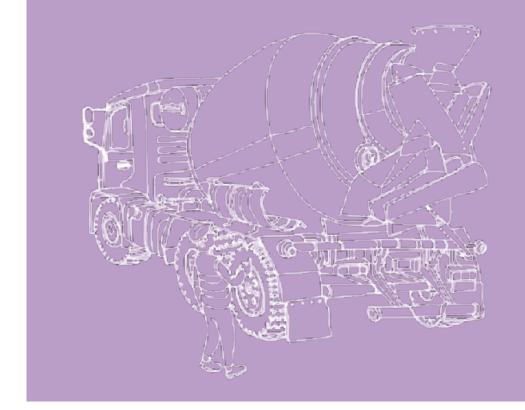
# Returned Concrete with Zero Impact







# THE INNOVATIVE PRODUCT FOR THE SUSTAINABLE RECOVERY OF RETURNED CONCRETE



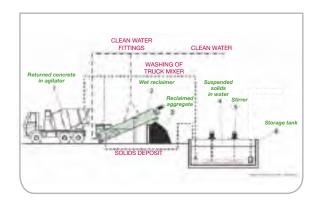
The global production of concrete amounts to a total of **10 billion m³/year**.

Out of this total, approximately **50 million m³** of concrete is never actually used and is returned to the production plant. Considering just 10% of this total as "critical", meaning not recyclable while fresh, this translates into **5 million m³** of returned concrete requiring treatment every year.

Returned concrete has a high environmental impact on concrete plants and leads to extra operating costs.



Current systems for treating returned concrete do not offer a sustainable solution in that they:



- 1 Have a negative impact on the environment
- 2 Do not make the best use of potentially recyclable material
- 3 Increase overall operating costs

**RE-CON** ZERØ is a solution to these problems, making the most of returned concrete by transforming it into granular material that can be re-used as aggregate in concrete.

- No waste produced
- Added directly into the truck mixer
- No treatment plants required



The pursuit of sustainable development depends on our capacity to guarantee the total interconnection between the **economy**, **society** and the **environment**. These three elements must never be considered as single, independent entities, but rather analysed within a systemic framework as elements which, together, contribute to the achievement of a common goal. This means that every programmed intervention must take all reciprocal inter-relations into consideration. If a programmed intervention focuses on only one or two of these aspects, a condition of sustainability will not be achieved. In view of these considerations, it would be preferable to represent the sustainability of development as three concentric circles, highlighting how **the economy exists within a society, and how both exist within the environment**. And from this consideration, it is possible to construct a **pyramid of sustainability**, with the environment forming the base which, through its supply of natural resources, services the ecosystem and wellbeing of society and plays a fundamental support role for the economy and society. And with this in mind, the advantages deriving from the use of **RE-CON** ZERØ may be summarised as follows:

# **ENVIRONMENTAL ADVANTAGES:**

- With RE-CON ZERØ, returned concrete may be completely re-utilised, thus reducing the amount of waste material to be disposed of.
- With RE-CON ZERØ, the amount of recycled material employed increases, thus reducing the impact caused by the extraction and processing of virgin materials.
- With RE-CON ZERØ, the amount of materials transported by road decreases, due to the fact that part of the aggregates are produced at concrete plants.

# **SOCIAL ADVANTAGES:**

Its ease of use and absence of hazardous, toxic and carcinogenic substances contained in RE-CON ZERØ all contribute to improving the health and safety in the work environment.

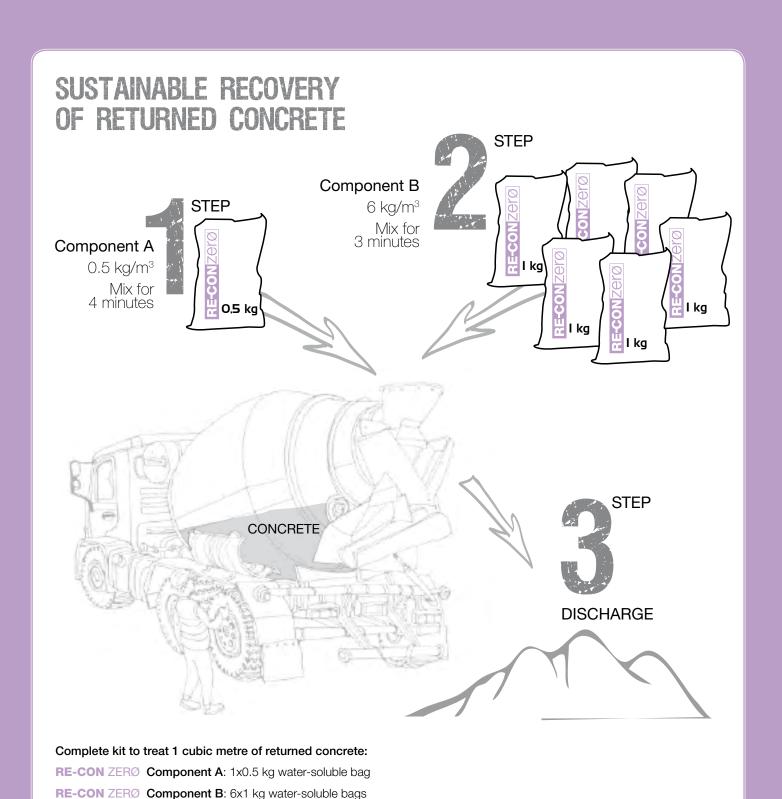
# **ECONOMIC ADVANTAGES:**

- The use of **RE-CON** ZERØ transforms one cubic metre of returned concrete into more than two tonnes of quality aggregate.
- The use of RE-CON ZERØ saves disposal costs for returned concrete and considerably reduces the amount of sludge created during washing cycles.
- The use of RE-CON ZERØ allows all returned concrete to be recycled without costly investments into machinery or equipment.



# RE-CON Zero

Returned Concrete with Zero Impact







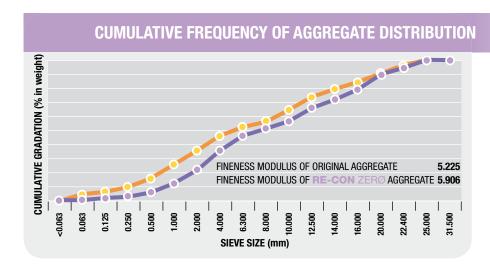


After mixing for a few minutes with **RE-CON** ZERØ, concrete is transformed into granular material which may be discharged on the ground and, once cured, used as aggregate in concrete. **RE-CON** ZERØ works with all types of concrete.



After discharging the material, the mixing drum is left clean.

The **cleaning water** for the mixer drum **may be completely recycled** and used again for mixing.

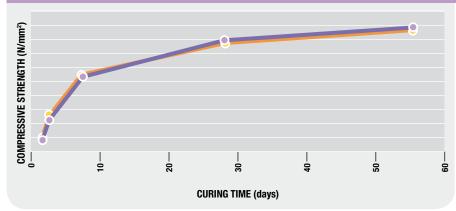


# RE-CON ZERØ

aggregates meet the requirements of EN 12620:2008 "Aggregates for concrete".

- Original aggregates
- RE-CON ZERØ aggregates

# **DEVELOPMENT OF Rck - CONCRETE WITH COARSE AGGREGATES SUBSTITUTED WITH 50% RE-CON** ZERØ



# RE-CON ZERØ

**aggregates** may be used to partially substitute coarse aggregates (up to 50%) in the production of concrete.

- Original aggregates
- RE-CON ZERØ aggregates

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