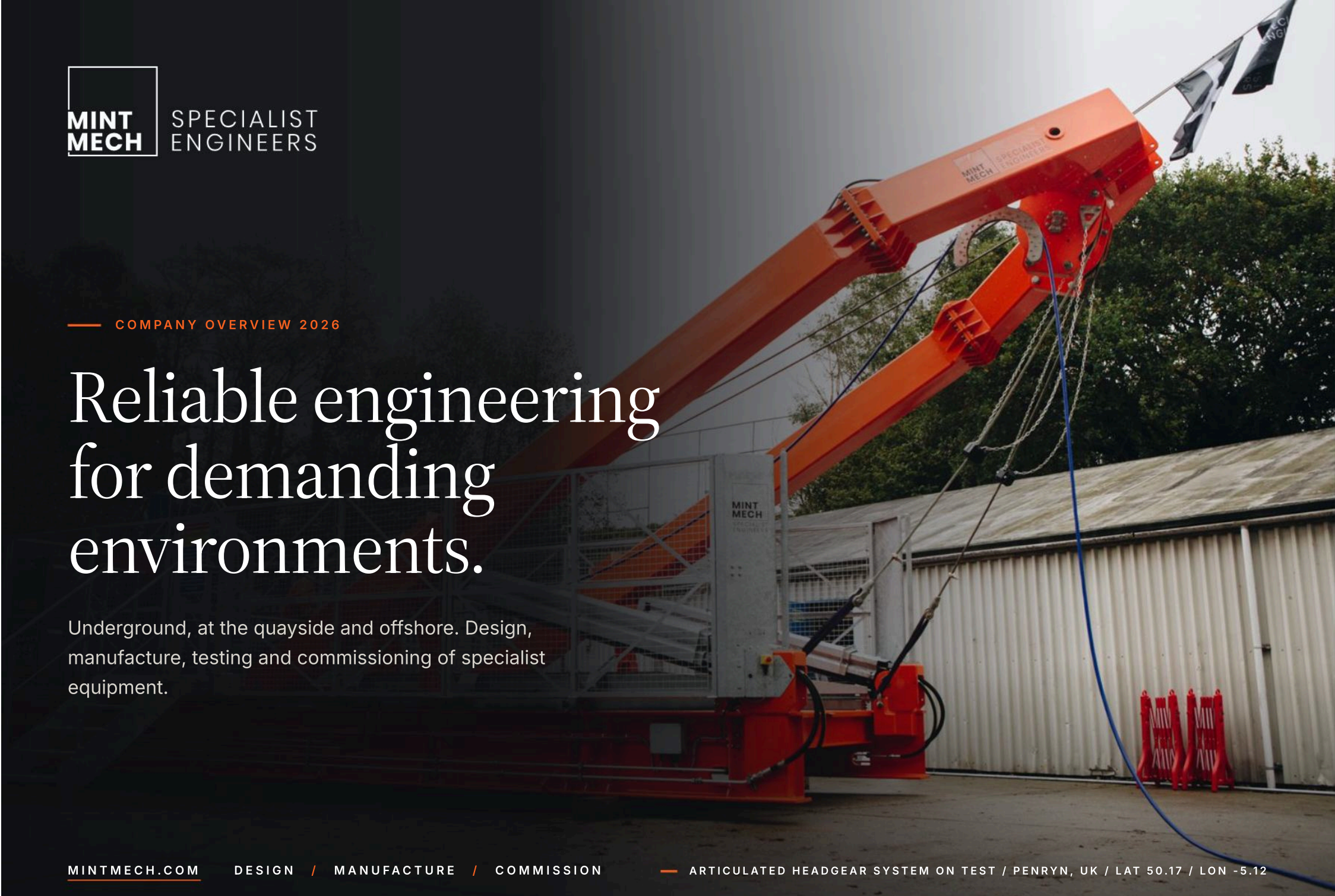
MINT MECH SPECIALIST ENGINEERS

COMPANY OVERVIEW 2026

# Reliable engineering for demanding environments.

Underground, at the quayside and offshore. Design, manufacture, testing and commissioning of specialist equipment.




MINTMECH.COM DESIGN / MANUFACTURE / COMMISSION

ARTICULATED HEADGEAR SYSTEM ON TEST / PENRYN, UK / LAT 50.17 / LON -5.12



THE MINTMECH TEAM WITH THE PIPE HANDLING SYSTEM / PENRYN, UK

01 / WHO WE ARE

# Black and white engineering.

MintMech is an integrated engineering contractor. Our design engineers, workshop and site teams deliver specialist equipment for mining, port and offshore work, from concept through commissioning to support in service. If it needs to work in conditions people tend to avoid, we make it happen. Clear decisions and no grey areas.

## Worldwide

EQUIPMENT IN SERVICE

### 01 Concept

Engineering studies with the site, vessel and crane interfaces understood.

