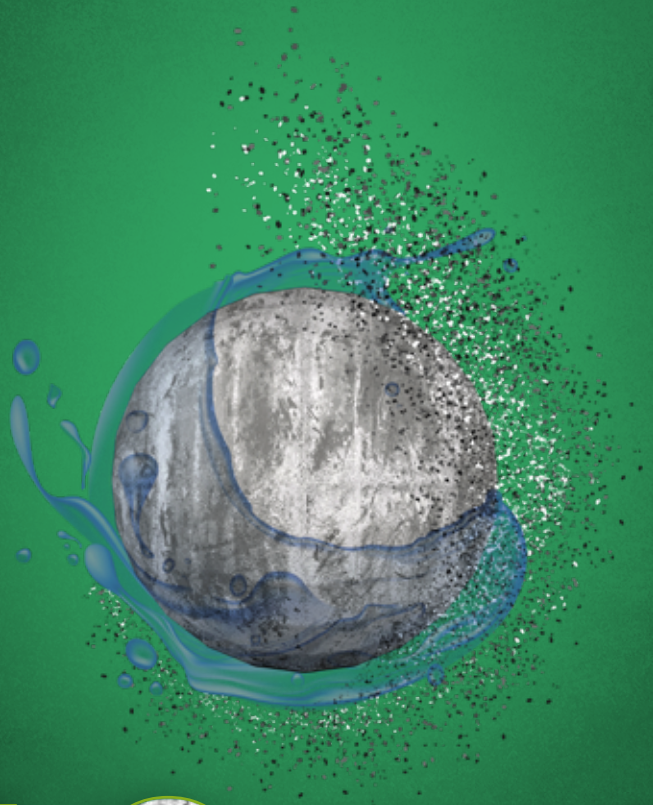


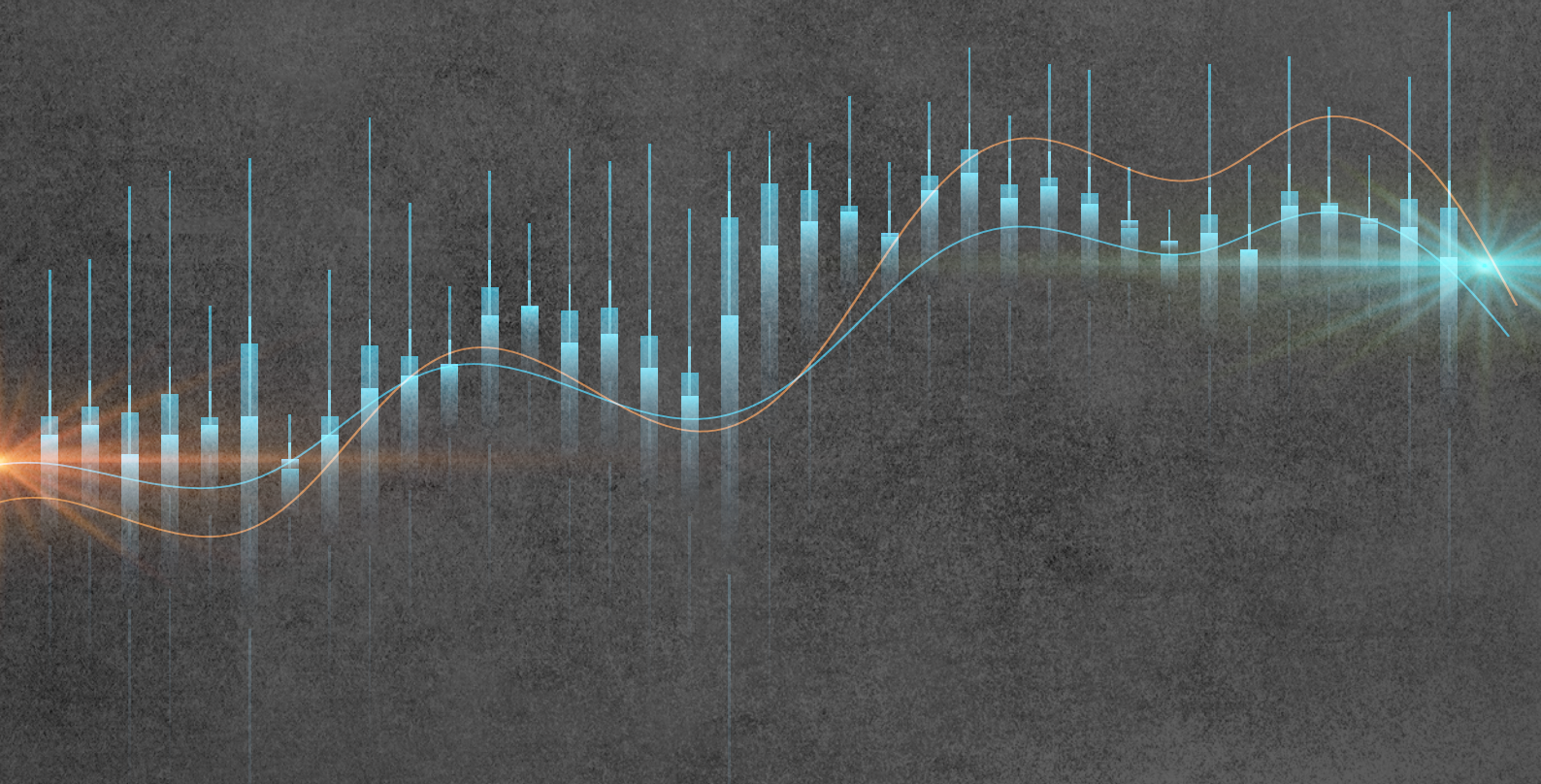
Wet Concrete & Gray Water Recycling Systems

RECNOS

RECYCLING ENGINEERING SYSTEMS

Gain All Your Waste With A Profitable Way

- Disposal Of The Returning Concrete
- Optimum usage of resources
- Recycling of aggregate, gray water and filling materials
- Utilization of 5-7% of total concrete production from recycling
- Provides environmentally friendly and sustainable production.



