



# TSC

*Ribbed welded wire mesh B500A (FeE500) made of cold rolled high tensile wire for concrete reinforcement of medium and high loads (factory, warehouse concrete slabs) and precast concrete elements.*

## Applied standards:

**The product is in accordance with:**

- Tunisian standard NT 26,135 and NT 26,136 (ISO 10544 and ISO 6935-3).
- French standard NF A35 080-1 and NF A35 080-2.
- British standard BS 4482 and BS 4483.

## Characteristics of the wire used in the ribbed wire mesh:

### Manufacturing:

The wire is cold rolled from rods that have been hot rolled from billets.

### Chemical composition:

It is a low carbon weldable steel wire.

Carbon	Sulphur	Phosphorus	Silicon	Magnesium	Nitrogen	Copper	Carbon equivalent
C ≤ 0,22 %	S ≤ 0,05 %	P ≤ 0,05 %	Si ≤ 0,60 %	Mn ≤ 1,60 %	N ≤ 0,012 %	Cu ≤ 0,80 %	*Ce <sub>q</sub> ≤ 0,42%

$$*Ce_q = \frac{C + Mn}{6} + \frac{(Cr + V + Mo)}{5} + \frac{(Cu + Ni)}{15}$$

### Mechanical characteristics:

Tensile strength	Yield strength	Elongation at max load	Ductility ratio	Bend test
T <sub>s</sub> ≥ 550 MPa	Y <sub>s</sub> ≥ 500 MPa	A <sub>gt</sub> ≥ 2,5%	T <sub>s</sub> /Y <sub>s</sub> ≥ 1,05	yes

### Linear weight tolerance:

- +/- 4,5%

### Characteristics of the ribs:

- Three rows of ribs
- Splitting coefficient  $\eta = 1,3$  for  $D < 6\text{mm}$  and  $\eta = 1,6$  for  $D \geq 6\text{mm}$
- Embedding coefficient  $\psi_s = 1,5$

### Characteristics of the wire mesh:

#### Manufacturing:

The wires are assembled by automatic machines which assure accurate spacing and alignment of all members of the finished fabric. Longitudinal and transverse members are securely connected at every intersection by a process of electrical resistance welding which employs the principle of fusion combines with pressure.

#### Welding:

- Weld shear test value greater than 150 MPa.

#### Dimensions:

Mesh size tolerance	Overall length tolerance (centre to centre)	Overall width tolerance (centre to centre)
+/- 7,5% or +/-10mm	+/- 0,5% or +/-25mm	+/- 0,5% or +/-25mm

Overhang tolerance to be specified by the customer.

### Product range (Diameter, mesh and weight)

Diameter	Mesh	Weight kg/m <sup>2</sup>
5	200 x 200	1,54
5	150 x 150	2,06
5	100 x 100	3,08
6	200 x 200	2,22
6	150 x 150	2,96
6	100 x 100	4,44
7	200 x 200	3,02
7	150 x 150	4,03
7	100 x 100	6,04
8	200 x 200	3,96
8	150 x 150	5,27
8	100 x 100	7,92
9	200 x 200	4,99
9	150 x 150	6,65
9	100 x 100	9,98
10	200 x 200	6,17
10	150 x 150	8,21
10	100 x 100	12,33
12	200 x 200	8,88
12	150 x 150	11,84

**Standard dimensions: 2,4 x 3m and 2,4 x 6m.**  
**Other diameters (diameter of longitudinal wire different from the transverse one), special mesh size and dimensions on request.**

**Packaging: in bundles of 20 to 100 sheets.**



Welded wire mesh