

Directorate of Procurement (Navy) Through Bahria Gate
Near SNID Center, Naval Residential Complex, E-8, Islamabad
Contact: P-34(Pre) 051-9262310, Bahria Gate 0331-5540649,
For General Queries (0900-1300 hrs) - 051-9262306

Tender No & Date _____
Tender Description _____
IT Opening Date _____
Firm Name _____
Postal Address _____
Email Address for Correspondence _____
CEO Name _____ & CNIC _____ (Compulsory)

Contact Person Name _____
Contact Number (Landline _____) (Mobile _____)

Documents to be Attached with Quotation

Firm is to submit its proposal in a sealed envelope which shall contain 03 x Sealed Envelops as per details given below:

Sealed Envelop 1 - Technical Offer in Duplicate			
This envelope must contain 02 x sets of Technical Offer (01 x Original + 01 x Copy). Each Set must contain following documents as per this order and Supplier is to mark tick ✓ against each to ensure that these documents have been attached:			
S No	Document	Original Set	Copy Set
1.	Bank Challan		
2.	Principal Authorization Letter (where applicable)		
3.	Principal Invoice (Muted - without Price) (where applicable)		
4.	DP -1 Form of IT (with compliance remarks)		
5.	DP - 2 Form of IT with compliance remarks against each clause of the Annex A)		
6.	Technical Offer / Specs		
7.	Annex A of IT (with compliance remarks)		
8.	Annex B & C of IT (with compliance remarks)		
9.	DP-3 form of IT (dully filled & signed)		
10.	DGDP Registration Letter (If firm is registered with DGDP)		
11.	Tax Filling Proof		
<u>Sealed Envelop 2 – Earnest Money</u>			
This Envelop must contain Earnest Money only.			
<u>Sealed Envelop 3 – Commercial Offer</u>			
This Envelop must contain following documents:			
1.	Firm's Commercial Offer	01 x Original	
2.	Principal Invoice (where applicable)	01 x Original	
3.	Dully filled DP-2 Form of IT	01 x Original	

Firm's Declaration

It is certified that we have submitted tender in compliance with above instructions and we understand that our offer is liable to rejection if tender is not prepared / packed as per above instructions.

Firm's Authorized Signatures _____

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For General Queries (0900-1300 hrs) - 051-9262306
Email: dpn@paknavy.gov.pk

TENDER SUMMARY

Tender No & Date: _____

Tender Description: _____

Technical Opening Date: _____

Commercial Opening Date: _____

Technical Opening Details

S No	Name of the Supplier	OEM	Quoted Model

INVITATION TO TENDER FORM

1. Schedule to Tender No. **2524194/R-2601/340435** dated **27 Jan 26**. This tender will be closed for acceptance at 1030 Hours and will be opened at **1100 Hours** on **18 Feb 26**. Please drop tender in the Tender Box No **204**.
2. You are requested to please use this Performa for price quotation, fill in the prices, affix your stamp on the same, sign it and forward it in original as your Commercial offer along with the covering letter of your firm. If you do not use this form as price quotations your offer might be rejected.
3. You are requested to please attach DP-1 and DP-3 alongwith your quotation duly signed & stamped.

SCHEDULE OF STORES

S NO	DETAIL OF STORES	QTY/ UNIT	UNIT PRICE (RS)	18% GST	TOTAL PRICE (Rs)
1.	NSN NO. 0870-06-189-9160 Part No. BSE 32 DESCRIPTION OF STORE: Cold/ Cool Room (FV) Base Oil (Bitzer BSE 32 Oil) PACKING: 05 Ltr/ 10 Ltr SPECIFICATION: Bitzer BSE 32 Oil. Technical Data Sheet is attached as Annex-A. Special instructions attached as Annex-B.	500 Ltr			

NOTE:

1. Stores required on supply order basis against consignee's supply order subject to requirement.
2. The item must be delivered at least 85% of the shelf life remaining.
3. Imported Stores.
4. The contract should be concluded for 02 years with extendable/ provision for a period of one year with mutual consent in writing.
5. The purchaser shall not be bound to draw entire contracted quantities but reserve the right to draw additional quantities to the extent of 15% of the contracted Qty. No compensation shall be provided to the supplier for short drawn quantities.

6. Firm to provide following at the time of inspection:
- OEM Conformity Certificate with Batch No.
 - OEM valid lab test report alongwith batch no and filling date of certificate of conformity.
 - Date of manufacturing and date of expiry to be clearly mentioned on product data sheet.
7. OEM certified stores will be accepted on DPL-15
8. Inspection to be carried out by CINS.
9. Firm/supplier shall provide correct and valid e-mail and fax No. to CINS and DP(N). Supplier/contracting firm shall either provide OEM conformance certificate to CINS or is to be e-mailed to CINS under intimation to DP (Navy) at e-mail address cins@paknavy.gov.pk, inspectorate1@paknavy.gov.pk. Hard copy of COC must follow in any case through courier. On receipt, CINS shall approach the OEM for verification of conformance certificate issued by the OEM. Companies/firms rendering false OEM conformance certificates will be black listed.
10. Firm will submit an Affidavit that the original Earnest money is attached with Commercial Offer in separate envelope and copy of the same is attached with Technical Offer.
11. Firm will comply/ confirm all above IT clauses, mentioned under Note including specification, packing, general terms and conditions on its technical offer and original technical offer on firm's letter head pad along with DP-1, DP-2 & DP-3 duly signed and stamped on each page are required **in duplicate**.

Above mentioned price includes 18% Sale Tax (Please tick Yes or No)	
Yes	No
Grand Total	

Terms & Conditions

- Special Instructions Attached as Annex-B.
- Terms of Payment. 100% on Delivery of stores against each supply order and issuance of CRV. Part delivery/ part payment is allowed.
- Origin of Stores. (To be indicated in Technical Offer)
- Origin of OEM. (To be indicated in Technical Offer)
- Technical Scrutiny Report Required.
- Delivery Period. SOB contract for a period of 02 years and further extendable for one year upon mutual consent.
- Currency Pak Rupees
- Basis for acceptance FOR
- Bid Validity. The validity period of quotations must be indicated and should invariably be 120 days from the date of opening of commercial / Financial Proposal offer or 30th June whichever

is later. Firm undertakes to extend validity of offer if required by equal number of original bid period (i.e 120 x days as per original offer) i.a.w PPRA Rule-26.

10. **Place of Inspection.** Inspection will be carried out by CINS at Firm's Premises.
11. **Tendering procedure** Single stage - Two Envelop bidding procedure will be followed as per PPRA Rule 36 (b).
12. **Earnest Money/
Bid Security:** Your tender must be accompanied by a Call Deposit Receipt (CDR) in favor of CMA (DP), Rawalpindi in separate envelope and outside **attached with technical offer**. The rate of earnest money and its maximum ceil for different categories of firms would be as under:-

**REGISTERED/INDEXED/PRE-QUALIFIED
FIRMS**

(a) 2% of the quoted value subject to maximum ceiling of Rs. 0.500 Million.

