



**THE SIAM INDUSTRIAL WIRE CO., LTD**

## COLD DRAWN AND HARD DRAWN WIRE

| STANDARD                   | NOMINAL<br>DIAMETER | DIAMETER<br>TOLERANCE | NOMINAL<br>AREA  | NOMINAL<br>WEIGHT | WEIGHT<br>TOLERANCE | RIB SPACING | TENSILE<br>STRENGTH   | YIELD<br>STRENGTH | DEFORM HIGHT | MINIMUM<br>REDUCTION OF AREA |
|----------------------------|---------------------|-----------------------|------------------|-------------------|---------------------|-------------|-----------------------|-------------------|--------------|------------------------------|
|                            | mm.                 | mm.                   | mm. <sup>2</sup> | kg./m.            | %                   | mm.         | Mpa                   | Mpa (0.5%)        | (mm.)        | %                            |
| ASTM A 82                  | 2.5                 | +/- 0.08              | 5.00             |                   |                     |             | 550                   | 485               |              | 30                           |
|                            | 4.4                 | +/- 0.08              | 15.00            |                   |                     |             | 550                   | 485               |              | 30                           |
|                            | 5.0                 | +/- 0.08              | 20.00            |                   |                     |             | 550                   | 485               |              | 30                           |
|                            | 6.7                 | +/- 0.10              | 35.00            |                   |                     |             | 550                   | 485               |              | 30                           |
|                            | 8.7                 | +/- 0.10              | 60.00            |                   |                     |             | 550                   | 485               |              | 30                           |
| ASTM A 496                 | 5.6                 |                       | 25.00            | 0.1962            | +/- 6               | 4.62 - 7.24 | 585                   | 515               |              |                              |
|                            | 6.7                 |                       | 35.00            | 0.2747            | +/- 6               | 4.62 - 7.24 | 585                   | 515               |              |                              |
|                            | 7.6                 |                       | 45.00            | 0.3532            | +/- 6               | 4.62 - 7.24 | 585                   | 515               |              |                              |
|                            | 8.0                 |                       | 50.00            | 0.3925            | +/- 6               | 4.62 - 7.24 | 585                   | 515               |              |                              |
|                            | 8.7                 |                       | 60.00            | 0.4709            | +/- 6               | 4.62 - 7.24 | 585                   | 515               |              |                              |
| TIS 747                    | 3.00                | +/-0.1                | 7.07             | -                 | -                   | -           | 550                   | 485               | -            | 30                           |
|                            | 4.00                | +/-0.1                | 12.57            | -                 | -                   | -           | 550                   | 485               | -            | 30                           |
|                            | 5.00                | +/-0.1                | 19.64            | -                 | -                   | -           | 550                   | 485               | -            | 30                           |
|                            | 6.00                | +/-0.1                | 28.29            | -                 | -                   | -           | 550                   | 485               | -            | 30                           |
|                            | 7.00                | +/-0.1                | 38.50            | -                 | -                   | -           | 550                   | 485               | -            | 30                           |
|                            | 8.00                | +/-0.1                | 50.29            | -                 | -                   | -           | 550                   | 485               | -            | 30                           |
| TIS 943                    | 4.00                | -                     | 12.57            | 0.099             | +/-6                | 4.62-7.25   | 585                   | 515               | 0.16         |                              |
|                            | 5.00                | -                     | 19.64            | 0.154             | +/-6                | 4.62-7.27   | 585                   | 515               | 0.22         |                              |
|                            | 6.00                | -                     | 28.28            | 0.222             | +/-6                | 4.62-7.29   | 585                   | 515               | 0.27         |                              |
|                            | 7.00                | -                     | 38.49            | 0.302             | +/-6                | 4.62-7.31   | 585                   | 515               | 0.32         |                              |
|                            | 8.00                | -                     | 50.27            | 0.395             | +/-6                | 4.62-7.33   | 585                   | 515               | 0.36         |                              |
|                            | 9.00                | -                     | 63.63            | 0.499             | +/-6                | 4.62-7.35   | 585                   | 515               | 0.4          |                              |
| TIS 194                    | 2.80                | +/-0.08               | 7.07             | 0.055             | -                   | -           | 540-1080              | -                 | -            | -                            |
|                            | 3.00                | +/-0.08               | 9.62             | 0.076             | -                   | -           | 540-1080              | -                 | -            | -                            |
|                            | 4.00                | +/-0.10               | 15.91            | 0.125             | -                   | -           | 440-930               | -                 | -            | -                            |
|                            | 5.00                | +/-0.10               | 23.76            | 0.186             | -                   | -           | 390-830               | -                 | -            | -                            |
|                            | 6.00                | +/-0.13               | 28.28            | 0.222             | -                   | -           | 390-830               | -                 | -            | -                            |
|                            | 7.50                | +/-0.15               | 33.19            | 0.260             | -                   | -           | 390-830               | -                 | -            | -                            |
|                            | 8.00                | +/-0.15               | 38.49            | 0.302             | -                   | -           | 390-830               | -                 | -            | -                            |
| AS/ NZS 4671<br>( 500L )   | 3.70                | -                     | 10.75            | 0.084             | +/- 4.5             | 1.35 - 3.70 |                       | 500 - 750         | -            | -                            |
|                            | 4.00                | -                     | 12.57            | 0.099             | +/- 4.5             | 2.00 - 4.00 |                       | 500 - 750         | -            | -                            |
|                            | 5.00                | -                     | 19.64            | 0.154             | +/- 4.5             | 2.50 - 5.00 |                       | 500 - 750         | -            | -                            |
|                            | 7.00                | -                     | 38.49            | 0.302             | +/- 4.5             | 3.50 - 7.00 |                       | 500 - 750         | -            | -                            |
| ASTM A648<br>( CLASS III ) |                     |                       |                  |                   |                     |             | BREAKING LOAD<br>(kN) |                   |              |                              |
|                            | 4.88                | +/-0.05               | 18.70            | 0.147             | -                   | -           | 32.5 - 36.3           |                   | -            | 35                           |
|                            | 6.35                | +/-0.05               | 31.67            | 0.249             | -                   | -           | 52.4 - 58.9           |                   | -            | 30                           |
|                            | 7.92                | +/-0.05               | 49.27            | 0.387             | -                   | -           | 75.2 - 85.4           |                   | -            | 30                           |