



Insulation Services



YOUR CHALLENGES

Insulation plays a critical role in maintaining the desired temperature of process streams and conserving energy. Knowing which type and quantity of insulation to use for a particular duty, how to apply, monitor and, when necessary, replace it in the right way and at the right time, is essential for achieving maximum efficiencies and savings.

It is important to periodically check the condition of your insulation, particularly under cladding, and repair or replace any defective sections, as appropriate, to remain energy efficient and minimise costs.

OUR INSULATION SERVICES

CR3 supplies and applies all types of insulation to meet any process requirement including, hot insulation, cold insulation, dual insulation, personal protection, cost-in-situ, acoustic insulation, LNG insulation and wrapping/coating. We have extensive experience of planning, managing, and

executing such projects including the removal and reinstatement of insulation for maintenance activities on equipment during shutdowns and turnarounds. Our highly trained experts have all the necessary equipment and tools to apply, repair and remove insulation safely and effectively across all industries.

HOW WE SUPPORT YOUR BUSINESS

We source the best quality materials through our network of approved vendors who are carefully screened and audited to ensure full compliance with our exacting product stewardship and delivery requirements.

We provide safe, reliable, and high-quality insulation services that deliver significant returns and are available to respond quickly to any planned or unplanned events. We minimise schedules and cost by investing in the latest tools and techniques and through our one-team approach to all aspects of the job.

THE CR3 DIFFERENCE

CR3's large in-house team of highly trained technicians is subject to regular audits and a stringent safety passport scheme. We invest heavily in the latest equipment and SMART systems to maintain our reputation as the region's leading one-stop provider of specialised maintenance services



Advanced equipment and technology

We have a track record of bringing innovation to the market place. With a global network of resources through our strategic alliances, we have unparalleled access to the latest equipment and technology from around the world. This collaborative approach ensures our customers always benefit from having access to the latest solutions and ways of working on any given project.

Unrivalled experience

We conserve energy with our environmentally friendly insulation products that meet the toughest standards in the industry and support you with detailed planning, coordination, and execution for any size of project. You can rest assured that all our insulation specialists are highly trained, hold valid certificates and have significant field experience.

YOUR BUSINESS BENEFITS

Benefit from a holistic approach – with our one-team approach to all aspects of the job along with our latest tools and techniques, to minimise schedules and costs.

Optimise efficiency and profitability – with our safe, reliable, and high-quality insulation services that deliver significant returns.

Ensure high safety standards – with insulation specialists that are highly trained, hold valid certificates and have significant field experience.

CR3 is a leading provider of energy engineering solutions. Established in 1991, we provide specialised maintenance, plant upgrade, revamp and engineering services with a sharp focus on **Energy Efficiency, Engineering Excellence, and Sustainable Solutions.**

To learn more, visit CR3.Group

Outstanding QHSE performance

We are committed to our staff and their welfare, and providing a safe workplace is our highest priority. We provide significant resources to ensure all staff have the best training available in the industry. Our experts not only have all the necessary equipment and tools to apply, repair and remove insulation safely, they are also highly trained to minimise risks.

Exceptional service

We aim to always deliver the best quality service, whilst ensuring the project is completed within schedule, within budget and without incident.

We work with all the main types of insulation material including:

- Fibreglass
- Mineral wool
- Cellulose
- Natural fibres
- Polystyrene
- Polyisocyanurate
- Polyurethane
- Vermiculite and perlite
- Phenolic foam
- Insulation facings
- Hot Tape / cold tape
- Nitrile rubber



OUR SOLUTIONS

- Site monitoring and assessment of insulation requirements
- Practical advice including engineering design and work methodology
- Supply of insulation material (all types)
- Application of insulation material (all types)
- Removal and disposal of insulation / cladding materials (all types)
- Fabrication and installation of cladding
- Supply of multi-skilled manpower

CR3 IN ACTION

The challenge

Amidst strong winds, a refiner in South Asia needed to replace the insulation on a polypropylene pipeline stretching several kilometres along an offshore jetty.

The solution

By setting up a series of staging platforms with netting protection we prevented drops and items from blowing off.

The outcome

The specialist team safely removed and replaced the insulation with zero dropped items and no environmental contamination. All redundant materials were bagged and removed back onshore for subsequent disposal.