### 02 Design

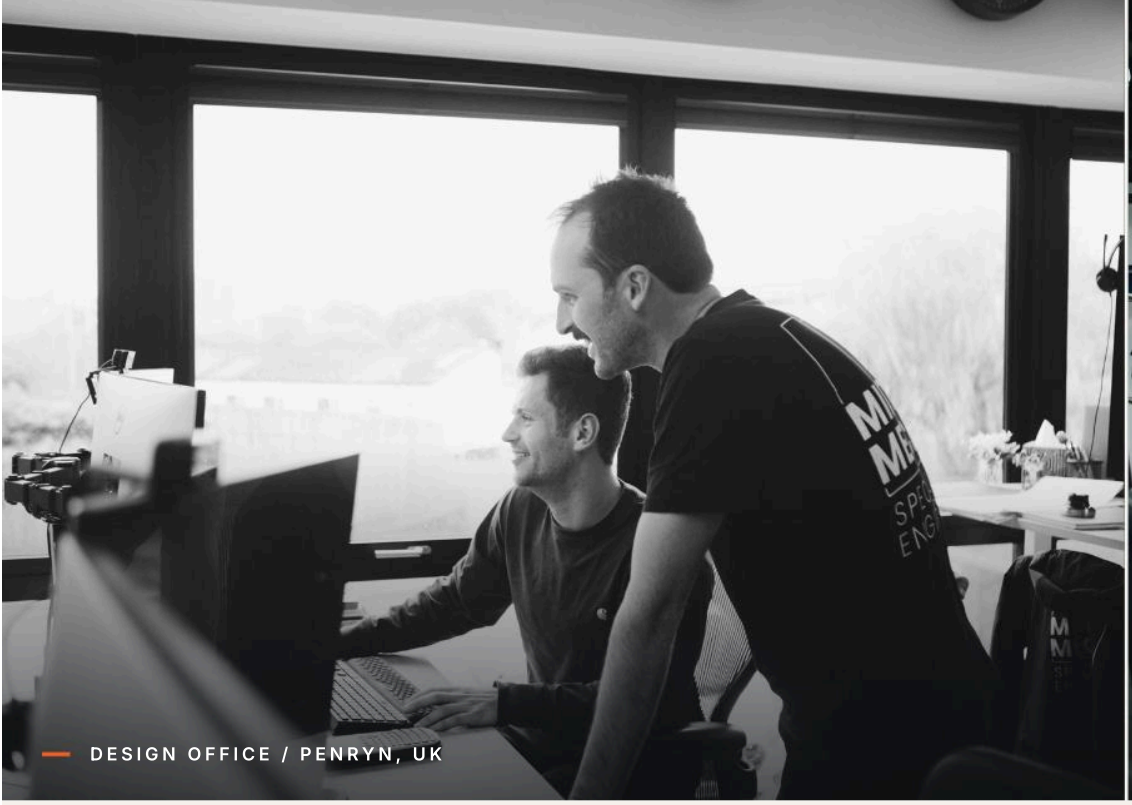
Mechanical, structural, hydraulic, electrical and control system design, analysis and certification.

### 03 Manufacture

Manufacture, assembly and full system FAT in our own facility, with customer witness.

### 04 Commission

Installation, commissioning, training and support by the engineers who designed it.



DESIGN OFFICE / PENRYN, UK



WORKSHOP / PENRYN, UK / LAT 50.17 / LON -5.12

02 / DESIGN OFFICE AND WORKSHOP

# Designed and built under one roof.

The engineers who design the equipment work alongside the people who build, test and commission it. Problems are solved at the desk and on the workshop floor on the same day, and quality is carried by the design engineers through manufacture, testing and commissioning.

## Design office

Structural, mechanical, hydraulic, electrical and control system design, analysis and naval architecture.

## Workshop

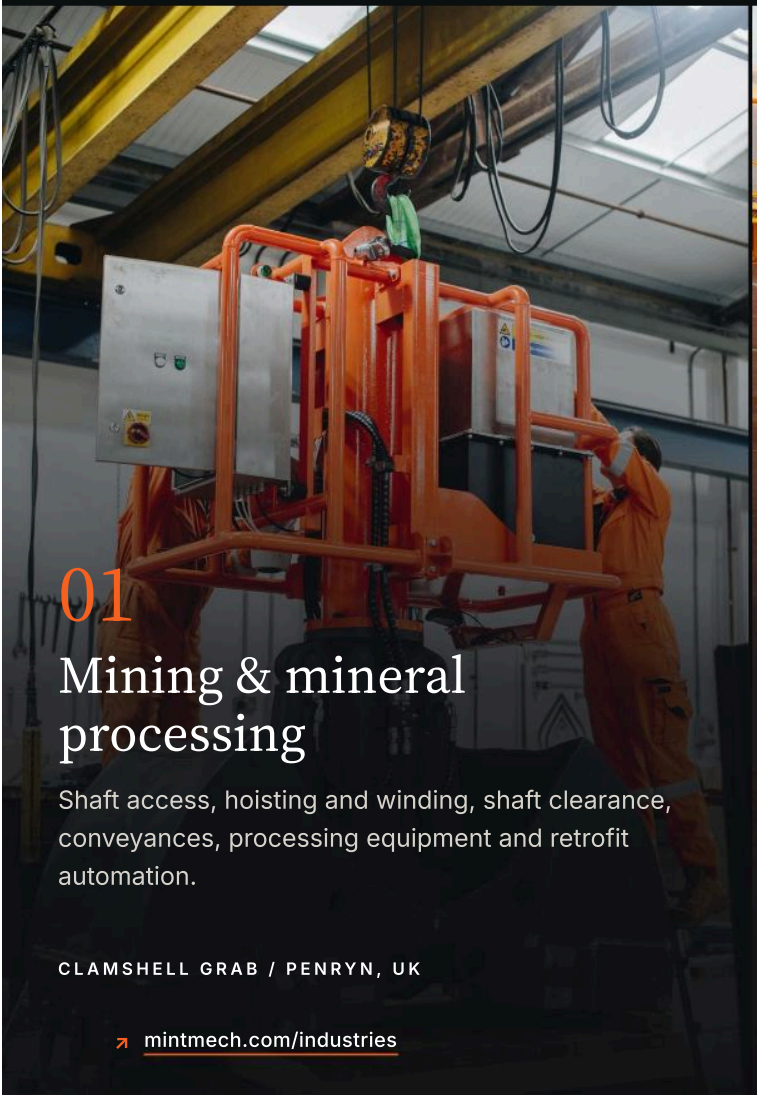
Assembly, hydraulic and electrical build, system integration, load testing and full system FAT, with a lay-down yard for large assemblies.

## Site teams

Installation, commissioning, operator training and support at the mine, the quayside and offshore, worldwide.

# Three environments. One standard.

Mobile man-riding headgear to BS ISO 19426 for mines. Pile gates from 300 mm piles to large monopiles for ports and marine construction. Launch and recovery systems from 5 t to over 50 t for offshore work.

