



MOBILE PLANT SOLUTIONS

FOR THE CONCRETE, CONSTRUCTION
AND ENVIRONMENTAL INDUSTRIES

transbatch

The Transbatch is a single load, fully mobile batching plant which offers outputs from 40m³/hr to 100m³/hr. With quick setup and fast mix times this makes for one of our most efficient plants to date.

rapidbatch

The Rapidbatch is a high capacity mobile batching plant suited to large construction, infrastructure and civil engineering projects. Offering outputs of up to 120m³/hr and fast setup times, the Rapidbatch is well suited to wind farms, airports, construction and readymix applications.

rapidmix

The Rapidmix is a fully mobile, high capacity continuous mixing plant for semi-dry mixes. Offering outputs of either 400 or 600 tonnes per hour, the Rapidmix is ideal for roller compacted concrete, concrete paving and soil stabilisation.

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HOME OF THE CONCRETE MIXER



Rapid mixer 1983

A HOME GROWN SUCCESS STORY

Established in 1969, Northern Ireland based Rapid International delivers high quality, reliable equipment to the concrete, construction and environmental industries. Today, with a presence in more than twenty countries worldwide via an ever expanding international dealer network, Rapid is a trusted partner to a wide variety of customers ranging from multinational construction groups to small concrete producers.

RAPID IS A GLOBAL LEADER IN THE MANUFACTURING OF:

- ▶ Pan, Planetary and Twin Shaft Concrete Mixers
- ▶ Mobile Continuous Mixing Plant/Pugmills
- ▶ Specialised Mobile Continuous Mixing Plant
- ▶ Mobile/Fixed/Bespoke/Compact Batching Plants
- ▶ High Pressure Mixer Washout Systems
- ▶ Silos
- ▶ Spare Parts

Rapid's vast experience over the last four decades ensures the highest quality design and manufacture of all equipment. Quality, reliability, efficiency and technological advancement are the greatest aims of Rapid's workforce, based at its impressive 50,000 sq ft production facility and headquarters in County Armagh, Northern Ireland. Always innovating, Rapid's emphasis on product development is driven by the needs of its wide-reaching customer base, and the company's in-house technical team consistently strive to meet the demands of total quality while exceeding customers' expectations.



Aerial shot of the Rapid site

 Craigavon Engineering Ltd.

1969

1983



1983

2013



A WORLD CLASS PRODUCT RANGE



MIXER RANGE

The heart of any concrete plant, Rapid's quality, durable concrete mixer range includes Pan, Planetary and Twin Shaft options. Built as standard with chill cast tiles, Rapid delivers low maintenance costs across the entire range. Rapid's Planetary option is ideal for the pre-cast industry as well as mixing semi-dry coloured concrete. Planetary outputs range from 0.375m³ to 3m³ per hour.

The Rapid Pan (outputs 0.5m³-4m³) is the ultimate mixer for the ready mix industry due to its high outputs and Rapid is the sole UK manufacturer of 4m³ output Pan mixers.

Rapid's range of Twin Shaft concrete mixers (outputs 1.7m³-4.5m³) are ideal for the ready-mix industry due to its high outputs, fast mixing time and compact design. Rapid's Twin Shaft mixers have heavy duty extra thick chill cast tiles throughout, offering low maintenance costs.



MOBILE BATCHING PLANTS

Rapid's fully mobile Rapidbatch 70 and 120 mobile batching plant offers super mobile batching with outputs from 70m³ to 120m³ per hour. Fast on-site set up within one day means less downtime and increased efficiency for large construction projects.

Rapid's Transbatch (outputs of 40, 60 and 100 m³ per hour) offers a more compact solution for mobile batching in a single load road towable unit, which folds and dismantles for transport. The Transbatch is perfect for remote location projects.



MOBILE/SPECIALISED CONTINUOUS MIXING PLANTS

Totally mobile and fully self contained with its own power source and self erecting system, the Rapidmix mixes up to 400 or 600 tonnes per hour depending on application. Rapidmix is fully operational within 2-3 hours and is typically used for RCC (roller compacted concrete), road sub base and a wide range of environmental applications including contaminated land treatment and soil stabilisation.