Working Principle

SCRU.S

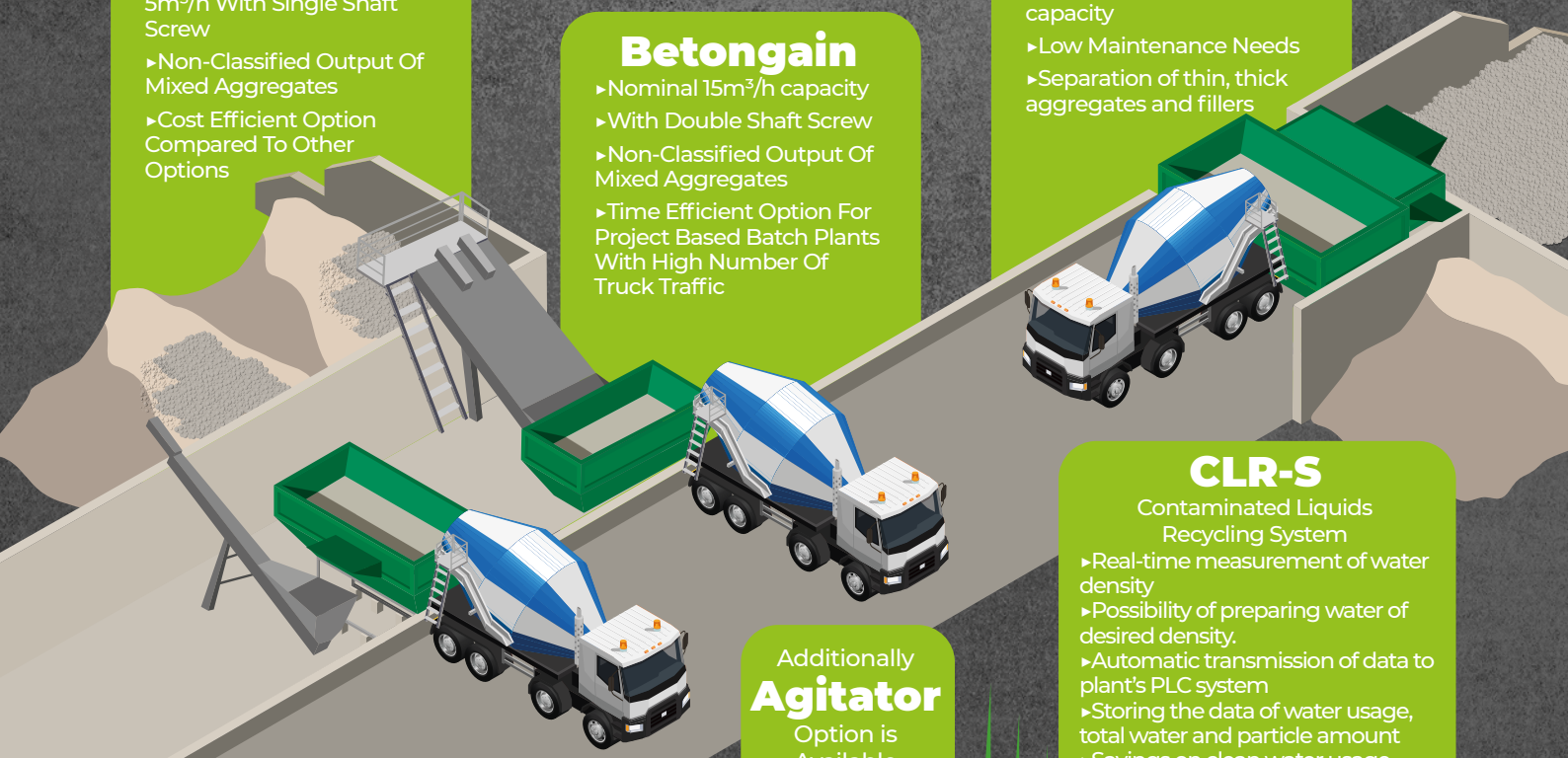
- Nominal Capacity Of 5m³/h With Single Shaft Screw
- Non-Classified Output Of Mixed Aggregates
- Cost Efficient Option Compared To Other Options

Betongain

- Nominal 15m³/h capacity
- With Double Shaft Screw
- Non-Classified Output Of Mixed Aggregates
- Time Efficient Option For Project Based Batch Plants With High Number Of Truck Traffic

CRS

- Nominal 20-30 m³/h capacity
- Low Maintenance Needs
- Separation of thin, thick aggregates and fillers

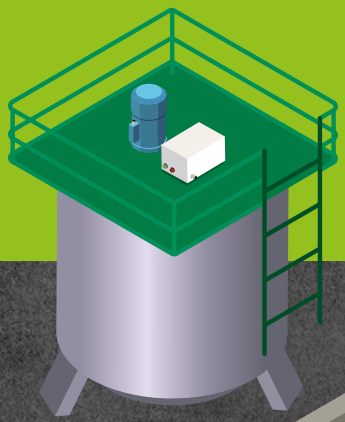


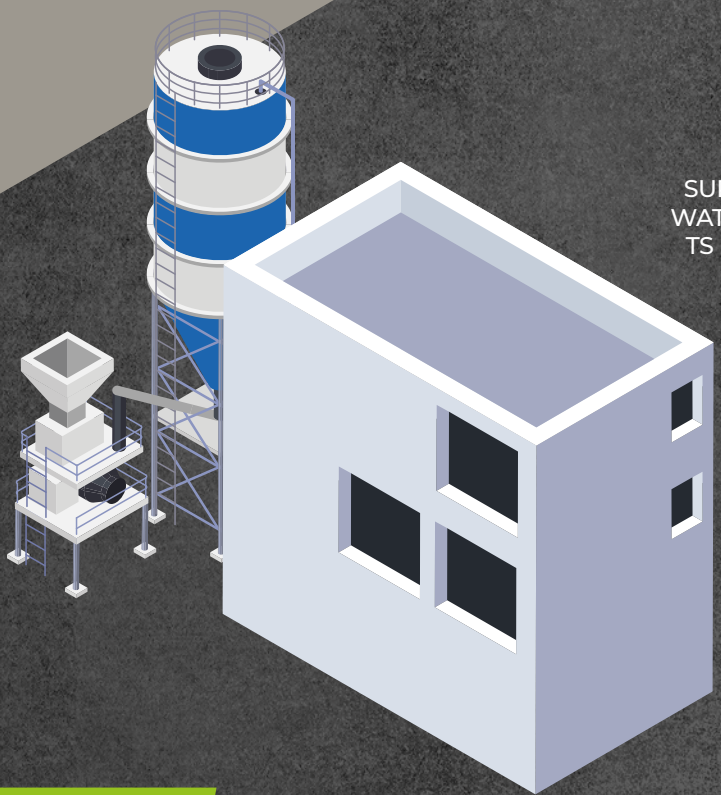
Additionally
Agitator
Option is Available