Leading one-stop provider of specialised maintenance services

CR3 supports your business with extensive contracting experience in the delivery of catered service packages, 'blind to blind' jobs and turnkey maintenance services during major shutdowns and turnarounds. Our business upholds a culture and track record of integrated management systems that are certified to multiple international standards.

Our Solutions

We offer a comprehensive portfolio of maintenance services that are grouped into six business lines. Our experts deliver these services – onshore and offshore – on time and on budget.

Our complete 'blind to blind' solution ensures more streamlined and efficient projects, as we maintain direct, single-source control of all critical path elements. We cater to projects of widely varying scope and complexity, and can deliver multiple shutdowns concurrently.

Related services:

- Static & Rotating Equipment Maintenance
- Industrial Scaffolding
- Mechanical Services
- Column Modifications & Repairs
- Total Heat Exchanger Maintenance
- Flare Tip Replacements & Repairs
- Cleaning & Decontamination Services
- Mercury Management Services
- Catalyst Handling Services
- Nitrogen Services
- Waste Handling
- Decommissioning Services
- Insulation Services
- Valve Maintenance
- Storage Tank Cleaning & Maintenance

Our experts meet your demands for shorter change-outs, leaner project teams and superior quality standards for all reactor types with end-to-end solutions that reduce downtime and increase profitability.

Related services:

- Catalyst & Adsorbent Handling Services
- Tubular Reactor Services
- Dense Loading
- 'Blind to Blind' Mechanical Services
- Reactor Internals Replacement & Repairs
- Nitrogen Services
- Waste Handling

We clean and inspect virtually all plant vessels, columns, drums and piping systems, both onshore and offshore, with services that can be tailored to requirements.

Related services:

- Pre-Commissioning & Commissioning Services
- Nitrogen Services
- Pipeline Cleaning (Chemical & Mechanical)
- Pipeline Flooding
- Pressure Testing
- Dewatering
- Drying
- Purging

We deliver projects safely, on time and on budget by ensuring single-source control through our multi-disciplinary approach and project management capability.

Related services:

- Process Revamps, Rejuvenations & Retrofits
- Construction & Constructability Reviews
- Engineering, Procurement & Commissioning Services
- Operations & Maintenance
- Dismantling, Demolishing & Removal of Equipment
- Fabrication of structural, Carbon Steels & Pipe Systems
- Fabrication of Stainless Steels & Special Alloys
- Installation of Large Equipment & Pipe Systems
- Welding
- Hot & Cold Cutting
- Scaffolding & Insulation

Our investment in training, equipment and SMART systems combined with our focus on safety and rigorous planning, preparation and execution of work underpins our track record as a leading provider of mechanical & plant maintenance services.