HIGH PRESSURE MIXER WASHOUT SYSTEMS

Proper mixer cleaning and maintenance is critical to prevent build up. The compact Rapid Jetwash High Pressure Mixer Washout System offers powerful concrete mixer cleaning in just 4 minutes using 2,000 PSI (140 BAR) water pressure, reducing mixer wear and increasing the potential lifespan of the mixer. Available in both 2, 3 and 4 pump models.

FAST-TRACK SPARES

Rapid's service doesn't stop the moment your plant is erected; our in-house spares department provides a wide range of spare parts for all mixer types, silos and plant. Rapid offers high inventory levels and a FAST-TRACK service, combined with highly competitive rates.

transbatch

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PLANT MODELS

- ▶ **TRANSBATCH 100**
RT3000 Twin Shaft (3m³ output)
with chill cast tiles and mixing tools.
- ▶ **TRANSBATCH 60**
RT1700 Twin Shaft (1.7m³ output)
with chill cast tiles and mixing tools.
- ▶ **TRANSBATCH 40**
R1000 Pan (1m³ output) with chill
cast tiles and mixing tools.

FEATURES

- ▶ 4 x 10m³ aggregate bins with pneumatic
discharge doors. Folds
and partly dismantles for transport.
- ▶ Weighing belt that transports the
material to mixer.
- ▶ Cement weigh hopper with aeration
and pneumatic vibrator. Pneumatic
outlet butterfly valve.
- ▶ Water weigher with pneumatic
butterfly valve and pipework to mixer.
- ▶ Twin additive meters with 2 x pumps
(more additive meters can be added
as optional extras).
- ▶ Stairs and access walkways around
mixer fold and dismantle for transport.
- ▶ Chassis structure with support legs, twin
axle bogie and fifth wheel coupling.



Transbatch in transit



Transbatch on site



Twin Shaft mixer



Internal of Twin Shaft mixer



Aggregate bins

PLANT CONTROL FEATURES

- ▶ Built-in secure cabin positioned at truck
loading area.
- ▶ Automatic control system with load cells,
starter panel and pneumatics panel.

OTHER FEATURES

- ▶ Water connection pipe at rear
of machine allows supply to be
connected.
- ▶ Compressor with receiver and drier.
- ▶ Discharge chute with rubber sock.

OPTIONS

Our vast experience over the last 40 years has led us to the understanding that every project has unique requirements. As such, Rapid can offer a selection of optional extras to accompany our entire range of plant. Available optional extras for Transbatch include:

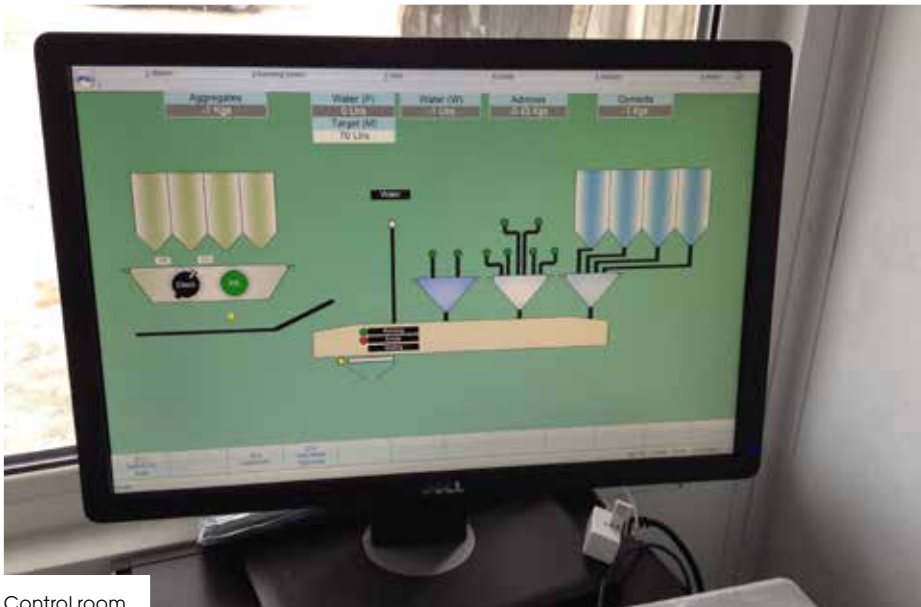
- ▶ **Silos** Sizes range from 30 tonnes to 1000 tonnes.
- ▶ **Precast bases** Rapid can provide precast bases to mount silos on for mobile and remote applications.
- ▶ **Admixtures** Additional admixtures can be added to the system if needed.
- ▶ **Wash-out system** The Rapid Jetwash system can be added to Transbatch for automatic mixer cleaning.
- ▶ **Winter Package** Fully winterised enclosure for plant, including heating systems for aggregates, water and mixer.
- ▶ **Control System** Alternative automated control systems are available.
- ▶ **Ice / Microsilica weigh hopper** Additional weigh hopper for warm climates.