**REGISTERED / PRE-QUALIFIED BUT
UNINDEXED FIRMS.**

(b) 3% of the quoted value subject to maximum ceiling of Rs. 0.750 Million.

**UN-REGISTERED / NOT PRE-QUALIFIED /
UNINDEXED FIRMS.**

(c) 5% of the quoted value subject to maximum ceiling of Rs. 1.00 Million.

13. **Return of Earnest Money:**
- (a) Earnest money to the unsuccessful bidders will be returned on finalization of the contract.
- (b) Earnest money of the firm/firms with whom contract is concluded will be returned on submission of Bank Guarantee and its acceptance by CMA (DP).

14. **Special Note.**
- a. All Participating firms must submit technical offers in duplicate (one for TSR committee and one for DP (Navy) record).
- b. Unregistered (Not registered with Directorate General Defense Purchase) firms must provide the documentary evidence of their technical and financial capability to undertake the project.
-

c. Unregistered firms are to submit a certificate along with their Technical offer stating that the firm is not black listed by any government organization and not under disciplinary trial or embargo. Acceptance of firm's offer, firms not registered with DGDP is subject to security clearance. All firms who do not provide requisite documentary or security wise not cleared by DGDP (FS Team) will be rejected.

d. In case of Pakistani firms, sales tax, NTN and income tax registration certificates are to be attached with the offer. These certificates are mandatory with the BID, otherwise offer shall be REJECTED.

e. Company registration certificates are to be attached with offer.

f. Requisite amount of earnest money (in shape of Bank Draft in the favour of CMA (DP)) is to be attached in **separate envelop in sealed condition with the Technical offer**. Photocopy of the same shall also be attached with DP-2 as a testimony. Cheques/crossed cheques shall not be accepted.

g. Duly completed Form DP-1 and DP-3 are to be attached with Technical Offer in duplicate.

h. DP-2 Form shall also be submitted with Technical Offer without mentioning of prices. Moreover, compliance or otherwise against each para/requirement of Annex A & B duly signed & stamped by firm authorized rep is to be provided for technical scrutiny.

j. Only registered supplier on Active Taxpayers List (ATL) of FBR are eligible to participate in the Tender and submit quote.

k. Release of payments is subject to mandatory submission of Filer Certificate duly issued by FBR showing the name of supplier on Active Taxpayers List (ATL). No payment will be released by CMA (DP) unless latest Filer Certificate duly issued by FBR showing the name of supplier on its Active Taxpayer list is submitted alongwith payment documents.

Note: In case of failure to comply above instructions, Terms and conditions, offer will liable for rejection.

*Individual signing tender and/or other documents connected with a contract must specify:-

- (a) Whether signing as "Sole Proprietor" of the firm or his attorney.
 - (b) Whether signing as a "Registered Active Partner" of the firm or his attorney.
 - (c) Whether signing for the firm "per procuration".
 - (d) In the case of companies and firms registered under the Act, 1913 as amended up-to-date and under the Partnership Act 1932, the capacity in which signing e.g., the Director, Secretary, Manager, Partner, etc. or their attorney and produce copy of document empowering him so to sign, if called upon to do so.
 - (e) Principal's proforma invoice (in original)
 - (f) Earnest money
 - (g) Treasury Challan Form for tender Fees as applicable Tender Covering Form
-

Technical Data Sheet



技術情報

TECHNISCHE INFORMATION
TECHNICAL INFORMATION

Polyolester-Öle BSE32 und BSE55 für Hubkolbenverdichter

Polyolester Oils BSE32 and BSE55 for Reciprocating Compressors

レシプロコンプレッサー用 ポリオールエステルオイル BSE32 および BSE55

Inhalt

- 1 Allgemeines
- 2 Anwendungsbereiche
- 3 Eigenschaften der BITZER Esteröle
- 4 Alternativen zu BITZER Esterölen
- 5 Einsatz von Esterölen mit chlorierten (H)FCKW-Kältemitteln (R22 etc.)

Content

- 1 General
- 2 Application ranges
- 3 Properties of the BITZER ester oils
- 4 Alternatives to BITZER ester oils
- 5 Use of ester oils with chlorinated (H)CFC refrigerants (R22 etc.)

目次

- 1 概要
- 2 適用範囲
- 3 BITZER製エステルオイルの特性
- 4 BITZER製エステルオイルの代替品
- 5 (H)CFC塩素化冷媒 (R22など) とエステルオイルの使用

1 Allgemeines

BITZER-Hubkolbenverdichter werden für den Einsatz chlorierter HFCKW-Kältemittel (R134a, R404A, R407A/B, R407C, R507A etc.) mit einem hochwertigen Polyolester-Öl befüllt. Bei Fabrikbefüllung erhält die Typenbezeichnung des Verdichters den Zusatz "Y" – z. B. 4CC-6.2Y.

Esteröle bieten – im Gegensatz zu konventionellen Schmiermitteln – eine gute Löslichkeit mit HFCKW-Kältemitteln und sind deshalb für den Betrieb mit diesen Stoffen zwingend erforderlich. Sie haben darüber hinaus hervorragende Schmiereigenschaften und ein günstiges Viskositätsverhalten (hoher Viskositätsindex).

Weitere Informationen über die Besonderheiten im Umgang mit Esterölen sowie Löslichkeitsgrenzen siehe Technische Informationen KT-620 und KT-630.

1. General

BITZER reciprocating compressors which are intended for use with chlorine free HFC refrigerants (R134a, R404A, R407A/B, R407C, R507 Aetc.) are charged with a high quality polyolester oil. When factory charged the compressor designation has the supplement "Y" – e. g. 4CC-6.2Y.

Contrary to conventional lubricants, ester oils provide good miscibility with H-C refrigerants and are therefore essential for the operation with these substances. Moreover they have outstanding lubrication characteristics and a favourable viscosity performance (high viscosity index).

Further information concerning the special handling of ester oils and miscibility limits are given in the Technical Informations KT-620 and KT-630.

