

GENERAL INSTRUCTION MANUAL

7.025

ISSUING ORG. TRANSPORTATION & EQUIPMENT SERVICES DEPARTMENT

ISSUE DATE
07/01/2016REPLACES
05/03/2015SUBJECT HEAVY EQUIPMENT OPERATOR AND RIGGER TESTING AND
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1 OF 10**1.0 PURPOSE**

This General Instruction (GI):

- 1.1 Specifies the requirements for testing and certification of Saudi Aramco and contractor onshore and offshore heavy equipment operators.
- 1.2 Identifies personnel authorized to operate and/or drive Heavy Equipment and Industrial Vehicles.
- 1.3 Identifies personnel authorized to rig/sling loads in support of lifting operations.
- 1.4 Identifies the USER/PROPONENT responsibilities to certify heavy equipment operators.
- 1.5 Improves Saudi Aramco and contractor safety performance when using heavy equipment.

2.0 REFERENCES

It shall be the responsibility of Saudi Aramco USERS and contractors to be familiar with the current version of the publications referenced below.

API: American Petroleum Institute

- A) API - SPEC 2C Specification for Offshore Cranes-1995
- B) API - RP 2D Recommended Practice for Operation and Maintenance of Offshore Cranes (4th Edition-1999)
- C) GI 6.001 Notification Requirements for Incidents (Including Fires)
- D) GI 6.003 Guide for Committees Investigating Major Incidents and Engineering Reviews of Other Incidents
- E) GI 7.024 Marine and Offshore Crane, Hoist and Rigging Operations
- F) GI 7.026 Cranes and Heavy Equipment Accident Reporting Procedures
- G) GI 7.028 Crane Lifts: Types and Procedures
- H) Saudi Aramco Construction Safety Manual
- I) Saudi Aramco Medical Services Policy MSP-98, Attachment E "Mobile Heavy Equipment Operators"
- J) Saudi Aramco Safety Handbook
- K) Saudi Aramco Job Training Standards:
 - 1) Basic Crane Operator
 - 2) Advanced Mobile Hydraulic Crane Operator
- L) IPT's Crane and Rigging Handbook
- M) W. G. (Bill) Newberry's Handbook for Riggers
- N) International Association of Powered Access Federation (IPAF)

3.0 SCOPE

This GI covers all onshore and offshore Saudi Aramco and contractor personnel operating cranes, heavy equipment or industrial vehicles as well as personnel rigging/slinging loads within Saudi

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Aramco facilities, on Saudi Aramco jobsites outside of operating facilities, off Saudi Aramco property under a Saudi Aramco contract, and in applicable Saudi Aramco domestic joint venture companies.

4.0 DEFINITIONS

4.1 CRANE OPERATOR – A person holding a heavy equipment operator certificate who is certified as being qualified to operate a specific model and capacity of crane as per Saudi Aramco Certification requirements; or a specific type or class as per the approved certification authority's requirements; may also receive additional certifications for crane attachments, tandem lifts, pick and carry operations, and personnel platforms (manbaskets).

4.2 HEAVY EQUIPMENT OPERATOR – A person holding a heavy equipment operator certificate who is certified as being qualified to operate a a specific make and model of heavy equipment as per Saudi Aramco Certification requirements; or a specific type or class as per the approved certification authority's requirements.

* 4.3 HEAVY EQUIPMENT OPERATOR CERTIFICATE – Certification issued by Saudi Aramco, accepted local training provider, a Saudi Aramco approved international institution or a home country certification to crane operators and heavy equipment operators. See Supplement 2 for a list of approved third-party certifications for specific types of equipment.

* 4.4 HOME COUNTRY CERTIFICATION – Certification for non-Saudi Aramco marine personnel from a recognized international institution (Refer to GI 7.024 for additional information). This certification is valid only for offshore work by non-Saudi Aramco marine personnel.

