



## Overview

### CASE STUDY:

Pelican Marvel | Penguin Shipyard | ADNOC | UAE

### PRODUCT:

[3 x Baudouin 12M26.3 Propulsion engines](#)

[2 x Baudouin 6W105S Gensets](#)



### CLASSIFICATION SOCIETY:

BV Type approved

### DUTY:

P2 Heavy Duty

### POWER OUTPUT:

12M26.3 - 1214 kW @ 2300 rpm

6W105S - 120 KWe

### APPLICATION:

High-speed Multi-Role Crewboat

### PARTNERS:

Shipyard:

Penguin Shipyard International Pte Ltd,

End User:

Abu Dhabi National Oil Company (ADNOC)

Penguin International Limited, a publicly listed leader on the Singapore Exchange and the world's foremost builder of high-speed aluminium crewboats and armoured security vessels, has launched the Pelican Marvel, the flagship of its new hybrid mFlex-42 series. Constructed at Penguin's Singapore shipyard, this 42 m multi-role vessel is powered by three heavy-duty Baudouin 12M26.3 main engines and two inline Baudouin 6W105S gensets. This complete Baudouin marine engine range ensures robust propulsion, silent auxiliary power, and seamless integration into the boat's "Hybrid Lite" shaft-generator system. Class-approved by Bureau Veritas and equipped with gyro stabilisation for improved ride comfort, Pelican Marvel is designed for extended offshore crew transfers, security, and SAR missions—capable of performing in monsoon conditions with a top speed of 30 kn and a 700 nmi range.

The vessel is currently chartered to ADNOC and features a distinctive pink hull and engine room—reflecting both Penguin's innovative identity and unique vessel branding. A second mFlex-42 hull is under construction, underscoring ADNOC and Penguin's confidence in Baudouin's end-to-end propulsion and auxiliary power solutions. Baudouin's engines are IMO Tier II compliant with optional Tier III upgrades, fully biofuel-ready, and supported by an extensive global service and spare-parts network covering over 130 countries. This ensures parts availability, technical support, and life-cycle maintenance for remote deployments.



Baudouin's 12M26.3 engines are purpose-built for high-speed crewboat operations. These 31.8 L V12 engines, rated at 1,214 kW at 2,300 rpm under P2 Heavy Duty classification, feature advanced common-rail fuel injection (2,200 bar), high-efficiency turbochargers, and a dual-circuit cooling system for optimal performance and fuel economy. Their square 150 × 150 mm bore-stroke configuration delivers high torque and durability, while marine-grade components, like individual cylinder heads, wet liners, and large inspection hatches, ensure easy maintenance and long MTBO intervals. Environmentally, the 12M26.3 meets IMO Tier II standards and can be upgraded to Tier III with SCR systems. It is also fully compatible with 100% HVO biofuels, making it a future-ready solution aligned with global decarbonization goals.

Complementing the main propulsion, Baudouin's 6W105S generator sets provide reliable ship service power. These inline 6-cylinder, 7 L gensets deliver 120 kW<sub>e</sub> at 1,500 rpm and share the same design DNA: electronic common-rail injection, turbocharging, and modular construction for easy servicing. Optimized for hybrid systems, they operate efficiently under varying loads, activating only when battery or shaft-generator power is insufficient, extending service life and improving energy management.

Together, the 12M26.3 and 6W105S engines create a cohesive, efficient marine power package covering propulsion, auxiliary systems, and hybrid integration. This end-to-end solution reflects Baudouin's strength in supplying modern workboats with scalable, emissions-compliant technology.

Critically, this performance is backed by Baudouin's global service and support network across 130+ countries. With certified distributors, regional spare parts availability, and trained technical teams, operators like Penguin benefit from reduced downtime and full lifecycle support. Illustrated parts manuals and digital monitoring further streamline maintenance in the field.

With a second mFlex-42 vessel already under construction using the same power configuration, this project confirms the trust placed in Baudouin's complete marine engine range. As the sector accelerates toward hybridization and sustainability, Baudouin remains a key enabler of reliable, future-proof offshore operations.

#### Client testimonial

"Penguin is no stranger to Baudouin. From engineering to commissioning, Baudouin has been with us throughout. We are especially impressed by their client support network in the Middle East."

*Mr James Tham, Managing Director, Penguin International Limited.*

