SEA DEFENSE

PRODUCTION

- Tetrapod's
- Interlocking blocks

Content

fibo intercon

The Tetrapod, which has become synonymous with wave-dissipating blocks, have a simple shape yielding superior workability, and its high stability against wave action due to strong interlocking between each block makes structures stable.

Perfected form With a simple form comprised of 4 truncated cone legs, this concrete block is extremely robust because of its high flexing resistance.

Excellent hydraulic stability With a low centre of gravity, individual blocks are extremely stable against currents and other external forces. As for the structure, the blocks interlock naturally and become more stable, and absorb the energy of the flow because of its high roughness and effective voids.

Easy installation Our Tetrapod steel moulds are easy to set up and remove because they are composed of 4 simple interchangeable sections For placement, the Tetrapod’s are extremely adaptable to site conditions.

fibo intercon

Easy installation Our Tetrapod steel moulds are easy to set up and remove because they are composed of 4 simple interchangeable sections.

For placement, the Tetrapod's are extremely adaptable to site conditions.

For economical reasons it make sense to cast the tetrapod's close to where they are going to be placed.

With Fibo Semi-Mobile Batching plant site set up and to move the plant and set up again in new locations is fast and easy.

fibo intercon

Casting Depending on the number and size of the tetrapod's we have many solutions.

The solutions use different batching plant to suit the environment and site location.

Fibo can supply you with everything you need to set up and begin the manufacture process.

Interlocking Concrete Blocks

Interlocking Concrete Blocks – An alternative to tetrapod's for sea walls. We can supply you with 600 x 600 x 1800 mm and 800 x 800 x 1600 mm interlocking blocks moulds,

We have a separate brochure the this product.

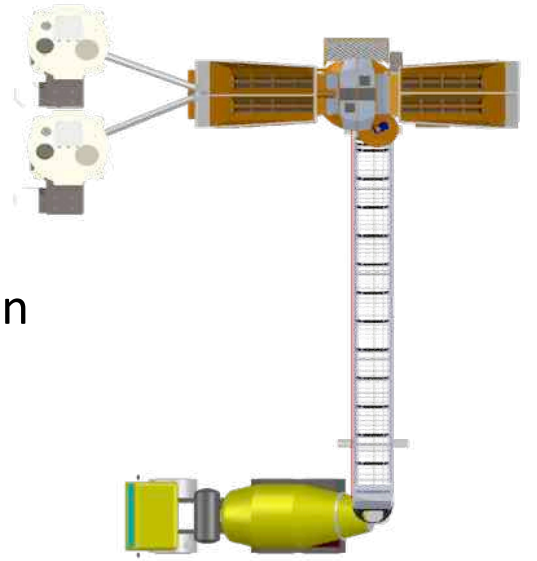
Tetrapod Production Outputs

F2200 Tetrapod Output

Weight Ton	Concrete Volume	Number Units per hour shift	Number Units 8 hour shift	Number Units 16 hour shift
1.5	0.63	58	464	928
3.0	1.25	29	232	464
5.0	2.08	17.5	140	280
8.0	3.33	11	88	176
13.0	5.42	6.8	54	108
20.0	8.33	4.4	35	70
25.0	10.42	3.5	28	56

Output - The table above shows the tetrapod outputs for the F2200 concrete batching plant. The plant has a hourly output of 37 m3 per hour. The table gives you the data for the number of various size Tetrapod's you can produce in a day using an 8 hour and 16 hour shift pattern.