4.5 INDUSTRIAL VEHICLES – vehicle used for industrial usage not intended to transfer passengers such as wireline trucks, boom trucks, trailers, tankers, etc.

* 4.6 RIGGER – A person certified by Saudi Aramco, accepted local training provider, a Saudi Aramco approved international institution, or a home country certification to prepare a load for lifting. Saudi Aramco rigger categories are Rigger-I, II, III (See Section 8.0 for more information).

4.7 SAFE WORK INSTRUCTION (SWI) – Provides step-by-step instructions for specific work being conducted at a drilling rig. This Drilling & Workover (D&WO) procedure is applicable to all D&WO rigs and service providers.

4.8 SAG – Saudi Arab Government

* 4.9 SLINGER – A person certified by Saudi Aramco, accepted local training provider or a Saudi Aramco approved international institution to prepare loads for lifting only at onshore, Drilling and Workover (D&WO) Rigs and D&WO Rigless operations (See Section 8.0 for more information).

** 4.10 ACCEPTED LOCAL TRAINING PROVIDER – Training institute that submitted their documentation to Saudi Aramco Local Workforce Development. Local Workforce Development Department along with Heavy Equipment Safety Committee will evaluate the requested training provider and accept them as location training provider if they meet Saudi Aramco requirement.

4.11 USER/PROPONENT - Saudi Aramco proponent department or other organization authorized to act on behalf of the Saudi Aramco proponent department.

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3 OF 10**5.0 HEAVY EQUIPMENT REQUIRING OPERATOR CERTIFICATION**

- 5.1 Use Supplement 2, Table #1 to verify the operator certification requirements for a particular piece of equipment.

NOTE #1: Additional pieces of equipment not currently listed in Supplement 2, Table #1, may also require a specific certification. Contact the USER department for information regarding unlisted equipment.

- * 5.2 A Home Country Certification for non-Saudi Aramco marine personnel from a recognized international institution shall be accepted for all heavy equipment used offshore (See GI 7.024 for additional information). Home country certificate is also accepted for operator who is presenting valid country certificate and pass ITD test. Department head shall review documentation of the specialized equipment operator before requesting the testing of ITD.
- 5.3 Heavy equipment operators for onshore fixed cranes (i.e. pedestal cranes) and tower cranes (fixed or on rails) shall be required to pass a written and performance test.
- ** 5.4 Accepted Local Training provider must be approved by Saudi Aramco Local Workforce Development Department with evaluation and acceptance of the Heavy Equipment Safety Committee.

6.0 GENERAL

- 6.1 Craftsmen (mechanics, electricians, inspectors, etc.) operating equipment for maintenance and testing reliability shall be designated in writing by the USER department manager to operate such equipment for repair, maintenance, and testing purposes only.
- 6.2 For this GI, equipment mounted on off-shore facilities/craft shall be considered 'fixed' equipment. Regulations for operator testing and certification shall be implemented as stated in API-Specification 2C, API-Recommended Practice 2D, and GI 7.024.
- 6.3 The USER may request re-certification of a crane operator or heavy equipment operator at any time.

7.0 HEAVY EQUIPMENT OPERATORS

- ** 7.1 Heavy equipment operators must be certified by Saudi Aramco, accepted local training provider, or by a Saudi Aramco approved international institution, as shown in Supplement 2, Table 1.
- 7.2 For heavy equipment operator certifications issued by Saudi Aramco, an online request should be submitted by an approved initiator by using the ITD online Certification and Tracking system for each request. The heavy equipment operator applicant shall provide soft-copies of the following documents to the initiator to upload them:

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- a) Saudi Aramco ID copy (if required),
- b) SAG Public Driver's License or SAG Heavy Equipment Operator License copy (if required) and a copy of the Government Driving License Printout showing the specific equipment Type.
- c) SA 9663 - Saudi Aramco/Contractor's Medical Examination for Heavy Equipment Operators "Physician's Examination Form" – Completed, signed, and stamped if required per Supplement 2, Table #1. See Supplement 1 for form SA 9663.

