



SUT Presentation – Dubai 2023

James Fisher Decommissioning

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James Fisher Decommissioning

JF Decom offers complete service capability in the cutting and removal of subsea and platform infrastructure.

Fully embedded partner in the methodology and execution of our customers' decommissioning campaigns, utilising in-house expertise and assets to provide industry leading solutions.

Through continuous investment and development of technologies, we provide a competent and reliable range of services for well severance, well abandonment, structure removal and pipeline demolition.













Link to Video of Decommissioning Services

James Fisher Offshore Decommissioning - YouTube





Decommissioning Toolbox





Decommissioning Toolbox

- Cutting equipment •
 - **UHP** Abrasive cutting
 - Hydraulic Demolition Shears
 - **Diamond Wire saws**
 - Chops saws
 - Band saws
 - Drilling and Boring tools
 - Subsea Diver Hand Tools
- Subsea Well Abandonment Tooling •
 - Seabass Phase 2 Environmental Plugging
- **Recovery Equipment** ٠
 - Wellhead Recovery Tooling
 - **Pipeline Recovery Grabs**
 - **Orange Peel Grabs**
- ROV tooling and integrated or fly to place cutting equipment ٠



Key Advantages

- Wide range of assets geographically located
- Multi-disciplined offshore technicians
- Ability to be single source supplier
- Proven track record for packaging solutions to decommissioning challenges



Pipeline Cut and Recovery



Cut and recovery on over 30 subsea pipeline removal projects in the Arabian Gulf. Customer requirement included suitable equipment for the cut and recovery of:

36" OD Pipeline, 1" Wall thickness c/w 5" CWC
32" OD Pipeline, 0.875" Wall thickness c/w 3" CWC
24" Pipeline, 0.875" Wall thickness c/w 3" CWC
20" Pipeline, 0.75" Wall thickness c/w 2" CWC
10" Pipeline, 0.5" Wall thickness c/w 1" CWC
8" Pipeline, 0.875" Wall thickness c/w 0.5" CWC

JF Decom delivered full continuous operations between the hydraulic shear and the hydraulic 20Te twin grab set-up through utilisation of the same HPU and downline, saving on both valuable deck space and vessel time.





Abrasive water jet cutting

Ultra High Pressure Abrasive Water Jet Cutting (AWJC)

- Suitable for internal and external cutting
- Live 360° cut verification No stitching
- Pressure induced garnet cutting
 - 2500bar @ 36 l/min with 3 kg/min Garnet
- Internal cutting system locked in situ for cut stability
- Suitable in water depths up to 350msw
- Cuts over 600mm (24") away from the nozzle allowing the severance of multistring







AWJC Design Cutting head





- Cutting using a high pressure WAS (2400 bar) ۲
- Localised dewatering using air at nozzle ۲
- Air spirals on discharge surrounding water jet ۲
- Air pressure up to 35 bar max (higher possible) ۲
- Dewatering remains constant through cutting ۲
- 1mm nozzle diameter .
- Nozzle insert and abrasive are consumables .







Abrasive Cut Verification System





- 1. Cutting head position in degrees
- 2. Traffic light system (cutting status)
- 3. Dewatering (packer only)
- 4. Confirms communication across system
- 5. Vibration sensor (P1-P3, (x, y, z))
- 6. Hydrophone sensor (P4-P6 (x, y, z))
- 7. Individual signals for sensors P1-P6
- 8. Signal strength of sensors
- 9. Ganging (is cutting head misaligned)
- 10. Limits (adjust cutting limits)
- 11. Settings (adjust sensors, time etc)
- 12. Fault finding archive
- 13. Finish run-time (system settings)
- 14. Start/stop recording process



Slipover Jacket Removal, KSA

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Year	Platform	Scope of Work	Location	Cut method	Number of cuts	Cut time
2019	SFNY 65	Multi-string 16" @ 20mm Inner + 37mm grouted annulus + 13mm Outer string	KSA	Internal DCH II	8	19 minutes per cut
2019	SFNY 93	Jacket legs/piles 42" @ 25.4mm WT	KSA	Internal DCH III	4	43 minutes per cut
2020	SFNY 91	Jacket legs/piles 42" @ 25.4mm WT	KSA	Internal DCH III	4	37 minutes per cut
2020	SFNY 72	Jacket legs/piles 20" @ 25.4mm	KSA	Internal DCH II	5	17 minutes per cut
2020	SFNY 610	Multi-string 4 x cuts @ 25.4mm 2 x cuts @ 143mm WT (pile insert @ 20mm + pile leg @ 25.4mm + pile sleeve @ 42.5mm)	KSA	Internal DCH III	6	25.4mm 35 minutes per cut 143mm 65 minutes per cut
2020	SFNY 354	Jacket legs/piles 42″ @ 25.4mm WT	KSA	Internal PCH	6	40 minutes per cut
2020	SFNY 378	"Mult-string: Abrasive internal cut of pile OD 42" + Insert pile of 30" fully grouted between annulus."	KSA	Internal PCH	6	72 minutes per cut
2020	SFNY 281	"Mult-string: Abrasive internal cut of pile OD 36" @ 38.1mm WT + Insert Pile on 3 legs 20" @ 18mm WT Including 6" grout between annulus Jacket Leg / Piles: Abrasive internal cut of pile OD 36" @ 58.1mm WT	KSA	Internal PCH	6	248 minutes per cut 50 minutes per cut
2020	SFNY 31	"Jacket Leg / Piles: Abrasive internal cut of pile OD 36" @ 50.8mm WT"	KSA	Internal PCH	6	65 minutes per cut
2020	SFNY 32	"Jacket Leg / Piles: Abrasive internal cut of pile OD 36" @ 38.1mm WT"	KSA	Internal PCH	4	42 minutes per cut
2020	SFNY 107	"Mult-string: Abrasive internal cut of pile OD 42" @ 38.1mm WT + Insert pile of 22" fully grouted between annulus."	KSA	Internal PCH	4	156 minutes per cut
2020	SFNY 210	"Mult-string: Abrasive internal cut of pile OD 36" @ 38.1mm WT + Insert rile of 20" fully grouted between annulus "	KSA	Internal PCH	4	TBC





