



Comparison between Rope Access and Scaffolding on 40m Pencil Columns
Refurbishment of semisubmersible rig – ESSAR WILDCAT



INTRODUCTION:

To scaffold a Column or Jack-up Leg or a Radio Tower/Flare tower or a Mast will be a time consuming task which



requires many materials and man hours that will have to be spent to erect and dismantle the scaffold structure. All the time and money elements attached to this are just a means to provide work positioning access and do not contribute to carrying out the actual task itself. In most cases scaffolding is neither possible nor practical because the tower structure will not withstand the additional load or time constraints will not permit.

Rope Access is the obvious solution for this challenge. As per our experiences at ESSAR WILDCAT, Semi submersible Rig Columns of

Case Study – ESSAR WILDCAT: COLUMN

Comparison between rope access and scaffolding on 40m Pencil Column refurbishment:

Description	Rope Access - MEGARME	Scaffold
1. Site Set Up	6 men; 0.5 Day to rig the ropes	12 men; 7 Days to erect scaffold
2. Degrease column	4 men; 0.5 Day	4 men; 0.5 Day
3. UHP WJ	18 men; 3 Days	9 men; 3 Days
4. Primer 1 st coat	4 men; 0.5 Day	4 men; 0.5 Day
5. Primer 2 nd coat	4 men; 0.5 Day	4 men; 0.5 Day
6. Intermediate 1 coat	4 men; 0.5 Day	4 men; 0.5 Day
7. Final Paint 1 Coat	4 men; 0.5 Day	4 men; 0.5 Day
8. Site Clearing	4 men; 0.5 Day	12 men; 3 Days to dismantle scaffold
Duration	6.5 Days to complete	15.5 Days to complete

As you can see the project can be completed in less than half time, with less man hours, materials and cost to the client. In today’s fast moving economic environment, time is the most precious resource – at MEGARME we believe that time and money saved by utilizing our services has had a huge impact on our customer’s bottom line, this coupled with our quality of service and exemplary safety record has ensured excellent customer retention and an ever expanding and prestigious client base through recommendation and referral over our 15 years of service.

WHY MEGARME ?

Proven Safety Record: Megarme Rope Access systems are relying on two independently anchored ropes (one



termed working line and other is safety line) on which technicians are suspended in industry-specific climbing and suspension harnesses. If the working line fails the safety line will prevent the technician falling down within Fall Factor (β)1.

Performance Enhancement: Traditionally oil industry within UAE were using two types of conventional access methods i.e. scaffold and cradles till the introduction of rope access (RA) which opened new door for oil industry to have complete access for integrity inspections and remedial

works to their high elevated capital equipments such as Stacks, Flare Towers and communication towers etc at minimal set up & removal time ultimately resulting huge savings by reducing downtimes.

Reputation: Industrial Rope Access standards and certifications are controlled by INDUSTRIAL ROPE ACCESS TRADE ASSOCIATION (IRATA), United Kingdom, which have three levels of professional certifications based on hands on experience, real practical safe operation demonstration and written examination completion. All tools and equipments used are also certified by IRATA certified companies. All personnel involved also go through series of medical checkups before works. It is recognized worldwide as one the **safest** way of carrying aforementioned works which involves abnormal heights.

MEGARME'S EXPERTISE: Reaching the under-decks and difficult areas on offshore installations is the reason



Rope Access is special and Megarme are experts in this field and our technicians are experienced professionals, prepared to work safely and effectively on every project.

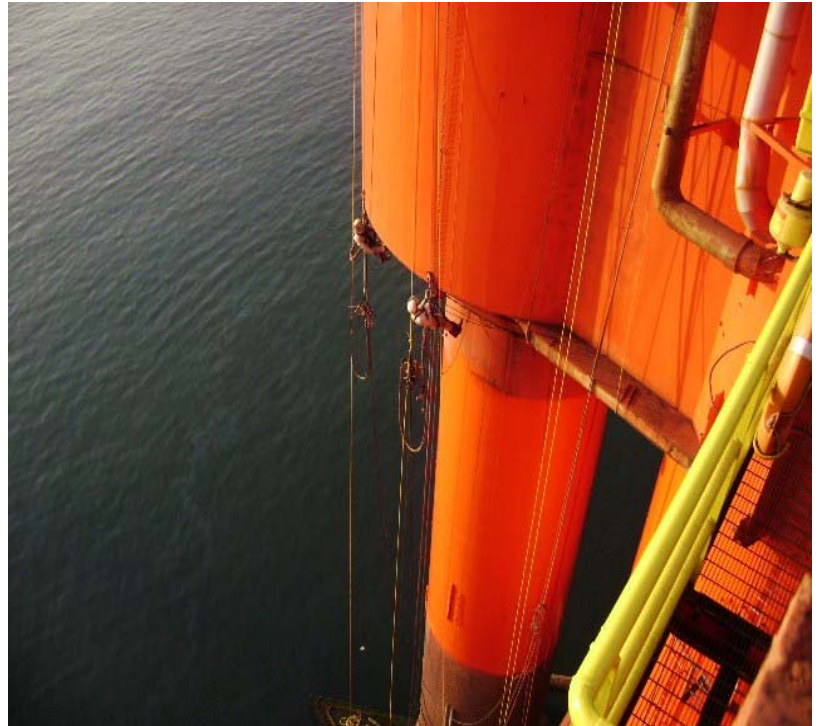
Our offshore teams are most often multi - disciplined inspectors and technicians who are certified ASNT-TC-1A and experienced in Industrial Rope Access certified by the IRATA body. Our crews work quickly and efficiently generating cost savings by reducing total project time and minimizing

operations. There are no scaffoldings or man baskets – just one team of specialist who can get the job done safely and cost effectively.

Splash Zone Services - Visual Inspections · Structural Steel Inspections · Welding Inspection · Coatings Inspection · Deployment of Long Range & Advanced Ultrasonic systems

Full NDE Services - Ultrasonics · Radiography · Magnetic Particle · Dye Penetrate · Eddy Current · ACFM · PMI

Top Side Maintenance - Insulation Removal & Repair · Bolt Torquing · Welding Repair · Paint & Coating Application · Confined Space Services · Tank Inspections



Rope Access becomes an important asset during shutdowns, turnarounds and outages. Our crews are kept busy performing critical inspection and maintenance tasks while working with limited space and a minimal expenditure of resources.



Areas of Service:

Overhead Lines & Towers · Stack & Flair Access · Storage tanks · Masts · Antenas · Bridges · Tunnels · Jetty · Offshore Structures · Rigs · Vessels · FPSO

Full NDE Services:

Visual Inspection · Ultrasonic · Magnetic Particle · Dye Penetrate · ACFM · Eddy Current · PMI

Maintenance:

Installation, Removal & Repair · Bolt Torquing · Blasting · Painting · Cleaning.

Rope Access crews can be deployed quickly and effectively to difficult internal and external areas without the time required for traditional scaffolding and without creating congestion below or above the work area.



The same team that provides quick and meaningful inspection data can often quickly retool and perform the needed maintenance or repair on “discovery items” significantly reducing their impact on shutdown schedules.

- Installation Removal & Repair
- Anode Installation
- Blinding flanges
- Bolt Torquing
- Flair tip removal/cleaning
- Welding
- Boiler cleaning
- Coatings application



Our Rope Access team consists of inspectors and technicians who have been trained and accredited in Industrial Rope Access and certified in accordance with ASNT-TC-1A. This means that one technician can do it all. They access the site and do the work. There is no large machinery or heavy equipment - just one team of specialist who can get the job done safely and cost effectively.

MEGARME has over 100 technicians working in the Asia – Middle East region!