

HYTECH - POMMEC



TUNNELLING



HYPERBARIC SOLUTIONS FOR TUNNELLING



BUILDING SAFETY AND EFFICIENCY UNDERGROUND

When working under pressure, safety and precision are everything. Tunnelling projects often demand hyperbaric interventions — whether for inspection, maintenance, or repair within the TBM pressure shield. With certified technology and decades of expertise, you gain the assurance that every operation runs smoothly, safely, and on schedule.



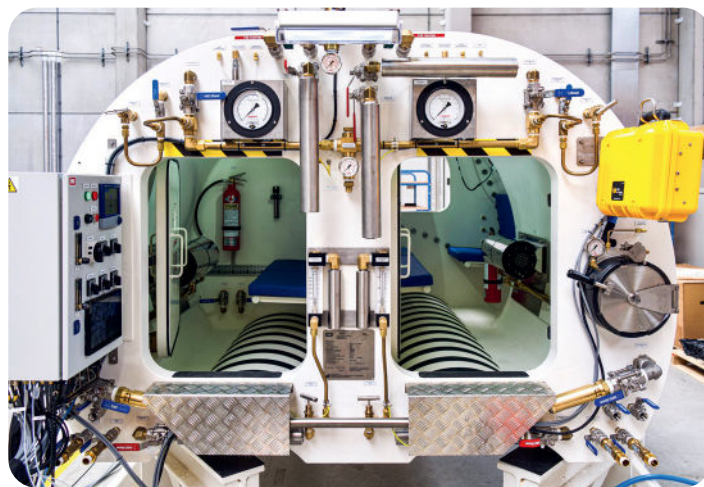
COMPLETE HYPERBARIC PACKAGES

For more than four decades, Hytech-Pommec has manufactured and certified decompression and hyperbaric chamber systems which have been installed in tunnel boring machines (TBMs) around the world.

Systems can include:

- **Man Lock Chambers** – for transfer under pressure, integrated into the TBM's shield.
- **Medical Chambers & Living Habitats** – for decompression, treatment, and extended interventions.
- **Auxiliary Equipment** – compressors, cooling, control panels, and life-support systems.

Each system is designed to meet the unique requirements of your tunnelling project – from compact units to complete hyperbaric complexes.



“ WHEN
EVERY DETAIL
COUNTS, TRUST
A SYSTEM BUILT
TO PERFORM
UNDER
PRESSURE

SYSTEM INTEGRATION AND MOBILITY

To simplify logistics, all required components — from control panels to compressors and cooling systems — can be built into for example **10ft, 20ft, 40ft containers**, mobile systems etc.

This approach ensures:

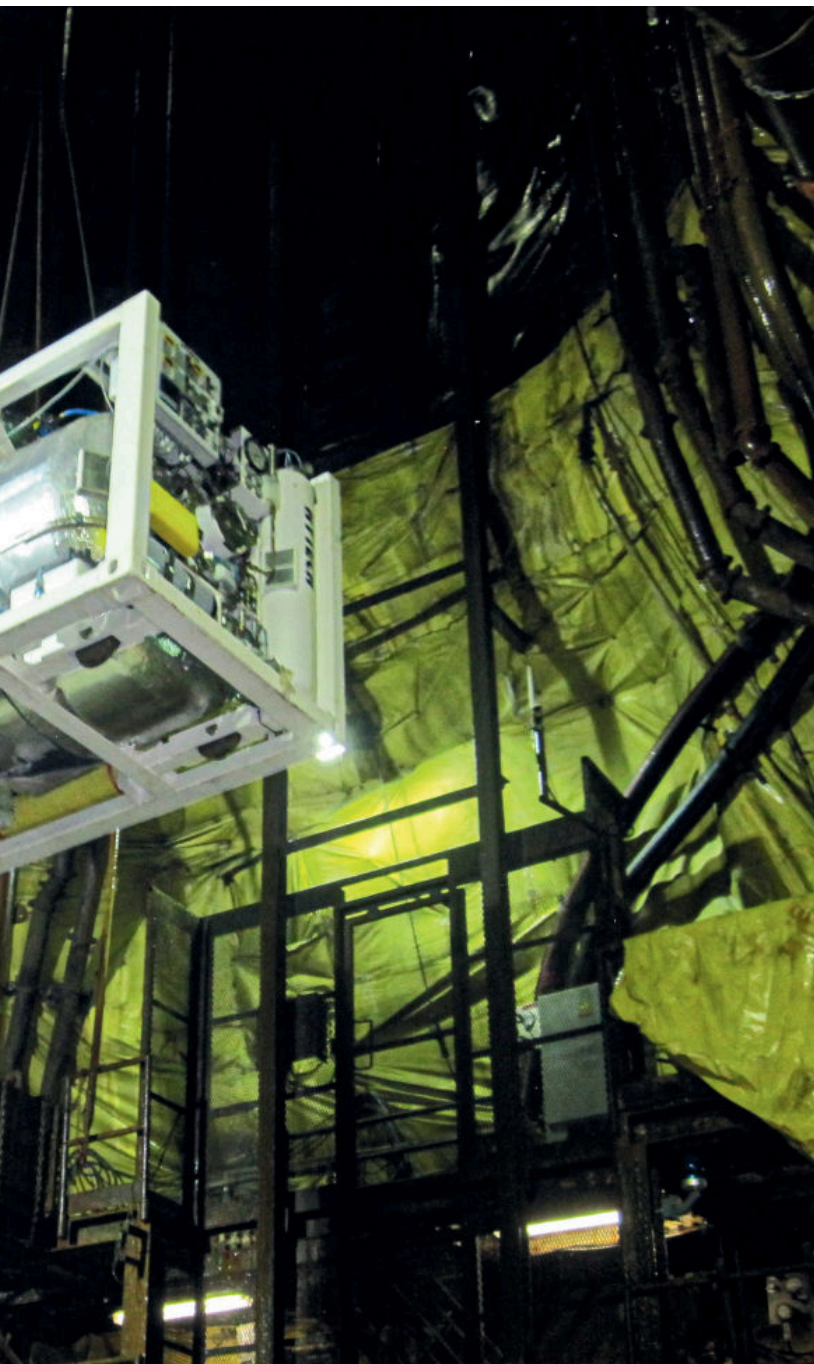
- Easy transportation to any tunnelling site
- Efficient on-site installation
- Protection of sensitive materials and equipment
- Centralised remote control for all hyperbaric activities

Integration and commissioning can be carried out by qualified engineers to guarantee seamless operation.



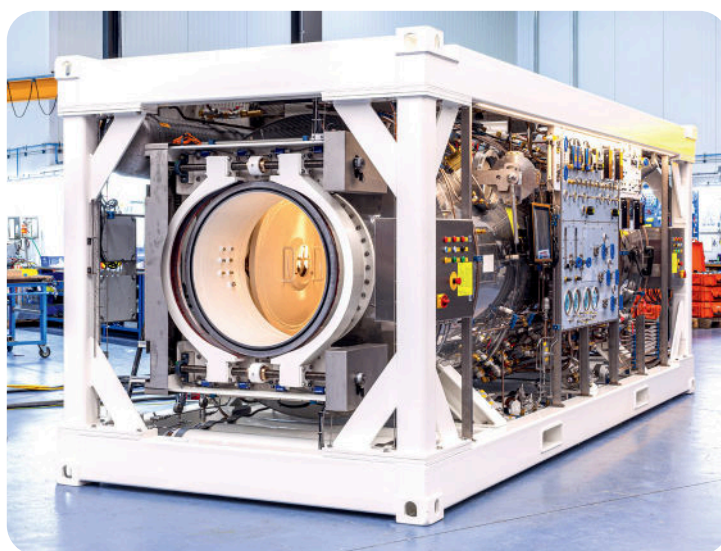
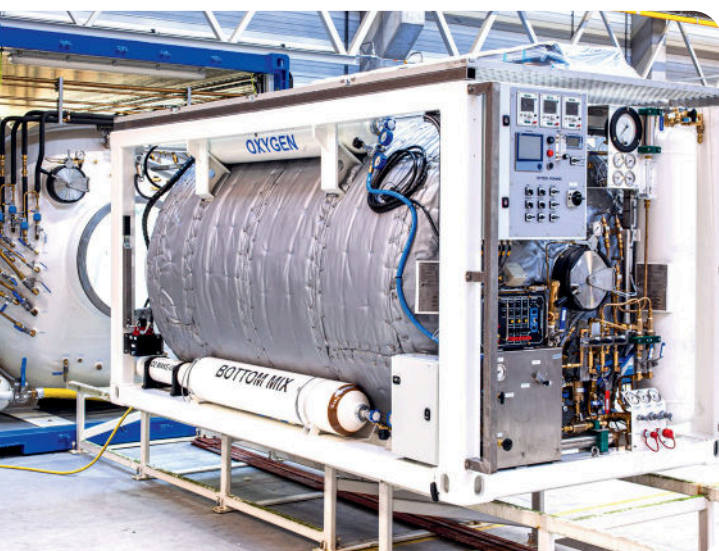
LIFE-CYCLE SUPPORT AND TRAINING