CLR-S

Contaminated Liquids Recycling System

- Real-time measurement of water density
- Possibility of preparing water of desired density.
- Automatic transmission of data to plant's PLC system
- Storing the data of water usage, total water and particle amount
- Savings on clean water usage
- Savings on aggregate and cement usage
- Elimination of dirty water treatment and solid waste disposal costs
- Sustainable concrete production



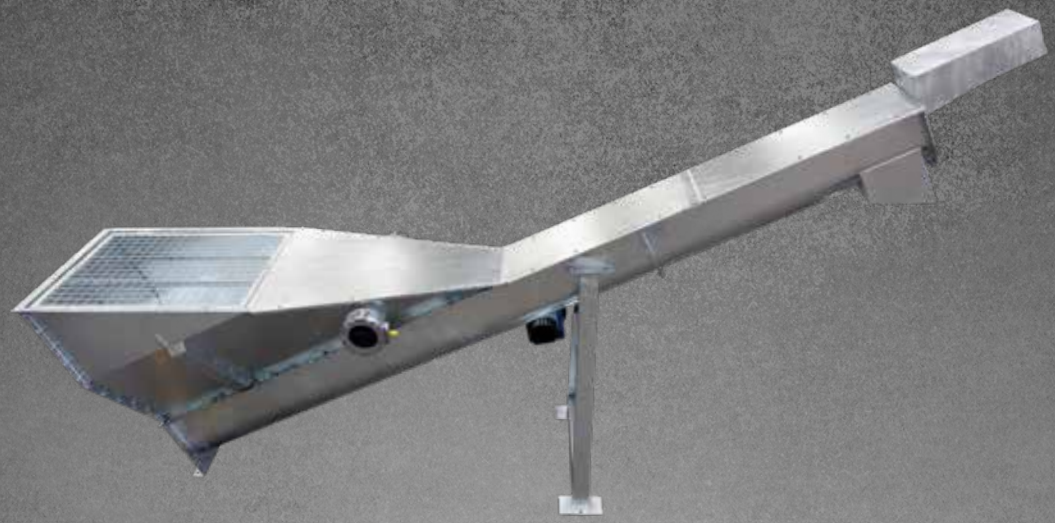


SUPPLYING MIXING WATER TO PLANT ON TS EN 1008 NORMS

GRAY WATER POOL

SCRU-S

Concrete Reclaimer System



Capacity: nominal 5m³/h

Recycling of Water and Aggregate

SCRU.S Concrete Reclaimer System

SCRU.S is designed to wash and separate concrete components for recycling purposes.

It is a complete system offered with a feeding station with vibrator, concrete reclaimer screw, control board and PLC.

This system allows the recycling operation to be evenly distributed during working hours.

Technical Details

SCRU Main Unit

▸It is designed to eliminate any sealing or bearing problems.

▸There is 1 drain outlet with blind plug.

▸There is one outlet at each side to guide overflowed grey water.

▸The 20mm thick carbon steel flights and shaft system are suitable for heavy duty operation.

▸A clean water distributor system is included for additional washing of separated aggregates. Also a washing hose system with fittings is included.

▸There are washing nozzles on the feding station and main unit's bunker.

Feeding Hopper

▸Feeding station consists of a main hopper and vibrating feeder. Thanks to its adjustable cover, it provides steady/optimum feed into the concrete reclaimer unit.

▸This station allows loadings by a loader or a similar machine and lets the main unit to be fed regularly by this load.

Control Panel

The control panel and PLC have a manual mode and three automatic modes of operation.

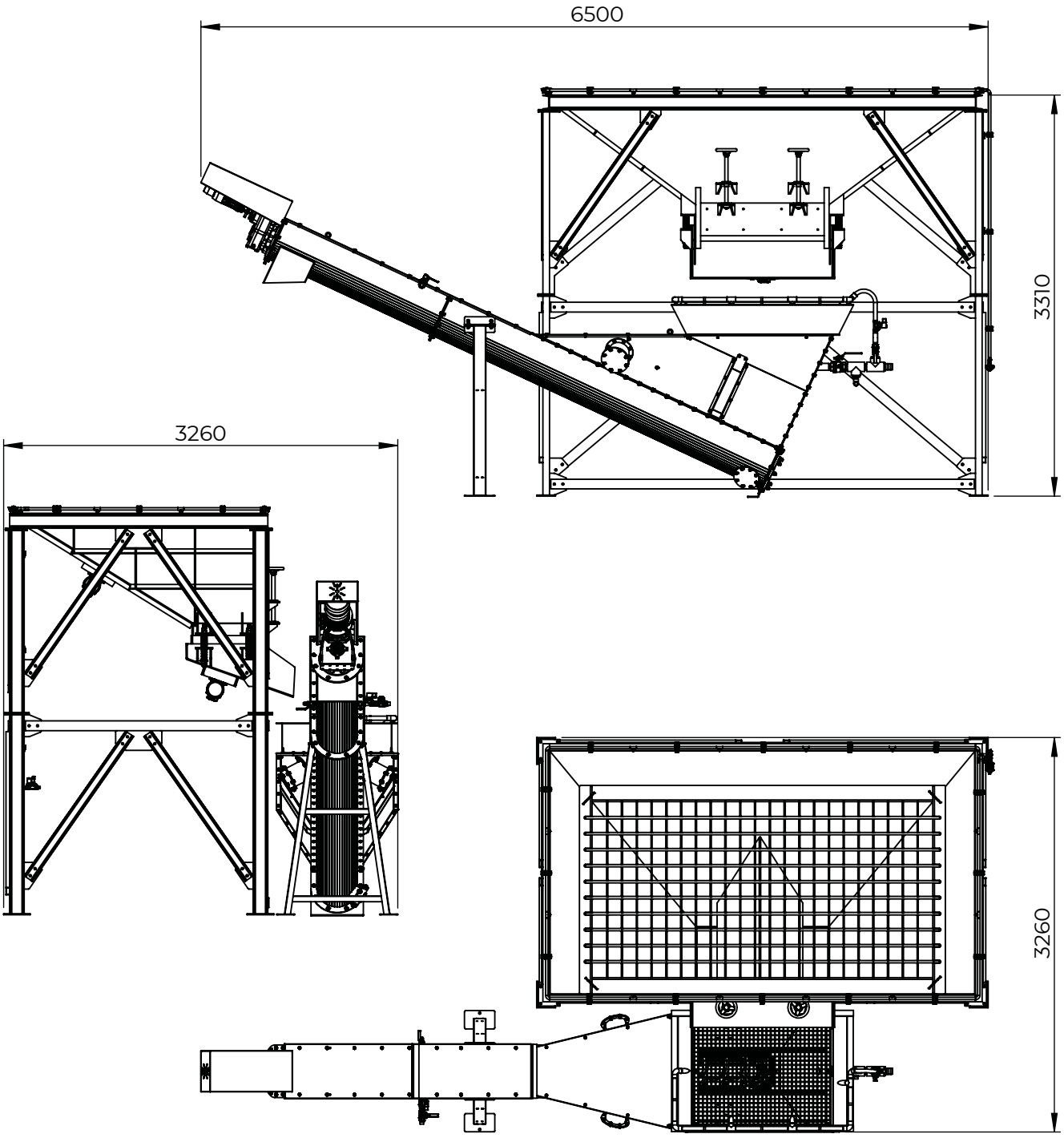
Automatic modes:

▸Mode 1: Separation/washing mode

▸Mode 2: Stand by

▸Mode 3: Off/park mode

The intervals can be adjusted according to the plant needs and required washing efficiency.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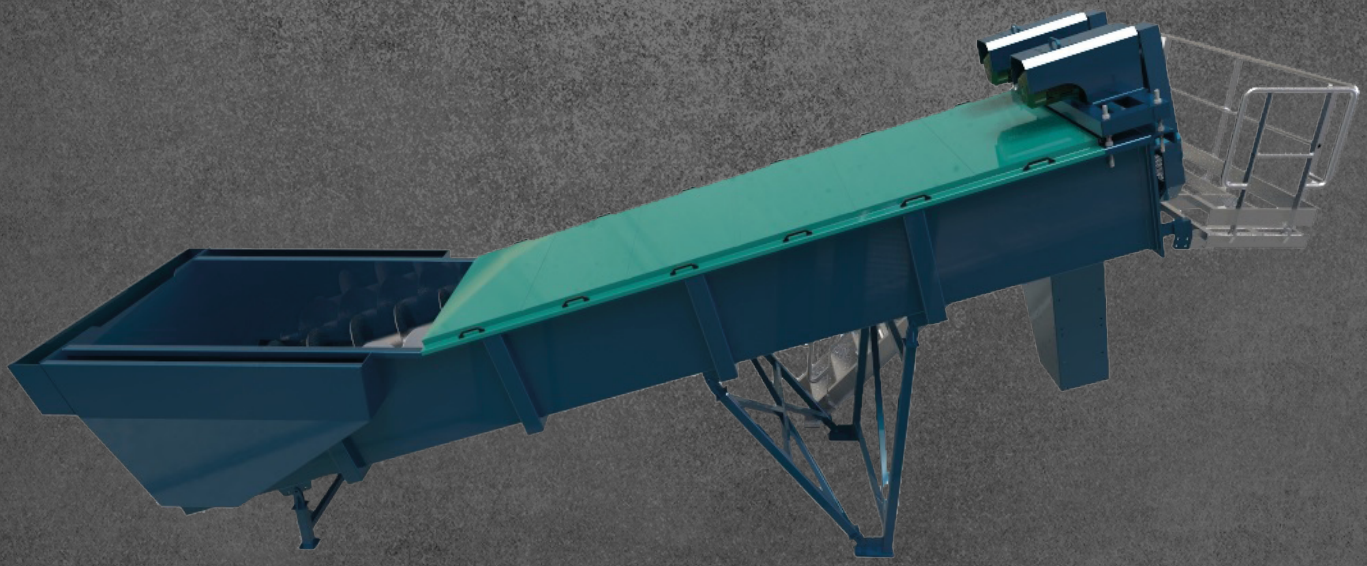
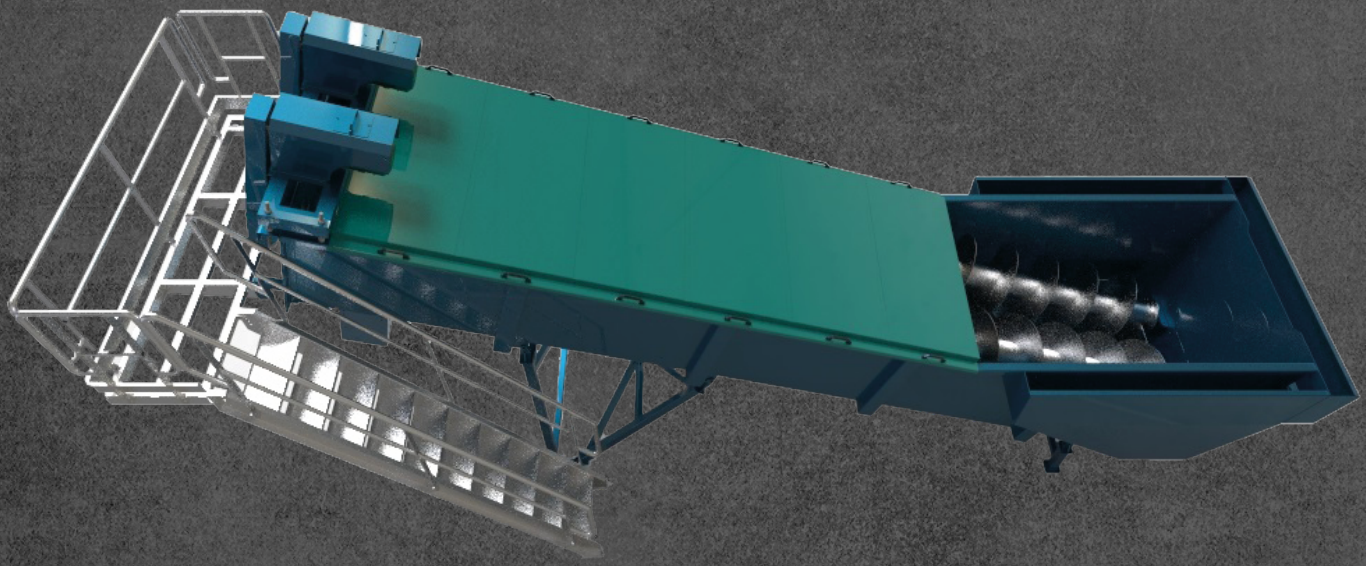
BETONGAIN