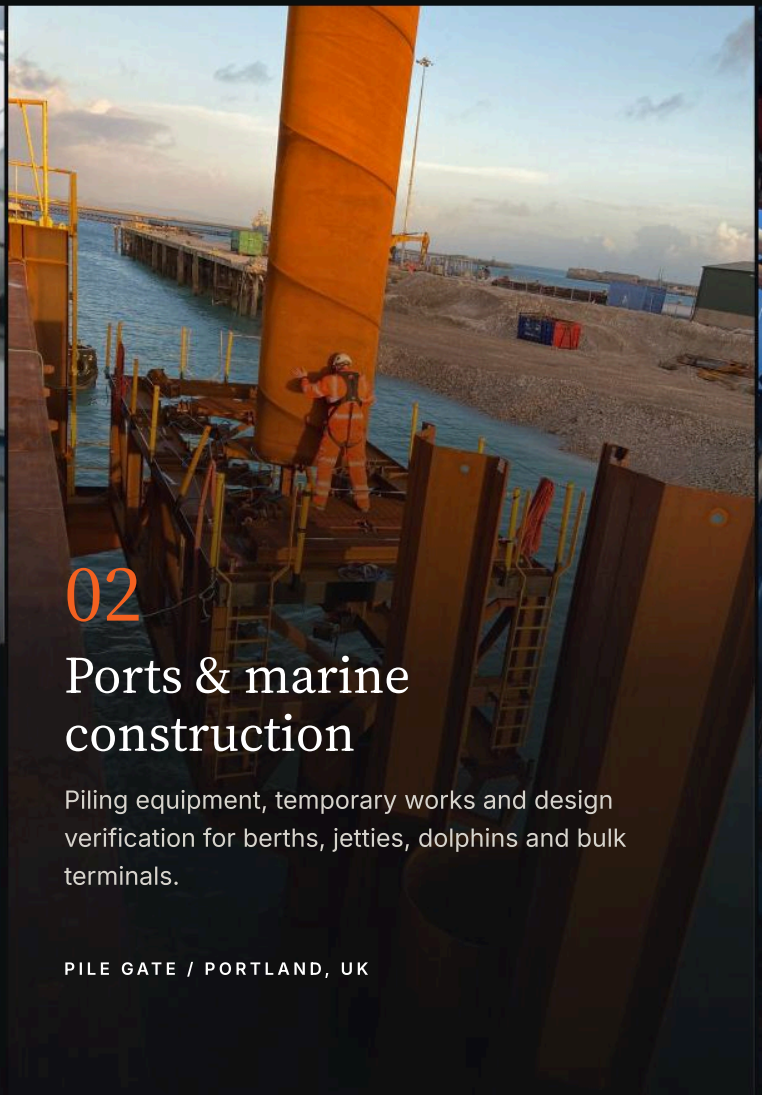


01

## Mining & mineral processing

Shaft access, hoisting and winding, shaft clearance, conveyances, processing equipment and retrofit automation.

CLAMSHELL GRAB / PENRYN, UK

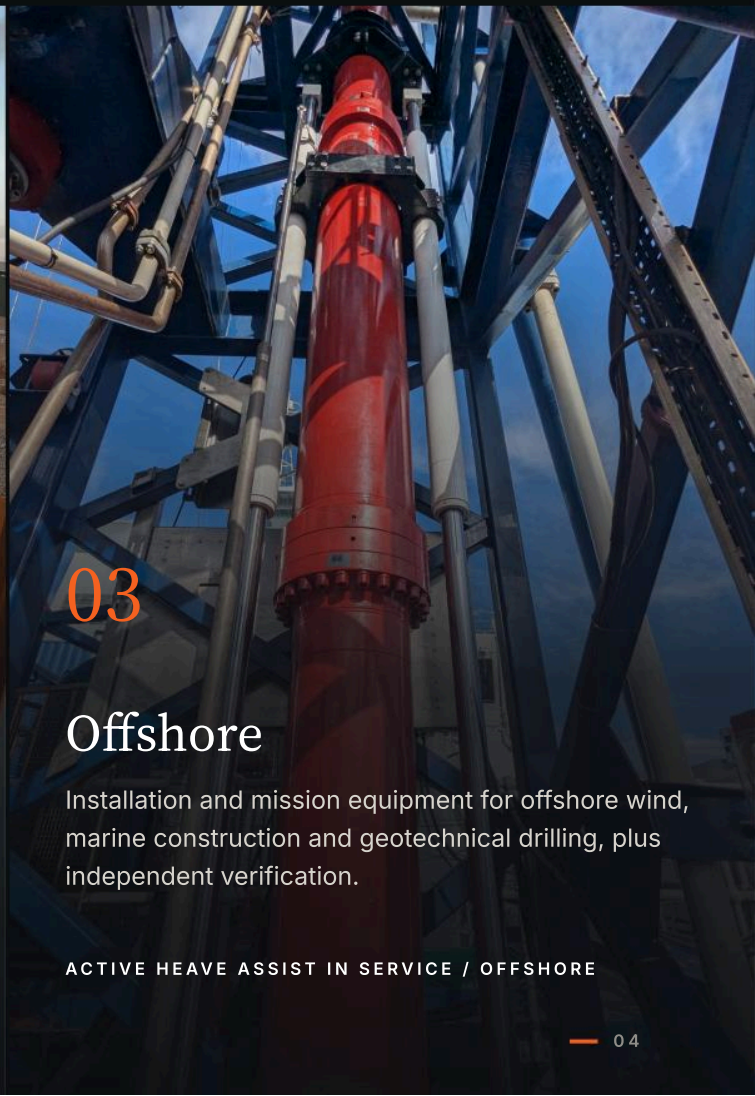


02

## Ports & marine construction

Piling equipment, temporary works and design verification for berths, jetties, dolphins and bulk terminals.

PILE GATE / PORTLAND, UK



03

## Offshore

Installation and mission equipment for offshore wind, marine construction and geotechnical drilling, plus independent verification.

ACTIVE HEAVE ASSIST IN SERVICE / OFFSHORE

# Headgear, hoisting and processing equipment.

Mobile equipment for shaft access, emergency access and clearance, with no permanent headframe. The AHS-400 headgear is man-riding rated and CE marked, to BS ISO 19426, and travels by road or in 20 ft containers.