1 概要

塩素を含まないHFC冷媒 (R134a, R404A, R407A/B, R407C, R507Aなど) を使用するBITZER製レシプロコンプレッサーには、高品質のポリオールエステルオイルを使用できます。工場でコンプレッサーにオイルが充填された場合は、4CC-6.2Yのように末尾に追加で「Y」と表記されます。

エステルオイルは従来の潤滑油と比較し、HFC冷媒との溶解性に優れているため、これらの物質を使用した操作に必須となるオイルです。さらに、エステルオイルには、優れた潤滑特性と粘性 (高い粘度指数) があります。

エステルオイルの特別な取扱い方法や溶解性の限度についての詳細は、「技術情報KT-620およびKT-630」に説明されています。

2 Anwendungsbereiche

2 Application ranges

2 適用範囲

2.1 BSE32

2.1 BSE32

2.1 BSE32

Basiviskosität 32 cSt bei 40°C

Basic viscosity 32 cSt at 40°C

基本的な粘度 (40°C時) : 32 cSt

Kältemittel Refrigerant 冷媒	Anwendungsbereich Application range 適用範囲	Erläuterungen Comments 注釈
R134a	- H M (L)	stationäre Kälte- und Klimaanlage bis zu einer Verflüssigungs- temperatur von 55°C
R404A	- (H) M L	stationary refrigeration and air conditioning plants with condensing temperatures up to 55°C
R407A	- (H) M L	
R407C	- H M L	
R507A	- (H) M L	凝縮温度が最大55°Cの設置型の冷凍・空調プラント
R22	- - M L	siehe besondere Hinweise, Kapitel 5 see special recommendation, chapter 5 特別な推奨事項については5章を参照してください。

2.2 BSE55

2.2 BSE55

2.2 BSE55

Basiviskosität 55 cSt bei 40°C

Basic viscosity 55 cSt at 40°C

基本的な粘度 (40°C時) : 55 cSt

Kältemittel Refrigerant 冷媒	Anwendungsbereich Application range 適用範囲	Erläuterungen Comments 注釈
R22	- H M (L)	siehe besondere Hinweise, Kapitel 5 see special recommendation, chapter 5 特別な推奨事項については5章を参照してください。
R134a	HH H M (L)	mobile Kälte- und Klimaanlage sowie stationäre Anlagen bei Verflüssigungs-temperaturen > 55°C
R407C	- H M -	mobile refrigeration and air conditioning plants and stationary systems with condensing temperatures > 55°C
R410A	- H M L	凝縮温度が55°Cを超える移動型の冷凍・空調プラントと設置システム stationäre Kälte- und Klimaanlage stationary refrigeration and air conditioning plants 設置型の冷凍・空調プラント

Definition der Anwendungs- bereiche

HH Hochklimabereich (t_p bis 25°C)
H Klimabereich
M Normalkühl-Bereich
L Tiefkühl-Bereich
() Weniger empfohlener Anwen-
dungsbereich (teilweise Ein-
schränkungen z. B. L-Bereich bei
R134a)

Definition of application ranges

HH high temperature air conditioning
(t_p up to 25°C)
H air conditioning range
M medium temperature range
L low temperature range
() application range less
recommended (partly restrictions
e.g. L range in case of R134a)

適用範囲の定義

HH 高温の空調装置
(t_p 25°C以下)
H 空調の範囲
M 中温域
L 低温域
() 推奨値以下の適用範囲 (部分的に限定
された範囲。例: R134aでLの温度域)

Weitere Ersatz-Kältemittel für R22, deren Anwendungsbereiche sowie empfohlene Schmierstoffe siehe Technische Information KT-651.

For further alternative refrigerants for R22, their application ranges and recommended lubricants see Technical Information KT-651.

R22用のその他の冷媒の適用範囲と推奨潤滑油については、技術資料KT-651を参照してください。

3 Eigenschaften der BITZER Esteröle

Die hier aufgeführten Öle werden nach DIN 51503 Teil 1 in die Gruppe KD eingestuft. Für die Beurteilung des Ölzustands – beispielsweise im Hinblick auf Wassergehalt oder Neutralisationszahl – gelten die Richtwerte dieser Norm.

3 Properties of the BITZER ester oils

The listed oils are categorized as group KD according to DIN 51503 part 1. Use the guidelines of this standard to determine the oil condition, e. g. with respect to its water content or total acid number (TAN).

3 BITZER 製エステルオイルの特性

表に示したオイルは DIN 51503 part 1 に準拠したグループ KD として分類されています。例えば含水量または全酸価 (TAN) についてオイル状態を判定するには、この標準の基準値を使用してください。

3.1 Technische Daten

3.1 Technical data

3.1 技術データ

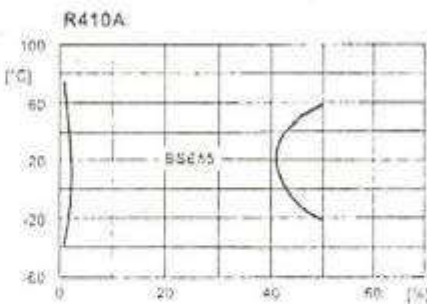
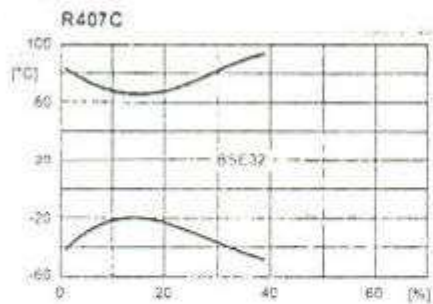
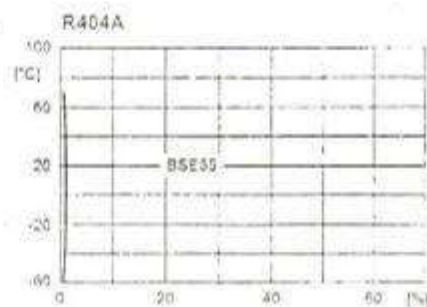
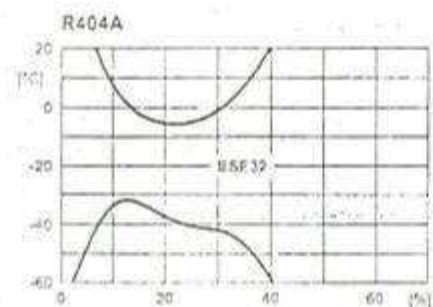
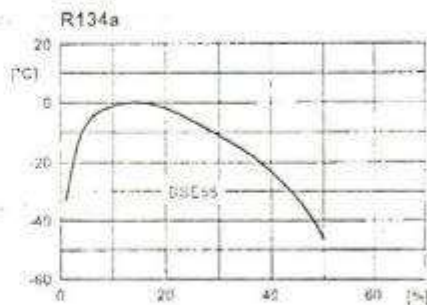
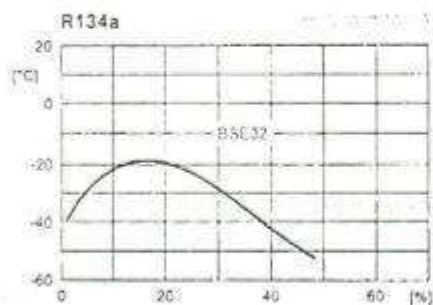
Ölsorte Oil type オイルの種類	Dichte bei 15°C Density at 15°C 密度 (15°C) g/ml	Flammpunkt Flash point 引火点 °C	Stockpunkt Pour-point 流動点 °C	Kinematische Viskosität (cSt) Kinematic viscosity (cSt) 動粘度 (cSt)		
				20°C	40°C	100°C
BSE32	1.006	243	-48	88.1	31.2	6.0
BSE55	1.010	270	-51	149.4	55.0	8.8

