

قطر للبترول  
Qatar Petroleum



## INTER-DEPARTMENTAL PROCEDURE OPERATIONS - DUKHAN FIELDS

### SCAFFOLDING WORK - DUKHAN FIELDS IP-OPS-030

**Operations Manager,  
Dukhan Fields**

**Director Operations**

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**INTER-DEPARTMENTAL PROCEDURE - OPERATIONS - DUKHAN FIELDS**

**SCAFFOLDING WORK - DUKHAN FIELDS**

**IP-OPS-030**

**DOCUMENT CHANGE HISTORY**

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**Remarks :**

**CONTENT LIST**

<b>1.0</b>	<b>OBJECTIVE</b>	<b>1</b>
<b>2.0</b>	<b>SCOPE</b>	<b>1</b>
<b>3.0</b>	<b>POLICY / MANAGEMENT INTENT</b>	<b>1</b>
<b>4.0</b>	<b>RELATED DOCUMENTS</b>	<b>1</b>
<b>5.0</b>	<b>DEFINITIONS AND ABBREVIATIONS</b>	<b>1</b>
<b>6.0</b>	<b>PROCESS</b>	<b>1</b>
6.1	Scaffold Materials	2
6.2	Fall Arrest Devices	2
6.3	Erecting a Scaffold	2
6.4	Scaffold Tag System	4
6.5	Frequency of Inspection	5
<b>7.0</b>	<b>RESPONSIBILITIES</b>	<b>5</b>
7.1	Permit Authority	5
7.2	Permit Controller	5
7.3	Scaffolding Supervisor	5
 <b>ATTACHMENTS</b>		
	ATTACHMENT A - FLOWCHART	7
	ATTACHMENT B - EXAMPLE OF SCAFFOLDING INSPECTION RECORD	8
	ATTACHMENT C - EXAMPLE OF SCAFFOLDING AUDIT CHECKLIST	9
	ATTACHMENT D - EXAMPLE OF SCAFFTAG	10
	ATTACHMENT E - EXAMPLE OF SCAFFTAG HOLDER	11

**1.0 OBJECTIVE**

This procedure provides guidance to personnel involved in scaffolding operations.

**2.0 SCOPE**

This procedure applies to all scaffold activities in Dukhan Fields Operational areas.

**3.0 POLICY / MANAGEMENT INTENT**

Qatar Petroleum is committed to developing and managing safer working practices.

**4.0 RELATED DOCUMENTS**

**IP-OPS-015** - Permit to Work System - Dukhan Fields

**5.0 DEFINITIONS AND ABBREVIATIONS**

- Policy** - A rule or directive that guides or restricts action.
- Procedure** - A document that details the execution of an activity.
- Scaffolding** - A temporary structure assembled to provide safe access to a work area, and to facilitate controlled lay down and storage of materials and / or equipment on the structure.
- Scaffold Tag** - An administrative tool, i.e. a plastic card displayed on the scaffold structure, used to control and record the operational status of the scaffold.
- Scaffolding Supervisor** - A work site supervisor who got a certificate as scaffolding supervisor
- Shall** - A mandatory action or requirement.
- Should** - A preferred course of action.

**6.0 PROCESS**

All scaffold work in Dukhan Fields operations areas is covered under the Permit to Work System and a separate work permit shall be issued for erecting or dismantling of each scaffold.

Scaffolding shall only be erected, dismantled or modified by a qualified scaffolding contractor in accordance with QP requirements.

A work permit for the erecting of scaffold cannot be signed off as complete until the scaffold has been inspected and approved for use by the Scaffolding Supervisor.

A work permit for the dismantling of scaffold cannot be signed off as complete until the scaffold materials have been removed from the site to a dedicated storage area.

After a scaffold has been erected and approved for use, any planned work on the scaffold structure that requires a work permit shall be conducted on a separate work permit.

### **6.1 Scaffold Materials**

All scaffold components, parts and materials shall conform to BS EN 12811-1 and shall be:

- maintained in good condition, free from corrosion damage or other defects
- stored in designated areas

The inventory of scaffold materials at the worksite shall be kept to the minimum number of lots required to complete the required work.