From delivery to daily operation, reliable support is key. Comprehensive manuals, operator training (on-site or in-house), and a complete spare parts and maintenance programme help you get the most out of your system — safely and cost-effectively.



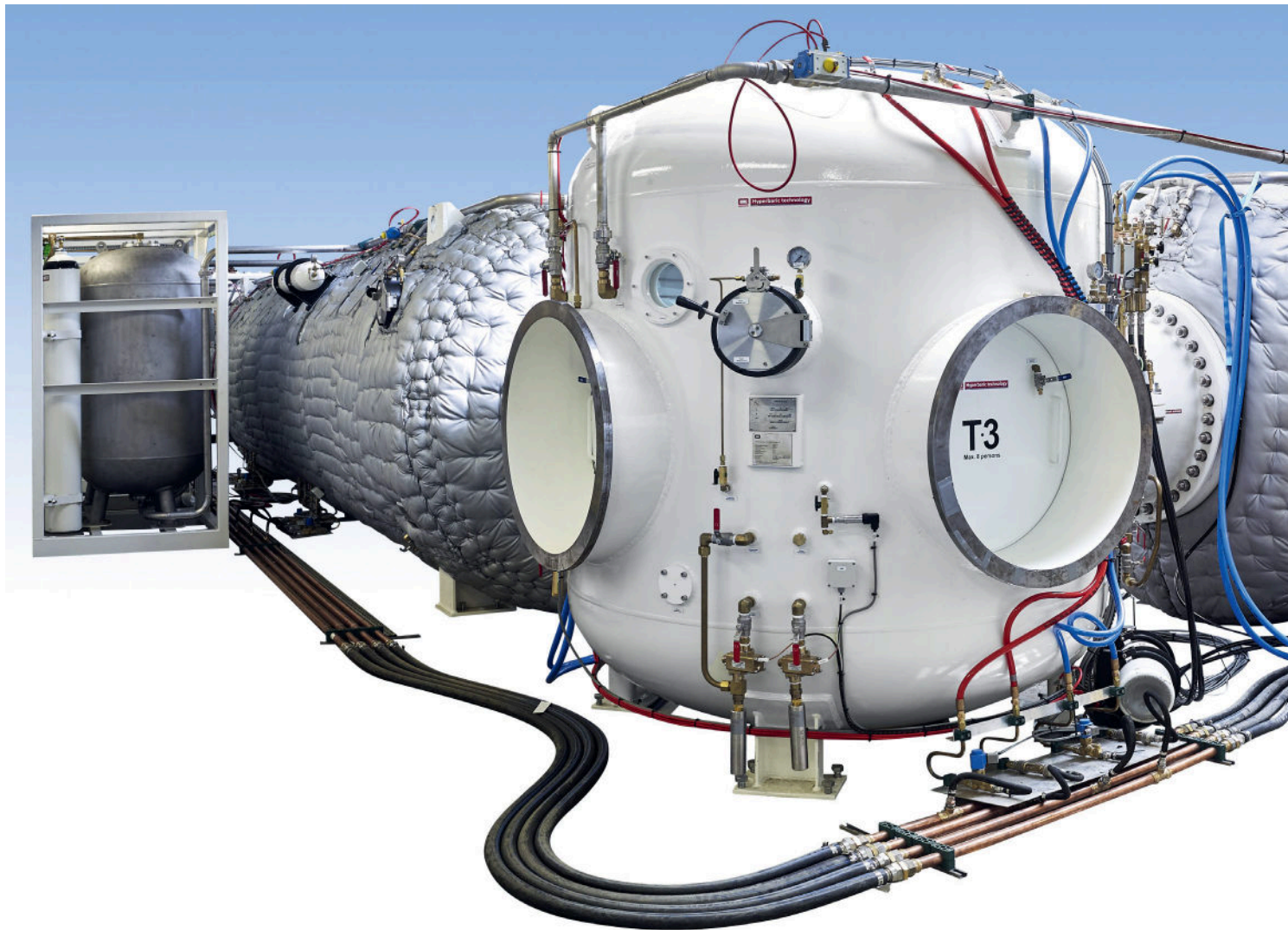
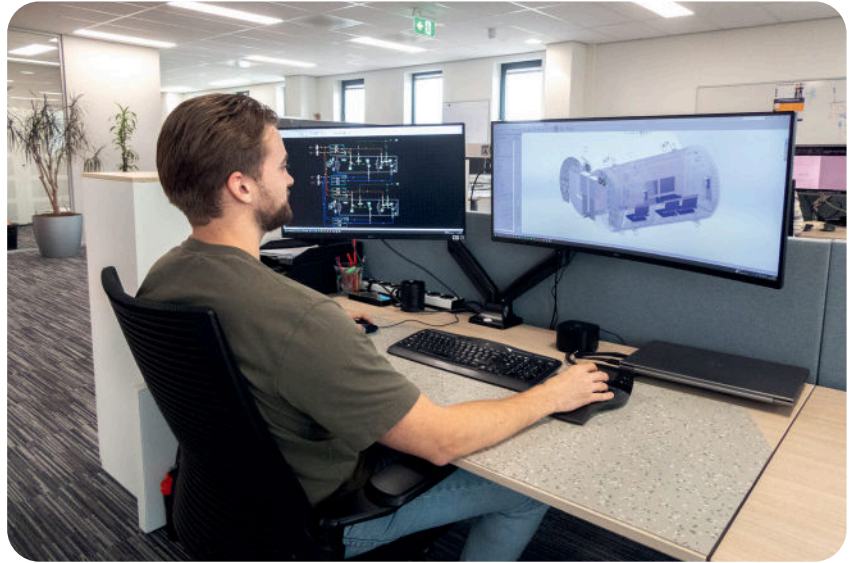
SAFE TRANSFER AND DECOMPRESSION