3.2 Mischungsgrenzen

3.2 Miscibility limits

3.2 溶解性の限度

Öltemperatur / Oil temperature / 温度



Massenanteil Öl in Kältemittel / Percentage by mass of oil in refrigerant /
冷媒内のオイル質量の比率

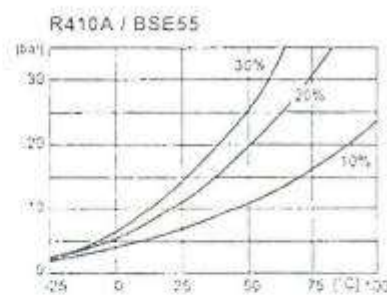
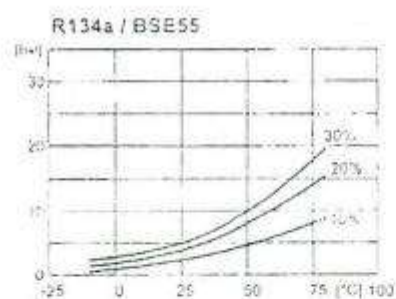
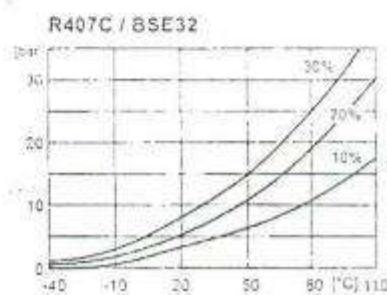
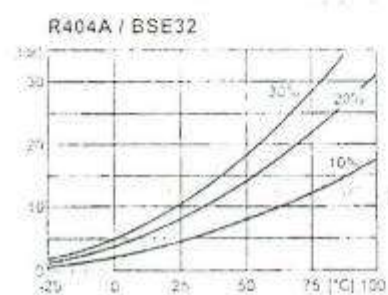
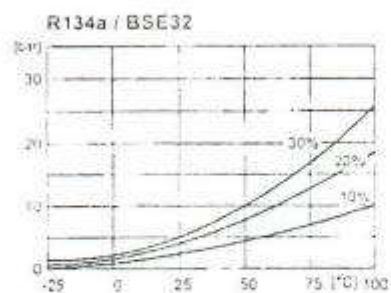
Abb. 1 Mischungsgrenzen
Gewichtsanteil Öl im Kältemittel

Fig. 1 Miscibility limits
Weight percentage oil in refrigerant

図1 溶解性の限度
冷媒内のオイルの重量パーセント



Kältemitteldruck / Refrigerant pressure / 冷媒圧



Öltemperatur / Oil temperature / 油温

Abb. 2 Kältemittel-Konzentration (Massen %) im Öl in Abhängigkeit von Kältemitteldruck und Öltemperatur

Fig. 2 Refrigerant solution in oil depending on refrigerant pressure and oil (mass.%) temperature

図2 冷媒の圧力とオイルの温度によって変化するオイル内の冷媒濃度 (質量%)



4 Alternativen zu BITZER Esterölen

4 Alternatives to BITZER ester oils

4 BITZER 製エステルオイルの代替品

4.1 BSE32

Lieferant	Ölsorte
BP	Enersyn MPS 32
Castrol	Icematic SW 32
CPI	Solest 31-HE
Fuchs	SEZ 32
Mobil	EAL Arctic 22 CC EAL Arctic 32
Shell	S4 FR-F 32 Clavus R32
Uniquema	RL 32 H

4.1 BSE32

Supplier	Oil type
BP	Enersyn MPS 32
Castrol	Icematic SW 32
CPI	Solest 31-HE
Fuchs	SEZ 32
Mobil	EAL Arctic 22 CC EAL Arctic 32
Shell	S4 FR-F 32 Clavus R32
Uniquema	RL 32 H

4.1 BSE32

サプライヤー	オイルの種類
BP	Enersyn MPS 32
Castrol	Icematic SW 32
CPI	Solest 31-HE
Fuchs	SEZ 32
Mobil	EAL Arctic 22 CC EAL Arctic 32
Shell	S4 FR-F 32 Clavus R32
Uniquema	RL 32 H

4.2 BSE55

Lieferant	Ölsorte
BP	Enersyn MPS 68
Castrol	Icematic SW 68
CPI	Solest 68
Fuchs	SE 55
Mobil	EAL Arctic 68
Shell	S4 FR-F 68 Clavus R68
Uniquema	RL 68 H

4.2 BSE55

Supplier	Oil type
BP	Enersyn MPS 68
Castrol	Icematic SW 68
CPI	Solest 68
Fuchs	SE 55
Mobil	EAL Arctic 68
Shell	S4 FR-F 68 Clavus R68
Uniquema	RL 68 H

4.2 BSE55

サプライヤー	オイルの種類
BP	Enersyn MPS 68
Castrol	Icematic SW 68
CPI	Solest 68
Fuchs	SE 55
Mobil	EAL Arctic 68
Shell	S4 FR-F 68 Clavus R68
Uniquema	RL 68 H

Die aufgeführten Alternativ-Öle entsprechen in ihren Eigenschaften weitgehend der Originalfüllung BSE32 oder BSE55. Eine Mischung mit dem Originalöl ist möglich – innerhalb der jeweiligen Viskositätsgruppe –, sofern entsprechende eigene oder vergleichende Erfahrungen für den betreffenden Anwendungsfall vorliegen. Grundlegende Voraussetzungen für den Einsatz von Alternativ-Ölen sind vom Hersteller bzw. Lieferanten garantierte Produktqualität und Feuchtigkeitswerte (< 50 ppm).

The characteristics of the alternative oils listed mainly correspond to the original BSE32 or BSE55 charge. It is also possible to mix these with the original oil, with in the respective viscosity group, as long as appropriate own or comparable experience is available for the application concerned. The basic assumption for the use of these alternatives is that the manufacturer or supplier guarantees the product quality and the moisture content (< 50 ppm).

表中の代替オイルの特性は、主にオリジナルの BSE32 または BSE55 の充填に類似しています。また、交換する用途や油種または類似の適切な経験がある場合には、これらのオイルを該当する粘度のグループ内でオリジナルのオイルと混合することもできます。これらの代替品を使用する場合の基本的な想定事項として、メーカーまたはサプライヤーが製品の品質と含水率 (50ppm 未満) を保証するものとします。

Achtung!

Verdichterschaden möglich!
In der Einfüllzeit des Verdichters
sind die Öle BSE32 und BSE55
zwingend erforderlich.
Für die Erstbefüllung dieses Öl
verwenden!

Attention!

Compressor damage possible!
The oils BSE32 and BSE55 are
mandatory for the running-in
time of the compressors. Use
these oils for initial charge!

注意!