Scaffold components and materials that are found to be damaged, defective or unsuitable shall be clearly identified (i.e. labelled as 'Unfit for use'), removed from service, and returned to the supplier's premises.

The removal and disposal of damaged / defective scaffolding materials is the responsibility of the Scaffolding Supervisor on site.

### **6.2 Fall Arrest Devices**

Fall arrest devices shall be used when scaffolders are exposed to a fall of greater than 2 metres, and are not protected by standard handrails or an appropriate enclosure.

All scaffolders shall wear body harnesses and lifelines when working at a height above 2 metres.

### **6.3 Erecting a Scaffold**

Scaffold that is erected by one scaffolding contractor shall not be dismantled or modified by another scaffolding contractor.

Whenever there is hammering activity, a rubber coated hammer or brass hammer shall be used in tightening scaffolding

A scaffolding contractor shall only use their own scaffold materials for the erection of scaffolds.

The Scaffolding Supervisor shall inspect and approve all erected scaffold structures and / or modifications to existing scaffold structures prior to their use, and shall complete the Scaffold Inspection Record accordingly (see Attachment B). ...

#### **a) Handrails**

Working platforms, that are 2 meters or greater in height, shall have side-rails and end-rails. Handrails shall be fixed at a height of between 910mm and 1150mm above the level of the scaffold decking, and a mid-rail shall be installed halfway between the handrail and the decking.

Handrails shall be fitted to the inside of the standards to prevent outward movement.

**b) Toeboards**

Toeboards shall be fitted to the edges of scaffold decking that is 2 metres or greater in height, and the boards shall have a minimum height of 155mm.

Toeboards shall be fitted to the inside of the standards to prevent outward movement, and shall be secured by toeboard clips or lashed using 6.5mm thick wire or rope.

**c) Scaffold Decking**

Scaffold decking boards shall be a minimum of 38mm thick and 203mm wide (nominal measurements), and shall be clean, unpainted, and free of nails, cracks and warps.

All boards shall be fitted with end protection, i.e. hoop irons, and shortened boards shall have the end protection refitted.

Boards shall be secured to the scaffolding poles with clamps or lashed using 6.5mm thick wire or rope. Gaps between boards shall be as small as possible (close-boarded).

**d) Bracing**

All scaffold structures should be built on a firm and level base, with the use of base plates to ensure stability.

Pipework or other equipment shall not be used for the securing of scaffolds.

Diagonal bracing shall be provided on all sides at all levels of the structure and bracing material shall not exceed 3 metres in length.

Diagonal bracing shall be fitted at an angle of 45 degrees and, where possible, shall be assembled upwards from the base plate level.

Scaffold poles over 2.44 metres in length shall be handled by two persons, to prevent the blind end from inadvertently striking personnel, equipment or instrumentation.

Where scaffold cross-members are less than 2 metres above ground level, the cross-member shall be taped with highly visible hazard warning tape.

**e) Ladders**

Ladders used to access scaffolds shall be constructed of metal or wood, shall be properly maintained and regularly inspected, and should be the proper length for the job.

Note: Lightweight metal ladders **SHALL NOT** be used in Zone 1 Areas.

Ladders shall be placed on a secure footing and NEVER on boxes, drums or other unstable bases.

The best angle for setting a ladder is approximately 75 degrees, and the ladder should rise at least 1 metre above the landing place.

Ladders shall not be supported on their rungs, and rungs shall not be used to support scaffold boards.

Ladders shall not be extended by lashing two ladder sections together.

Vertical ladders shall be fastened securely in place at the top and bottom ends and at 750mm intervals, and should be kept to a minimum length only for accessing a scaffold platform.

Ladders shall be inspected at the same frequency and as part of the scaffold structure.

Damaged or defective ladders shall be clearly identified, removed from service and returned to the supplier's premises.