NOTE #2: For Saudi Aramco heavy equipment operators, form SA 9663 shall be completed by Johns Hopkins Aramco Healthcare (JHAH) physician in accordance with (JHAH) Medical Services Policy MSP-98, supplement E. Form SA 3941, "Medical Examination Request/Notice", shall then be completed by the physician and the SA 9663 placed in the Saudi Aramco heavy equipment operator's medical records. The heavy equipment operator's supervisor shall submit the completed soft copy of SA 3941 and any other required documents, to their assigned initiator for online request submission.

For contractor heavy equipment operators, form SA 9663 shall be completed by a physician in accordance with Johns Hopkins Aramco Healthcare (JHAH) Medical Services Policy MSP-98, Supplement E. Upon completion, the contractor heavy equipment operator's supervisor shall submit the completed soft-copy of SA 9663 and any other required documents, to their proponent assigned initiator for the online request submission.

- d) Colored clear recent photographs and scan copy of the applicant.

NOTE #3: Any Additional crane attachments need to be specified in the online request.

NOTE #4: Written certification tests (if required) for heavy equipment operators shall be in the English language only.

NOTE #5: For granting an access for initiator and verifier, user can check the website of Industrial Training Department:
http://tcd/ITDCERTS/home/itdcerts_home.aspx

- * 7.3 For heavy equipment operator certifications issued by accepted local training provider or Saudi Aramco approved international institution, or for home country certification, the specific requirements of the issuing authority shall be followed. All associated costs shall borne by the applicant's company (e.g., contractor).

- 7.4 A heavy equipment operator shall have a valid heavy equipment operator certificate to operate the specific heavy equipment listed in Supplement 2 to which he is assigned.

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- * 7.5 Heavy equipment operator certificates issued by Saudi Aramco and accepted local training providers shall be valid for three (3) years. Heavy equipment operator certificates issued by a Saudi Aramco approved international institution or the home country certification shall be valid as per the issuing authority's specified period.

NOTE #6: Certifications for all crane attachments and additional crane manufacturers shall also expire with the expiration of the heavy equipment operator certificate.

- ** 7.6 Heavy equipment operator certifications issued by Saudi Aramco, Saudi Aramco approved local training provider will be issued for the specific make and, model of heavy equipment (and the specific model and capacity of crane, as appropriate) being tested. Specific requirements of the local training provider shall be followed and all associated costs shall be carried out by the applicant's company (e.g., contractor).

- 7.7 A heavy equipment operator shall possess a valid Heavy SAG license (if required per Supplement 2) and the government driving license printout showing the specific equipment type which he is assigned.

- 7.8 A heavy equipment operator shall immediately provide his heavy equipment operator certificate and SAG license (if license is required), to any authorized Saudi Aramco representative, upon request.

- * 7.9 A heavy equipment operator, involved in a crane incident, shall immediately surrender his heavy equipment operator certificate to the USER representative during the investigation. Based on the outcome of the investigation, the operator certificate will be returned to the operator or in the case of certifications issued by Saudi Aramco, be forwarded to ITD until the operator is re-certified. For certifications issued by accepted local training provider, Saudi Aramco approved international institution or a home country certification, the USER shall retain the certification until the operator is recertified by the issuing authority (Refer to GI 7.026 for additional information.).

- * 7.10 A heavy equipment operator, involved in a heavy equipment incident other than a crane incident, shall immediately surrender his heavy equipment operator certificate to the USER representative during the investigation. Based on the outcome of the investigation, the operator certificate will be returned to the operator or in the case of certifications issued by Saudi Aramco, be forwarded to ITD until the operator is re-certified. For certifications issued by accepted Local Training provider or a Saudi Aramco approved international institution or a home country certification, the USER shall retain the certification until the operator is recertified by the issuing authority. The heavy equipment operator shall not be allowed to operate any other piece of heavy equipment for which he may also be certified until his operator certificate is returned to him (Refer to GI 6.001 and GI 6.003 for additional information).

