

Kralupy nad Vltavou, 14/04/2025

Reinforcing steel in coils named JUMBO STRETCHED B500SP.

Weldable ribbed steel wire in wound layer coils for concrete reinforcement according to PN-H-93220, steel grade B500SP, produced in STEELAG, Kralupy plant.
Manufacturing process: hot rolling and cold stretched for diam. 8mm-12mm.

CHEMICAL COMPOSITION ON HEAT

Standard	Limits (%)	C	Mn	Si	P	S	Cu	N	C _{eq}
PITTINI	Max	0.22 (0.24)	1,60 (1,65)	0,50 (0,55)	0.050 (0.055)	0.050 (0.055)	0.80 (0.85)	0.012 (0.013)	0.50 (0.52)
PN-H-93220	Max	0.22 (0.24)	1,60 (1,65)	0,50 (0,55)	0.050 (0.055)	0.050 (0.055)	0.80 (0.85)	0.012 (0.013)	0.50 (0.52)

Note: the values in the brackets refer to product analysis

Higher values of N are permitted providing that for every increase of 0,001% of N the maximum value of P is decreased of 0,005%. Nevertheless, the maximum permitted value of N for cast analysis is 0,015%.

MECHANICAL AND DIMENSIONAL PROPERTIES

Standard	Steel grade	Diameter range mm	Weight tol. %	R _e min N/mm ²	R _m /R _e	R _e max N/mm ²	A _{gt} min %	A ₅ min %	Bend - rebend
PITTINI	B500SP	8 ÷ 12	± 4	500c	≥1.15c; ≤1.35c	625c	8.0c	16.0	note
PN-H-93220	B500SP	8 ÷ 20	± 4	500c	≥1.15c; ≤1.35c	625c	8.0c	16.0	note

NOTE:

- Tests after artificial ageing at 100°C for 1h.
- Bend and re-bend test: bend 90° - age 100°C/1h – rebend 20°, mandrel D=4d.
- Fatigue performance: $\sigma_{\max}=0.6R_{e\text{nom}}$, $2\sigma=175\text{MPa}$, 2 million cycles.
- Low cycle fatigue: according to PN-H-93220.

STANDARD PACKAGING.

Coils weight about 2,5 t, height = 700 mm, internal diameter = 630 mm, tied with 4 strips
Coils weight about 5,0 t, height about = 700 mm, internal diameter = 630 mm, tied with 4 strips.

STANDARD IDENTIFICATION.

Each coil is identified with a plastic label reporting product name, heat/lot number, diameter, nominal weight, date of production, reference standard, steel grade.

APPROVALS

Simptestcert (Poland)

IDENTIFICATION MARK AND SPECIFIC RIB AREA PARAMETER**Mark 1/38**

Diameter	Fr min
mm	
8	0.045
10	0.052
12	0.056