Transbatch silo



Mixer Jetwash

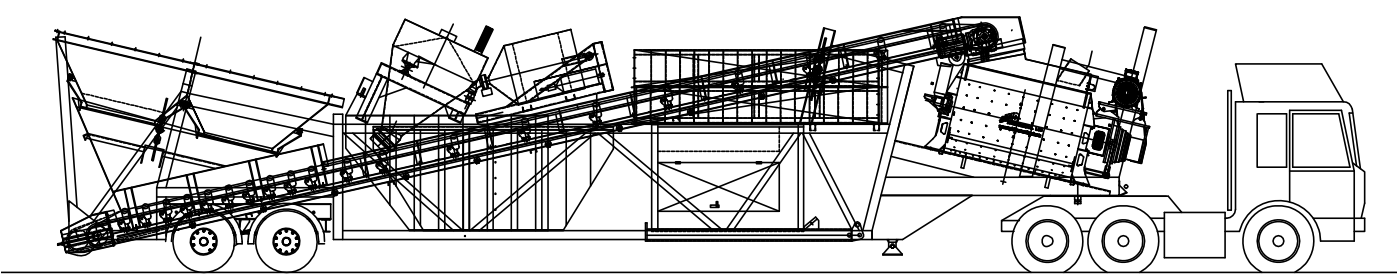


Control room

TRANSBATCH SPECIFICATIONS

MODEL (Transport dimensions)	MIXER	OUTPUT CAPACITY (per hour)	BATCH SIZE	LENGTH	WIDTH	HEIGHT	WEIGHT
TRANSBATCH 100	RT3000	100m³	3m³	18m	3m	4.2m	36,520kg
TRANSBATCH 60	RT1700	60m³	1.7m³	18m	3m	4.2m	33,500kg
TRANSBATCH 40	R1000	40m³	1m³	18m	3m	4.2m	31,100kg

Above weight does not include tractor unit



Rapid Transbatch in transport

APPLICATIONS

Rapid's Transbatch is a superior choice for a wide varying selection of construction projects, including but not limited to:

- ▶ Road building
- ▶ Housing developments
- ▶ Commercial yards
- ▶ Car parks / parking lots
- ▶ Pavements / sidewalks
- ▶ Wind farm bases
- ▶ Warehouse flooring



Transbatch on site- Northern Ireland



Concrete being poured

rapidbatch

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BUILT TO LAST

- ▶ Fully galvanised.
- ▶ Auto greasing system.
- ▶ Hard wearing liner on weigh belt conveyor and bin outlets.
- ▶ Hard wearing inner mixing chamber.
- ▶ Heavy duty gearboxes.
- ▶ Multiple mixer door discharge positions.
- ▶ Heavy duty hydraulic power pack.
- ▶ Reduced wear with extra thick chill cast tiles and paddles.
- ▶ Hexagonal heavy duty mixer shafts.
- ▶ Aerofoil arm design offering reduced wear and thorough mix.
- ▶ Rhombus style wear tiles.



Mixer unit in transit



Dust filter for mixer



Easy access to readymix chute



Bin unit



Rapidbatch 120 & bin unit



Twin Shaft mixer

INCREASED PRODUCTION

- ▶ Enlarged outlet on bins for quick charging.
- ▶ Short mixing times and high outputs with Twin Shaft mixer.
- ▶ Computerised control system.
- ▶ Accurate metering.

COMPACT DESIGN

- ▶ Small plant footprint.
- ▶ Easily transported.

SHORT INSTALLATION TIME

- ▶ No foundations required.
- ▶ Single crane lift.
- ▶ Plug and play electrics.

