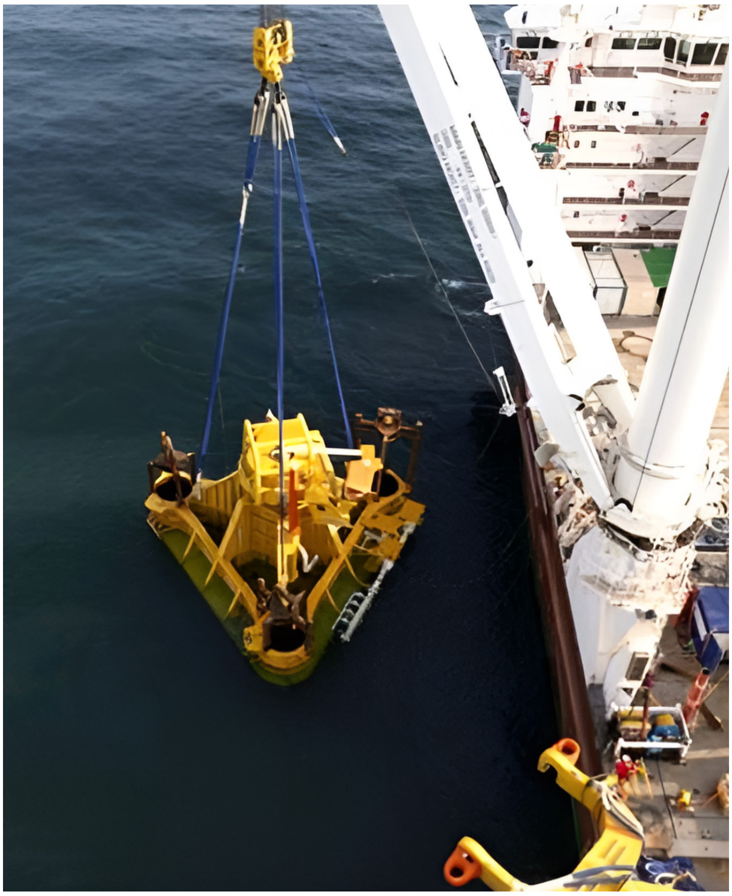
SIKA AT WORK
ENI CONGO FLNG MOORING SYSTEM

OFFSHORE & MARINE CONSTRUCTION
MARINE INFRASTRUCTURE

BUILDING TRUST

ENI CONGO FLNG MOORING SYSTEM



Three anchor piles were installed in pre-drilled holes and grouted with SikaGrout®-9650 to reinforce the foundation.

ENI Congo FLNG Mooring System and production barge facility.

PROJECT DESCRIPTION
Sika successfully delivered a complete offshore grouting programme for the ENI Congo FLNG Mooring System, located offshore the Democratic Republic of Congo. The project included the grouting of three anchor piles (A1, A2, A3) and three Subsea Swivel & York (SSY) base sleeves (B1, B2, B3), forming the foundation of the mooring system for large FLNG production barges. Offshore work was performed in water depths of around 30 metres, between February and May 2025.

Project name:	ENI Congo FLNG Mooring System
Location:	Democratic Republic of Congo
Year:	2025
Client:	ENI Congo
Main Contractor:	WISON / GEOCEAN S.A.S
Water depth:	32 m
Application:	Installation
Product:	SikaGrout®-9650 and SikaGrout®-9500

PROJECT REQUIREMENTS
The project required Sika to deliver a full offshore grouting programme to support the installation of the ENI Congo FLNG Mooring System. This included developing the complete grouting procedure along with all necessary project documentation, followed by the supply and delivery of significant volumes of grout materials - approximately 250 MT of SikaGrout® - as well as all essential mixing and pumping equipment, hoses, valves, and auxiliary installation tools. A fully calibrated and stocked mobile offshore laboratory was deployed to ensure real-time quality control, supported by a toolbox container and a dedicated seven person offshore team.