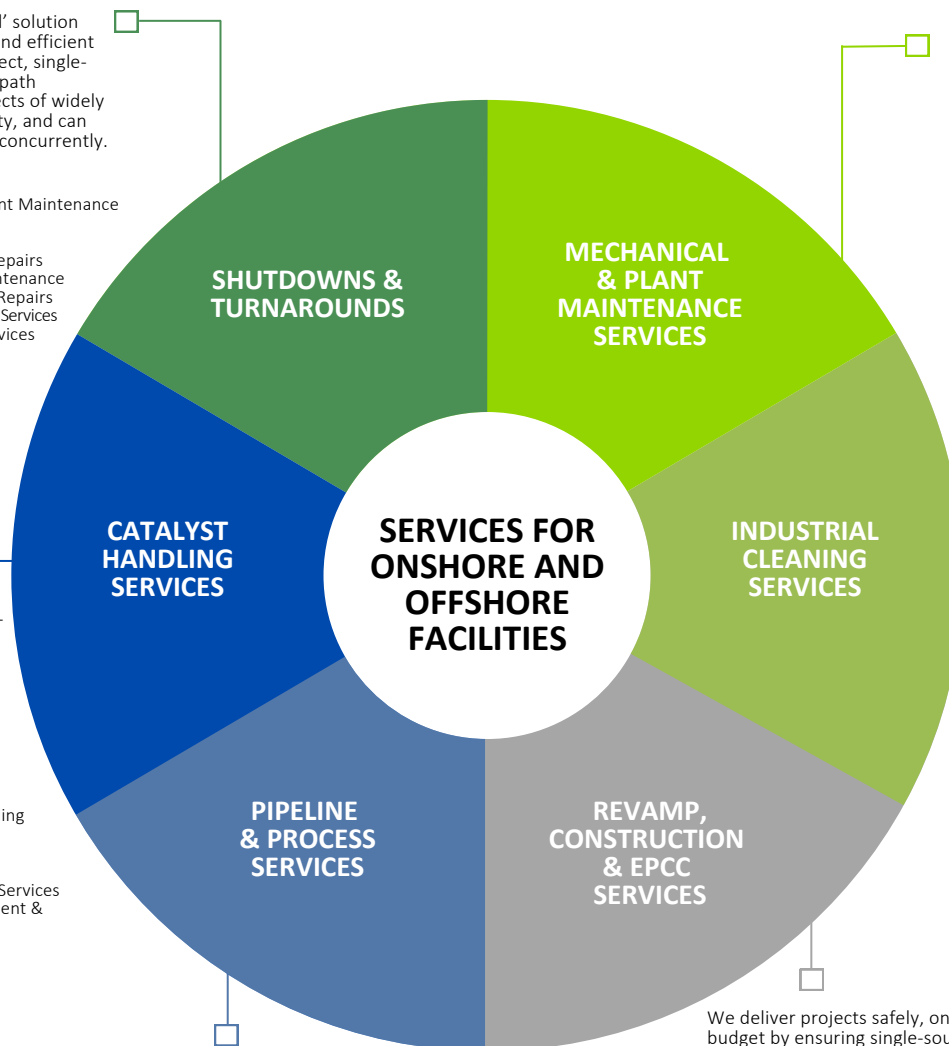
Related services:

- Static Equipment Maintenance
- Rotating Equipment Maintenance
- Specialist Cutting Services
- Online Leak Sealing
- Controlled Bolting
- Reactor Repairs & Maintenance
- Plant Change & Piping Modifications
- In-situ Flange Facing & Machining
- Industrial Scaffolding
- Insulation Services
- Valve Maintenance
- Continuous Plant Maintenance
- Storage Tank Cleaning & Maintenance

Our extensive portfolio of cleaning services sets the benchmark in terms of technical, environmental and safety standards.

Related services:

- Chemical Cleaning Services
- Mercury Management Services
- Fin Fan Optimisation
- Hydro Jetting Services
- CR3 Decoking Technology (CDT)
- Decontamination Services
- Waste Handling





CR3 is a leading provider of energy engineering solutions. Established in 1991, we provide specialised maintenance, plant upgrade, revamp and engineering services with a sharp focus on **Energy** Efficiency, **Engineering** Excellence, and Sustainable **Solutions**.

Contact us today to learn more

CR3 Group

17th Floor, Unit 1706
Two Pacific Place Building
142 Sukhumvit Road
Klongtoey, Bangkok 10110, Thailand
Tel: +66-2-653-3913-5
Fax: +66-2-653-3916
Email: cr3g@cr3.group

CR3 Thailand

15/1 Moo 3, Bankoh - Mabkha Road
Mabkha, Nikompattana
Rayong 21180, Thailand
Tel: +66-38-698-399
Fax: +66-38-698-398
Email: cr3t@cr3.group

CR3 Malaysia

P.T. 6068, Teluk Kalong Industrial Area
24000 Kemaman
Terengganu Darul Iman, Malaysia
Tel: +60-9-863-2325 to 26
Fax: +60-9-863-2328
Email: cr3m@cr3.group

CR3 Singapore

156 Gul Circle
Singapore 629613
Tel: +65-6268-0255
Fax: +65-6268-3369
Email: cr3s@cr3.group

CR3 (India) Private Limited

601, 6th Floor, Building No. 9, Gigaplex
Plot No. IT-5, Airoli West, MIDC
TTC Industrial Area
Navi Mumbai 400708, India
Tel: +91-22-6288-1000
Email: cr3i@cr3.group

CR3 Middle East

Musaffah, M19
Plot #1 DSV Solutions
Abu Dhabi, UAE
PO Box 132569
Tel: +971-2-583-4228
Email: cr3me@cr3.group

Or visit **CR3.Group**

