

### 1. DESCRIPTION.

Lattice Girder type TOP made from cold rolled rib steel wire according to D.M. 17.01.2018 grade B450A.

### 2. CHEMICAL COMPOSITION ON PRODUCT (%).

	Limits	C %	P %	S %	Cu %	N %	C <sub>eq</sub> %
<b>PITTINI</b>	max	0.24	0.055	0.055	0.85	0.014	0.52
<b>D.M. 2018</b>	max	0.24	0.055	0.055	0.85	0.014	0.52

### 3. MECHANICAL PROPERTIES.

Standard	Steel grade	Ø (mm)	Weight tol %	f <sub>y</sub> min MPa	f <sub>y</sub> max MPa	f <sub>t</sub> min MPa	f <sub>t</sub> / f <sub>y</sub> min	Agt min %	Rt min %
<b>PITTINI</b>	B450A	5 ÷ 8	nota	450c	563c	540c	1.05c	2,5c	25
<b>D.M. 2018</b>	B450A	5 ÷ 10	nota	450c	563c	540c	1.05c	2,5c	25

**NOTES:** c - characteristic values ; test after artificial ageing to 100°C for 1h.  
for diameters Ø ≤ 8 mm the permissible deviation is ± 6%,  
for diameters Ø > 8 mm the permissible deviation is ± 4.5%.

Diameter ratio Ø<sub>min</sub>/Ø<sub>max</sub> ≥ 0.60

### 4. STANDARD PACKAGING.

bundle length: 6m up to 12m, on multiple lengths of 0.20m  
n° piece for bundle = 66 – 90 – 102 – 120 – 140  
n° stirrups for bundle = 2

### 5. STANDARD IDENTIFICATION.

Each bundle with label reporting:

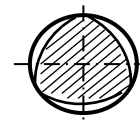
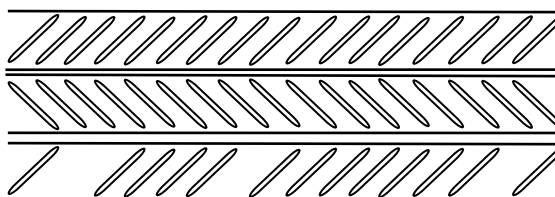
FERRIERE NORD S.p.A.  
I - 33010 OSOPPO (UD) ITALIA  
Production plant  
D.M. 17/01/18 – B450A  
TRALICCIO PITTINI  
Type/Lenght  
Lot number

### 6. STANDARD CERTIFICATION.

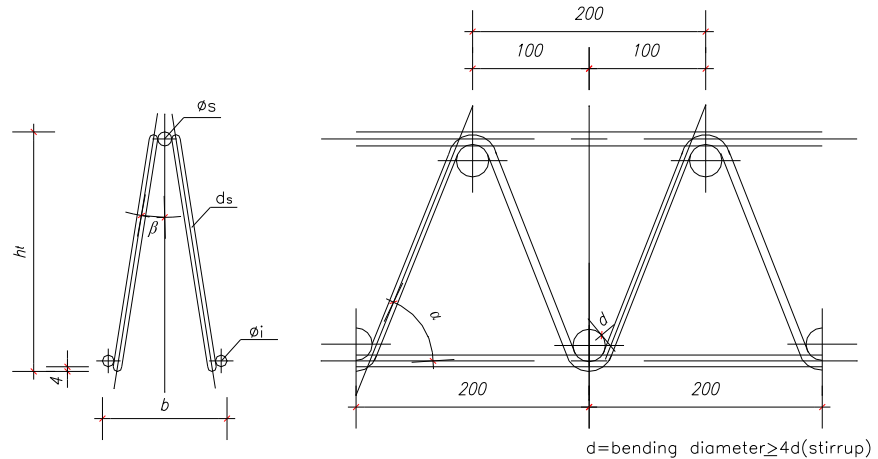
Document according to EN 10204 3.1.  
Product qualified by Ministero Infrastrutture e Trasporti

### 7. IDENTIFICATION MARK.

Mark 4-7



## 8. GIRDER DIMENSIONS



List of TOP standard Lattice Girders (length: 12m)

TOP	L (m)	Øi (mm)	Øs (mm)	ds (mm)	ht (cm)	b (Mm)
5/7/5 h=7	6	5	7	5	7.0	85
5/7/5 h=9.5	6-12	5	7	5	9.5	100
5/7/5 h=12.5	6-12	5	7	5	12.5	100
5/7/5 h=14.5	6-12	5	7	5	14.5	100
6/7/5 h=12.5	6	6	7	5	12.5	100
5/7/5 h=16.5	6-12	5	7	5	16.5	100
5/8/5 h=20.5	6-12	5	8	5	20.5	100

Notes: TOP Lattice Girders can be provided on demand in length from 2m up to 12m, on multiple lengths of 0.20m

## 9. NON STANDARD LATTICE GIRDERS

Non standard lattice girders can be provided on demand and after feasibility evaluation in accordance with the following configurations:

- Length L: 2m up to 12m, on multiple lengths of 0.20m
- Possible multiple lengths of 0.10m (cut on the upper welded joint)
- Height between 70 and 205mm, with upper chord diameter between 7 and 8mm, lower chord diameter between 5 and 6mm, stirrup diameter between 5 and 6mm
- Base b as a function of the height of the lattice girder:  
if  $ht = 70\text{mm} \rightarrow b = 85\text{mm}$ , if  $ht > 70\text{mm} \rightarrow b = 100\text{mm}$

## 10. DIMENSIONAL TOLERANCES

The following tolerances are valid for both standard and non standard lattice girders:

- Height: +1/-3 mm;
- Width : +3/-3mm;
- Length: +5/-40 mm.
- Stirrup pitch:  $\pm 2,5$  mm
- Upper overhang: max 4 mm
- Lower overhang: max 4 mm
- Maximum rising from the flat of lower chords (stirrups excluded):
  - 10mm if  $L \leq 8\text{m}$ ;
  - 15mm if  $L > 8\text{m}$
- Sabre: max 15mm