

### Technical Specifications ٣- المواصفات الفنية

The purpose of the technical specifications is to determine the technical characteristics of commodities and relevant services required by the Buyer. The Buyer shall set up a detailed list of the technical specifications taking into account the following:

- The technical specifications consist of clear indications through which the Buyer may determine whether the technical specifications provided in the Bid conform to the specifications required, and thus it may submit the Bid.

Therefore, the well set technical specifications facilitate the process of setting up Bids that meet the specifications of Bidder, in addition to checking, evaluating and comparing the same by the Bids Analysis Committee.

- The specifications require that all commodities and materials used in commodities shall be brand new, state-of-the-art and involve all developments in design and materials, unless the Contract states otherwise.

- The technical specifications shall make use of the best previous practice. Samples of specifications used in successful similar Bids in the same country or sector may provide solid ground in establishing the technical specifications.

- The Buyer requires using the metric system in specifying the units in the Bid.

- To establish fixed standards for the technical specifications may be very useful. This depends on the degree of sophistication and recurrence of this type of supply processes. The technical specifications shall be comprehensive to avoid restriction of manufacture, materials or equipments often used in the manufacture of similar commodities.

- The standards fixed for equipments, materials and manufacture in the Bidding documents shall not be restricted. The international specifications adopted shall be set whenever possible. Also, shall be avoided as much as possible any indication to the trade names, figures, illustrations or any other details determining the materials and items required in those produced from a certain factory. If this is not possible, the descriptions of such items shall be

إن الهدف من المواصفات الفنية هو تحديد الخصائص الفنية للملح والخدمات المتصلة بها التي يطلبها المشتري. على المشتري أن يعد قائمة مفصلة بالمواصفات الفنية أخذاً بعين الاعتبار ما يأتي:

- تتألف المواصفات الفنية من مؤشرات واضحة يستطيع المشتري من خلالها أن يحدد فيما إذا كانت المواصفات الفنية التي يقدمها العطاء مطابقة للمواصفات المطلوبة وبالتالي يستطيع تقييم العطاء. ولذا فإن المواصفات الفنية المحددة جيداً ستسهل عملية إعداد العطاءات المستوفية للمواصفات من مقدمي العطاءات، بالإضافة إلى فحصها وتقييمها ومقارنتها من قبل لجنة تحليل العطاءات.

- تتطلب المواصفات أن تكون جميع السلع والمواد المستخدمة في السلع جديدة وغير مستخدمة ومن أحدث طراز وتتضمن التطورات كافة في التصميم والمواد ما لم يذكر خلاف في العقد.

- يجب أن تستفيد المواصفات الفنية من أفضل التطبيقات السابقة. وقد توفر العينات لمواصفات استخدمت في عطاءات ناجحة مشابهة في نفس الدولة أو القطاع، أرضية صلبة في وضع المواصفات الفنية.

- يطلب المشتري استخدام النظام المترى في تحديد الوحدات في العطاء.

- إن وضع معايير ثابتة للمواصفات الفنية قد يكون مفيداً، وهذا يعتمد على مدى تعقيد السلع وتكرار هذا النوع من عمليات التجهيز. و يجب أن تكون المواصفات الفنية شاملة لتتجنب تقييد التصنيع، أو المواد، أو المعدات المستخدمة عادة في تصنيع سلع شبيهة.

- يجب أن لا تكون المعايير المحددة للمعدات والمواد والتصنيع في وثائق العطاء مقيدة. و يجب تحديد المواصفات الدولية المعتمدة كلما كان ذلك ممكناً. كما يجب تجنب الإشارة إلى الأسماء التجارية، أو أرقام الأدلة المصورة، أو أية تفاصيل أخرى تحدد المواد والبنود المطلوبة بتلك المنتجة من مصنع معين، وذلك قدر الإمكان. و إذا لم يكن ذلك ممكناً يجب أن يتبع وصف هذه البنود جملة (أو مايمثلها إلى أقصى حد).

followed by the phrase (or similar to max. extent).

- The technical specifications shall demonstrate all the requirements in the following points, for example but not limited to:

A Standards of materials and manufacture required for the production and manufacture of such materials.

b- Details of tests required (type and number).

c- Any additional work and/or related services required to achieve delivery/completion on the best way.

d- Details of activities to be performed by the supplier and the nature of Buyer's participation therein.

e- List of the details of guarantees covered by the commodities warrantee Liquidated Damage to be applied if the guarantees are not realized.

- The specifications shall describe all the technical and performance requirements and characteristics, to include the higher and lower values guaranteed and accepted, as applicable. The Buyer shall, if necessary, add a special form (to be attached to the Bid Submission Form) in which the Bidder shall state detailed information on such performance characteristics against such guaranteed and accepted values.