- **Shaft and emergency access.** Mobile headgear, man-riding conveyances and winches.
- **Shaft clearance.** Grabs, kibbles and airlift systems.
- **Hoisting and winding.** Winches, sheaves, skips, conveyances and headframe upgrades.
- **Retrofit automation.** Bolt-in remote operation for legacy plant.
- **Processing equipment.** Plant engineered for easier, lower-cost manufacture.
- **Spoil, fluid and plant.** Spoil management, pumping and containerised plant.

## 250 m+

SHAFT DEPTH

The AHS-400 carries two 4 t WLL man-riding winches and a 1.8 t WLL electro-hydraulic grab on one mobile headgear.

## 75%

LESS ASSEMBLY TIME

A separator chassis re-engineered for easier, lower-cost manufacture: assembly cut from about two weeks to half a week.





CLAMSHELL GRAB ON TEST / PENRYN, UK



AHS-400 UNDER TEST / PENRYN, UK / LAT 50.17 / LON -5.12

05 / PRODUCT

# AHS articulated headgear system.

Mobile headgear with no permanent headframe, relocating from shaft to shaft. One system for man riding, emergency access, hoisting and shaft clearance. The AHS is a product family; the specification below is the AHS-400.

**250 m+**
SHAFT DEPTH

**4 t**
MAN-RIDING WLL

AHS-400 SPECIFICATION

| | |
|---|---|
| **Winches** | 2 × 4 t WLL, man-riding rated |
| **Man riding** | 4 t WLL including cage |
| **Grab** | Electro-hydraulic, 1.8 t WLL, integrated HPU |
| **Power** | 55 kW HPU plus 11 kW backup |
| **Standards** | BS ISO 19426, CE marked |
| **Safety** | Fully guarded and interlocked |
| **Transport** | Road or 20 ft container shipping |

↗ mintmech.com/products/articulated-headgear-system

# Piling equipment and temporary works.

We engineer the equipment and temporary works that build and upgrade marine infrastructure, from harbour berths to bulk export terminals.

- **Pile gates for any diameter.** Fixed, modular, actuated, articulated, walking and variable-geometry gates, from 300 mm piles to large monopiles.
- **Berths, jetties and dolphins.** Positioning brackets and installation methodology.
- **Temporary works.** Grillages, cantilevers, seafastenings, rollover frames and lift beams with full calculation packages.
- **Jack-up barges.** Jacking system upgrades, hydraulics and controls, structural modifications and JackLad® access.
- **Bulk terminals.** Feasibility, option studies and design verification on constrained and exposed sites.

## 168 piles

PLUS DOLPHINS

Deep-water berth piled from two jack-ups: pile gates, positioning brackets and methodology.

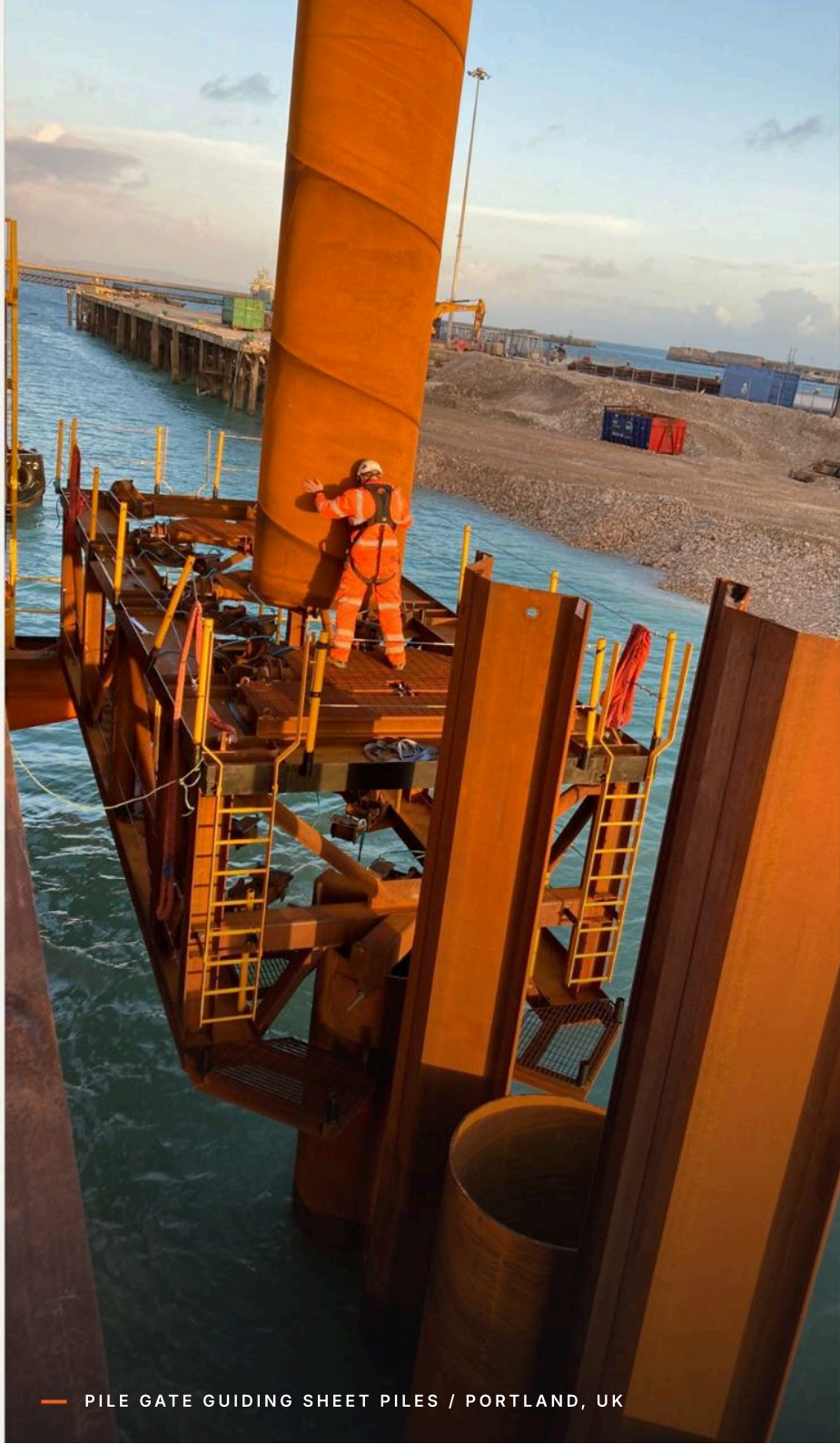
## 230 t

CASING OSCILLATOR LOAD

Foundation piling beside a working motorway bridge, positioned within ±250 mm.

