



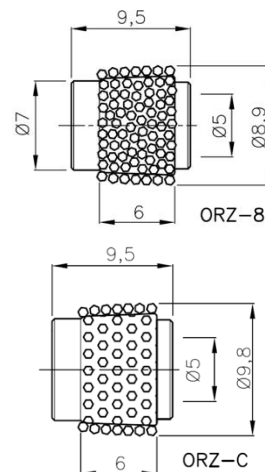
## ORZ-C 42 - "Hybrid"

The **ORZ-C 42** is a special **hybrid, electroplated** diamond wire expressly designed to perform cuts from *plain concrete* to *heavily reinforced concrete*, to *jacket piles*, due to its **strongly resistance**. Its characteristic **tapered** (conical) shape bead increases both **cutting speed** and **life** due to these reasons:

**Reduced Contact Area.** Only few parts of diamond grains are in close contact with the material, thus the *reduced Contact Area* of the diamond increases the cutting pressure. Due to the high pressure the diamond can cut faster. The conical shape permits a faster cutting speed on all materials

**Progressive usage of the diamond.** The diamond is progressively used, from the external diameter to the inner part. When a diamond is completely crashed it comes out and a new one, which is in the inner part, it is immediately ready to action. The conical shape increases the life on all materials.

These are not the only features "Hybrid" has. Our electroplated beads are made by patented technology named **Oriented Crystal®**, the diamond grains are oriented and almost all cutting edges are positioned in the best way to start and continue the cut.



**Assembly:** The **SHX polymeric coating** was produced with the purpose to increase safety in workplace. This particular and unique assembly gives *more flexibility* to the diamond wire, as well as the pre-compressed springs give a *greater resistance* on the sliding of the beads, thus obtaining a **strongly resistant** diamond wire. At the loss of cutting speed on the *concrete* cut, it compensates with the strength on the *Jacket Piles* cut. If the diamond wire is correctly used, it doesn't need to be reassembled until the whole exhaustion of the diamond beads, avoiding problems such as wire breakages. Therefore, the **SHX** assures the maximum safety, in accidental case of breakage no beads will throw out.

This diamond wire is assembled with 42 BPM (beads per meter).



### Specifications:

**Bead Type:** Electroplated **Diamond Grit:** Us Mesh 40/50 (Fepa D426)

**Bead Shape:** Tapered ø8,9 and 9,8mm

**Material to cut:** From Plain Concrete to Heavily Reinforced Concrete, and Jacket Piles.

**Twist:** 1 torsion per meter

Material	Average Cutting Speed		Average Life		Peripheral speed
	[m <sup>2</sup> /h]	[ft <sup>2</sup> /h]	[m <sup>2</sup> /lm]	[ft <sup>2</sup> /ft]	[m/sec]
Plain Concrete	4 - 6	43 - 64	5 - 8	16,5 - 26	23 - 25
LR Concrete	2 - 4	21,5 - 43	2,5 - 6	8 - 20	23 - 25
MR/HR Concrete	1,5 - 3	16 - 32	2 - 5	6 - 16,5	22 - 24
Jacket Piles	1 - 1,5	11 - 16	2 - 2,5	6 - 8	21 - 23

Average data of **Hybrid**



Figure 1 Assembled Hybrid Diamond Wire -



Figure 2- Hybrid Diamond Beads

### Other related products:

**Manual Idraulic Press:** HT45 (5 tons) or HT120 (12 tons)

**Connectors:** Tube connector 9518 - Quick Connector

