| S59  | 2.0 prawa | 8.00        | 14.30      | 158.16 | 74.90       | czarny węglowy | 6.00  |
| S62  | 2.0 prawa | 11.00       | 14.12      | 147.70 | 68.30       | czarny węglowy | 6.00  |
| S65  | 2.0 prawa | 11.00       | 6.10       | 81.90  | 74.70       | czarny węglowy | 5.00  |
| S66  | 2.0 prawa | 11.00       | 8.15       | 90.60  | 83.30       | czarny węglowy | 5.00  |
| S69  | 2.0 prawa | 11.00       | 8.10       | 122.60 | 60.30       | czarny węglowy | 5.00  |
| S71  | 2.0 prawa | 11.00       | 12.00      | 96.12  | 89.50       | czarny węglowy | 5.00  |
| S123 | 2.1       | 21.40/14.20 | 10.50/4.20 | 96.00  | 78.50       | nierdzewny     | 15.00 |
| S73  | 2.1 lewa  | 21.20       | 4.20       | 119.00 | 107.00      | nierdzewny     | 8.00  |
| S76  | 2.1 lewa  | 21.20       | 6.30       | 81.20  | 69.10       | nierdzewny     | 8.00  |
| S78  | 2.1 lewa  | 21.20       | 10.50      | 92.00  | 80.50       | nierdzewny     | 10.00 |
| S79  | 2.1 lewa  | 21.20       | 8.40       | 117.00 | 105.80      | nierdzewny     | 10.00 |
| S82  | 2.1 lewa  | 21.20       | 6.30       | 161.00 | 74.20       | nierdzewny     | 8.00  |

|      |           |       |       |        |             |                |       |
|------|-----------|-------|-------|--------|-------------|----------------|-------|
| S74  | 2.1 prawa | 21.20 | 4.20  | 119.00 | 107.00      | nierdzewny     | 8.00  |
| S75  | 2.1 prawa | 21.20 | 6.30  | 81.20  | 69.10       | nierdzewny     | 8.00  |
| S77  | 2.1 prawa | 21.20 | 10.50 | 92.00  | 80.50       | nierdzewny     | 10.00 |
| S80  | 2.1 prawa | 21.20 | 8.40  | 117.00 | 105.80      | nierdzewny     | 10.00 |
| S81  | 2.1 prawa | 21.20 | 6.30  | 161.00 | 74.20       | nierdzewny     | 8.00  |
| S20  | 2.2       | 18.20 | 18.20 |        |             | czarny węglowy | 6.00  |
| S26  | 2.2       | 6.70  | 8.85  |        |             | czarny węglowy | 7.00  |
| S108 | 2.2       | 8.10  | 6.70  | 31.90  | 25.70       | czarny węglowy | 15.00 |
| S8a  | 2.5       | 12.50 | 7.55  |        | 50.85       | czarny węglowy | 25.00 |
| S8b  | 2.5       | 11.25 | 10.00 |        | 27.10       | ocynk          | 25.00 |
| S11  | 2.5       | 7.70  | 12.60 |        | 29.00       | czarny węglowy | 25.00 |
| S14  | 2.5       | 21.00 | 12.70 |        |             | czarny węglowy | 30.00 |
| S43  | 2.5       | 19.75 | 7.54  | 149.20 | 72.00/78.00 | ocynk          | 7.00  |
| S118 | 2.5       | 19.50 | 7.50  | 52.50  | 17.10/40.00 | ocynk          | 15.00 |
| S119 | 2.5       | 19.50 | 7.50  | 52.50  | 17.10/40.00 | ocynk          | 15.00 |
| S138 | 2.5       | 8.10  | 15.40 | 35.00  | 28.00/25.00 | nierdzewny     | 25.00 |
| S50  | 2.5 prawa | 20.00 | 10.00 | 75.38  | 63.63       | ocynk          | 8.00  |
| S37  | 2.50      | 20.00 | 10.30 | 80.00  | 67.50       | ocynk          | 6.00  |
| S38  | 2.50      | 20.00 | 10.10 | 152.00 | 73.00       | ocynk          | 6.00  |
| S5   | 2.8       | 17.90 | 8.34  |        | 65.45       | czarny węglowy | 30.00 |
| S105 | 2.8       | 13.85 | 16.80 | 72.40  | 62.00       | nierdzewny     | 30.00 |
| S2   | 3.0       | 20.85 | 15.20 |        | 73.60       | czarny węglowy | 30.00 |
| S6   | 3.0       | 21.30 | 12.00 |        |             | czarny węglowy | 30.00 |
| S16  | 3.0       | 16.50 | 21.30 |        | 30.20/55.70 | czarny węglowy | 6.00  |
| S9   | 3.0       | 18.85 | 12.15 |        | 54.00/22.55 | czarny węglowy | 6.00  |
| S27  | 3.0       | 16.20 | 12.04 |        |             | ocynk          | 13.00 |
| S111 | 3.0       | 37.65 | 31.65 | 99.00  | 39.80/81.15 | czarny węglowy | 15.00 |
| S113 | 3.0       | 13.70 | 12.00 | 147.00 | 67.50/80.00 | czarny węglowy | 7.00  |
| S1   | 3.2       | 12.10 | 6.30  |        | 40.95       | czarny węglowy | 45.00 |
| S3   | 3.2       | 21.10 | 16.50 |        | 72.50       | czarny węglowy | 30.00 |
| S4   | 3.2       | 18.50 | 12.95 |        | 75.00       | czarny węglowy | 30.00 |
| S18  | 3.2       | 25.00 | 9.62  |        | 65.00       | czarny węglowy | 35.00 |
| S28  | 3.2       | 6.70  | 6.40  |        |             | czarny węglowy | 6.00  |
| S13  | 3.5       | 19.80 | 7.00  |        |             | czarny węglowy | 30.00 |
| S124 | 3.5       | 26.00 | 17.60 | 61.70  | 40.00/37.60 | czarny węglowy | 25.00 |
| S7   | 4.0       | 23.50 | 16.15 |        |             | czarny węglowy | 30.00 |
| S12  | 4.0       | 17.00 | 24.20 |        | 55.50       | czarny węglowy | 20.00 |
| S40  | 4.0       | 26.00 | 48.33 | 105.80 | 22.36/35.11 | czarny węglowy | 25.00 |
| S42  | 4.0       | 23.00 | 16.35 |        | 80.00/68.00 | czarny węglowy | 23.00 |
| S109 | 4.0       | 20.60 | 8.00  | 62.96  | 49.60       | czarny węglowy | 20.00 |
| S92  | 4.0       | 28.30 | 32.00 |        | 35.30/49.00 | czarny węglowy | 35.00 |
| S19  | 5.0       | 10.70 | 21.30 |        |             | czarny węglowy | 10.00 |
| S63  | 5.0       | 23.50 | 25.00 | 130.90 | 115.00      | czarny węglowy | 35.00 |
| S88  | 5.0       | 23.50 | 25.15 | 86.35  | 69.90       | czarny węglowy | 35.00 |
| S39  | 5.5       | 23.40 | 33.40 | 128.80 | 113.15      | czarny węglowy | 45.00 |
| S89  | 6.0       | 30.60 | 42.60 | 178.22 | 92.80       | czarny węglowy | 45.00 |
| S91  | 6.5       | 28.60 | 39.00 | 156.00 | 72.30/80.00 | czarny węglowy | 35.00 |