

# Powerful with Somaloy®



## **Koenigsegg has developed the world's most powerful production car, where Somaloy is a key ingredient.**

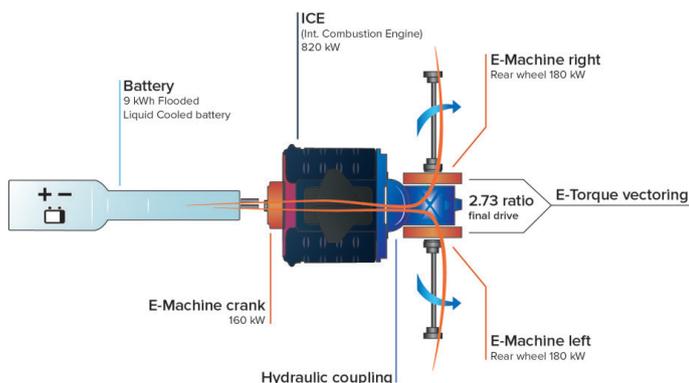
In the spring of 2015 the Swedish hyper car manufacturer presented their latest model "Regera" featuring 1500 hp or 1.1 MW, thus being the most powerful street legal production car ever made. Direct drive, without a gearbox, it operates in regular city traffic as well as on a race track and accelerates 0-400 km/h in less than 20 sec.

The secret is a unique drive train using a combustion V8 combined with three extremely compact axial flux electric motors from YASA Motors Ltd., each containing Somaloy components, pressed and produced by SG Technologies.

## The drive

The all new hybrid drive system of the Regera represents a milestone in performance and weight.

“The three electric motors constitute the most powerful electrical motor set-up in production car history, replacing the gears of a normal transmission while adding; power, torque, torque vectoring and yet still able to remove weight” says Christian von Koenigsegg.



There are two direct drive YASA-750 motors delivering 1600Nm/360kW on the rear axle for traction, and a single engine speed YASA-400 Motor Generator Unit delivering 350Nm/160kW of electrical power, torque gap filling and starter motor functionality.

## YASA motor

Koenigsegg chose YASA motors because of their light and compact design combined with high power and torque density. Koenigsegg CEO, Christian von Koenigsegg commented: “YASA’s motors are extremely power dense, making them the key-ingredient for the direct drive system.

The torque capability of the YASA motors combined with our world-leading engineering expertise has given the Regera an acceleration capability that is second to none”.

YASA-750 Traction Motor



*“Somaloy is an excellent match with the YASA topology. The low losses and the manufacturability compared to laminations are important to us but so is the mechanical strength of the material. The result is a high-performance e-motor that is also very durable in a road car environment.”*

**Dr. Tim Woolmer,**  
CTO and Founder YASA Motors Ltd.

## Somaloy® component

YASA motors found Somaloy to be the optimal material choice. The Somaloy stator core component is one of the main ingredients in their high performance motor.

Höganäs has a long working relationship with both YASA Motors and SG Technologies, and is supporting them in the development and production process of Soft Magnetic Composites components.



Somaloy motor components formed by SG Technologies

**For more information about Somaloy please visit**  
[www.hoganas.com/somaloy](http://www.hoganas.com/somaloy)