When the Buyer requires the Bidder to state in its Bid all or some of these technical specifications, technical tables or other technical information, then it shall specify in details the extent and nature of information required and the method in which these should be provided by the Bidder in the Bid.

[The Buyer shall enter the information in the following table, if it is presumed that it should provide a technical specifications summary. The Bidder shall provide similar table to clarify how they conform to the required specifications].

• يجب أن تبين المواصفات الفنية جميع المتطلبات فيما يتعلق بالنقاط الأتية، كاملة لا للحصر:

(أ) معايير المواد والتصنيع المطلوب لإنتاج وتصنيع هذه المواد.

(ب) تفاصيل الاختبارات المطلوبة (النوع والرقم).

(ج) أي عمل إضافي و/أو خدمات متصلة به مطلوبة لتحقيق التسليم/الاكتمال على أكمل وجه.

(د) تفاصيل النشاطات التي يجب تنفيذها من المجهز وطبيعة مشاركة المشتري فيها.

(هـ) قائمة بتفاصيل

Liquidated الضمانات التي تغطيها كفالة السلع التي ستطبق في حالة عدم تحقيق الضمانات. Damage.

• يجب أن تبين المواصفات جميع المتطلبات والخصائص الفنية والأدائية، بما في ذلك الأقيام العليا والدنيا المضمونة أو المقبولة، كما هو مناسب. يضيف المشتري، عند الضرورة، نموذجاً خاصاً (يرفق بنموذج تسليم العطاء) ليبيّن فيه مقدم العطاء معلومات تفصيلية حول هذه الخصائص الأدائية مقابل هذه الأقيام المضمونة أو المقبولة.

عندما يطلب المشتري من مقدم العطاء أن يبيّن في عطائه جميع هذه المواصفات الفنية أو جزءاً منها، أو جداول فنية أو معلومات فنية أخرى، فعليه أن يحدد بالتفصيل مدى وطبيعة المعلومات المطلوبة والطريقة التي يجب تقديمها بها في العطاء من مقدم العطاء.

Technical Specifications Summary: Commodities and related services shall be according to the following standards and specifications:

[على المشتري أن يُدخل المعلومات في الجدول الآتي ، إذا كان من المفترض أن يقدّم ملخصاً بالموصفات الفنية. وعلى مقدم العطاء أن يجهز جدولاً مشابهاً لإيضاح كيفية تطابقها مع المواصفات المطلوبة]

| المعايير والموصفات الفنية        | أسماء السلع والخدمات المتصلة بها | رقم البند        |
|----------------------------------|----------------------------------|------------------|
| [ادخل المعايير والموصفات الفنية] | [ادخل الاسم]                     | [ادخل رقم البند] |
|                                  |                                  |                  |
|                                  |                                  |                  |
|                                  |                                  |                  |
|                                  |                                  |                  |
|                                  |                                  |                  |

تفاصيل المعايير والموصفات الفنية [حيثما ضروري]

[ادخل وصفاً مفصلاً للمواصفات الفنية]

| Item              | Names of Commodities and Related Services | Standards and Technical Specifications          |
|-------------------|---|---|
| [Insert item No.] | [Insert name]                             | [Insert standards and technical specifications] |
|                   |   |   |
|                   |   |   |
|                   |   |   |
|                   |   |   |

Details of standards and technical specifications [when necessary] [Insert detailed description of technical specifications].

## **6000 GPM / WATER PUMP**

### **Portable skid mounted fire fighting pumps**

#### **Engine specifications**

Fire pump skid rated at 550 HP, tier 3 emissions rating 6000 GPM/ 12 bar pressure 14:5 CFM engine driven air compressor, lift frame air receiver with four air outlets, mounting flanges for manifolds.

RPM: 1500-2000

Cooling fan and guard

Inter cooled, with radiator

Air start with lubricator and quick open valve working pressure (100-150) PSI

Couple to the pump via manual operated clutch with lever

Twin disc power take off

Short coupled drive shaft with slip yoke and heavy-duty universal joint pump to PTO with heavy duty drive shaft guard.

Control panel equipped with oil pressure, water temperature, air pressure, fuel pressure, fuel pressure suction, discharge gauges, electronic throttle, emergency kill and tachometer with hour meter.

Enclosed battery box with lock

Engines oil drain plumbed to edge of skid for easy access.

Start stop button local control panel with engine throughling knob and emergency (S.O).

Built in (24 volt) alternator and illumination system.

#### **Structural skid.**

Heavy (C-IRON) or plated (C-FRAME) to carry the pump and engine with integrated fuel tank peneth the engine , the fuel automatically feed into engine fuel system ,fuel tank capacity not less than (300 LTR).