コンプレッサーが損傷するおそれ
があります。コンプレッサーの始動
し運転時には、オイルBSE32お
よびBSE55を使用する必要があり
ます。最初の充填にはこれらのオイ
ルを使用してください。

Wegen der spezifischen Formulierung
der Öle BSE32 und BSE55 darf für
die Erstbefüllung der Verdichter nur
das jeweilige Original verwendet
werden. Diese beiden Öle zeichnen
sich durch besondere tribologische
Eigenschaften aus und besitzen spe-
zielle Verschleißschutz-Additive, die
die Lebensdauer des Verdichters er-
höhen. Die oben gelisteten
Alternativen sind nur für das
Nachfüllen zugelassen.

Due to the specific formulation of the
oils BSE32 and BSE55 only original
oil shall be used for the initial charge
of the compressor. These oils are
characterized by specific tribological
characteristics and have special wear
protection additives to increase the
compressors life span. The
alternatives listed above are allowed
only in case of recharging.

オイルBSE32およびBSE55の特別な形
成のため、コンプレッサーに初めてオイ
ルを充填する場合にはオリジナルのオイ
ルのみを使用してください。これらの
オイルは摩耗に対しての特別な潤滑特
性を持ち、コンプレッサーの寿命を高め
るための特殊摩耗保護添加剤を含んで
います。上の表に示す代替品の使用は、
再充填のケースでのみ許されます。



5 Einsatz von Esterölen mit chlorierten (H)FCKW-Kältemitteln (R22 etc.)

Inzwischen besteht auch bei Anlagen mit (H)FCKW-Kältemitteln ein Trend zur Befüllung der Verdichter mit Esteröl, um eine spätere Umstellung auf chlorfreie Kältemittel zu vereinfachen. Esteröle sind grundsätzlich auch für derartige Anwendungen geeignet, jedoch besteht ein deutlich erhöhtes Risiko hinsichtlich Verdichterver-schleiß und chemischer Stabilität des Kältekreislaufs. Dies gilt selbst im Hinblick darauf, dass in BITZER-Verdichtern nur besonders hochwertige Materialien zum Einsatz kommen – u. a. nitrierte Wellen, sonderbehandelte Lager, hartverchromte Verdichtungsringe, Edelstahl-Arbeitsventile.

Auch das Argument einer vereinfachten Umstellung auf chlorfreie Alternativstoffe gilt nur unter Einschränkung. Eine qualifizierte Umstellung erfordert auf Grund der unvermeidlichen Kontamination des Öls mit Chlor aus dem (H)FCKW-Kältemittel ohnehin einen mehrfachen Ölwechsel.

5.1 Kritische Punkte

Der Einsatz von Esteröl in Verbindung mit (H)FCKW-Kältemitteln sollte immer sorgfältig abgewogen werden, wobei folgende Punkte berücksichtigt werden müssen:

Starke Viskositätsminderung

Beim Betrieb mit (H)FCKW ist die im Esteröl gelöste Kältemittelmenge mehr als doppelt so hoch als bei herkömmlichen Schmierstoffen oder bei Verwendung von Esteröl in Verbindung mit chlorfreien HFKW. Daraus resultiert vor allem bei hohen Saugdrücken und niedriger Öltemperatur eine starke Viskositätsminderung mit der Gefahr eines erhöhten Verschleißes. Besonders kritisch ist dabei der Startvorgang nach längeren Stillstandszeiten.

5 Use of ester oils with chlorinated (H)CFC refrigerants (R22 etc.)

A trend also exists towards charging compressors with ester oil for plants with (H)CFC refrigerants, to simplify a subsequent conversion to chlorine-free refrigerant. Ester oils are generally suitable for such applications, however, a significantly increased risk exists regarding compressor wear and the chemical stability of the system. This applies even though BITZER compressors are constructed with high quality materials such as surface hardened shafts, specially treated bearings, hard chrome plated compression rings and high alloy steel valve reeds.

The argument that the conversion to alternative refrigerants is simplified is only valid with certain restrictions. A qualified conversion requires repeated oil changes due to the unavoidable contamination of the oil with chlorine from the (H)CFC refrigerant.

5.1 Critical points

The use of ester oil in combination with (H)CFC refrigerants should always be considered carefully, especially regarding the following points:

Strong viscosity reduction

When operating with (H)CFC the quantity of refrigerant dissolved in the ester oil is more than double as with conventional lubricants or when operating with a combination of ester oil and chlorine free HFC. This results in a strong viscosity reduction and the danger of increased wear, especially in cases of high suction pressure and low oil temperature. The starting procedure after a long period of standstill is particularly critical.

5 (H)CFC 塩素化冷媒 (R22 など) と エステルオイルの使用

(H)CFC冷媒を使用するプラントの場合、従来の非塩素系の冷媒への転換に容易に対応できるよう、コンプレッサーにエステルオイルを使用する傾向があります。一般的にエステルオイルはこのような用途に適していますが、コンプレッサーの摩耗やシステムの化学的な安定性に関するリスクが著しく大きくなります。この問題は、表面硬化処理を施したシャフト、特殊処理を施したベアリング、硬クロムメットのピストンリングや高合金鋼製バルブなど、高品質な材料で製造したBITZER製コンプレッサーでも同様に起こります。

代替冷媒への転換を簡便化する前提は、一定の制限がある場合にのみ有効です。適切な交換を行うには、(H)CFCの冷媒が完全な状態によりオイルが汚染されるため、オイル交換を繰り返し必要があります。

5.1 危険事項

(H)CFCの冷媒とエステルオイルを組み合わせる場合には、常に以下の点を十分に考慮してください。

強い粘度低下

(H)CFCで充填される場合、エステルオイルに溶解した冷媒の量は、従来の潤滑油の2倍超えが、またはエステルオイルと塩素系HFCを組み合わせる場合の2倍以上になります。その結果、粘度が大きく低下して摩耗が増加する危険があり、特に吸入圧力が高い場合やオイルの温度が低い場合にその危険があります。長時間停止させた後に始動するときは、特に危険が伴います。

Starke Hygroskopie

Esteröle sind stark hygroskopisch. Sie erfordern deshalb bei (H)FCWK auf Grund des Chloranteils einen besonders hohen Trocknungsgrad (< 50 ppm), der in der Praxis nur mit erheblichem Aufwand erreicht werden kann. Überschüssige Feuchtigkeitswerte führen zu Hydrolyse und damit zu Säurebildung und Kupferplattierung sowie in der Folge zu Verdichterschaden.

Hohe Schmutzlöslichkeit

Esteröle haben ein besonders gutes Löslichkeitsverhalten gegenüber Schmutzablagerungen in der Anlage. Sie erhöhen damit die Gefahr einer Anlagerung des Verdichters durch abgelösten Schmutz.