↗ mintmech.com/solutions/marine-construction
↗ mintmech.com/products/pile-gates





PILE GATE GUIDING SHEET PILES / PORTLAND, UK

07 / OFFSHORE WIND

# Installation and decommissioning equipment.

Mission equipment for installation contractors and developers, and purpose-built removal tooling for wind farms reaching end of life. Engineered, manufactured and supported offshore.

- **Bespoke interface equipment.** Lift beams, platforms and attachment points, with drawings, lift plans and certification.
- **Automated tool handling.** Gantry and arm handling systems that remove people from deck hazard zones.
- **Transport and installation works.** Seafastenings, grillages, upending frames and installation gates, load tested before mobilisation.
- **Decommissioning tooling.** Nacelle lift points, blade and rotor lifts, transition piece removal and seafastening. Vessel agnostic.

## 102 t

RAKED PILE LIFT BEAM

Hydraulic remote release, proof loaded and certified before shipment.

## 87 t

ROTOR REMOVAL

Senior team experience: rotor support frame, blade lifting tool and lift plans.

## 4

TOOL FAMILIES

One decommissioning tool set, reused across multiple sites.



BLADE LIFTING TOOL IN SERVICE / SENIOR TEAM EXPERIENCE

# Complete drilling spreads.

- **Turnkey drilling spreads.** Derrick, power swivel, heave compensation, pipe handling, control cabins and deck equipment, with class-ready documentation.
- **AHA™ and AWOB™.** Active heave assist that retrofits to passive systems, with automatic weight-on-bit control for consistent coring.
- **Automation and retrofit.** Iron roughnecks, remote tool handlers and pipe handling that take people out of the red zone, on new or existing rigs.
- **Large-diameter drilling.** Pile-top drills, bottom-hole assemblies, bits and underreamers for hard rock, clays and mixed strata.
- **Spoil and fluids.** Airlifting, jetting, grouting, drilling fluid mixing and mud pumping.

## 12 m+

SHAFT DRILLING DIAMETER

Large-diameter drilling in rock, clay and mixed ground.

## 30 t

PIPE HANDLING SYSTEM

With gantry crane, designed and manufactured in-house.

## Turnkey

DECK HANDLING SYSTEM

Supplied complete for a geotechnical survey vessel.

↗ mintmech.com/solutions/geotechnical-drilling
↗ mintmech.com/solutions/large-diameter-drilling






GEOTECHNICAL DRILLING SPREAD ON DECK

# Jack-up barges, launch and recovery.

Equipment that puts people, tools and structures where they need to be, from barge access to deep-water deployment.

- **Launch and recovery systems.** From 5 t DNV containerised units to vessel-class systems with telescoping functions, onboard HPUs and multifunction winches. Supply or rental.
- **Winching and heave compensation.** Constant-tension and active heave-compensated winches, sheaves, line tensioners and OLPS™ overload protection.
- **Jack-up barges.** Jacking system upgrades, hydraulics and controls, legs and grippers, structural modifications and mounted equipment.
- **JackLad® 650.** Retractable cantilever access with 12 locked positions, in service internationally.
- **Skidding and cantitravel.** Skidding systems and cantilever travel for piling and construction from barges.

## 5 to 50 t+

**LARS AND A-FRAME RANGE**

Containerised units to vessel-class systems.

## 9 m

**JACKLAD® VERTICAL RANGE**

Safe access across the tide and the jacking range.

## 20 ft

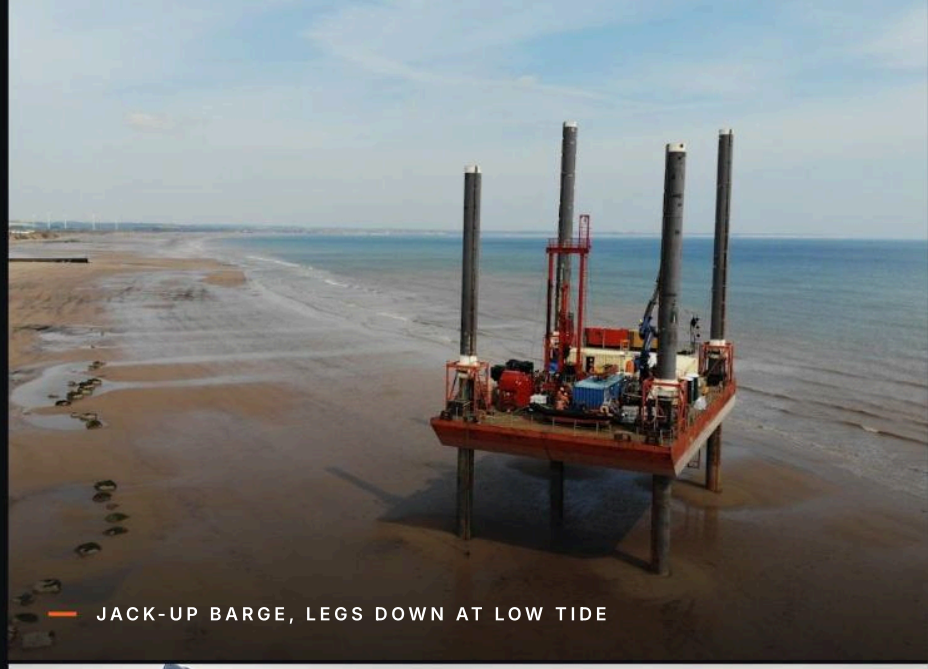
**CONTAINER FOOTPRINT**

The 5 t LARS ships top-stack in a high-cube envelope.