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- * 8.1 Riggers and slingers shall have a valid rigger or slinger certificate issued by Saudi Aramco, accepted local training provider, Saudi Aramco approved international institution or a home country certification for the load weight limit and type of lift to be rigged/slung without supervision, as shown in Supplement 2, Table 2. Only a Saudi Aramco certified Rigger-I may approve Critical Lift Plans. The rigger/slinger certification categories are as follows:

Slinger: Can rig loads up to 5 tons and all pre-rigged/slung loads that are included in a rigs pre-prepared Safe Work Instruction (SWI) except loads that require a Rigger-I.

Rigger-III: Can rig loads up to 10 tons except loads that require a Rigger-I.

Rigger-II: Can rig loads up to 40 tons, originate Critical Lift Plans, and rig/supervise crane suspended personnel platform (manbasket) operations.

Rigger-I: Can rig all loads and approve Critical Lift Plans for critical lifts.

NOTE #7: Refer to GI 7.028 for specific limitations for Riggers and Slingers depending on their certification level.

- * 8.2 Rigger and Slinger certifications issued by Saudi Aramco, Accepted Local Training provider shall be valid for two (2) years. Rigger and Slinger certifications issued by a Saudi Aramco approved international institution or the home country certification shall be valid as per the issuing authority's specified period.
- ** 8.3 A Rigger-I must be certified by Saudi Aramco. Local training providers and international institutions are not allowed for Rigger-I certifications.

9.0 SUPPLEMENTS

- 9.1 Supplement #1 - Saudi Aramco/Contractor Medical Examination For Heavy Equipment Operators – "Physician's Examination Form" (SA 9663)
- 9.2 Supplement 2 - Heavy Equipment Operator and Rigger/Slinger Certification Requirements

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Recommended by:

Manager

Transportation & Equipment Services Department

Concurred by:

Manager

Loss Prevention Department

Concurred by:

Director

Industrial Training Department

Concurred by:

Manager

Local Workforce Development Department

Concurred by:

Chief

Preventive Medical Services Division

Concurred by:

Vice President

Industrial Services

Approved by:

Sr Vice President

Operations & Business Services

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SA-9663 (01/2015)

MSP-85-7 - Attachment #1

GI 7.025 - Attachment #1

Photo

**SAUDI ARAMCO/CONTRACTOR MEDICAL EXAMINATION
FOR HEAVY EQUIPMENT OPERATORS****PHYSICIAN'S EXAMINATION FORM****(UPON COMPLETING FORM, PHYSICIAN SHALL SIGN IN THE BOX AT THE BOTTOM
AND VERIFY SIGNATURE WITH HIS PERSONAL STAMP AND HIS FACILITY STAMP)EMPLOYEE NAME _____ SAUDI GOVERNMENT ID # _____
(PLEASE PRINT) OR IQAMA # _____COMPANY NAME _____ DATE _____
(PLEASE PRINT)

| VISION | NORMAL | ABNORMAL |
|---|--------|----------|
| 1- The vision shall not be less than 20/40 in each eye separately, with or without the use of eyeglasses or contact lenses. | | |
| 2- Color vision and visual fields should be normal. | | |
| 3- Diplopia is UNACCEPTABLE. | | |

| HEARING | NORMAL | ABNORMAL |
|---|--------|----------|
| 4- Hearing shall be adequate for normal speech communication with or without a hearing aid. | | |

| POTENTIAL SUDDEN INCAPACITY | NORMAL | ABNORMAL |
|--|--------|----------|
| 5- Any condition likely to cause sudden incapacity is UNACCEPTABLE. This includes, but is not limited to, a history of seizures after the 5 years, vestibular disorders, heart disease, and diabetes mellitus. | | |