OPTIONS

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- ▶ **Winter Package** Fully winterised enclosure for plant, including heating systems for aggregates, water and mixer.



Precast base



Silo



Winter package



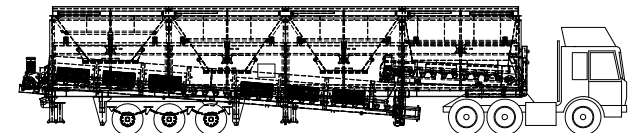
Admixtures

SPECIFICATIONS

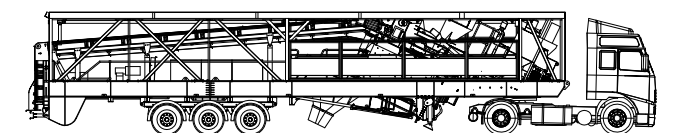
MODULE	MIXING CAPACITY	BATCH SIZE	CURRENT GENERATOR	LENGTH (Transport dimensions)	WIDTH (Transport dimensions)	HEIGHT (Transport dimensions)	WEIGHT
MIXING UNIT	120m³/h	3m³	400kVA	17.7m	3m	4m	38,500kg

MODULE	BIN CAPACITY	LENGTH (Transport dimensions)	WIDTH (Transport dimensions)	HEIGHT (Transport dimensions)	WEIGHT
BIN UNIT	84m³	16.6m	3m	4m	35,000kg

MODULE	LENGTH	WIDTH	HEIGHT	WEIGHT
CONTROL CABIN	4.6m	2.5m	2.5m	3,500kg



Rapidbatch bins in transport



Rapidbatch mixing unit in transport



90 degree configuration



In line configuration

APPLICATIONS

The Rapidbatch is a superior choice for a wide varying selection of construction projects, including but not limited to:

- ▶ Road building
- ▶ Housing developments
- ▶ Commercial yards
- ▶ Car parks / parking lots
- ▶ Pavements / sidewalks
- ▶ Wind farm bases
- ▶ Warehouse flooring



Wind farm project

rapidmix

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CEMENT / BINDER SILO

- ▶ Capable of storing 54 US tons (50 tonnes).
- ▶ Shut off slide plate closes silo, allowing maintenance to the hopper below.
- ▶ Fully galvanised folding access ladder with safety cage.
- ▶ Access hatch.
- ▶ 24m² reverse jet fan assisted filter.
- ▶ Pressure relief valve.

- ▶ Storage vessel for receiving cement/binder material from road tankers.
- ▶ Level probes control and monitor silo filling and emptying.
- ▶ Volumetric version fitted with a large rotary valve capable of up to 60 tonnes/hr.
- ▶ Weighed version fitted with dual rotary valves and load cell suspended screw conveyors.

OUTLOADING CONVEYOR

Transports the mixed material from the mixing chamber to the truck:

- ▶ Fitted with gob hopper allowing truck changeover and preventing filling segregation:
 - 800mm (31.5") - 400 model
 - 1,000mm (40") - 600 model
- ▶ Polyurethane blade belt cleaner scraper mounted on the face of the head drum.
- ▶ Rubber lagged motorised drive drum.



Outloading conveyor



Rapidmix gob hopper



Mixing chamber



Rapidmix silo



Rapidmix in transit

AGGREGATE HOPPER WITH VARIABLE SPEED BELT FEEDER

Hopper receives the aggregates into the plant from a standard loading shovel:

- ▶ Capacity of 15.6 yds³ (12.0m³) and loading width of 14ft 2½ ins (4,330mm).
- ▶ Hopper can be loaded from either side of the machine.
- ▶ Steep sides for difficult materials. (end slopes of 60 degrees).
- ▶ Removable division plate allows two materials to be used.
- ▶ Adjustable level gates enable the material height on the conveyor belt to be varied.
- ▶ Belt feeder provides feed from the hopper to the mixer.
- ▶ Belt width is 1,200mm (4ft) and a heavy duty 3 ply belt is fitted.
- ▶ Conveyor fitted with heavy duty geared motor drive, adjustable rubber skirts and heavy duty support rollers.
- ▶ Weighed version is fitted with an additional weigh belt, weighing material from the aggregate hopper to the mixing chamber.