↗ mintmech.com/solutions/launch-recovery

↗ mintmech.com/solutions/jack-up-barge-solutions





JACK-UP BARGE, LEGS DOWN AT LOW TIDE



5 T DNV CONTAINERISED LAUNCH AND RECOVERY SYSTEM

# Automation designed as part of the machine.

Hydraulics, electrics and controls are engineered with the structure and the mechanism, then built, integrated and tested together before the equipment leaves us.

- **Hydraulic power.** Power units, manifolds, cylinders and rotary drives, electric or engine driven and matched to the duty.
- **Control systems.** Electrical and PLC control with clear operator interfaces, safety interlocking and remote operation.
- **Retrofit automation.** Automation and safety systems added to existing rigs and plant.
- **Subsea systems.** Clamping systems, seabed frames, piling templates and levelling systems, stabbing guides and ROV skids.
- **Fluid handling.** Mixing, pumping and containerised plant for drilling fluids and process duties.
- **Through-life support.** Spares, service, technical procurement and equipment rental.




HYDRAULIC POWER UNIT / PENRYN, UK



SUBSEA CLAMPS

mintmech.com/capabilities/power-control-automation

mintmech.com/solutions/subsea

# Standard products, configured to your site.

01

## AHS articulated headgear ↗

Mobile, regulation-compliant man riding and shaft clearance.

02

## RCG-1000 clamshell grab ↗

Remotely operated, electro-hydraulic, works fully submerged.

03

## LARS and A-frames ↗

5 t DNV containerised units to vessel-class systems. Supply or rental.

04

## JackLad® 650 ↗

Retractable cantilever access. 9 m vertical range, 12 locked positions.

05

## AHA™ and AWOB™ ↗

Active heave assist for passive systems, with automatic weight-on-bit.

06

## Pile gates and support arms ↗

Fixed, modular, actuated and variable-geometry gates for any pile diameter.

07

## Iron roughneck MMIRN MK2 ↗

Remote make-up and break-out that takes people off the drill floor.

08

## Hydraulic power units ↗

Electric or engine driven, matched to the duty. Supply or rental.

09

## RapiMud 600 ↗

Automated drilling fluid mixing, pumping and control in one system.

Also: constant-tension winches, cable and hose tensioners, OLPS™ overload protection, subsea clamps and the tensile shear sub. Select a product to open its page on mintmech.com.



IRON ROUGHNECK MMIRN MK2 / PENRYN, UK




HYDRAULIC POWER UNIT / PENRYN, UK

# Engineering that survives extreme environments.

- **Design.** Mechanical, structural, hydraulic, electrical and control systems, to class-approved detailed design.
- **Analysis.** FEA, fatigue, dynamic and motion analysis, every result traceable to a hand calculation.
- **Naval architecture.** Vessel modification, equipment foundations, deck layouts and seafastening.
- **Verification.** Independent design review, tender review, FMECA, risk assessment and incident investigation.
- **Testing and assurance.** Load testing, FAT with customer witness and class-ready documentation.
- **Personnel.** Engineers, technicians and owner's engineer support, mobilised worldwide.

CERTIFICATION SUPPORT

DNV / Lloyd's Register / Bureau Veritas / ABS / BS ISO 19426 / CE marking

↗ mintmech.com/capabilities

↗ mintmech.com/capabilities/independent-verification-analysis



INDEPENDENT VERIFICATION

# Reviewed by equipment designers.

We design and build this kind of equipment ourselves, so we know where it goes wrong. When we audit, we have nothing to sell. Independent review of drilling rates, equipment and method, covering design, manufacture, vessel integration, test planning and readiness, with findings reported plainly.

**64**
MONOPILE SOCKETS UNDER AUDIT

**3 yrs**
OVERSIGHT ON ONE DRILLING SPREAD

**35**
CHECKS PER COMPONENT

**1 to 3**
CRITICALITY SCORE PER FINDING

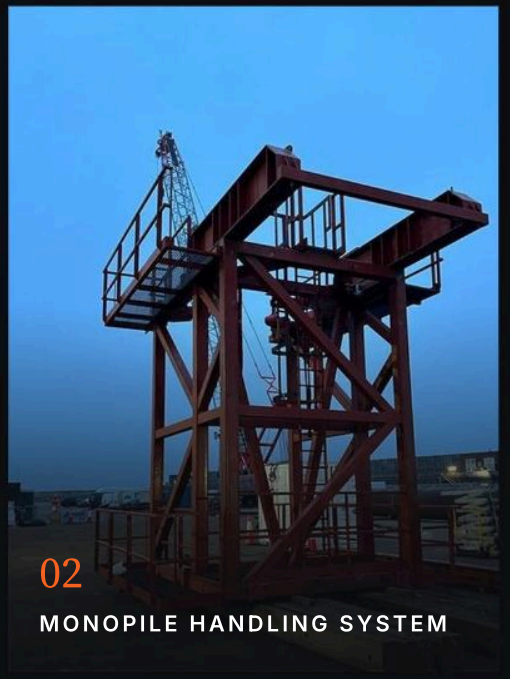
# Projects.

A selection of delivered work, from single tools to complete systems.

