



The Smart-Tie ICARO is a fast and innovative rebar tying system. It is composed of a device adoptable to any screwdriver and a wide range of clips for the most various tying combinations.

Made in aluminium and special steel.

TOOLING



1) To couple the equipment to the screwdriver it is necessary to:

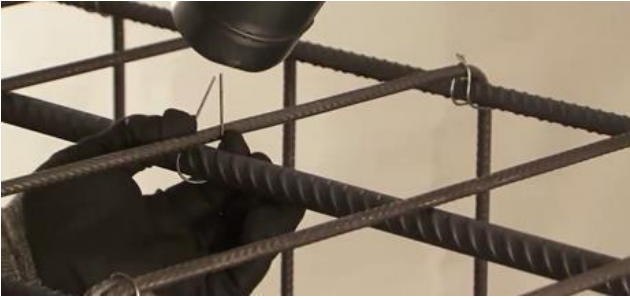
1. Open the screwdriver's mandrel (M).
2. Insert the hexagonal bar hold (N) inside the mandrel along the entire length.
3. Tighten the mandrel.



2) Before using the device, check for proper installation:

1. Turn the equipment downwards and turn the screwdriver first slowly and then at the maximum speed.
2. Verify that the external body (C) comes out by itself.

INSTRUCTIONS



1. Place the clip between the crossings of the rebars to be tied, perpendicularly to the rebar on which the head is expected to press.



2. Insert the ends of the wires into the hole of the head relative to the body, and then pull and push the head against the wire until the inner body of the equipment is fully retracted within the external body. This way the pincer jaws get tightened on the clip extremities of the tying wire (clip).



3. Press the screwdriver till the wire is tightened. If the screwdriver is equipped with friction it is necessary to adjust the friction or turn till it cuts the tie extremity. In order to tighten more, turn on the “hammer” function in the screwdriver (if equipped).



4. Bend the tying downwards, aligned and in contact with the upper rebar.

SCREWDRIVER

Use a screwdriver with the following technical features:

- Electric screwdriver / Pneumatic screwdriver.
- Maximum speed of the mandrel's rotation: 600 rpm.

In case the screwdriver has got a higher rotation speed, adjust the speed to the maximum indicated above.

- Self-locking mandrel.

Use a shaped tying wire: (clip):

- Soft iron.
- Maximum diameter (\varnothing_{max}): 3 mm.

BASIC EQUIPMENT



SMART TIE

The Smart-Tie is a fast and innovative rebar tying system.

It is composed of a device adoptable to any screwdriver and a wide range of clips for the most various tying combinations. Made in aluminium and special steel.



2 CLIP CASES

Practical clip cases to tie to the waist for easy and quick insertion of the clip on the cage.

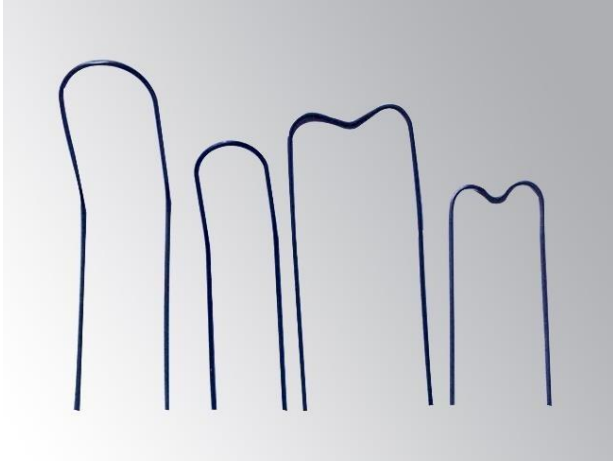
They are equipped with magnetic bottom to prevent clips falling.



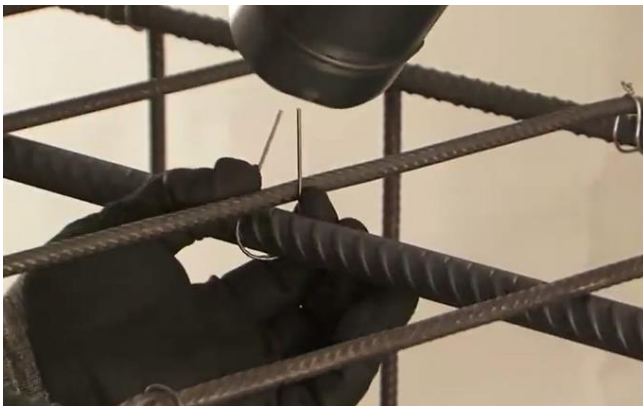
BELT FOR CLIP CASE

Belt for clip case support.

CLIPS AVAILABLES



Two different types available: “**Flat W Wire Clips**” and “**Bent Wire Clips**”, of different forms and use.



The “**Flat W Clip**” is ideal for the tying of the crossings between the transversal and longitudinal meshes. It is also excellent for tying cages central bars.

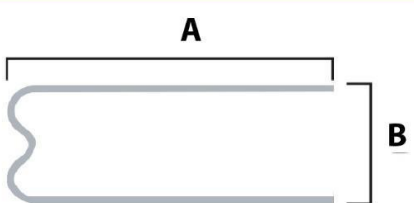
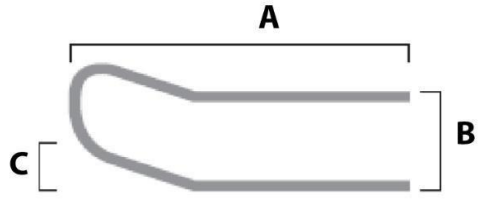
Available in **two different sizes**:

- 65mm (2 2/4”) long and 30mm (1 1/4”) high and allows tying $\varnothing 8$ (#3) with $\varnothing 8$ (#3) (min) and $\varnothing 16$ (#5) with $\varnothing 16$ (#5) (max).
- 100mm(4”) long and 40mm(1 3/4”) high and allows tying $\varnothing 16$ (#5) with $\varnothing 16$ (#5) (min) and $\varnothing 30$ (#9) with $\varnothing 16$ (#5) (max).



The “**Bent Wire Clip**” is ideal for tying the stirrup’s angle. Available in **two different sizes**:

- 110mm (4 1/4”) long, 30mm (1 1/4”) high and 50mm (2”) wide. It allows tying from $\varnothing 12$ (#4) (min) to $\varnothing 16$ (#5) (max) with $\varnothing 25$ (#8).
- 100mm (4”) long, 20mm (3/4”) high and 35mm (1 1/2”) wide. It allows tying from $\varnothing 8$ (#3) (min) to $\varnothing 12$ (#4) (max) with $\varnothing 20$ (#6).

CLIP TIE	Ø WIRE	A	B	C
	1,5 mm (16 AWG)	100 mm (3 1/2")	40 mm (1 3/4")	/
		65 mm (2 1/4")	30 mm (1 1/4")	/
	1,5 mm (16 AWG)	110 mm (4 1/4")	30 mm (1 1/4")	50 mm (2")
		100 mm (4")	20 mm (3/4")	35 mm (1 1/2")

TECHNICAL DATA

Equipment: Sizes	Value	Value
Closed (LC)	110 mm	4 1/4"
Open (LA)	130 mm	5 1/4"
Diameter (D)	70 mm	2 3/4"
Hexagonal bar hold: Diameter (Øc)	9 mm	2/4"
Screwdriver connection: Length (L)	20 mm	3/4"