#### **6.4 Scaffold Tag System**

The Scaffolding Contractor shall use a Scaffold Tagging System to control the safe use of scaffold structures. The system shall include the following 2 tags:

- 'Approved for Use' tag
- 'Do Not Use' tag

The 'Approved for Use' tag shall be attached to a scaffold structure that has been completed, inspected and is approved for the use for which it was constructed. This tag shall identify the following minimum requirements:

- Location of scaffold
- Date erected
- Requested by
- Scaffolding Supervisor's signature
- Load bearing capabilities
- Re-inspection signatures

The 'Do Not Use' tag shall be displayed on scaffold that is:

- in the process of being erected but not completed
- erected but awaiting inspection
- deficient and requiring correction or modification

Any defects in materials and / or construction shall be recorded and the scaffold cannot be approved for use until the noted deficiencies have been corrected.

After the completed scaffold structure has been inspected and approved for use, the Scaffolding Supervisor shall remove the 'Do Not Use' tag and replace it with an 'Approved for Use' tag, affixed in a clearly visible location (see Attachments D and E for examples).

### **6.5 Frequency of Inspection**

Scaffold structures shall be inspected at least once per week if the scaffold is being continuously used.

If the use of the scaffold changes, e.g. from light duty purpose to heavy duty purpose, then the scaffold shall be re-inspected for its new use.

Scaffolding structures shall be re-inspected after adverse weather conditions to ensure that they are structurally sound.

Scaffolding that is not in regular use shall be inspected once per month or each time a new Work Permit is raised for work involving the use of the scaffold.

Inspection dates and signatures shall be recorded on the scaffold tag.

All scaffold structures in 'long term' use shall be audited on a regular basis by the Scaffolding Supervisor, using the Scaffolding Audit Checklist (see Attachment C), and a report submitted to the Permit Authority.

## **7.0 RESPONSIBILITIES**

### **7.1 Permit Authority**

Shall ensure that scaffolding activities in Dukhan Fields Operational areas are administered under the controls of the Permit to Work System.

Shall monitor the audit reports provided by the Scaffolding Supervisor.

### **7.2 Permit Controller**

Shall ensure that only authorised scaffolding personnel are involved in scaffolding activities in his area.

Shall ensure that the scaffolding personnel comply with Permit to Work requirements.

Shall ensure that scaffolding structures are re-inspected after adverse weather conditions.

### **7.3 Scaffolding Supervisor**

Shall ensure that all scaffolding personnel under his authority fully comply with this procedure and Permit to Work requirements.