Concrete Reclaimer System





Capacity: nominal 15m³/h

Water and Aggregate Reclaiming

BETONGAIN Concrete Reclaimer System

▸Fresh Concrete Recycling System BetonGain is designed to serve for the fields where there is a high transportation of volumed concrete sales. BetonGain is derived application from a screw washer specially arranged for Readymix Concrete Plants. Concrete Recycle machines expected to be as fast as possible where the Truck drivers are pushing the deliveries hardly.

▸Most important improvement at BetonGain is the upgraded drive group and service condition for concrete batch plants.

▸15m³/h is the optimum capacity where BetonGain can seperate 1m³ of waste beton at 4-5 minutes of theoretical cycle.

▸Customer experiences show that for fast-paced fields of concrete batch plants, BetonGain is a perfect solution for single classified aggregate seperation.

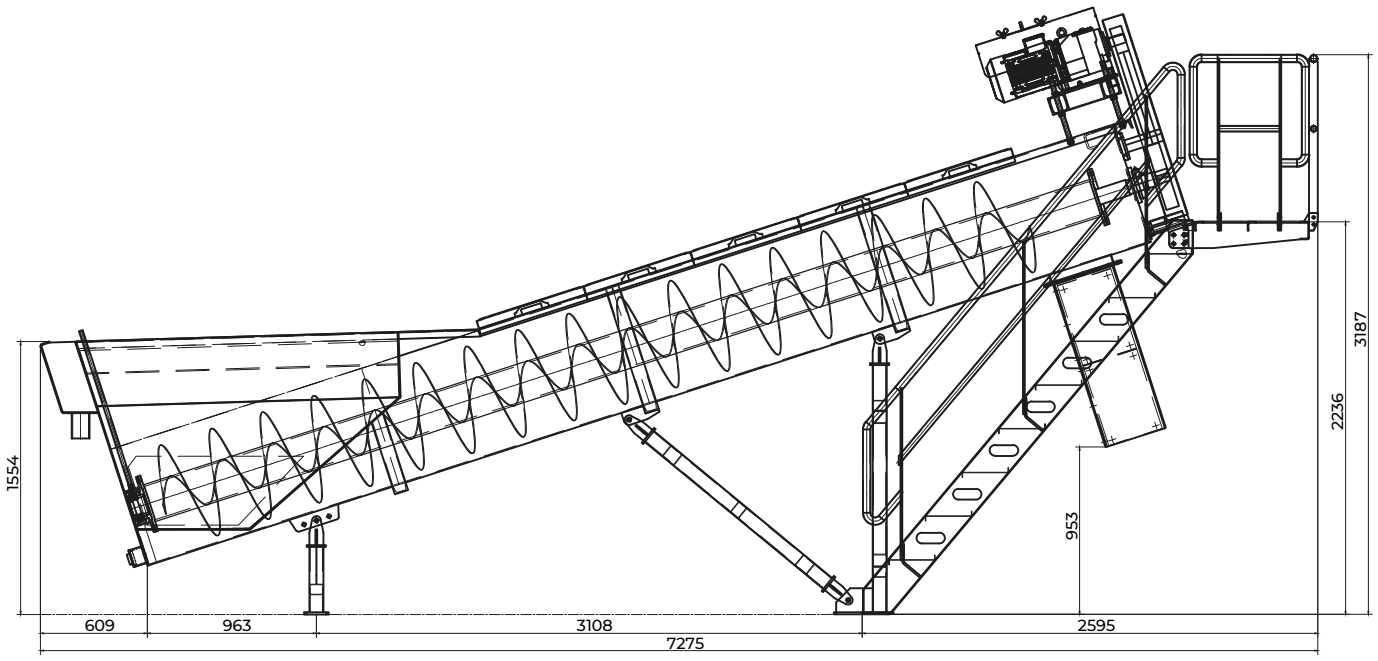
BETONGAIN

Concrete Reclaimer System

Technical Details

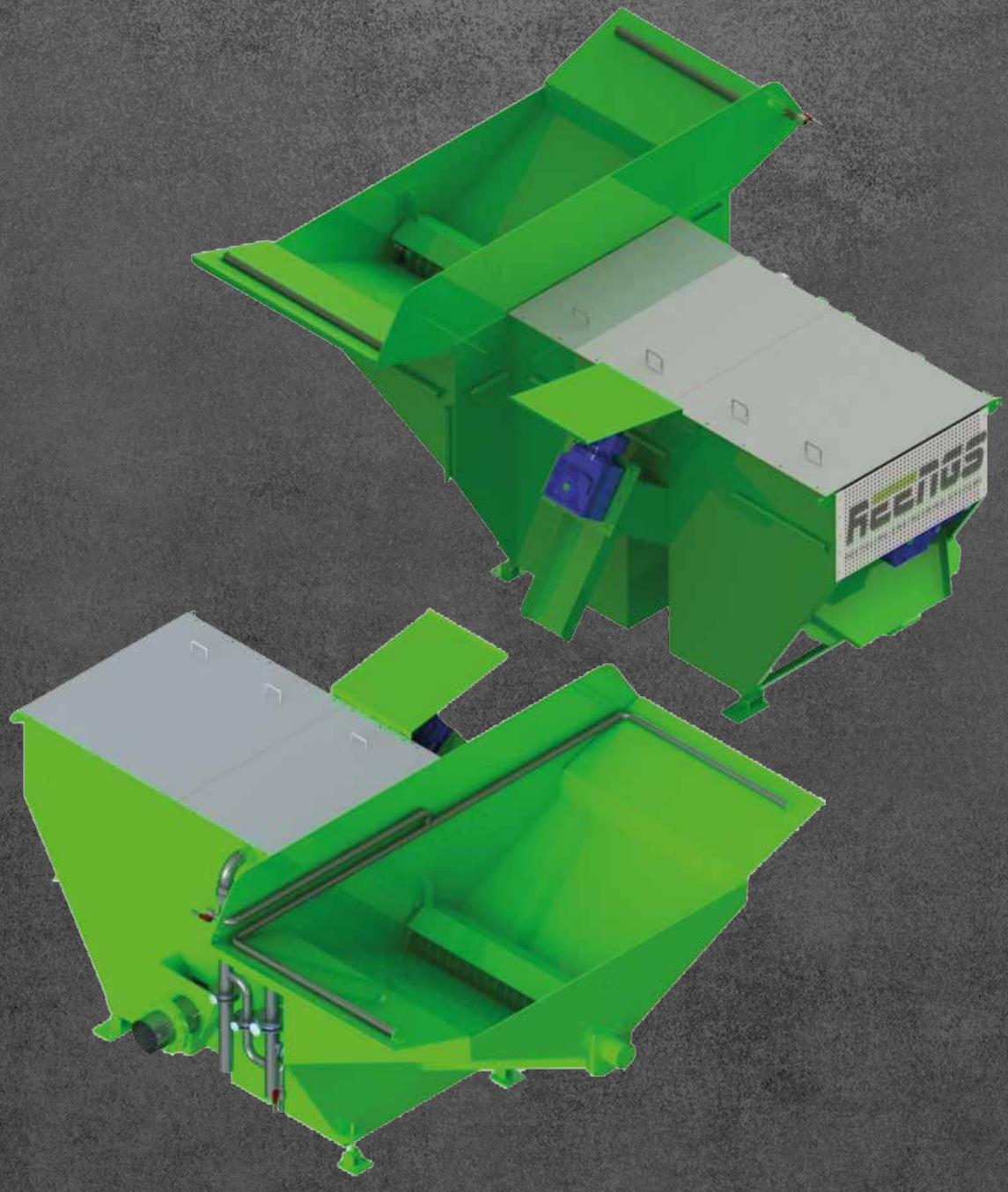
Sizes:	750 x 7.500 mm – Double Screw
Capacity:	15 ton/h
Electric Motor:	2 x 7.5 kW, 1500 rpm
Transmission:	Gearbox With Triple Chains
Screw material:	St 52
Body:	St 37 - 6 mm

- Protection hatches, platform and ladder are galvanized.
- Control panel with 380 V plug and cable are present.



CRS

Concrete Recycling System



Capacity: 20-30m³/h

Seperation: 3 Outputs
- > Grey Water
- > Sand
- > Classified Aggregate

CRS

Concrete Recycling System

▸CRS is designed to recycle aggrete inside ready mix concrete with high level of classification.

▸CRS has a large holding hopper for 2m³ of capacity where pumps and truck mixer can drop returned concrete easily, self embedded water hose let users easily clean their truck on the field & CRS provides a land gain at the field of batch plant.

