

RE-CON LINE

Circularity in concrete production

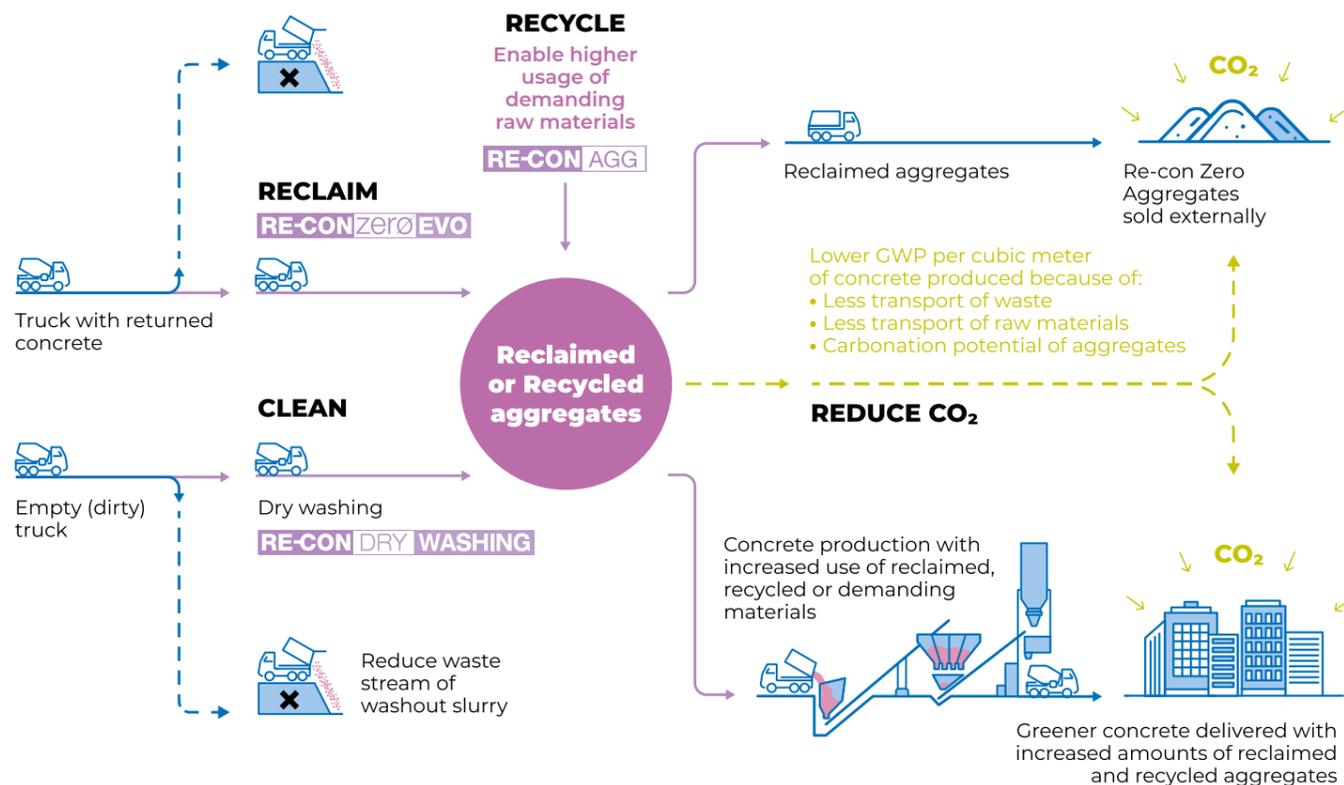


Moving towards the future

The **RE-CON line** from **Mapei** helps concrete producers to make the move towards a more circular and effective production model by offering cost effective and sustainable solutions. Under the four key words of **Reclaim, Clean, Recycle** and **Recarbonate** substantial savings in waste handling costs can be made through transformation of returned concrete and truck washing slurry into value material. **RE-CON line** also offers products that enhances circularity of material flows by reducing the need for high cost virgin raw materials by mitigating problems of using recycled concrete, manufactured sand or clay contaminated sand in new concrete.



Sustainable concrete production from linear to circular material flows



RE-CON LINE VALUE

RECLAIM

COST SAVING by cost effective handling of returned concrete creating a value material that can replace virgin aggregates and be used for further cleaning of concrete trucks.

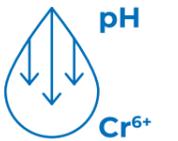
Mapei product: **Re-Con Zero EVO**



CLEAN

COST SAVING by reducing truck washing slurry waste and water treatment costs.

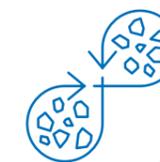
Mapei product: **Re-Con Dry Washing**



RECYCLE

COST SAVING by reduced cement consumption and reduced need for high quality virgin raw materials.