TWIN SHAFT CONTINUOUS MIXER

Twin shafted, pugmill mixer features 72 specially phased paddles to give a high velocity, aggressive mixing action:

- ▶ All mixing tools are manufactured using chill cast, hard wearing steel paddles.
- ▶ Total access to the mixer via the top and the sides for cleaning and maintenance.
- ▶ Dual spraybars for water dosing.
- ▶ Floor conveyor for mixer cleanout.

CONTROL PANEL

The system uses a Siemens S71200 PLC (Windows based PC) to control all of the plant functions for automatic control with manual backup:

- ▶ Manual option on control panel complete with manual rate meters which display and allow adjustment on the speed of the in feeds.
- ▶ Control panel allows the operator to store, edit and retrieve multiple recipes for the proportioning of different materials.
- ▶ Siemens MP277 touch screen panel has facility to archive production information such as current stock levels and production records.
- ▶ Displays speed of the in feeds during manual operation.
- ▶ 40 characters per line thermal printer.



Control panel



On board hydraulic system for erection



Erection of mobile plant - no crane required



Gen set

GEN SET

This unit provides electrical power for all machine functions:

- ▶ Powered by a 6 cylinder, turbocharged diesel engine with directly coupled brushless alternator.
- ▶ Heavy duty steel skid type base frame with anti-vibration mounting pads.
- ▶ Electric starting system.
- ▶ Automatic engine shutdown protection equipment.
- ▶ On board 380 litre fuel tank.

OPTIONS

Our vast experience over the last 40 years has led us to the understanding that every project has unique requirements. As such, Rapid can offer a selection of optional extras to accompany our entire range of plant. Available optional extras for Rapidmix include:

- ▶ **Blending bins** 3 or 4 bins available in a fully mobile unit allowing for additional aggregates to be used.
- ▶ **Auxiliary silo** The option for a second silo allows further application options, again the silo can be mobile for ease of transportation.
- ▶ **Additional chemical admixtures** additional chemical admixtures can be fitted to broaden the range of applications the plant is suitable for.
- ▶ **Steering axles** Steering axles can be fitted to the plant to comply with specific road regulations in certain countries.
- ▶ **Paint colour of customer's choice** The plant can be painted in any colour. Our standard colours will be applied if no colour is specified however for branding purposes customer colours can be used.
- ▶ **Vibrating / hydraulic grid for aggregate hopper** Grid fitted to avoid oversized materials from entering the hopper.