▸Most important aspect is the seperation of aggregates according to their mesh size. Two mesh sized aggregates, are the output of the CRS series. Sand & aggregates are seperated by CRS series and grey water is send to pool via drain channels.

▸The CRS is offered in 2 different configurations with the CRS20 model with a nominal capacity of 20m3/s and the CRS30 model with a nominal capacity of 30m3/s.

▸Material Classification
CRS recycling system is the first recycling system that separates the materials above 0-5 as well as the materials below 0-5. In this way, it increases the usage rate of dirty water considerably, but it also has the ability to wash only with dirty water.

▸Lubrication-Free Bearing System
The bearings in the CRS recycling system have oil-free bearing and the system works with water. There are no bearing and bearing failures that may occur due to oil consumption and oillessness

▸PLC and Automation System With Control Panel
In the automation of the CRS recycling system, the following specified settings can be set by the responsible person at the facility via the panel the system is encrypted. In addition, there is an air control switch on the machine, which turns off the machine when the air is cut off in the system.

- Taking dirty water and washing
- Getting clean water/ washing
- Washing time
- Manual test
- Optional machine speed adjustment
- Separation and washing mode

▸Ease of Maintenance and Cleaning
Thanks to the automation of the system, the machine automatically cleans itself. The pump or mixer operator using the machine will only use the start and stop keys. There is no need for daily cleaning or maintenance because it is a non-lubricated system. Weekly visual inspection is sufficient.

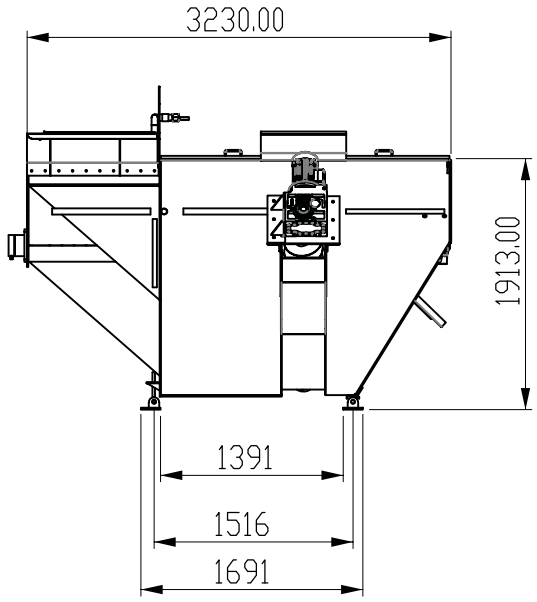
▸Seperation Speed
The system has a seperation capacity of 25-30 m³/h. Optionally, with a speed drive, the separation capacity can be increased.