5.2 Resultierende Anforderungen

Bei CIC-Betrieb

Reinab bei Klimabedingungen (H-Bereich) und Einspritzkühlung (CIC) mit einstufigen Verdichtern: Esteröl mit höherer Basisviskosität einsetzen (BSE55 an Stelle von BSE32).

Bei der Montage

- grundsätzlich nur Rohrleitungen und Anlagen-Komponenten verwenden, die innen sauber und trocken sind (frei von Zunder, Metalloxiden, Rost- und Phosphat-Schichten) und die luftdicht verschlossen angeliefert werden
- technisch dimensionierten Trockner einbauen
- saugseitigen ReinigungsfILTER einbauen
- Öl sorgfältig handhaben: Öl vor Feuchtigkeit schützen. Nur originalverschraubte Öldosen verwenden!

Bei der Inbetriebnahme

- hochgradig evakuieren

Strong hygroscopicity

Ester oils are strongly hygroscopic and therefore require a very high degree of dehydration (< 50 ppm) when used with (H)CFC due to the chlorine content; this can only be achieved in practice with a considerable effort. Excessive moisture content leads to hydrolysis and thereby to acid formation with copper plating resulting in damage to the compressor.

High solubility of dirt deposits

Ester oils have an especially good solubility behaviour with regard to system dirt deposits and therefore increase the danger of damage to the compressor due to loosened dirt.

5.2 Resulting requirements

With CIC operation

Operation at air conditioning range (H range) and injection cooling (CIC) with single stage compressors: Use ester oil with a higher basic viscosity (BSE55 instead of BSE32).

While mounting

- Only use tubes and components which are clean and dry inside (free from slag, swarf, rust, and phosphate coatings) and which are delivered with an air tight seal
- install generously sized drier
- install suction side cleaning filter
- handle the oil carefully: Keep oil dry. Use oil from originally sealed containers only!

While commissioning

- evacuate to a high-grade vacuum

Hohe Feuchtigkeit

Esteröle sind sehr hygroskopisch. Sie erfordern deshalb bei (H)FCWK und -insbesondere bei -injection-cooling (CIC) einen besonders hohen Trocknungsgrad (< 50 ppm), der in der Praxis nur mit erheblichem Aufwand erreicht werden kann. Überschüssige Feuchtigkeitswerte führen zu Hydrolyse und damit zu Säurebildung und Kupferplattierung sowie in der Folge zu Verdichterschaden.

Hohe Schmutzlöslichkeit

Esteröle haben ein besonders gutes Löslichkeitsverhalten gegenüber Schmutzablagerungen in der Anlage. Sie erhöhen damit die Gefahr einer Anlagerung des Verdichters durch abgelösten Schmutz.

5.2 要求事項

CIC 運転の場合

空調の範囲 (H 範囲) で運転し、一段式コンプレッサーでは噴射冷却 (CIC) を行う場合、高い粘度 (BSE32ではなく、BSE55) のエステルオイルを使用してください。

取付け時

- 配管や構成部品は、内側がきれい (錆、屑、くず、サビやリン酸塗料がない状態) で乾燥し、しかも気密性のシールで梱包された部品のみを使用してください。
- 十分なサイズのドライヤーを取り付けてください。
- 吸入側に浄化用のフィルターを取り付けてください。
- オイルの取扱いは注意してください。オイルはドライな状態を保ってください。シールされた容器に入ったオイルのみを使用してください。

試運転時

- 高真空状態にしてください。

SPECIAL INSTRUCTIONS

SOURCE OF SUPPLY

1. Genuine OEM Certified Brand New Stores will only be acceptable. Stores not procured directly from OEM or his Authorized Dealer/Agent/Stockist will not be acceptable.
2. Supplying firm in its "Offer/Quotation" is to clearly state whether stores will be supplied directly from relevant OEM or OEM's Authorized Dealer/Agent/Stockist.
3. In case the stores are being sourced through OEM's Authorized Dealer/Agent/Stockist a documentary proof to this effect comprising OEM's Dealership Certificate in respect of Dealer/Agent/ Stockist is to be provided by the supplying firm with following endorsements.
 - a. Certificate reference number with date
 - b. Name of the authorized dealer/agent/stockist
 - c. Last date/duration/period for validity of dealership
4. Supplying firm in its "Offer/Quotation" is to provide OEM's contact (address, e-mail address, phone, fax and website etc)

ORIGIN OF SUPPLY

5. Supplying firm in its "Offer/Quotation" is to specifically mention country of origin for the stores, which will be subsequently endorsed in the "Contract".

UPDATES & CURRENT INFORMATION

6. In case, NSN, Part Number or Quality Standard of the indented item has been superseded by a new one before/after conclusion of contract, the supplying firm is to provide all such relevant information alongwith a documentary proof to this effect originating from the concerned OEM. If replaced part effects fittings and functioning of other associated parts as well, then details of those parts are also to be provided.

DOCUMENTATION REQUIRED

7. Supplier is to provide following documentation at the time of inspection:-
 - a. Firm's Warranty/Guarantee on form "DPL-15".
 - b. OEM's "Certificate of Conformity" indicating following.
 - (1) OEM Name and Valid email address.
 - (2) Description of stores along with quantity.
 - (3) Part/ Pattern No of stores.
 - (4) Manufacturing identification (Name Address and Contact No).
 - (5) Date/ Period of Manufacturing.
 - (6) List of Serial Numbers or Batch Numbers or Lot Numbers as embossed/ engraved on the stores (as applicable)
 - (7) Details of Test Report (FATs/ OEM Lab Test Report) along with dates and tests conducted as applicable.
 - (8) Details of third party testing authority (if their services used).
-

- (9) List of safety/ regulatory standard (as applicable).
- (10) Conformance to standards/specifications quoted in the Contract.
- (11) Date/ Period of Manufacturing should not be older than one year at the time of delivery (In Case of machinery equipment/spares).

c. Import documents comprising "Lading/Airway Bill" or "Shipping Bill" and "Bill of Entry" duly endorsed with the name of Supplying Firm if the item is sourced from abroad by local supplier/authorized dealer of OEM.

8. Firm/Supplier shall provide correct and valid email and fax No. to CINS and DP(N). Supplier/contracting firm shall either provide OEM/conformance certificate to CINS or is to be emailed to CINS under intimation to DP(N). Hard copy to COC must follow in any case through courier. On receipt, CINS shall approach the OEM for verification of conformance certificate issued by the OEM. Companies/firms rendering false OEM conformance certificates shall be black listed. "OEM's certificate" of conformity "originating from principal" who is neither the OEM nor the OEM's authorized dealer/agent/stockiest will not be acceptable.

INSPECTION

9. Inspection Authority for all types of stores will be "CINS". However, in cases, where testing/verification of supplied stores is not possible, joint inspection will be carried out by reps of CINS, consignee and end/specialist user.