The **Main Transfer Shuttle (MTS)** moves personnel between the TBM and the Special Decompression Chamber (SDC), which typically consists of a two-compartment chamber with an external control container. Together, these systems ensure a controlled and safe transition between working and ambient pressure environments.





COMPLETE
HYPERBARIC
SOLUTIONS
FOR THE NEXT
GENERATION
OF TUNNELLING
PROJECTS



CUSTOM-ENGINEERED FOR YOUR PROJECT

Every tunnelling project is different — so your hyperbaric system should be too. Dimensions, pressure ratings, and operational demands vary depending on geology, TBM design, and contractor preferences. That's why collaboration between the equipment supplier, the TBM builder, and the contractor is essential. Through close cooperation, each system is tailored to meet exact specifications — delivering an optimised, safe, and efficient solution that fits your operation perfectly.



QUALITY YOU CAN RELY ON

All subcomponents are designed and manufactured under strict internal quality control, ensuring full compliance with international standards and project deadlines. Certified by authorities such as **LR, DNV GL, ASME, and TÜV**, every system is inspected at key stages of production to guarantee maximum safety and performance.



PROVEN IN PRACTICE – HONG KONG PROJECT

An innovative **Onshore Saturation System Living Chamber Complex** was delivered for the Tuen Mun – Chek Lap Kok tunnel in Hong Kong — one of the largest saturation systems ever built for the tunnelling industry. This system included multiple interconnected pressure chambers, a medical room, and accommodation units designed for up to 20 bar pressure. The project supports the world's largest TBM (diameter of 17.6 m), supplied by Herrenknecht, for the 4.2 km tunnel connecting the Hong Kong airport to Tuen Mun.

HYTECH-POMMEC

DIVING, MEDICAL, TUNNELLING & LIFE SUPPORT SOLUTIONS

YOUR PARTNER IN HYPERBARIC TECHNOLOGY

As a leading global partner in tunnelling, diving, medical and life support solutions, Hytech-Pommec combines technical expertise with a passion for innovation. By analysing your needs and working alongside your team, we help you achieve safe, efficient, and compliant hyperbaric operations — anywhere in the world.

WE KEEP YOU BREATHING

“LET’S BUILD YOUR
NEXT TUNNELLING
SUCCESS TOGETHER



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