01 / 07 OF 21



01
25 T TOP-PUSH CPT



02
MONOPILE HANDLING SYSTEM



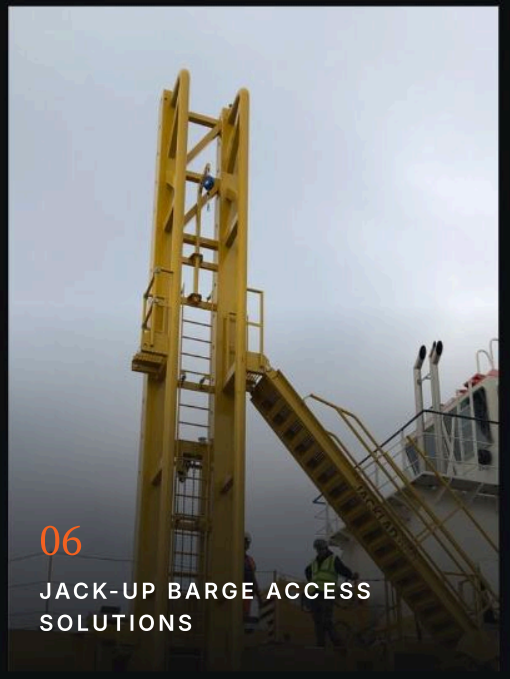
03
GEOTECHNICAL MARINE DRILL OPTIMISATION




04
MINERAL PROCESSING



05
DOWNHOLE TOOLING



06
JACK-UP BARGE ACCESS SOLUTIONS

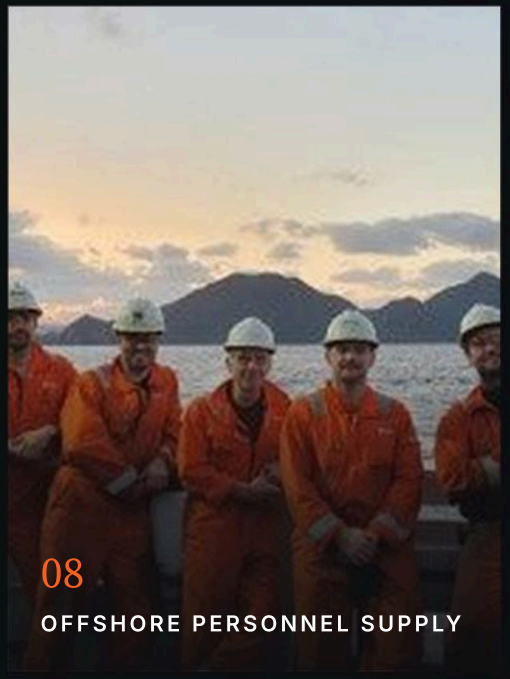


07
PILE GATE SYSTEMS

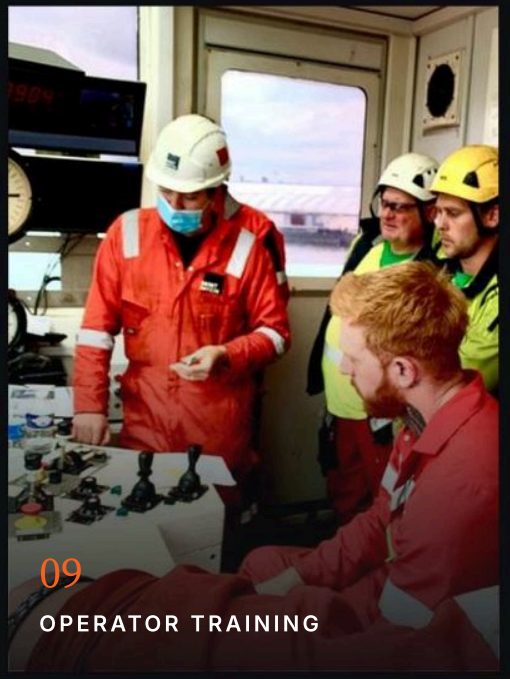
# Projects.

More delivered work across mining, ports and offshore.