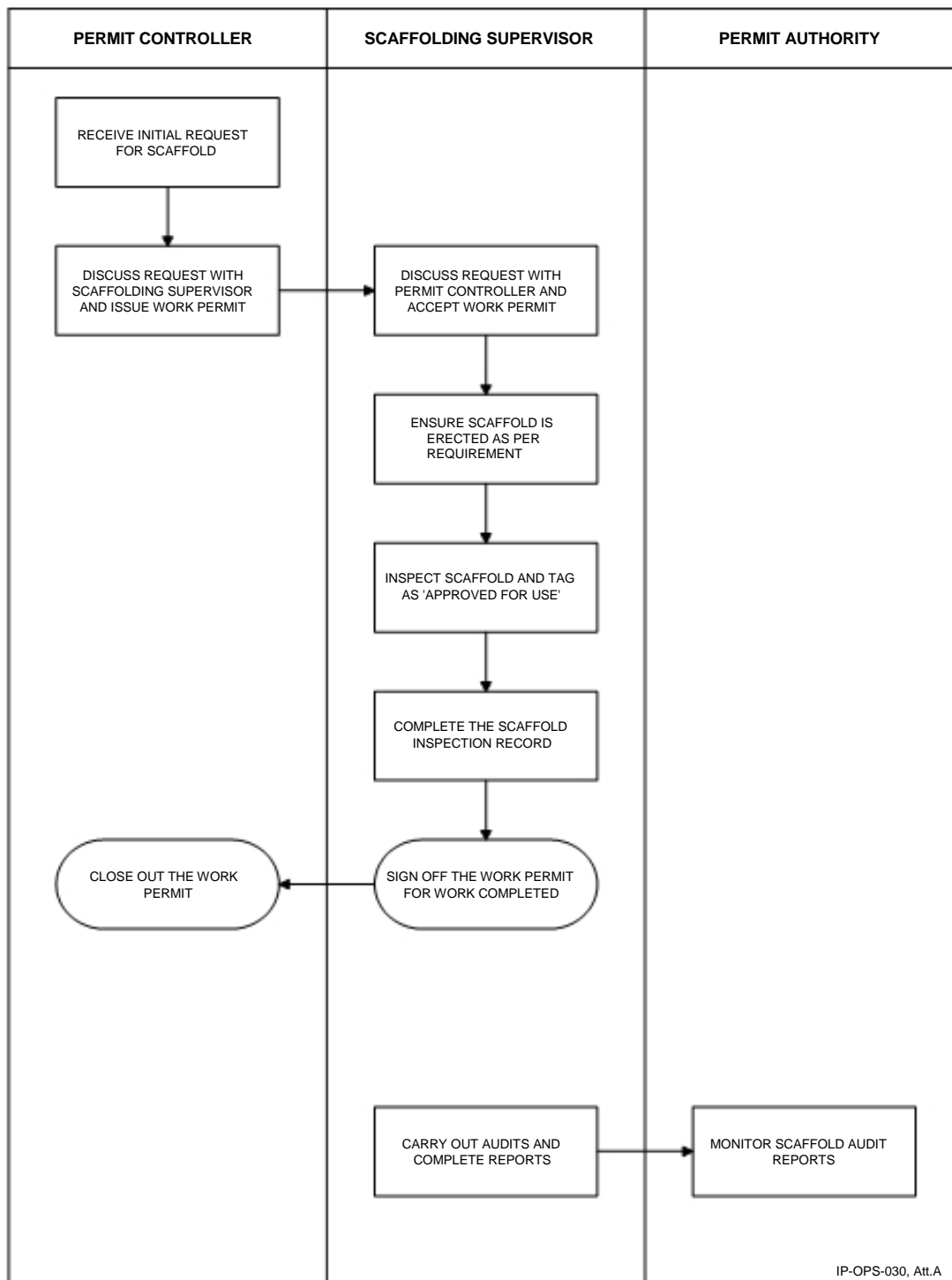
Shall ensure that all scaffolding is inspected regularly and that up-to-date records are maintained.

Shall re-inspect all scaffolding structures after adverse weather conditions.

Shall ensure that 'long term' scaffold structures are regularly audited and reports are submitted to the appropriate Permit Authority.

Shall ensure that all damaged or defective materials are identified, tagged and returned to the supplier's premises.