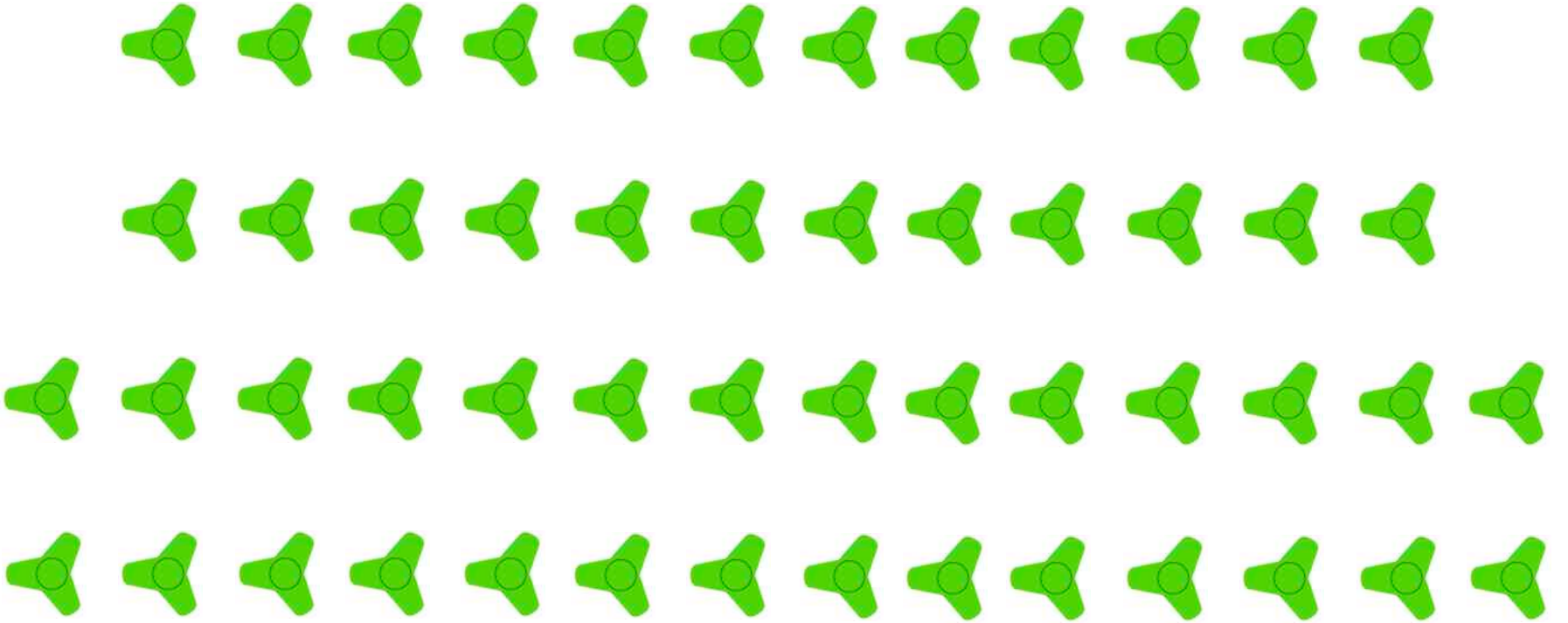
Output Example



F2200 producing 54 number 13, ton tetrapod's in an 8-hour shift

The tetrapod output with a 16, hour shift is 108 units per day

With two F2200 batching plants the output is 216 per day with a 16, hour shift



F1800 Tetrapod Output

Weight Ton	Concrete Volume	Number Units per hour shift	Number Units 8 hour shift	Number Units 8 hour shift
1.5	0.63	39	312	624
3.0	1.25	20	160	320
5.0	2.08	12	96	192
8.0	3.33	7.5	60	120
13.0	5.42	4.6	36	72
20.0	8.33	3	24	48
25.0	10.42	2	16	32

Output - The table above shows the tetrapod outputs for the F1800 concrete batching plant. The plant has a hourly output of 25 m3 per hour. The table gives you the data for the number of various size Tetrapod's you can produce in a day using an 8 hour and 16 hour shift pattern.

