



Offshore Wind Power Grouting Solutions

Durable grouting systems for suction bucket foundations, annular gap grouting and underwater placement.

Solution Matrix

CBGM5 Low-Density Non-Shrink Grout Low density for suction bucket; high flow and stable non-shrink. Product Page	CBGM-125 High-Strength Grout Ultra-high strength (>130 MPa @28d); shrinkage compensated for annular gap stability. Product Page	CBGM-70 Underwater Grout Anti-washout underwater placement; zero bleeding; complete filling. Product Page
---	--	--

Performance Highlights

- Compressive strength: 1d ≥ 50 MPa, 3d ≥ 85 MPa, 28d ≥ 130 MPa (prototype up to 158.9 MPa).
- Flow retention: 290 mm (initial), 260 mm (30 min), 230 mm (60 min).
- Zero bleeding; air content $\leq 4.0\%$.
- Elastic modulus: ≥ 12 GPa (1d), ≥ 45 GPa (28d).
- Initial set time: ≥ 120 min.

Application & Construction

Representative Project: Huaneng Dalian Zhuanghe 200 MW Offshore Wind Farm – pile-bucket composite foundation grouting successfully verified in 2023.

- 1 Drive pile and install jacket; leg sleeves overlap piles.
- 2 Seal bottom, install lines and gauges; flush with water.
- 3 Pump lubrication slurry, then grout continuously until overflow.
- 4 Hold pressure, cure and inspect (diver video confirmation).

Recommended Equipment

Grout mixer	22 kW; continuous mixing
Main pump + standby	50 kW; standby changeover ≤ 30 min
Grout hoses	3-inch, quick couplings, rated 1.5x pressure
Water tank	5-ton fresh water
Testing kit	Flow cone, cube molds, thermometers

Technical Specifications

Bulk density	≥ 2350 kg/m ³
Air content	≤ 4.0 %
Bleeding	0 %
Flow	≥ 290 / ≥ 260 / ≥ 230 mm
Expansion	0.1–3.5 % (3h) / 0.02–0.5 % (24h-3h)
Strength	≥ 50 / ≥ 85 / ≥ 130 MPa
Elastic modulus	≥ 12.0 / ≥ 45.0 GPa
Initial set	≥ 120 min

Contact

Sino-Sina Building Materials Co., Ltd. | www.zrete.com | info@zrete.com | +86-153-7387-2353