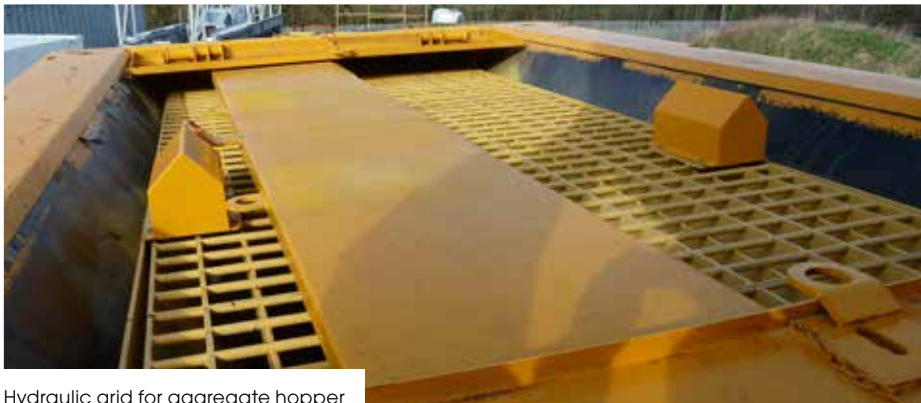
Blending bin unit



Rapidmix in white



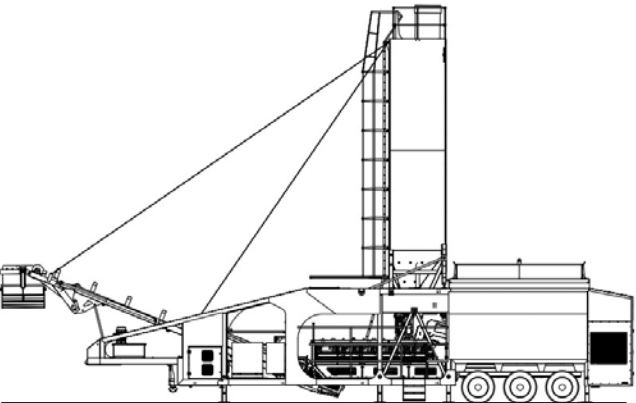
Auxiliary silo



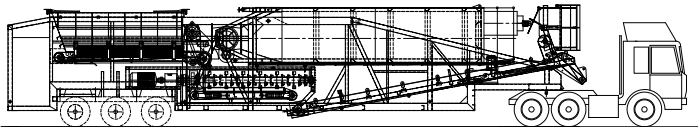
Hydraulic grid for aggregate hopper

SPECIFICATIONS

MODEL (Transport dimensions)	TOTAL WEIGHT	WEIGHT ON REAR TRI-AXLES	WEIGHT ON FRONT PIN	LENGTH	WIDTH	HEIGHT	HEIGHT when erected
RAPIDMIX 400	33,420kgs	22,170kgs	11,250kgs	18.5m	3m	4m	13m
RAPIDMIX 600	35,860kgs	24,360kgs	11,500kgs	18.5m	3m	4m	13m



Rapidmix erected



Rapidmix in transit



Rapidmix CBGM Application in Wales

SUITABLE FOR FOLLOWING PROJECTS AND APPLICATIONS:

- ▶ Mixing roller compacted concrete (RCC).
- ▶ Bentonite land fill sealing.
- ▶ Airport runways.
- ▶ Contaminated land treatment.
- ▶ Mine backfill.
- ▶ Cement treated base (CTB).
- ▶ Environmental remediation.
- ▶ Soil stabilisation.
- ▶ Dam construction.
- ▶ Paving quality concrete.
- ▶ Soil cement.

CASE STUDIES

Rapid International products have successfully been deployed on numerous different projects around the world, some examples of which are below:

transbatch



Readymix concrete
Northern Ireland

rapidbatch



Airport project
Latvia



Concrete road building and readymix Russia



Wind farm project
Sweden

rapidmix



Airport runway
Russia



Dam building
Mexico



RCC
Canada



RCC
South Carolina



Soil stabilisation
California



Road project
Russia

EXPERIENCE COUNTS. FOUR DECADES IN THE INDUSTRY GUARANTEES THE HIGHEST QUALITY DESIGN AND MANUFACTURE OF ALL OUR EQUIPMENT.



BENEFITS OF USING RAPID INTERNATIONAL



IN HOUSE DESIGN

All Rapid products are designed by our team of highly qualified engineers, using the latest 3d design software.

MANUFACTURING FACILITY

Everything is produced in our 50,000 square foot factory. We take pride in our manufacturing capabilities and have the latest equipment, including:

- ▶ Kaltenbach KBS620 DG/T Drill & Saw Line
- ▶ Esab Suprarex SXE-P 3500 Plasma
- ▶ Ermaksan HGD3100X13 Guillotine
- ▶ LVD PPEB 220 Press
- ▶ Excel AHS30/04 Plate Rolls
- ▶ Akyapak APK100 Section Rolls
- ▶ Colchester Combi K2 Lathe
- ▶ Colchester Combi 4000 Lathe
- ▶ Richmond VMC1020 Mill

We have recently added a new state of the art painting facility.

We also incorporate lean manufacturing, which starts at the design stage of our products and is implemented throughout the process to reduce waste.

SMART SOURCING

We only use components of the highest quality, all of which are sourced from internationally recognised brands. This not only ensures that we have the highest quality components but we have a strong network of distributors throughout the world reducing lead times and offering superior customer support.

SPARE PARTS

We carry a large stock of all our Rapid genuine spare parts. In order to reduce plant down time Rapid can offer a same day dispatch on most items.



AFTER SALES SUPPORT

With a Service and Support team of highly qualified technical operatives and service engineers, Rapid will ensure that all your after sales requirements are met with total professionalism and quality.

ENVIRONMENTAL CONSIDERATIONS

We take our environmental responsibility seriously. Our facility is powered by eco electric using our own 500Kw wind turbine.





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