Mapei product: **Re-Con AGG**



REDUCE CO₂

Lower GWP per m³ of concrete using aggregates produced by the **Re-Con Zero** and **Re-Con Dry Washing** process.



Re-Con Dry Washing

Reducing truck washing slurry and washing water pollution

An innovative way to reduce truck washing slurry by up to 70% with a dry method that does not require a reclaiming system with filter presses or other costly and complex process equipment.

Reduce hazardous waste and lower water consumption



Simple feed hopper and conveyor solution to feed dry washing aggregates into a dirty truck.



End result of the **Re-Con Dry Washing** Process. Recyclable aggregates with increased carbonation potential by absorption and hardening of the cementitious waste from concrete truck washing.

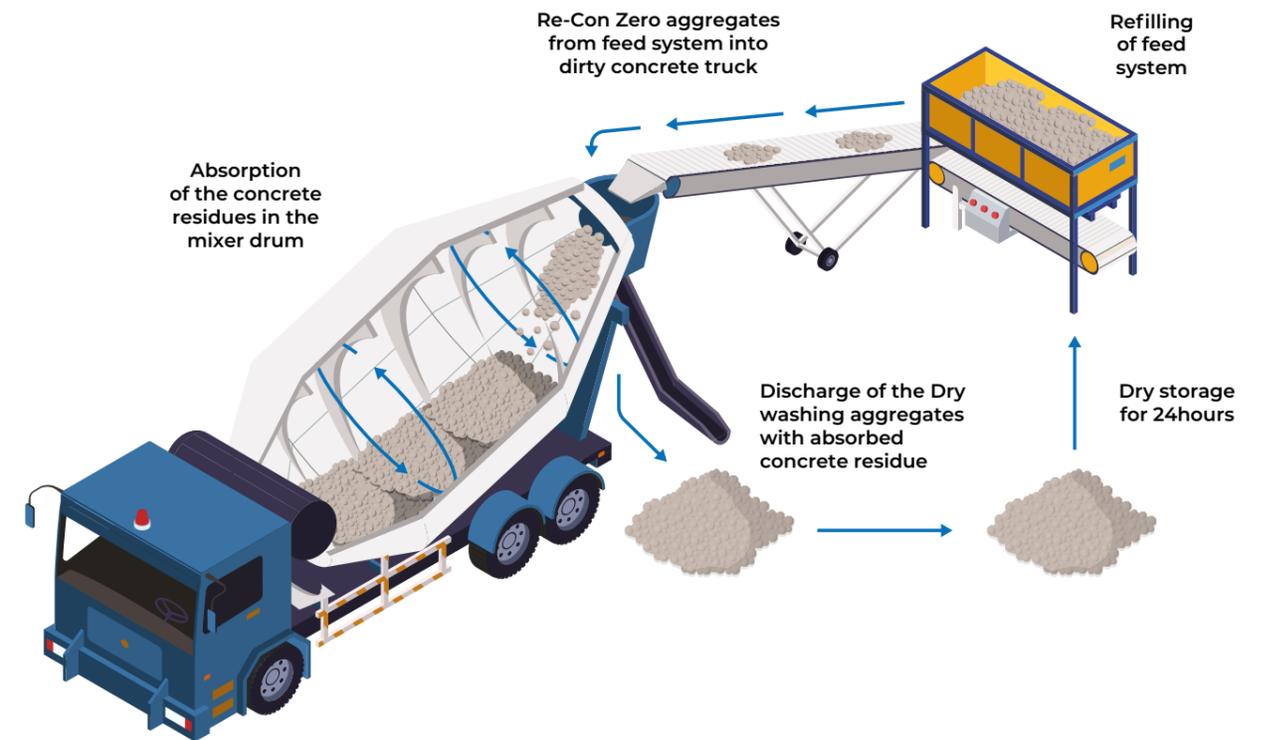
- Greatly reducing slurry waste with high pH and potential high content of Cr VI
- Potential for increasing higher ratios of recycled process water in concrete



Removing 70% of the problems related to washout of trucks. Without the use of Wet reclaimer equipment.

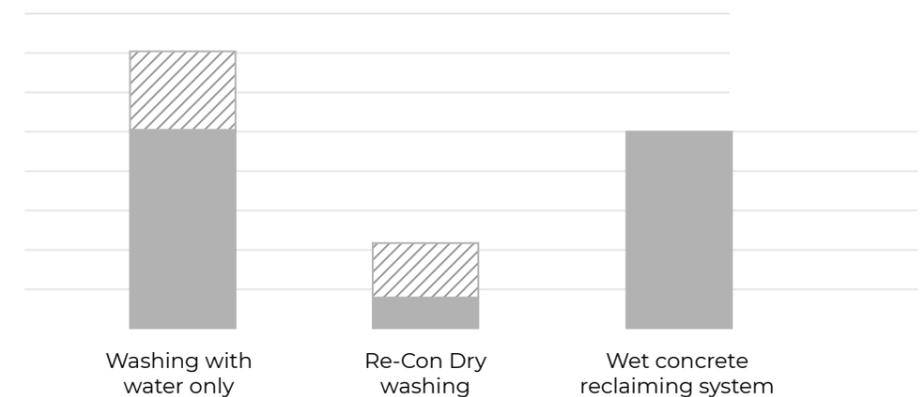
Less disposal and transport costs.