CRS Concrete Recycling System

Technical Details

Capacity:	CRS20: nominal 20m³/h
	CRS30: nominal 30m³/h
Aggregate Size:	3-25 mm
Powder or Sand Size:	0-5 mm
Control Voltage:	24 V
Total Motor Power:	15 kW

CRS-20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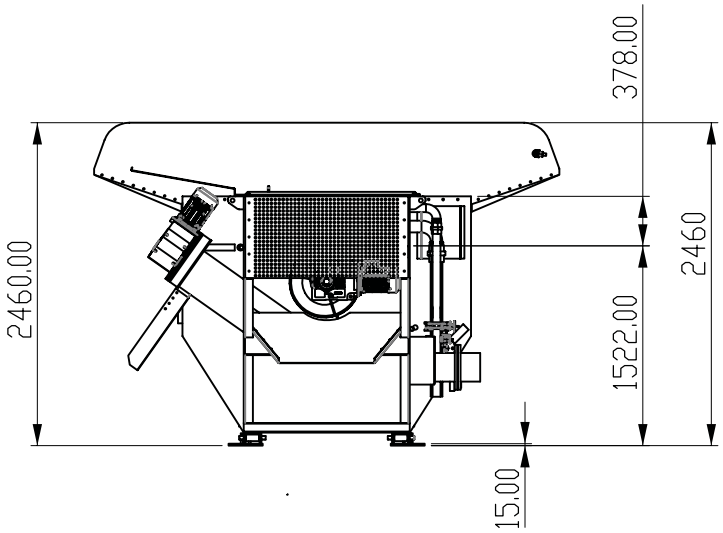
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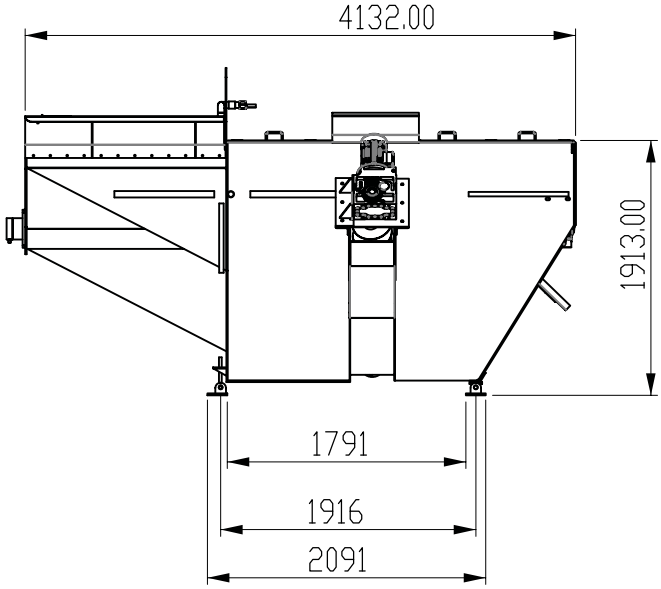
CRS-30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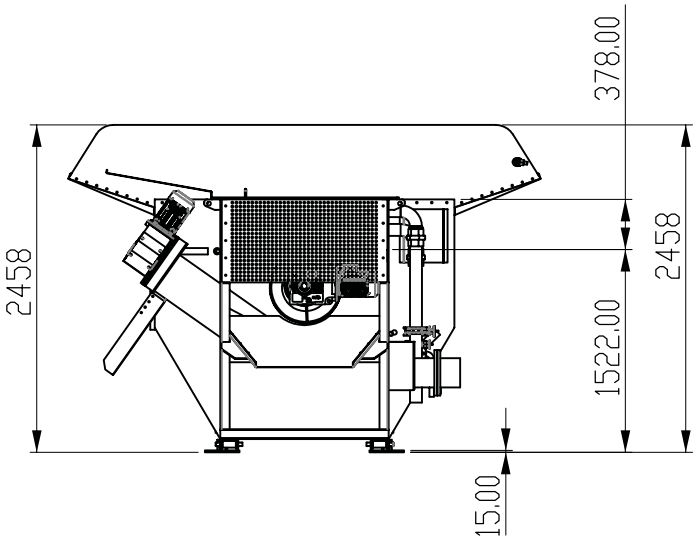
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CLR-S

Contaminated Liquids Recycling System

Capacity: 55m³/h (with 4“ pipe at 5 bar pressure)

Output: Water that can be used in production with a determined density

CLR-S

Contaminated Liquids Recycling System

▸CLR-S is designed to contribute to sustainable concrete production and create “Green Plants” by complete utilization of the waste water in batching plants.

▸Our natural resources diminish each day due to changing consumption habits and increasing of the World’s population. Therefore, it has become vital to reduce material consumption and to efficiently use natural resources by recycling. Especially with the increasing raw material prices and energy costs in the production, the manufacturers have become increasingly expectant of maximum benefit from their plant. It is possible to increase profits by recycling waste material into the system.

▸The growing environmental awareness, legal regulations and international agreements has led Governments to inspect industrial plants. As a result of this chain Recovery and Recycling has gained more importance.

▸One of the biggest problems faced by the batching plants, is the problems arising from disposal and non-utilisation of grey water.

▸At this point, the only system in the World that can determine the density of the grey water in real-time and feed it back to the system is CLR-S.

▸The CLR System has the ability to measure the contamination level and density in real-time, allowing 100% usage of the grey water and helps prepare the grey-fresh water mixture as defined in EN-1008, where the quality of water to be used in concrete recycling is defined.

▸The LCA (Liquid Contamination Analyser) inside the system is able to analyse the particles inside the grey water instantly during use of grey water and is also able to feed this information to the plant software in real time.

▸By using the CLR System, the water and particle amounts inside the grey water can be scientifically measured.

▸This way, the system is able to instantly re-calculate the amount of aggregate, water and cement to be used and form the mix according to the concrete recipe.

▸Since there is an automatic data transfer between CLR-S and batching plant software, all results are used by the plant PLC system in real-time.

▸CLR-S makes it possible to keep the water density under control at all times and also provides instantaneous reporting.

CLR-S

Contaminated Liquids Recycling System

Technical Details

Reservoir Tank

▸3000lt cylindrical reservoir tank and with mechanical components to facilitate a total of nominal 55m³/h fresh and gray water