**ATTACHMENT A - FLOWCHART**





# INTER-DEPARTMENTAL PROCEDURE - OPERATIONS - DUKHAN FIELDS

**SCAFFOLDING WORK - DUKHAN FIELDS**

**IP-OPS-030**  
**Page 9 of 11**

## ATTACHMENT C - EXAMPLE OF SCAFFOLDING AUDIT CHECKLIST

QP - DUKHAN FIELDS - SCAFFOLDING AUDIT CHECKLIST								
SCAFFOLDING CONTRACTOR:			PLANT LOCATION:					
SCAFFOLD LOCATION:			SCAFFOLD USE:					
TYPE OF SCAFFOLD:			LOAD (Per sq/mtr):					
<b>Check at each audit and indicate by a tick if any of the faults shown below are apparent in the scaffold.</b>								
<b>Footings:</b>	Soft and uneven	<input type="checkbox"/>	No base plates	<input type="checkbox"/>	No sole boards	<input type="checkbox"/>	Undermined	<input type="checkbox"/>
<b>Standards:</b>	Not plumb	<input type="checkbox"/>	Joined at same height	<input type="checkbox"/>	Wrong spacing	<input type="checkbox"/>	Damaged	<input type="checkbox"/>
<b>Ledgers:</b>	Not level	<input type="checkbox"/>	Joint in same bays	<input type="checkbox"/>	Loose	<input type="checkbox"/>	Damaged	<input type="checkbox"/>
<b>Putlogs &amp; Transoms:</b>	Wrongly spaced	<input type="checkbox"/>	Loose	<input type="checkbox"/>	Wrongly supported	<input type="checkbox"/>		
<b>Couplings:</b>	Wrong fitting	<input type="checkbox"/>	Loose	<input type="checkbox"/>	Damaged	<input type="checkbox"/>	No check couplers	<input type="checkbox"/>
<b>Bridles:</b>	Wrong spacing	<input type="checkbox"/>	Wrong couplings	<input type="checkbox"/>	Weak support	<input type="checkbox"/>		
<b>Bracings:</b>	Some missing	<input type="checkbox"/>	Loose	<input type="checkbox"/>	Wrong fittings	<input type="checkbox"/>		
<b>Ties:</b>	Some missing	<input type="checkbox"/>	Loose	<input type="checkbox"/>	Not enough	<input type="checkbox"/>		
<b>Boarding:</b>	Bad boards	<input type="checkbox"/>	Trap boards	<input type="checkbox"/>	Incomplete	<input type="checkbox"/>	Not enough supports	<input type="checkbox"/>
<b>Platform:</b>	Not wide enough	<input type="checkbox"/>						
<b>Loading:</b>	Too heavy	<input type="checkbox"/>						
<b>Guard rails:</b>	Wrong height	<input type="checkbox"/>	Loose	<input type="checkbox"/>	Some missing	<input type="checkbox"/>	Wrongly positioned	<input type="checkbox"/>
<b>Toeboards:</b>	Wrong height	<input type="checkbox"/>	Loose	<input type="checkbox"/>	Some missing	<input type="checkbox"/>		
<b>Ladders:</b>	Damaged	<input type="checkbox"/>	Insufficient length	<input type="checkbox"/>	Not tied	<input type="checkbox"/>		
<b>Access:</b>	Obstructed	<input type="checkbox"/>	Not enough	<input type="checkbox"/>				
<b>Hoist Towers:</b>	Not enough ties	<input type="checkbox"/>	No gates	<input type="checkbox"/>	Poor operating position	<input type="checkbox"/>		
<b>Mobile Tower Scaffolds</b>								
<b>Height:</b>	Too short	<input type="checkbox"/>						
<b>Height Ratio Base:</b>	More than 3 : 1	<input type="checkbox"/>						
<b>Ties, Guys or Base Weights (if needed):</b>	Some missing	<input type="checkbox"/>						
<b>Surface:</b>	Soft	<input type="checkbox"/>	Uneven	<input type="checkbox"/>	Sloping	<input type="checkbox"/>		
<b>Access ladder:</b>	Not provided	<input type="checkbox"/>	Too short	<input type="checkbox"/>	Not tied	<input type="checkbox"/>		
<b>Bracing:</b>	Some missing	<input type="checkbox"/>	Wrong direction	<input type="checkbox"/>				
<b>Brakes / chocks:</b>	Not provided	<input type="checkbox"/>	Not secured	<input type="checkbox"/>				
<b>Wheels:</b>	Liable to fall off	<input type="checkbox"/>	Unable to move	<input type="checkbox"/>				
<b>Guard Rails:</b>	Wrong height	<input type="checkbox"/>	Loose	<input type="checkbox"/>	Missing	<input type="checkbox"/>		
<b>Toeboards:</b>	Wrong height	<input type="checkbox"/>	Loose	<input type="checkbox"/>	Missing	<input type="checkbox"/>		
<b>Temporary Roof and Beamed Scaffolds</b>								
<b>Design drawings:</b>	Not provided	<input type="checkbox"/>	Not detailed enough	<input type="checkbox"/>				
<b>Scaffold:</b>	Not constructed in accordance with drawing	<input type="checkbox"/>						
<b>Remarks:</b>								
<b>Scaffold Supervisor: (Print Name)</b>			<b>Signature:</b>			<b>Date:</b>		

IP-OPS-030, Att.C

**ATTACHMENT D - EXAMPLE OF SCAFFTAG**

EXAMPLE OF SCAFFTAG

**SCAFFTAG**

**ERECTION AND INSPECTION RECORD**

LOCATION .....

REF. NO. ....

DATE ERECTED .....

REQUESTED BY .....

BUILT BY .....

FOREMAN .....

SIGNATURE .....