Method to reduce truck washing slurry



70% less cementitious waste in every truck washout

Re-Con Dry Washing utilize the absorption capability of the **Re-Con Zero EVO** aggregates to clean trucks of cementitious waste that is otherwise washed out. Using **Re-Con Dry Washing** followed by a light wash with water will greatly reduce truck washout solids that lead to a high pH and increased risk of pollution of heavy metals like hexavalent Chrome. With **Re-Con Dry Washing**, the root cause of truck washout pollutions removed by the transformation of waste into aggregates. in a repeatable process.



Re-Con Zero EVO

Transforms returned concrete into reclaimed aggregates

2-component system of superabsorbent polymer and hardener. Transforms fresh returned concrete to a granular material by chemically binding of the free water (Part A) and stabilizing and accelerating the process (Part B).

Reducing the environmental impact of concrete production



- Transforming waste stream to resource material
- Increasing material circularity



Reclaimed aggregates achieved without crushing

Re-Con AGG

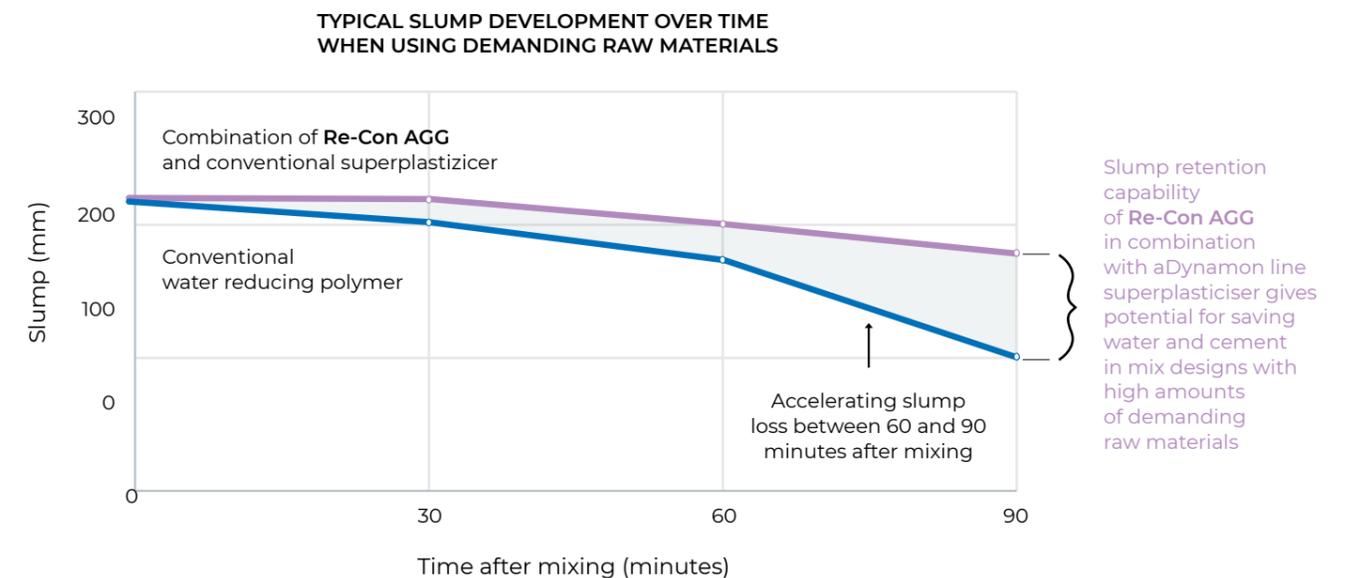
Contributes to higher dosages of recycled aggregates or other demanding raw materials

Re-Con AGG has proven to be very effective in combination with superplasticizers in the **Dynamon** line, to retain the workability of concrete when using demanding sand or coarse aggregates without reducing the compressive strength at 24 hours or later. The workability retention effect of **Re-Con AGG** has been proven in a number of different applications.



- Manufactured sand
- Clay bearing sand
- Recycled concrete aggregates
- Supplementary cementitious materials

Typical slump development over time with and without Re-Con AGG



The combination of **Re-Con AGG** and **Dynamon** superplasticizers help concrete producers to use higher amounts of sustainable raw materials without having to make compromises on concrete workability or cost by increased cement usage.

EVERYTHING'S OK WITH MAPEI

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