| MISCELLANEOUS - The following must be considered: | NORMAL | ABNORMAL |
|--|--------|----------|
| 6- Impairment of musculo-skeletal capacities. | | |
| 7- Coordination and progressive or disabling neurological disease. | | |
| 8- A history of psychiatric illness or emotional instability. | | |
| 9- Substance abuse. | | |
| 10- Medication and its side effects. | | |

| FIT TO WORK? | YES | NO |
|--------------|-----|----|
|--------------|-----|----|

REMARKS: _____

PHYSICIAN'S NAME (PLEASE PRINT) _____

PHYSICIAN'S SIGNATURE _____

DATE MM / DD / YYYY

FACILITY NAME (PLEASE PRINT) _____

FACILITY LOCATION (CITY) _____

FACILITY TELEPHONE # _____

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| EQUIPMENT TYPE | ALLOWABLE CERTIFICATION | | | HEAVY SAG LICENSE | SAG PUBLIC DRIVER'S LICENSE |
|--|-------------------------|-------------------|------------------------------|-------------------------|--------------------------------------|
| | SAUDI ARAMCO | LOCAL PROVIDER | INTERNATIONAL INSTITUTION | | |
| Backhoe | Yes | SPSP | | Yes | No |
| Boom Truck – Articulating | Yes | | | No | Yes |
| Boom Truck – Telescoping | Yes | | | No | Yes |
| Bulldozer | Yes | SPSP | | Yes | No |
| Crane – Mobile | Yes | SPSP | | Yes | No |
| Crane – Pedestal | Yes | SPSP | | No | No |
| Crane – Tower | Yes | SPSP | | No | No |
| Forklift | Yes | SPSP | | Yes | No |
| Gradall | Yes | SPSP | | Yes | No |
| Grader | Yes | SPSP | | Yes | No |
| Loader – Skid (Bobcat) | Yes | SPSP | | Yes | No |
| Loader – Wheel /Pipeloader | Yes | SPSP | | Yes | No |
| Manlift – Hydraulic | Yes | | IPAF | No | No |
| Manlift – Scissor | Yes | | IPAF | No | No |
| Manlift -Telescoping | Yes | | IPAF | No | No |
| Sideboom – Pipelayer | Yes | SPSP | | Yes | No |
| Straddle Carrier | Yes | SPSP | | No | No |
| Telehandler | Yes | SPSP | | Yes | No |
| Tractor - Scraper | Yes | SPSP | | Yes | No |
| Traxcavator | Yes | SPSP | | Yes | No |
| Bucket Truck Driver | Yes | | IPAF | No | Yes |
| Bucket Truck Technician (bucket operator) | Yes | | IPAF | No | No |

Note 1: Bucket Truck Driver shall hold both Saudi Aramco certificate and SAG Public Driver License. He has to be fully certified and tested in the function of operating the equipment entirely.
The bucket truck technician (bucket operator) does not require SAG license. He is not authorized to drive the vehicle. Saudi Aramco Bucket Truck certification is required for bucket truck operation only.

** Note 2: If a specific box in the table is blank then there is not an approved local training provider on international institution approved to issue certifications for that specific piece of equipment.

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| CERTIFICATION LEVEL | ALLOWABLE CERTIFICATION | | |
|---------------------|-------------------------|----------------|---------------------------|
| | SAUDI ARAMCO | LOCAL PROVIDER | INTERNATIONAL INSTITUTION |
| Slinger | Yes | SPSP | |
| Rigger-III | Yes | SPSP | |
| Rigger-II | Yes | SPSP | |
| Rigger-I | Yes | Not Applicable | Not applicable |

** Note 1: If a specific box in the table is blank then there is not an approved local training provider or international institution approved to issue certifications for that specific rigger/slinger certification level.

** Note 2: A Rigger-I may only be certified by Saudi Aramco. Local training providers and international institutions are not allowed for Rigger-I certifications.