10. Lab test charges will be borne by the contracting firm.

11. Contracted firm is to submit inspection challan to CINS for inspection through fastest mean such as electronic mail at CINS e-mail address i.e cins@paknavy.gov.pk and same is to be followed through registered mail to following CINS address:

Chief Inspector of Naval Stores
6, Liaquat Barracks, Near Lucky Star
Saddar, Karachi
Ph: 021-48506119

Tender No.....

Name of the Firm.....

DGDP Registration No.....

Mailing Address.....

Date.....

Telephone No.

Official E-Mail.....

Fax No

Mobile No of contact person.....

To:

Directorate of Procurement (Navy)
 through Bahria Gate Near SNIDS
 Centre, CDA Market
 at Naval Residential Complex
 Sector E-8, Islamabad
 Tele : 051-9262310
 Email : dpn@paknavy.gov.pk

Dear Sir

1. I/We hereby offer to supply to the Director of Procurement (Navy) the stores detailed in schedule to the tender inquiry or such portion thereof as you may specify in the acceptance of tender at the prices offered against the said schedule and further agree that this offer will remain valid up to **120 days** and will not be withdrawn or altered in terms of rates quoted and the conditions already stated therein or on before this date. I/we shall be bound by a communication of acceptance to be dispatched within the prescribed time.

2. I/We have understood the Instructions to Tenders and General Conditions Governing Contract in Form No. DDP&I (Revised-2019) included in the pamphlet entitled, Government of Pakistan, Ministry of Defence (Directorate General Defence Purchase) "General Conditions Governing Contracts" and have thoroughly examined the specifications/drawings and/ or patterns quoted in the schedule hereto and am/are fully aware of the nature of the stores required and my/our offer is to supply stores strictly in accordance with the requirements.

3. The following pages have been added to and form part of this tender:

- a.
- b.
- c.

Yours faithfully,

.....

(Signature of Tenderer)

.....

(Capacity in which signing)

Address:.....

Date.....

Signature of Witness.....

ADDRESS.....

DIRECTORATE PROCUREMENT (NAVY)

Tender No.....
 Directorate of Procurement (Navy)
 through Bahria Gate Near SNIDS
 Centre, CDA Market
 at Naval Residential Complex
 Sector E-8, Islamabad
 Tele : 051-9262310
 Email : dpn@paknavy.gov.pk

M/s _____

Date _____

INVITATION TO TENDER AND GENERAL INSTRUCTIONS

Dear Sir / Madam,

1. DP (Navy) invites you to tender for the supply of stores/equipment/ services as per details given in attached Schedule to Tender (Form DP-2).

2. **Caution:** This tender and subsequent contract agreement awarded to the successful bidder is governed by the rules / conditions as laid down in PPRA Rules-2004 and DPP&I (Revised 2019) covering general terms & conditions of contracts laid down by MoDP / DGDP. As a potential bidder, it is incumbent upon you and your firm to first acquaint yourself with PPRA Rules 2004 (www.ppra.org.pk) and DPP&I-35 (Revised 2017) (print copy may be obtained from DGDP Registration Cell on Phone No. 051-9270967 before participating in the tender. If your firm / company possesses requisite technical as well financial capability, you must be registered or willing to register with DGDP to qualify for award of contract, which shall be made after security clearance and provision of required registration documents mentioned in Para 15 of this DP-1.

3. **Conditions Governing Contracts.** The „Contract“ made as result of this I/T (Invitation to Tender) i.a.w PPRA Rules 2004 shall mean the agreement entered into between the parties i.e. the „Purchaser“ and the „Seller“ on Directorate General Defence Purchase (DGDP) contract Form “DP-19” in accordance with the law of contract Act, 1872 and those contained in Defence Purchase Procedure & Instructions and DP-35 (Revised 2017) and other special conditions that may be added to given contract for the supply of Defence Stores / Services specified herein.

Understood
agreed

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Understood
not agreed

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4. **Delivery of Tender.** The tender documents covering technical and commercial offers are to be furnished as under:-

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a. **Commercial Offer.** The offer will be in **single** and indicate prices quoted in figures as well as in words in the currency mentioned in IT. It should be clearly marked in fact on a separate sealed envelope “Commercial Offer”, tender number and date of opening. Taxes, duties, freight/transportation, insurance charges etc are to be indicated separately. Total price of the items quoted against the tender is to be clearly mentioned. In case of more than one option offered by the firm, DP(N) reserves the right to accept lowest technically accepted option if more than one options were accepted in Technical Scrutiny Report.

b. **Technical Offer: (Where Applicable).** Should contain all relevant specifications in **DUPLICATE** (or as specified in IT) along with essential literature/brochure, drawings and compliance metrics in a separate sealed envelope and clearly marked “Technical Offer” without prices, with tender number and date of opening. Technical offer shall be opened first; half an hour after the date and time for receipt of tender mentioned in DP-2. Firms are to confirm/comply with IT technical specification in the following format:

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S.No	Technical requirement as per IT	Firm's endorsement (Comply/ Partially Comply/ Non Comply)	Basis of C, PC of NC i.e. Refer to page or brochure	In case of non availability of enclosed proof from brochure/ Literature, quote/ attach additional documents/ data/undertaking as proof of compliance

(Legend: C = Fully Comply, PC = Partially Comply, NC = Not Comply)
(Firms must clearly identify where their offer does not meet or deviates from IT Specs)

c. **Special Instructions.** Tender documents and its conditions may please be read point by point and understood properly before quoting. All tender conditions should be responded clearly. In case of any deviation due to non-acceptance of tender conditions(s), the same should be highlighted alongwith your offered conditions. Tender may however be liable to be rejected.

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d. Firms shall submit their offers in two separate envelopes (i.e. one copy of commercial offer and **two copies of the technical offer** as asked in the IT) and envelopes clearly marked “Technical proposal”, “Commercial proposal” in bold. The commercial offer will include rates of items/services called for and the technical offer will not indicate the rates. Both types of offers are to be enclosed in separate covers and each envelope shall be properly sealed bearing the signature of the bidder. Each cover shall indicate type of offer, number and date of IT and IT opening date. Thereafter both the envelopes (technical and commercial offer) shall be

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placed in one envelope (second cover) duly sealed and signed. This cover should bear the address of the procurement agency indicating, issuance date of IT and No, with its opening date. This should be further placed in another cover (third cover), addressed and indicated in the tender documents, without any indication that there is a tender within it.

e. **FORM DP-1, DP-2, DP-3 and Questionnaires.** Form DP-1, DP-2 (alongwith annexes), DP-3 and Questionnaires duly filled in are to be submitted with the offer duly stamped/signed by the authorized signatory/ person. It is pertinent to mention that all these are essential requirement for participation in the tender.