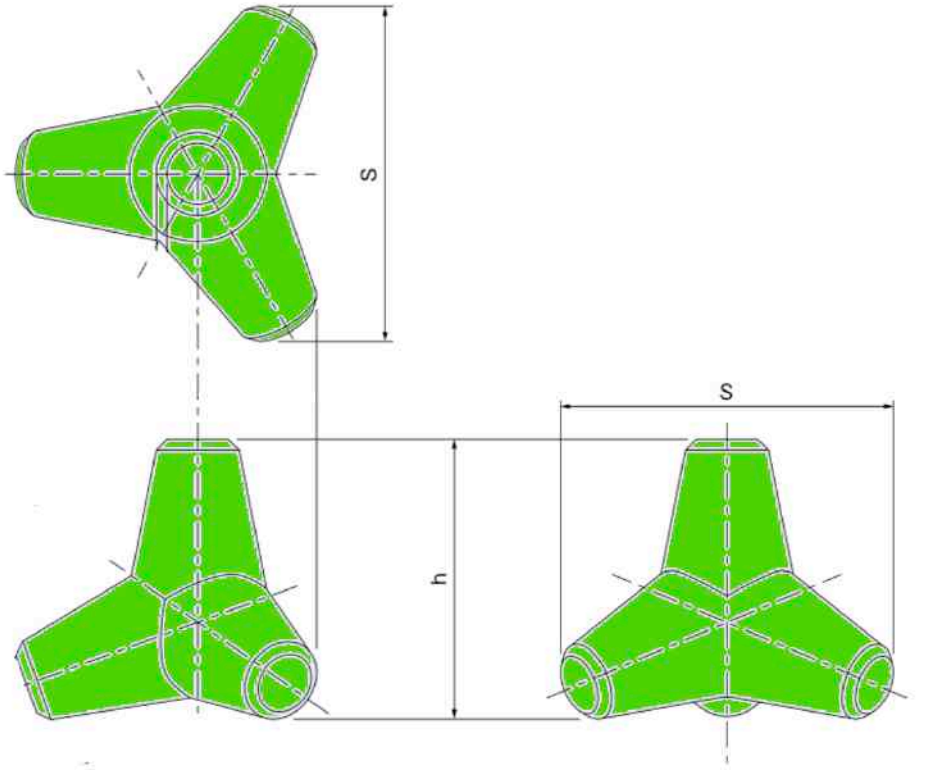
Output Example

F1800 producing 312 number 1.5, ton tetrapod's in an 8-hour shift

fibo intercon

Tetrapod Dimensions

Weight Ton	Concrete Volume	S	H
1.5	0.63 m3	1.4 m	1.3 m
3.0	1.25 m3	1.9 m	1.6 m
5.0	2.08 m3	2.3 m	1.9 m
8.0	3.33 m3	2.7 m	2.2 m
13.0	5.42 m3	3.1 m	2.6 m
20.0	8.33 m3	3.6 m	3.0 m
25.0	10.42 m3	3.9 m	3.3 m



Batching Plant

F1800
F2200

The F1800 / F2200 are semi-mobile batching plants and are designed for the production of ready-mixed and high-quality concrete.

The productivity of the plant, depending on the model and setup and ranges from 25 to 45 m3 per hour. The production of the dry mix can be up to 80 m3 per hour.

The batching plant is mounted on a metal frame with legs.

This plant has a concrete mixer, four built-in separate hoppers, four independent conveyors, water tank, dosing weight sensors and a compute to control the operation of the plant.

It can be supplied with a high-pressure washer, and the hoppers can be raised to increase capacity. The plant can be transported on a flatbe wagon.

F1800 F2200

TECHNICAL SPECIFICATIONS

		F1800	F2200
Productivity	M3/hour	20/30	30/45
Volume (gross)	L	1800	2200
Volume mixed material	L	1000	1400
Motor	kW	30	55
Mixing arms/side scrapers	pcs	6	8
Aggregate hoppers	pcs	4 x 2.4 m3	4 x 2.4 m3
Water tank	L	500	500
Dimensions W x H x L	M	2.5, 2.65, 8.8	2.58,2.65, 9.0
Weight	kg	9800	10500
Supply voltage	V/A	400/55	450/60

The Fibo One Stop Shop

Batching Plant

Loading Plant

Testing Equipment

Tetrapod Molds

Concrete Chemicals

Small Plant

FIBO FINANCE

No Payments for Twelve months

+

Return on investment less than twelve months

=

A positive cashflow

FIBO FINANCE

KEY BENEFITS

Fibo Batching plant has a return on investment between 6 and 12 months.

No payment for 12 months allows the plant to generate the cash to pay for itself.

Finance your project - Buy moulds, cement silos, bucket loaders and concrete batching plant.

Everything you need to set up a new business for pre-cast, on-site and remote site concrete production.

Fibo Finance is a great way to grow and build your business.

Great for:

- Sweating the machine to earn money to pay for itself.
- No need to borrow or use your own capital.
- Having a positive cashflow and owning your new plant.
- Great to finance all your construction plant for a project.

“IT’S THE WORLD’S BEST KEPT SECRET AND GREAT FOR YOUR BUSINESS”

Business Ideas

Concrete Solution

Onsite Concrete Batching

Batching concrete on-site has many advantages:

- Concrete on demand
- No waiting time
- No late concrete due to traffic or the plant being busy
- No part load charges
- Save 25% of a Ready-mix budget

Fibo Intercon batching plant is weight batched to +- 1% dosing accuracy using pre-weight cement.

