

# NEW REUSABLE, LIGHTWEIGHT AND ECONOMICAL FORMWORK ELEMENT

P PATENTED TECHNOLOGY

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#### ABSTRACT

The research group Materials and Construction Systems for Buildings (belonging to the Department of Building and Urbanism at the University of Alicante-Spain) has developed a reusable formwork element to implement joints with continuous reinforcement armours in reinforced concrete construction elements.

This invention is characterized through its perfect adaptation to any construction element currently available in the market, resisting the pressure exerted through the concrete. It is also a low cost element, quick and simple to use it, and it allows obtaining clean and geometric concrete joints.

The group is looking for companies interested in commercial exploitation.

## ADVANTAGES AND INNOVATIVE ASPECTS

#### MAIN ADVANTAGES OF THE TECHNOLOGY

The advantages of this element over currently existing devices on the market are:

- It is reusable, so total cost of the work product is reduced.
- The material used in its manufacture is resistant to the thrusts derived from concreting.
- The size and weight of the element is reduced, so it can be used through a single operator.
- It is not necessary any additional equipment (cranes) for handling.
- The implementation is quick and simple, reducing execution time of the formwork.
- Low cost of labour during use.
- It is possible to manufacture different sizes and shapes, so it has a great versatility to be used in any type of work and in any linear or surface constructive element of reinforced concrete (e.g. slabs, tiles, beams, walls, etc.).
- It is easy to be produced, since it is a small element of simple geometry that can be manufactured through companies from different sectors.
- It has a low acquisition cost, since it is a piece of simple geometry that can be manufactured with different materials.
- Transportation from the place of manufacture is simple, as it is a piece of small size and weight that can be stacked or rolled.
- It allows to obtain clean, geometric and easily-continued joints in reinforced concrete.
- It can be removed without causing damage or abnormal jerking in concrete.

#### INNOVATIVE ASPECTS

- Reusable.
- Reduced size and weight.
- Low cost of labour.
- Low acquisition cost.

Obtains clean, geometric and easily-continued joints in reinforced concrete.
MARKET APPLICATIONS
Construction and Building Products.
Companies interested in acquiring this technology for commercial exploitation through:  • Patent license agreements.  • Technical cooperation agreements.
• R & D agreements.