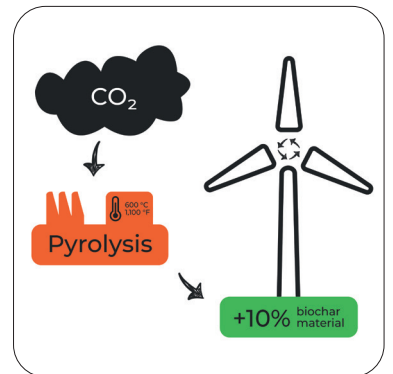
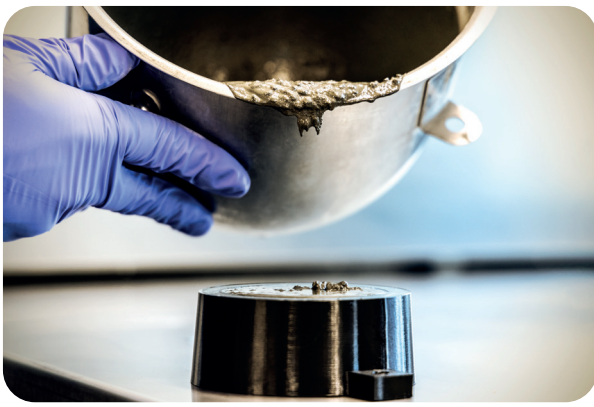


# Y-MatTec® G800 *ECO*



High strength grout with low carbon footprint for offshore connections



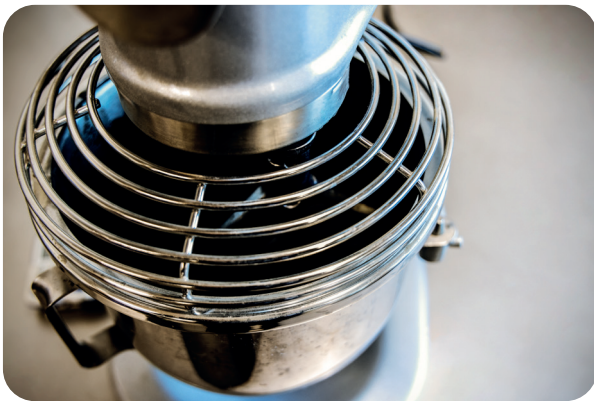
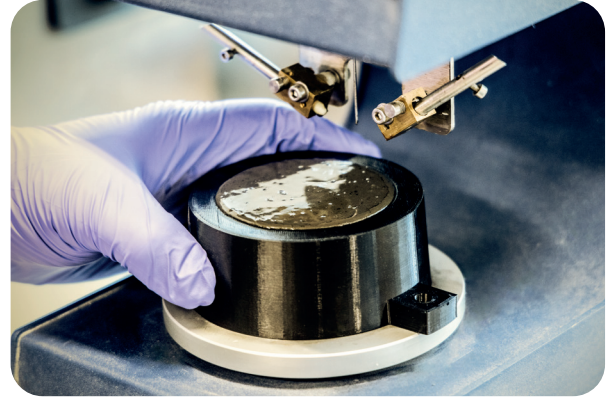


## Applications

Y-MatTec®G800 *ECO* is a pneumatically transferred high strength shrinkage compensated grout material with high flowability, designed for its used in offshore grouted connections.

## Characteristics

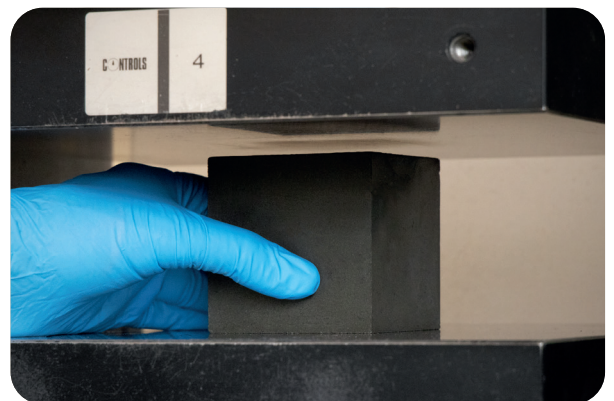
Y-MatTec®G800 *ECO* incorporates biochar, without compromising the grout's quality. Biochar is a carbon dioxide removal method using controlled pyrolysis to rapidly carbonize and transform biomass for permanent CO<sub>2</sub> storage.