With Fibo LINK our innovative software, you can produce certified concrete with delivery and conformity notes for each batch. Concrete can be produced on-site to BS 8500 - EN 206 easily with no hassle.

PHOTO KEY

1. Onsite Concrete Production
2. Continuous slip form concrete
3. Concrete frame construction
4. Housing site concrete

Concrete Solution

Wind Farm Foundation Construction

The location of wind farms is generally remote with no concrete batching plant in the area.

Fibo Intercon mobile batching plant is an ideal solution. Whether the quantity is 300 m3 or 600 m3 of concrete required per pour.

Fibo has a batching plant to deliver the concrete on demand.

The Fibo solution can be far more economical than traditional batching plants.

The concrete is high quality with weight batching, and with Fibo LINK every batch is stored in the cloud. The data can then be printed out as delivery and conformity documents for every batch.

PHOTO KEY

1. Wind Farm
2. Laying the blinding concrete
3. Foundation steel reinforcement
4. Concrete pour

Business Ideas

NEW HOUSING PROJECTS

We sell a lot of Fibo batching plant for remote housing projects in Africa. The plants are used to manufacture concrete blocks and to make concrete for foundations.

House block manufacturing making between 15,000 to 25,000 blocks per day.

Blocks can be made using a mix of recycled materials supporting the circular economy.

We can design and build the whole solution

Business Ideas

Mining and Quarrying

Fibo batching plant is used within the quarry and mining sectors to produce concrete and shotcrete.

PHOTO KEY

1. Concrete Batching Plant
2. Loading the shotcrete pump
3. Tunneling project
4. Rock stabilisation project

Business Ideas

1

RECYCLING CONSTRUCTION MATERIALS

We have many customers who recycle construction materials such as:

- Demolition concrete
- Sanitary ware
- Glass
- Road sweepings

They then make concrete interlocking blocks from the recycled aggregates and sell them. This is a very economical business, as you get paid to take in the materials as well as for selling the blocks.

PHOTO KEY

1. F2200 recycling concrete batching plant
2. Sanitary ware waste
3. Crushed sanitary ware
4. Concrete production
5. Completed blocks


2


3

4


5

Business Ideas

CONCRETE INTERLOCKING BLOCKS

There are many ways that concrete interlocking blocks can be used in large numbers. For example:

1. Retaining walls
2. Material storage bays
3. Buildings
4. Sea defense projects
5. River erosion protection

Business Ideas

RENTING MOBILE BATCHING PLANTS

Renting Fibo concrete batching plant makes sense. The plant produces weight batched high quality concrete.

Mobile batching plants are used on inner city projects, remote sites such as Islands, wind farm locations, remote bridge construction and small construction sites.

Many construction companies prefer to rent than purchase Fibo batching plant. This make a great opportunity for construction plant businesses or to rent the plant out when you are not using it on your projects.

Business Ideas

SELLING CONCRETE

Builders merchants and recycling companies sell concrete to the public and small contractors where they collect the concrete from your site.

Fibo have developed concrete to collect software to make the concrete sales simple and automated.

Your customer buys the mix and quantity of concrete from you. You give him a receipt that includes a code.

The customer put the code into the plant, and the plant automatically batches and dispatches the concrete.

SOIL STABILISATION

In Belgium they use a semi-dry mix of recycled aggregates and cement and use it under foundations and road construction.

The mix hardens and improves the ground bearing capacity for construction.

The process is big business in Belgium and there are many companies making money from this solution.

