

# Wind farm, Stemwede

### Data and facts

Company	PORR Spezialtiefbau GmbH
Туре	Foundations
Runtime	03.2023 - 07.2023
Principal	enercity Erneuerbare Projekte GmbH & Co. KG

Project report online

www.porr-group.com



## Deep foundations for 10 wind turbines with 380 Franki piles

These alternating layers made it necessary to partially pre-compact the gravel above and below the pile setting depth in order to increase the bearing capacity. Due to the soil improvement, the piles could be dimensioned shorter and more economically.

#### Economical francipiles reduce CO<sub>2</sub> emissions

Since concrete of monitoring class 2 was used, external monitoring by an appreciation monitoring agency was carried out as part of the quality assurance in addition to the self-monitoring of the concrete quality. The measurements for the verification of the external pile load-bearing capacity were carried out by PORR Spezialtiefbau Planung. PORR branch manager Thomas Cramer explains how choosing the right foundation method minimises resources and reduces  $\mathrm{CO}_2$  emissions: "With our slender full displacement piles, we make a significant contribution to sustainability and economic efficiency in the construction of wind turbines. Significantly less in-situ concrete is required than with comparable pile types and, in addition, there is no need to dispose of the drilled material."

### **Impressions**









### Image notes

1

Wind farm, Stemwede

The slender full displacement drilled pile is erected sustainably and economically.

3

Wind farm, Stemwede

Due to the soil improvement, the piles could be dimensioned shorter and more economically.

2

Wind farm, Stemwede

The slender full displacement drilled pile is erected sustainably and economically.

4

Wind farm, Stemwede

In Stemwede, 30 piles of this type with a diameter of 51 cm and a length of up to around 11 metres were produced for each foundation.

Do you have questions about the project or would you like to learn more? Feel free to contact us for further information.

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