08 / 14 OF 21



08
OFFSHORE PERSONNEL SUPPLY



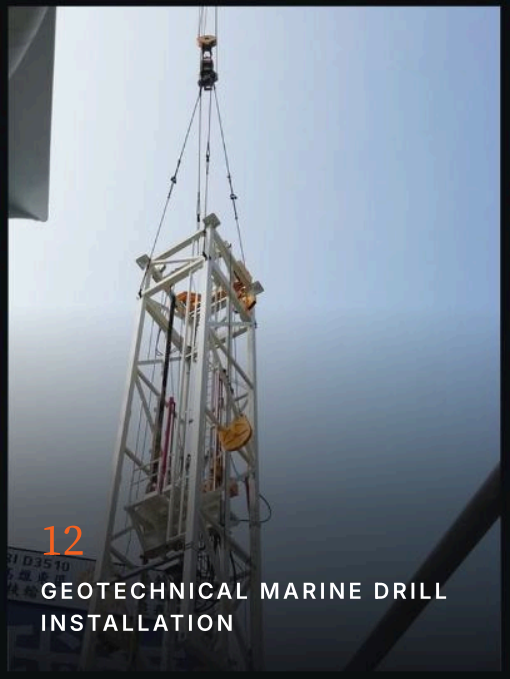
09
OPERATOR TRAINING



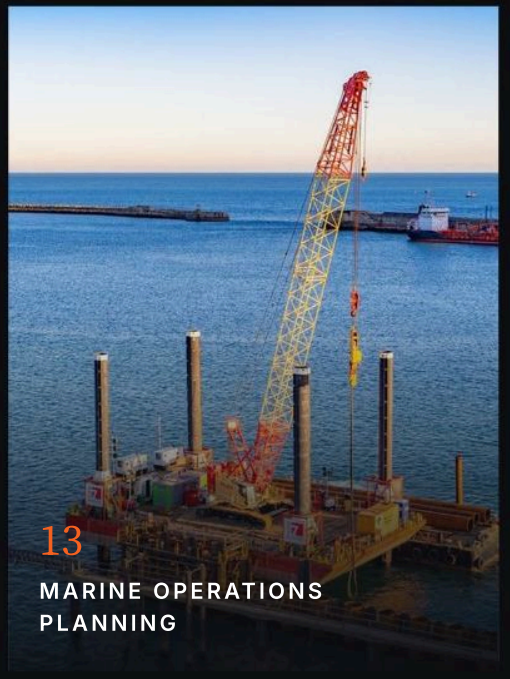
10
BESPOKE LOAD TESTING EQUIPMENT



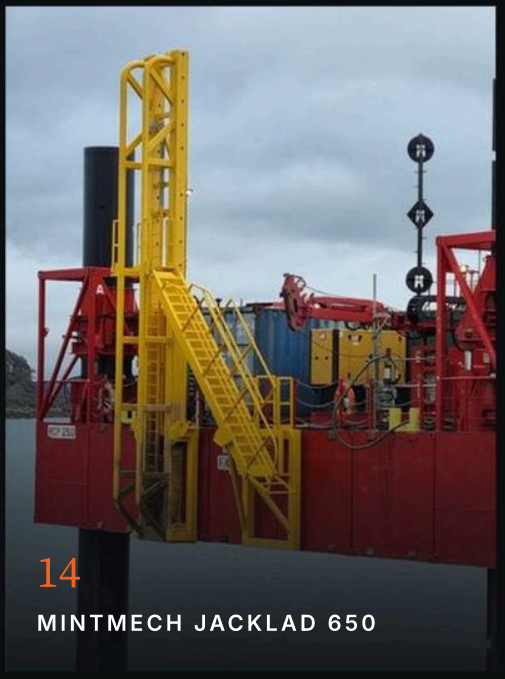
11
MINTMECH IRON ROUGHNECK



12
GEOTECHNICAL MARINE DRILL INSTALLATION



13
MARINE OPERATIONS PLANNING

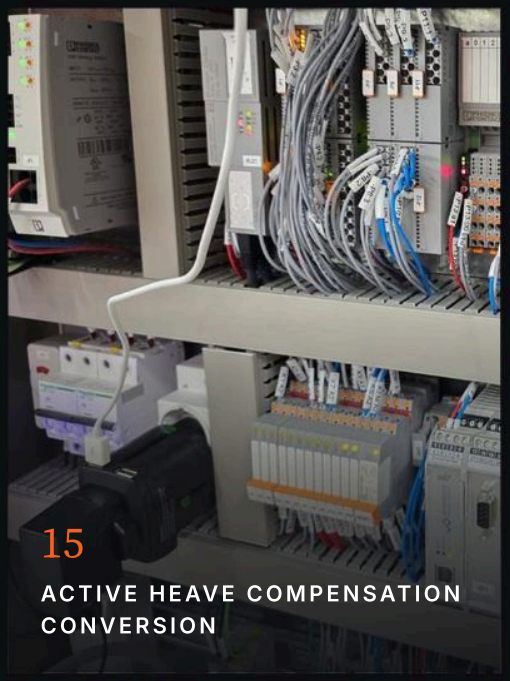


14
MINTMECH JACKLAD 650

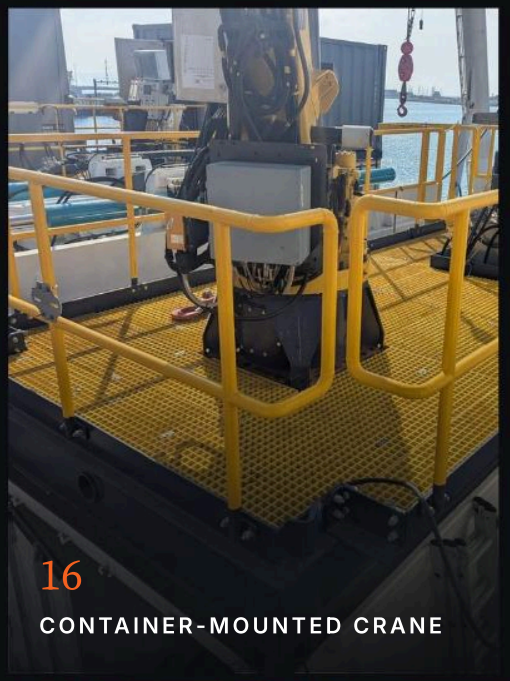
# Projects.

More delivered work across mining, ports and offshore.

15 / 21 OF 21



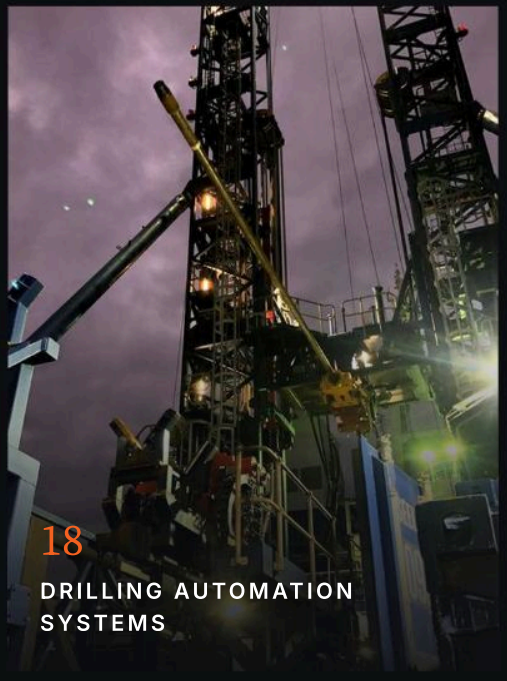
15
ACTIVE HEAVE COMPENSATION CONVERSION



16
CONTAINER-MOUNTED CRANE



17
HPU SUPPLY AND RENTAL



18
DRILLING AUTOMATION SYSTEMS



19
XL CYLINDER SUPPLY




20
INSTALLATION AND COMMISSIONING



21
PILE ROLLOVER FRAME

# What makes us different.

**01** One contract
Concept, design, manufacture, testing and commissioning.

**02** Direct access to the designers
You deal with the engineers who own the design.

**03** In service worldwide
Underground, at the quayside and offshore.

**04** Fast turnaround
Pile gates, temporary works and verification delivered in weeks.

**05** Repeat orders
Every client has placed a second order.



MINT MECH SPECIALIST ENGINEERS

TALK TO US

# Tell us about your next project.

hello@mintmech.com
+44 1326 369469
mintmech.com

Unit 9, Parkengue
Kernick Industrial Estate
Penryn, Cornwall TR10 9EP, UK

Prequalification documentation available. NDA turnaround within 48 hours.
Members of IJUBOA and the Offshore Wind Growth Partnership.