Easy to deploy from trailer or loaders

Nonskid expanded metal decking,

Fork lift pockets

Oil field end for tail boarding.

Single point lifts eye and four point lifting connection on corners.

6" pipe frame and enclosure to protect motor and pump.

Fuel connection mounted to edge of engine pump skid.

Suction hose storage rack on skid frame complete with chain and binder tie downs attached skid.

Suction hose support arm.

Air hose manifold system located for easy starting and operation.

### Pumps

Centrifugal pump.

Horizontal.

Split case pump (14" \* 12" or 10") rated at 6000 GPM

Body of volute / cast iron.

Bronze wear rings and impeller.

Stainless steel shaft.

Working as water lifting from surface pond, with at (6 MTR) NPSH.

With Auto priming pump.

### Manifold

Suction and Discharge manifold : gear operated butterfly valve on discharge side of priming pump with hammer union wing 6 " hammer union thread for easy discharge manifold connection.

With 4" storez coupling recycling relief branch.

### Year of manufacture in 2023 and above

### Set operation and maintenance and spare part manuals

### Note

USA , Western European , Japan , Canada Origin.

## **Spare part**

- 1- Fuel filter/ Quantity = 10
- 2- Oil filter / Quantity = 10
- 3- Air filter / Quantity = 10
- 4- Mechanical Seal Quantity / 2

## 4000 GPM / WATER PUMP

### Portable skid mounted fire fighting pumps

#### Engine specifications

Fire pump skid rated at 500 HP , tier 3 emissions rating 4000 GPM/ 12 Bar pressure 14:5 CFM engine driven air compressor , lift frame air receiver with four air outlets, mounting flanges for manifolds .

RPM : 1500-2000

Cooling fan and guard

Inter cooled, with radiator

Air start with lubricator and quick open valve working pressure (100-150) PSI

Couple to the pump via manual operated clutch with lever

Twin disc power take off

Short coupled drive shaft with slip yoke and heavy-duty universal joint pump to pto with heavy duty drive shaft guard.

Control panel equipped with oil pressure, water temperature, air pressure, fuel pressure, fuel pressure suction, discharge gauges, electronic throttle, emergency kill and tachometer with hour meter.

Enclosed battery box with lock

Engines oil drain plumbed to edge of skid for easy access.

Start stop button local control panel with engine throughling knob and emergency (S.O).

Built in (24-volt) alternator and illumination system.

#### Structural skid.

Heavy (C-IRON) or plated (C-FRAME) to carry the pump and engine with integrated fuel tank peneth the engine , the fuel automatically feed into engine fuel system ,fuel tank capacity not less than (300 LTR).

Easy to deploy from trailer or loaders

Nonskid expanded metal decking.

Forklift pockets

Oil field end for tail boarding.

Single point lifts eye and four point lifting connection on corners.

6" pipe frame and enclosure to protect motor and pump.

Fuel connection mounted to edge of engine pump skid.

Suction hose storage rack on skid frame complete with chain and binder tie downs attached skid.

Suction hose support arm.

Air hose manifold system located for easy starting and operation.

### Pumps

Centrifugal pump.

Horizontal.

Split case pump (12" \* 10" or 8") rated at 4000 GPM

Body of volute / cast iron.

Bronze weir rings and impeller.

Stainless steel shaft.

Working as water lifting form surface pond, with at (6 MTR) NPSH.

With Auto priming pump.

### Manifold

Suction and Discharge manifold : gear operated butterfly valve on discharge side of priming pump with hammer union wing 6 " hammer union thread for easy discharge manifold connection.

### Year of manufacture in 2023 and above

### Set operation and maintenance and spare part manuals

#### Note

USA , Western European , Japan , Canada Origin



## **Spare part**

- 1- Fuel filter/ Quantity = 10
- 2- Oil filter / Quantity = 10
- 3- Air filter / Quantity = 10
- 4- Mechanical Seal Quantity / 2

## **DIESEL AIR COMPRESSOR**

1-DIESEL ENGINE, SKID MOUNTED, WATER, COOLED  
2-SELF STARTER, SCREW TYPE  
PRESSURE 12 BAR  
CAPACITY / (200-250) CFM  
WORKING TEMP (-5 TO 55) C  
SYSTEM FOR COMPRESSOR: OIL COOLING  
HOSE CONECCTED FROM (3/4-1/2) INCH  
HOSE 3/4 INCH LENGTH 10 MTR Q/ 2

SPARE PART FOR ENGINE  
OIL FILTER / Quantity / 20  
FUEL FILTER / Quantity / 20  
AIR FILTER / Quantity / 20  
ELECTRIC STARTER / Quantity / 1  
KIT OF OVERHAUL FOR FUEL INJECTION PUMP

SPARE PART FOR AIR COMPRESSOR  
ALL FILTER (OIL , AIR)/ Quantity / 5  
OIL 20 LITTER

USA OR WESTERN EUROPEAN OR JAPAN CANADA ORIGIN

Year of manufacture In 2023 and above

**Sets operation and maintained manuals and spare part manuals**

## Discharge hose specifications

Construction : polyester jaket, circular woven, twill weave inside lining of EPDM- rubber.