Daily operations were further supported by client-provided riggers and big-bag operators, enabling 24 hour coverage. Upon completion, Sika submitted a comprehensive Close-Out Report containing QC monitoring logs, daily activity summaries, compressive strength test results performed in Sika's certified laboratory, certificates of grout filling, and detailed equipment checklists and Site Acceptance Test documentation, ensuring full traceability and compliance.

To fully ballast the yoke tank once in-situ, the client team requested for a high-density iron oxide-based product be mixed and placed into the submerged tank by Sika as additional scope. Despite the potential challenges associated with mixing and pumping a product with a consolidated specific gravity of nearly 5, the Sika CPT25 equipment and team efficiently mixed and placed over 1000 MT of product into the yoke tank to complete the additional scope in good time.

SIKA SOLUTIONS
Sika delivered a comprehensive offshore grouting solution tailored to the installation requirements of the ENI Congo FLNG Mooring System. This included supplying all grout materials - most notably SikaGrout®-9650 for anchor piles and SikaGrout®-9500 for SSY base sleeves - along with a complete grouting spread consisting of mixers, pumps, hoses, valves, and all related installation accessories. A fully equipped mobile offshore laboratory was mobilized to carry out continuous onsite QC testing, ensuring that the grout materials performed consistently under offshore environmental conditions. Mobile water chilling units were mobilised together with reefer containers to maintain optimal powder and mixed grout temperatures despite the hot and humid conditions.

Beyond material supply and equipment provision, Sika deployed a full offshore team responsible for operational execution, QC oversight, and safe handling procedures. QC activities included temperature control, early-age cube testing offshore, and 28 day compressive strength testing at a certified third-party laboratory in France. Sika provided end-to-end project management, from mobilisation to final reporting, culminating in a detailed Close-Out Report. Together, these services ensured efficient, controlled, and high-quality grouting performance across the entire offshore campaign.

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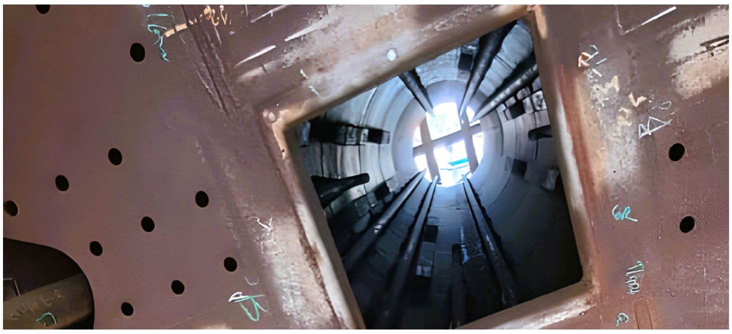

Grout line, inlet and internal overflow inside anchor piles.

SSY Base assembly with sleeve.

The SSY base sleeve column was installed on three grouted anchor piles and subsequently levelled and grouted with SikaGrout®-9500.

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York, mooring assembly and riser.

Mooring tether.

Grouting operation onboard Sianna.

Grouting spread setup onboard HLV Spliethoff.

PROJECT PERFORMANCE

Despite environmental and logistical challenges, Sika ensured reliable and high-quality execution through close technical support, effective temperature management measures, and flexible offshore coordination. Grout temperature concerns were effectively managed using dedicated chilling measures during grouting operations and temperature controlled storage, ensuring compliant performance throughout the campaign. These actions ensured the grouting programme met all required specifications and performance expectations.

CUSTOMER BENEFITS

The project delivered a reliable mooring foundation system for the FLNG facility, supported by Sika's integrated offshore services, material expertise, and robust QC process. Furthermore, the project marked an important milestone for GEOCEAN S.A.S., as it was their first installation of an SSY Base Mooring System, positioning the contractor strongly for future mooring installation campaigns with the main client.

USGBC MEMBER

SIKA SERVICES AG
Tueffenwies 16
CH-8048 Zurich
Switzerland

Contact
Phone +41 58 436 40 40
www.sika.com

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