Zulf, Slipover Jacket Removal

Removal of 3 slipover jackets including a 6 legged jacket structure and 2 off 2 legged structures.

A cut was required at the base of each leg on the 6 legged structure.

The initial strategy as per the scope of work was to remove the 50m tall 2 legged jackets in 4 sections with cuts at 4 elevations.

However, close to the mobilisation date this approach changed and it was decided to remove the structure with single cuts BML, requiring late adjustments to the tooling scope supplied.

Water depth was between 39 and 46m at all locations.

Location	Jacket Leg	Main Pile	Insert Pile
51/56	46" x 0.5" WT	42" x 1.5" WT	26" x 0.5" WT
234/239	46"	42" x 1.0" WT	32" x 1.0" WT
246/251	46"	42" x 1.0" WT	32" x 1.0" WT









Safaniya Slipover Jacket Removal

Removal of 3 slipover jackets within the North Safaniya oil field

Scope of supply included engineering, project management, equipment and offshore personnel for the internal and external cutting of the jackets.

Ultra high pressure abrasive water jet cutting spread complete with 3S cut verification system and 12" Air lift tool for the removal of soil plug within the jacket legs





Platform	Diameter	Cut time
SFNY 58 upper cut	42" OD x 1" WT	50 minutes
SFNY 58 lower cut	42" OD x 1" WT	50 minutes
SFNY 312/317 main pile A1	32" OD x 1.25" WT	35 minutes
SFNY 312/317 skirt pile A1	36" OD x 1" WT	33 minutes
SFNY 312/317 main pile A2	36" OD x 1.25" WT	35 minutes
SFNY 312/317 skirt pile A2	36" OD x 1" WT	35 minutes
SFNY 312/317 main pile B1	32" OD x 1.25" WT	35 minutes
SFNY 312/317 skirt pile B1	36" OD x 1" WT	32 minutes
SFNY 312/317 main pile B2	32" OD x 1.25" WT	33 minutes
SFNY 312/317 skirt pile B2	36" OD x 1" WT	33 minutes
SFNY 618/625 upper cut A1	42" OD x 1" WT	34 minutes
SFNY 618/625 lower cut A1	42" OD x 1" WT	27 minutes
SFNY 618/625 upper cut A4	42" OD x 1" WT	31 minutes
SFNY 618/625 lower cut A4	42" OD x 1" WT	28 minutes



Jacket and Pipeline removal, Thailand





James Fisher Decommissioning supported Chevron Thailand Exploration and Production Ltd with the first 'Rigs to Reef' project in Thailand - an initiative where idle platforms are relocated to create artificial reefs, serving as a valuable habitat for marine life.

Operating in the Gulf of Thailand, James Fisher Decommissioning successfully cut and removed 7 platforms and associated pipelines, completing the project 3 weeks ahead of schedule.

Our scope of service included:

- Cut and removal of risers and subsea spools
- Soil plug removal
- Cut and removal of subsea jackets
- Cut and recovery of associated pipelines





Gyda Jacket Decommissioning

There were 20 internal cuts completed on the jacket in total:

- 8 off 84" OD straight x 100mm WT average cut time 2 hours per cut
- 8 of 84" OD angled x 120mm WT average cut time 2.5 hour per cut
- 4 off 84" OD x 120mm WT average cut time 2.5 hours per cut
- Subsea template cuts:
- 2 off 72" OD x 63.5mm WT locating piles average cut time 2 hours per cut
- 3 off 30" OD x 25mm WT support piles average 28 minutes per cut

The scope of work was completed successfully, resulting in the seamless removal of the Gyda jacket by Allseas vessel Pioneering Spirit with jacket lift technology.









Batch Well Severance, Australia

- 21 wells Batch cut 10 ³/₄" x 20" grouted and some un-grouted.
- 2 wells had unknown 3rd casing present, discovered during recovery phase
- Batched drifting
- SIMOPs for rigless unit rig up
- SIMOPs for concurrent abrasive cutting and proving
- 100% severance success











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Thank you



