Product Manual

Product Name: CBGM Onshore Wind Power High Strength Non-Shrink Grout

Product Description

CBGM Onshore Wind Power High Strength Non-Shrink Grout is a single-component, cement-based grout specially engineered for wind-turbine foundations and anchor systems in onshore wind farms. It features high early strength, controlled micro-expansion, excellent fluidity, and long-term durability in harsh climates.

Product Parameters (Typical Values, GB/T 50448-2015)

Item	CBGM-80	CBGM-90	CBGM-100	CBGM-110	CBGM-130
Flowability – initial (mm)	≥340	≥290	≥340	≥290	≥340
Flowability – 30 min (mm)	≥310	≥260	≥310	≥260	≥310
Expansion (3 h) %	0.1–1.5	0.1–1.5	0.1–1.5	0.1–1.5	0.1–1.5
Expansion (24 h) %	0.02–0.5	0.02–0.5	0.02–0.5	0.02–0.5	0.02–0.5
Compressive Strength (1 d, MPa)	≥30	≥40	≥50	≥60	≥70
Compressive Strength (3 d, MPa)	≥50	≥60	≥70	≥80	≥90
Compressive Strength (28 d, MPa)	≥80	≥90	≥100	≥110	≥130
Bonding Strength with Steel (MPa)	≥10	≥12	≥16	≥16	≥20
Freeze–Thaw Resistance (cycles)	≥200	≥200	≥200	≥200	≥200

Key Benefits

- High early strength for rapid load transfer.
- Non-shrink with micro-expansion, ensuring void-free bedding.
- Excellent flowability and long workability.
- Durable in frost, sulfate, and chloride environments.

Applications

- Wind turbine base-plate bedding and anchor bolt sleeves.
- Heavy equipment foundation grouting.
- Structural steel anchoring and reinforcement.
- Onshore renewable energy infrastructure in harsh climates.

Construction Method

- Prepare substrate, ensuring clean and sound surface.
- Install watertight formwork.
- Mix powder with clean water (w/b ratio 0.13–0.16), stir 3–5 min.
- Place grout by pouring or pumping, ensuring continuous flow.
- Do not vibrate; allow free flow.

- Cure for at least 7 days under wet conditions or curing compound.
- For hot weather, use cool mixing water; for cold weather (<5 °C), insulate and use warm water.

Packaging & Storage

- Packaging: 25 kg bags.
- Storage: Store in dry, ventilated conditions, away from moisture.
- Shelf life: 12 months.

Disclaimer

All technical data are typical values tested under controlled conditions. Actual performance may vary depending on project environment and site practices. Users are advised to conduct trials to confirm suitability for specific applications.