**STRUCTURE TO BE USED FOR**

Very Light Duty 0.75 kN/m <sup>2</sup>	<input type="checkbox"/>
General Purpose 2.00 kN/m <sup>2</sup>	<input type="checkbox"/>
Heavy Duty 2.50 kN/m <sup>2</sup>	<input type="checkbox"/>
Special Purposes kN/m <sup>2</sup>	<input type="checkbox"/>

FRONT VIEW



**WARNING**

UNLAWFUL REMOVAL OR INTERFERENCE  
WITH THIS SIGN COULD MAKE YOU LIABLE TO  
PROSECUTION AND FINES

**AUTHORISED PERSON:**

DATE	SIGNED

LADDER N° RUNGS: .....

N° OF STANDARDS: .....

N° OF LIFTS: .....

M<sup>2</sup> BOARDING: .....

STRUCTURE DECOMMISSIONED  
DATE:

REF. No. S.T.S.1.

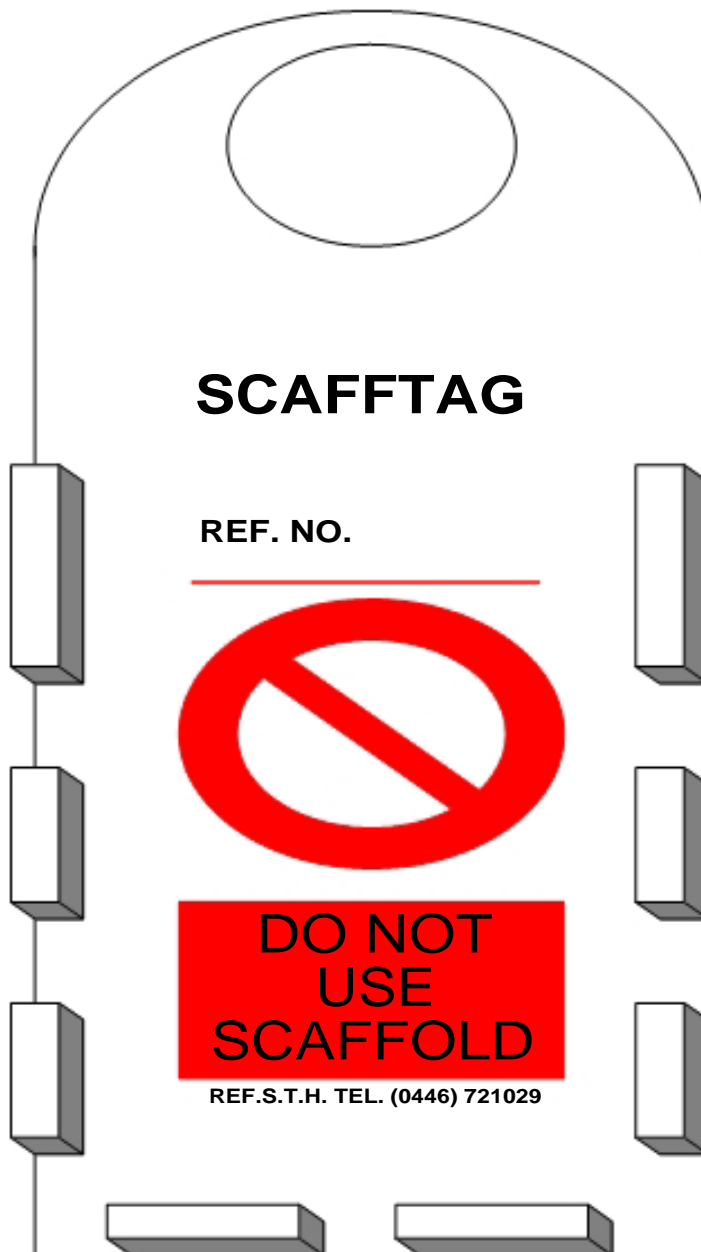
SCAFFTAG LTD. (0446) 721029

REAR VIEW

IP-OPS-030, Att. D

ATTACHMENT E - EXAMPLE OF SCAFFTAG HOLDER

EXAMPLE OF SCAFFTAG HOLDER



IP-OPS-030, Att. E