

## 1. DESCRIPTION

Weldable ribbed microalloyed steel wire in wound layer COILS for concrete reinforcement according to Israel standard SI 4466 part 3 grade S500W, ductility C in the range of diameters 10-20mm. Manufacturing process: hot rolling and heat treatment (soft quenching).

## 2. CHEMICAL COMPOSITION ON PRODUCT

	Limits	C %	P %	S %	P+S %	Si %	Mn %	(V+Nb)/ V/Nb %	Ceq %
		max	max	max	max	max	max	min	max
SI 4466 – S500W	Max	0.24	0.050	0.050	0.080	0.55	1.80	0.02	0.55

**NOTE:** C max 0.25% is permitted, provided that Ceq max is 0.48%;  
In brackets chemical composition on product.

## 3. MECHANICAL AND DIMENSIONAL PROPERTIES

Standard	Steel grade	Diameter Range mm	ReH min N/mm <sup>2</sup>	Rm/Re min N/mm <sup>2</sup>	Rm/Re max N/mm <sup>2</sup>	Agt min %	A10 Min %	Bend $\alpha, \beta, \kappa$
SI 4466	S500W Ductility C	10 ÷ 20	500 ÷ 650	1,15	1,35	7,5	11	note

**NOTE:**

- Test on sample straight by laboratory machine after artificial ageing;
- Maximum permissible deviations from nominal of the actual average weight per unit length: +4.5/-2.5% for 8-10mm, +3.5/-2.5% from 12mm; single bar +6/-4%;
- Bend test: D mandrel = 3d for  $\varnothing \leq 16$  mm; D mandrel = 6d for  $\varnothing 18-20$  mm; bend angle  $\alpha$  between 160 and 180°;
- Rebend test: D mandrel = 5d for  $\varnothing \leq 16$  mm; D mandrel = 8d for  $\varnothing 18-20$  mm; bend angle  $\alpha = 90^\circ$  and bend back angle  $\beta = 20^\circ$  after ageing 100°C/30';

## 4. STANDARD PACKAGING AND DIMENSIONS

In coils of standard weight 2.4t and 4.8 t. Internal diameter 700 mm, height 900mm, max width 1050 mm (2.4 t) and 1320 mm (4.8 t). Tied with 4 metallic strips.

## 5. STANDARD IDENTIFICATION

Each coil with diameter painted on the surface and label reporting:

**PITTINI**  
**JUMBO SPOOLED**  
**HEAT N°**  
**WEIGHT t**  
**DIAMETER mm**  
**DATE**  
**REFERENCE STANDARDS**  
**PRODUCT CERTIFICATION LOGOS**

## 6. STANDARD CERTIFICATION

On demand test certificate 3.1 according to EN 10204.

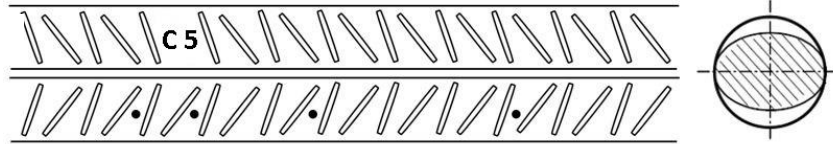
## 7. APPROVALS

Standard Institution of Israel (SII), License nr. 76246.



## 8. IDENTIFICATION MARK AND SURFACE CONFIGURATION

Mark 4 + 7  
Ø10-16mm



Ø18-20mm