Characteristics: economical, flexible, light- weight, space saving, weather resistant , rot and mildew ptoof, resistant to aging , ozone, sea water and many chemicals,good abrasion resistance . general purpose fire hose for pump and vehicles.

Test pressure : 25 bar

Bursting pressure : 50 bar

Size (4" \*20 mtr , 6" \* 20 mtr , 8" \* 15 mtr)

USA , ITALY , GERMANY ORIGIN

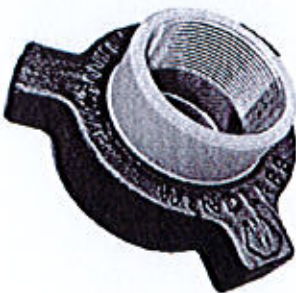
Year of manufacture in 2023 and above

## Hammer unions specifications

Kind fig (100) union

| size | Nut radius(inches) | Length total (inches) | Pressure working(PSI) | Pressure test (PSI) | Weight (LBS) |
|------|--------------------|-----------------------|-----------------------|---------------------|--------------|
| 4    | 4.7                | 4.94                  | 1000                  | 1500                | 19.42        |
| 6    | 6.5                | 6.84                  | 1000                  | 1500                | 46.21        |
| 8    | 7.87               | 7.31                  | 1000                  | 1500                | 69.88        |

- These hammer unions are used in low pressure manifold line and air, water, oil or gas application.
- Available in both threaded and butt weld ends
  - Metal to metal sealing surface.



## **Suction hose specifications**

hard rubber flexible hoses round threads , oil resistant pressure working (200 psi ) complete with hammer union .  
size (6" \* 4 mtr and 8" \* 3 mtr)

USA , ITALY , GERMANY ORIGIN

Year of manufacture in 2023 and above



#### 4- Drawings

#### ٤ - المخططات

Bid documents [Insert "include" or "does not include"] drawings.

وثائق العطاء هذه [ادخل "تتضمن" أو "لا تتضمن"] مخططات.

[ادخل قائمة المخططات الآتية إذا كانت هذه الوثائق سيتم تضمينها]

[Insert the following list of drawings if these documents will be included]

| قائمة المخططات |            |            |
|----------------|------------|------------|
| الغرض          | اسم المخطط | رقم المخطط |
|                |            |            |
|                |            |            |
|                |            |            |
|                |            |            |
|                |            |            |

| List of Drawings |               |         |
|------------------|---------------|---------|
| No. of Plan      | Name of Plane | Purpose |
|                  |               |         |
|                  |               |         |
|                  |               |         |
|                  |               |         |
|                  |               |         |

## 5- Test and Engineering Inspection ٥- الاختبار والفحص الهندسي

The following tests and engineering inspections will be conducted: [Insert list of tests and engineering inspections]

سيتم إجراء الاختبارات والفحوص الهندسية الآتية: [أدخل قائمة الاختبارات والفحوص الهندسية]

| قائمة الاختبارات والفحص الهندسي   |   |           |
|---|---|-----------|
| الاختبار و/أو الفحص الهندسي   | وصف ملخص لكل بند  | رقم البند |
| خطة الفحص المصنعي   | تجهيز مضخات إطفاء حرائق رؤوس الآبار النفطية والهوزات والتوصيلات | ١         |
| شهادات الفحص المصنعي مصادقة من قبل طرف فاحص ثالث مصنعي معتمد من قبل وزارة النفط |   | ٢         |
| حضور الفحص المصنعي لعدد (١) شخص (الفحص الهندسي)                                 |   | ٣         |
| الجدول الزمني للفحوصات المصنعية   |   | ٤         |
| شهادة فحص UL  |   | ٥         |

| List of Tests and Engineering Inspections |   |   |
|---|---|---|
| Item No.                                  | Brief Description of each Item                        | Test and/or Engineering Inspection  |
| 1   | 6000 GPM/ water pump portable skid mounted fire pumps | ITP   |
| 2   |   | The mill certificate shall be approved by one of the third-party companies that approved by the ministry of oil |
| 3   |   | Mill monitoring by (1) engineers from engineering inspection department   |
| 4   |   | Time Schedule for FAT   |
| 5   |   | Inspection certificate (UL)   |