▸Agitator and drive group for homogenisation

▸Delivery capacity: 4" pipe – nominal 55m³/Hr at 5bar

▸Mounting legs

▸Ladder and work platform above the tank

▸Load cells for preventing overflow

▸Main pump to deliver homogonized water to the plant

Measuring System

▸System sensor

▸Proccecor

▸Closed circuit pump for water circulation

▸High pressure nozzles and waterpump for cleaning of sensor

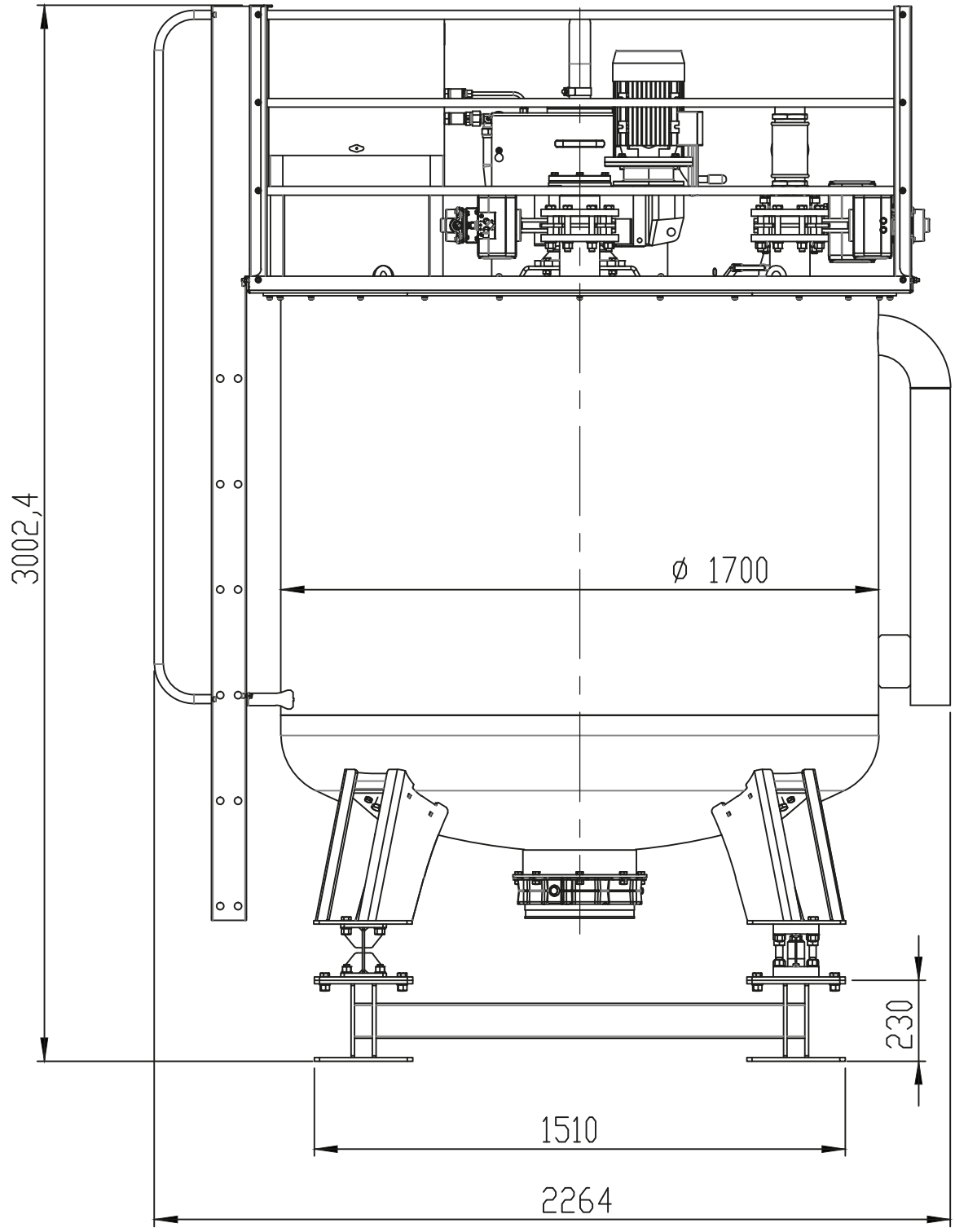
Electric Board

▸Electrical control system

▸Electric box suitable for outdoor use at -10C° to +40 C°

▸Controls for electric motor and level indicator

▸PLC system including LED touchscreen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A NEW SYSTEM TO FACILITATE SUSTAINABLE CONCRETE PRODUCTION

Return from job site with residue concrete

Job site

SCRU.S CONCRETE RECLAIMER SYSTEM

WASHED AGGREGATES
Gain: Size over 0,5mm

CONCRETE INGREDIENTS
- Water
- Cement
- Aggregate and additives

Loading concrete from plant

GREY WATER

FRESH WATER

CLRS

CLR-S
- Real-time measurement of water density
- Save data for fresh water, total water and particle quantity
- Automatic data transfer to plant PLC
- Recycling of all grey water
- Fast payback

→ SUSTAINABLE CONCRETE PRODUCTION

AGGREGATE HOPPER

MOISTURE PROBE
- Regulates quantity of water according to reciper
- Minimized risk of quality/slump fluctiations

MOISTURE PROBE
- Controlling concrete moisture & temperature during production

CONCRETE MIXER

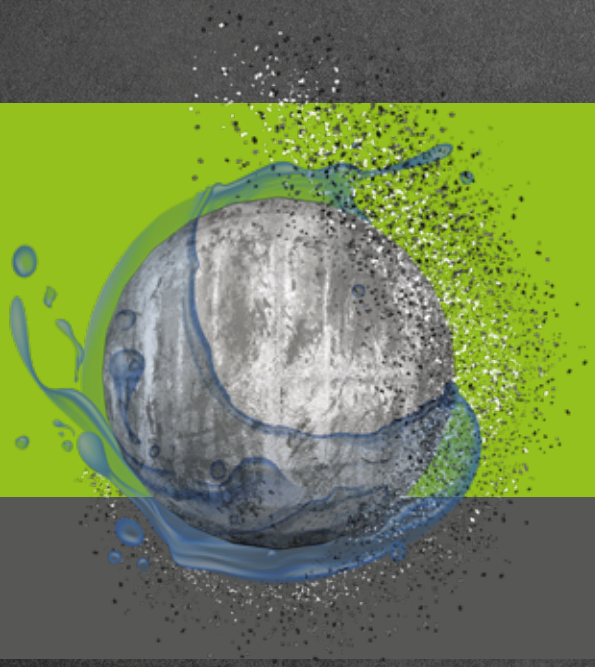
- Saving in fresh water usage
- Saving in aggregate and cement usage
- Elimination of waster water treatment and solid water disposal costs

BATCH WATER TO THE PLANT ACCORDING TO EN 1008

www.ozb.com.tr

REENGS

RECYCLING ENGINEERING SYSTEMS



The Future Of The Concrete Is At Recycling

Save The Nature While Making Profit!

REENGS GmbH

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