Y-MatTec®G800 *ECO* can be transferred pneumatically, which allows optimizing the installation time and in consequence the cost of the grouting operation. The material has extremely good flow properties that makes it possible to grout narrow constrictions with very low water cement ratio at very low or high temperatures, obtaining, at the same time, a high early strength within 24 hours.

Application thickness from 10 mm to 600 mm.

Y-MatTec®G800 *ECO* is to be mixed with 14.0% to 15.0% potable water at 20°C (based powder mass) in a jet mixer (continuous mixer) or a paddle mixer. The water dosage depends on ambient temperature – higher temperature increases the water demand.



The product can be mixed and used within ambient temperature from 2°C to 35°. At any temperature, it is recommended to make a flow test before the application, to set the correct water dosage.

## Quality management system

Development, production, and sales are covered by Y-MatTec's quality management system certified in accordance with ISO 9001:2015 by DNV. The system indicates quality supervisors, routines for in-house inspection and documented routines.

Y-MatTec is hereto certified according to the Environmental Management System ISO 14001:2015 and Occupational Health and Safety Management System ISO 45001:2018 by DNV.



## Packaging and distribution

Y-MatTec®G800 *ECO* is manufactured at Y-MatTec's facilities in Holstebro, Denmark with the use of Y-MatTec's automatic production facilities and can be supplied in 1500 kg FIBC bags for eventual loading into silos. The yield is approximately 500 litres per ton of material.

Quality control is done at Y-MatTec's internal laboratory.

Y-MatTec®G800 *ECO* has a shelf life of 12 months, if stored in a sheltered and dry place in its original packaging away from direct sunlight and heat, not exceeding 40°C. When stored in silo's shelf life is reduced to 6 months. Stored under high temperature and high humidity conditions, the shelf life may be reduced.

## Health risks

Y-MatTec®G800 *ECO* is a cement-based product and should be stored out of reach of children.

It is dangerous if consumed.

If Y-MatTec®G800 *ECO* gets into the eyes, it can lead to serious eye injuries.

Mixed Y-MatTec®G800 *ECO* forms calcium hydroxide which is an irritant to the skin.

For further info we refer to the MSDS.

As Y-MatTec®G800-ECO is a special grout, material application must be done by trained and qualified personnel.

## Technical Data

Pot life [hours]	>2				
Setting time [Min] EN196-3	Initial: 6 - 8 hours		Final: 8 - 10 hours		
Flow [mm]ASTM C1437 / EN 1015-3	310 - 340				
Air content [%] EN 1015-7	< 3				
<b>Compressive strenght classification*</b>	<b>C90/105</b>				
Compressive strength 75 mm cubes, 20 <sup>o</sup> C [MPa] EN12390-3	1 day > 45	3 days > 75	7 days > 85	28 days > 100	56 days > 110
Compressive strength, Characteristic [MPa]	90				
Density [g/cm3] EN12390-7	2.20 - 2.30				
Static Modulus of Elasticity, [GPa] EN 12390-13	> 35				
Flexural Strength [MPa] EN 196-1 (Prism 40 x 40 x 160 mm)	> 12				
<b>Shrinkage Classification*</b>	<b>SKVM 0</b>				
Drying Shrinkage [mm/m] EN 12617-4	< 0.5				
Autogenic Shrinkage [mm/m] Until 56 days ASTM 1698	< 0.4				
<b>Exposure Classes* EN 206-1, EN 1045-2</b>	<b>XC4, XD3, XS3, XF3, XA2, WF</b>				

\*Classification according to "DAfStb-Richtlinie - Herstellung und Verwendung von zementgebundenem Vergussbeton und Vergussmörtel, Ausgabe Juli 2019".

All data are given for conditions of 21 +/- 2°C and 60 +/- 10% RH.

The technical data provided do not represent guaranteed minimum values. \*\* Fock based on 150/300 cylinders.

### Note:

Similar to all other recommendations and technical information, the information given in this TDS serves only as a description of the products characteristics, area of use and application is expected to be done by trained and professional personal.

The data and information given are based on the best technical knowledge in the area of cement and concrete technology. The given data and consumption are obtained in a controlled laboratory environment and may be subject to variations due to different work conditions.

Actual consumption and dosage should be determined on the job based of prior tests at the worksite.

Our Technical Service Team is at your disposal for further recommendations.

Y-MatTec reserves the right to modify the composition of the products provided these continue to comply with the data given. For liabilities of products sold we refer to our General Sales and Delivery Terms. Y-MatTec® - Registered trademark of Y-MatTec.

