



SCANTECH OFFSHORE AND CAT® ENGINES.

TAKING TO THE SEA
TO PROTECT LIFE



CUSTOMER:

[ScanTech Offshore](#)

EQUIPMENT:

ST3100 air compressors

LOCATION:

Houston, TX | Great Yarmouth, UK

PRODUCT:

Cat® C32 Industrial Diesel Engine

SCOPE OF ENGINE USE:

1000-1200 HP

CAT® DEALER:

Finning (UK), Mustang (Texas)



FEATURED TOPIC:

Cat® C32 Industrial Diesel Engine

Wind farms and other subsea construction generate a large degree of noise. Underwater sound levels can be five times higher than in open air, and that noise can be harmful to marine life that relies on ultrasound for orientation in the water. This noise can disrupt animal migration, which is crucial to a species' survival.

ScanTech Offshore developed and manufactures ST3100 air compressors, powered by the Cat® C32 Industrial Diesel Engine, the most powerful air compressors on the market. The ST3100 air compressors were solely designed for the renewables market, they work by delivering oil free compressed air through to a hose that sits on the seabed to form a curtain of bubbles. These rising bubbles work as a barrier to reduce the noise exposed to marine life by up to 90%, by creating a curtain. With the increase of global offshore wind demand, the need for big bubble curtain technology has grown, making innovations like the ST3100 more important.

"The bubbles stop the sound from travelling for miles. We've developed this compressor to be a global market leader." – Scott Berry, Engineering Manager, ScanTech Offshore

A DURABLE ENGINE THAT FITS IN TIGHT SPACES

The ST3100 air compressors require a large volume of power but, due to the compact nature of the containers, there isn't a lot of space available in the unit. The compact frame of the Cat C32 industrial diesel engine makes it an ideal power source for ScanTech Offshore's needs. The Cat C32 engine was created to eliminate the need for thermal management and diesel exhaust fluid (DEF), reducing the size of the overall engine package. The modern engine design of the C32 provides one of the highest levels of reliability and power for operations such as pile installations.

More power means more pressure generated by the compressor. In areas of the ocean where the sea level is higher, additional pressure is needed to force air down the hoses attached to the compressor and form the bubble curtain. The C32 delivers.

"With the compact nature of the C32 engine, it allows us to have a relatively small footprint. And, we've more than doubled the horsepower compared to previous engines."
– Scott Berry, Engineering Manager, ScanTech Offshore

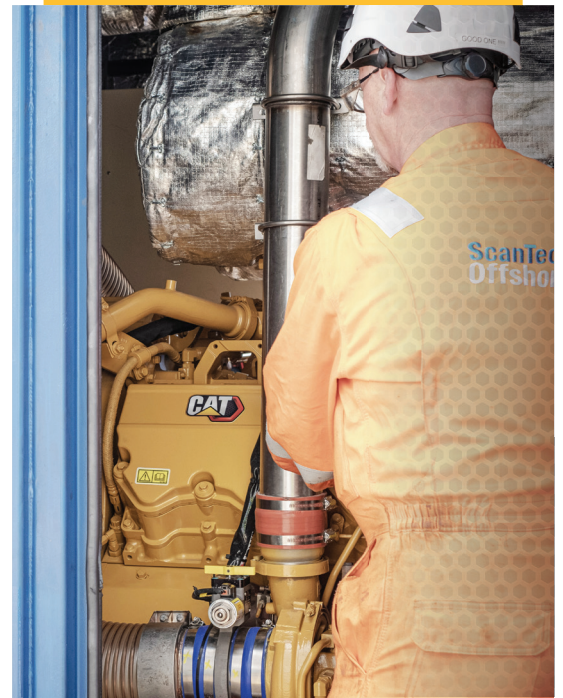
SUSTAINABILITY IS KEY FOR SCANTECH OFFSHORE

ScanTech Offshore created the ST3100 air compressor because they care about the environment and the sea life affected by wind farms and construction noise. The engine chosen for the ST3100 needed to meet the highest emission standards, and the internal engineering team conducted extensive design work to find a match. They concluded that the Cat C32 U.S. EPA Tier 4 Final engine was ideally suited for their sustainability goals.

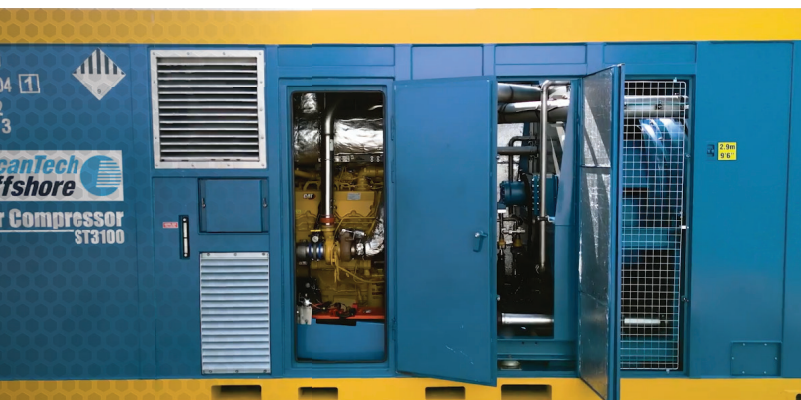
"Caterpillar is really the only supplier available that could supply this kind of engine with this kind of horsepower. Compared to competitors, they have an engine that is unique. We know we're in good hands." – Scott Berry, Engineering Manager, ScanTech Offshore

A RELATIONSHIP BUILT ON TRUST

ScanTech Offshore has used Cat engines for more than 25 years. There are currently more than several hundred air compressors operating with a Cat engine. Along with reliability and performance, a big reason the ScanTech Offshore team favors Cat engines is because of the accessibility to the global network of Cat dealers and the worldwide access to parts and service. So, no matter where the next bubble curtain is needed, ScanTech Offshore and Caterpillar will be there.



**"Cat engines
are unrivalled
in the offshore
marine
environment."**



LET'S DO THE WORK.™

© 2023 Caterpillar. All Rights Reserved. CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow," the "Power Edge" and Cat "Modern Hex" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