CUSTOMER STORIES

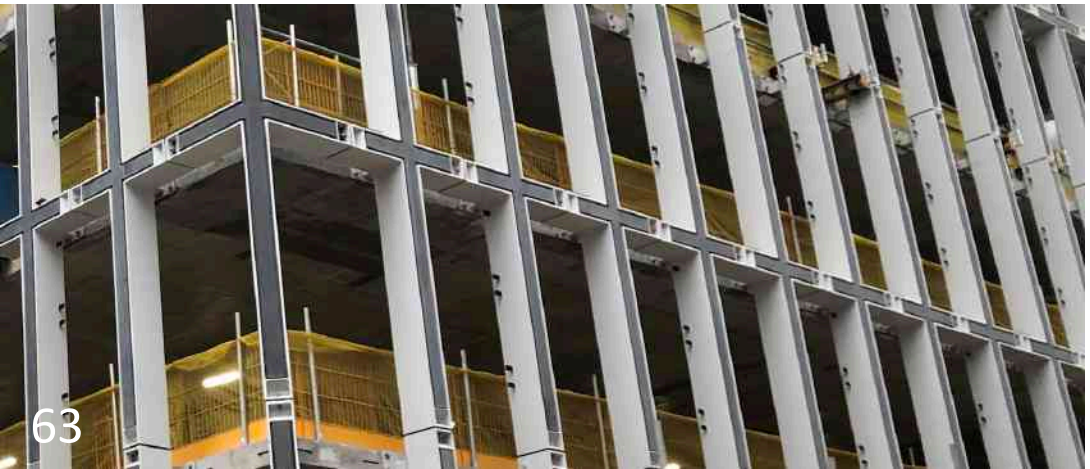
Case Study

Vierendeel Beams and Columns for 22 Hanover Bond, London

Our customer Barret's of Asbury won the project to fabricate the feature Vierendeel frame to the facade of 22 Hanover Bond for their client Clivedale.

Clivedale is an independent super-prime developer based in Mayfair, London with an expanding portfolio of luxury real estate including residential, commercial and hotel projects in some of the Capital's most prestigious addresses.

The Vierendeel columns are manufactured from steel plate and reinforced with rebar, then filled with pigmented concrete to offer a unique architectural look.



The steel columns and beams where being finished with black pigmented concrete that had to be consistent in colour for all the columns and beams; otherwise, they would be rejected by the client costing thousands of pounds.

The project managers of Barret's looked at a number of concrete batching plant companies and options. The final decision was to purchase a **Mini Viking** from Fibo.

The decision was made in favour of Fibo Intercon because we listened and adjusted the batching plant adding fine-tuning controls so that each batch of concrete would be consistent in batching and colour.

The fine-tuning involved adding a frequency controller to the cement auger motor. The speed of the cement auger is reduced by frequency converter and is controlled by the batching plant software during dosing.

You can see the results in the image on the left..

Case Story

Sabbeta Airport

Sabeta airport on Yamal Peninsula was built to fly construction and plant operators into the nearby gas fields.

Passenger numbers are about150 000 people per year. It is forecasted to grow with the further development of the Arctic Region. The airport will also be able to receive cargo planes.

The soil bearing capacity at the airport is very poor for construction. The solution was to mix the existing soil with cement and chemicals and replace it using a compactor.

Two F2200 fibo batching plants were used to build the airport and runways.

Case Story

Angara Bridge Construction

A new bridge was needed over the Angara river for the Boguchany Yurubchen Baikit freeway.

The bridge was a large civil engineering project especially for such remote location from the main freeways.

A Fibo F2200 concrete batching plant was used to produce all the concrete.

Case Story

RUSSIAN WINTER OLYMICS

Remote Site Batching Plant – In the years 2011-2013, in the Adler Area of Sochi Region in Russia, an Olympic park of 200 hectares was built for the 2014 Winter Olympics.

Over 100.000 m3 of concrete was required to build the Olympic park and sports venues.

The transport infrastructure prepared to support the Olympics included twelve tunnels, forty-six bridges, thirty-one miles of road, 223 miles of railroads and stations in and around Sochi, forty-two hotels, four sports venues and two training areas.

The complexity of the construction was determined by Sochi's location in the mountains where it was virtually impossible to deliver concrete, due to the high rise. A remote site batching plant was required.

The high rise made it impossible to place a modular or stationary concrete plant on the remote mountain areas, due to the compact location, the inaccessibility of preparing the foundation and the difficulties in transporting oversize parts.

Denmark (Head Office)

Fibo Intercon A/S
Herningvej 4
6920 Videbæk
Denmark
CVR: 35841571
Tel: +45 97 17 16 66

International Dealer Network

Denmark
Norway
Sweden
Finland
Russia

Lithuania
Ukraine
Bulgaria
Poland
Switzerland

Germany
Holland
France
Spain
Portugal

United Kingdom
Ireland
Canada
Untitled States
New Zealand

Philippines
South Africa
Ghana