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f. The tender duly sealed will be addressed to the following:-

Directorate of Procurement (Navy)
through Bahria Gate Near SNIDS
Centre, CDA Market
at Naval Residential Complex
Sector E-8, Islamabad

5. **Date and Time For Receipt of Tender.** Tender must reach this office by the date and time specified in the Schedule to Tender (Form DP-2) attached. This Directorate will not accept any excuse of delay occurring in post. Tenders received after the appointed/ fixed time will NOT be entertained. The appointed time will, however, fall on next working day in case of closed/forced holiday. Only legitimate/registered representatives of firm will be allowed to attend tender opening. In case your firm has sent tender documents by registered post or courier service, you may confirm their receipt at DP (Navy) on Phone No 051-9267412 well before the opening date / time.

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6. **Tender Opening.** Tenders will be opened as mentioned in the schedule to tender. Commercial offers will be opened at later stage if Technical Offer is found acceptable on examination by technical authorities of Service HQ. Date and time for opening of Commercial offer shall be intimated later. Only legitimate / registered representative of firm will be allowed to attend tender opening. Tenders received after date & time specified in DP-2 would be rejected without exception and returned un-opened i.a.w Rule 28 of PPRA-2004.

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7. **Validity of Offer.**

a. The validity period of quotations must be indicated and should invariably be 120 days from the date of opening of commercial / Financial Proposal offer or 30th Jun whichever is later. Firm undertakes to extend validity of offer if required by equal number of original bid period (i.e. 120 days or less as per original offer) i.a.w PPRA Rule-26.

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b. The quoting firm will certify that in case of an additional requirement of the contract items (s) in any qty(s) within a period of 12 months from the date of signing the contract, these will also be supplied at the ongoing contract rates with discount.

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|---|--|--|
| <p>8. <u>Part Bid.</u> Firm may quote for the whole or any portion, or to state in the tender that the rate quoted, shall apply only if the entire quantity/range of stores is taken from the firm. The Director Procurement reserves the right of accepting the whole or any part of the tender or portion of the quantity offered, and firm shall supply these at the rate quoted.</p> | <p>Understood
agreed</p> <p>☐</p> | <p>Understood
not agreed</p> <p>☐</p> |
| <p>9. <u>Quoting of Rates.</u> Only one rate will be quoted for entire quantity, item wise. In case quoted rates are deliberately kept hidden or lumped together to trick other competitors for winning contract as lowest bidder, DP(N) reserves the right to reject such offers on-spot besides confiscating firm's Earnest Money / Bid Security and take appropriate disciplinary action. Conversion rate of FE/LC components will be considered w.e.f. opening of commercial offer as per PPRA Rule-30(2).</p> | <p>Understood
agreed</p> <p>☐</p> | <p>Understood
not agreed</p> <p>☐</p> |
| <p>10. <u>Return of I/T.</u> ITs are to be handled as per following guidelines:</p> <p>a. In case you are Not quoting, please return the tender inquiry stating the reason of NOT quoting. In case of failure to return the ITs either quoted or not quoted consequently on three occasions, this Directorate, in the interest of economy, will consider the exclusion of your firm's name from our future distribution list of invitation to tender.</p> <p>b. For registered firm(s), case will be referred to DGDP for necessary administrative action if firms registered / indexed for tendered items/stores do not quote / participate.</p> <p>c. It is a standard practice to invite all firm(s) including those un-registered with DGDP who gave their preliminary budgetary/ technical proposals to end users / indentors. If your firm has been invited to participate in the tender, you must either participate in tender. In case of your inability to do so, you must inform DP (Navy) by a formal letter/email.</p> | <p>Understood
agreed</p> <p>☐</p> | <p>Understood
not agreed</p> <p>☐</p> |
| <p>11. <u>Withdrawal of Offer.</u> Firms shall not withdraw their commercial offers before signing of the contract and within validity period of their offers. In case the firm withdraws its offer within validity period and before signing of the contract, Earnest Money of the firm shall be confiscated and disciplinary action may also be initiated for embargo up to 01 year.</p> | <p>Understood
agreed</p> <p>☐</p> | <p>Understood
not agreed</p> <p>☐</p> |
| <p>12. <u>Provision of Documents in case of Contract.</u> In case any firm wins a contract, it will deposit following documents before award of contract:</p> <p>a. Proof of firm's financial capability.</p> <p>b. Foreign Seller has to provide its Registration Number issued by respective Department of Commerce authorizing export of subject stores.</p> <p>c. Principal/Agency Agreement.</p> <p>d. Registration with DGDP (Provisional Registration is mandatory)</p> | <p>Understood
agreed</p> <p>☐</p> | <p>Understood
not agreed</p> <p>☐</p> |
| <p>13. <u>Treasury Challan.</u></p> <p>a. Offers by registered firms must be accompanied with a Challan form of Rs.200/- (obtainable from State Bank of Pakistan/Government</p> | <p>Attached</p> <p>☐</p> | <p>Not
Attached</p> <p>☐</p> |

Treasury) and debit able to Major Head C02501-20, Main Head-12, Sub Head „A“ Miscellaneous (Code Head 1/845/30). Each offer will be covered by one Challan.

b. Firms, un-registered / un-indexed with DGDP (Registration Section) are to participate in the tender competition accompanied by Challan Form of Rs **300** in favour of CMA (DP).

14. **Earnest Money/Tender Bond:-** Your tender must be accompanied by a **Call Deposit Receipt (CDR) in favor of CMA (DP)**, Rawalpindi for the following amounts:-

Attached

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Attached

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a. **Rates for Contract.** The rate of earnest money and its maximum ceiling for different categories of firms would be as under:-

(i) **Registered/Indexed/Pre-Qualified Firms.** 2% of the quoted value subject to maximum ceiling of Rs. 0.500 Million.

(ii) **Registered/Pre-Qualified but Un-indexed Firms.** 3% of the quoted value subject to maximum ceiling of Rs. 0.750 Million.

(iii) **Unregistered/not Pre-Qualified/Un-indexed Firms.** 5% of the quoted value subject to maximum ceiling of Rs. 01.00 Million.

b. **Return of Earnest Money**

(i) Earnest money to the unsuccessful bidders will be returned on finalization of the contract.

(ii) Earnest money of the firm/firms with whom contract is concluded will be returned on submission of Bank Guarantee and its acceptance by CMA (DP).

15. **Documents for provisional registration:** In case your firm wins a contract on Earnest Money (EM) , it will deposit following documents to DGDP (Registration Section) before the award of contract for provisional registration:-

S No	Local Supplier	Foreign Supplier
a.	Three filled copies of SVA-8121 of each member of management.	Three filled copies of SVA-8121-D of each member of management.
b.	Three filled copies of SVA-8121-A	Three filled copies of SVA-8121.
c.	Three photocopies of NIC for each member of management.	Three photocopy of Resident Card or equivalent identification Card for each member of management.
d.	Three PP size photographs for each member of management.	Three PP size Photographs for each member of management.
e.	Challan Form	Challan Form
f.	Bank Statement for last one year.	Financial standing/audit balance sheet
g.	Photocopy of NTN	Photocopy of passport
h.	Foreign Principal Agency	Agency Agreement in case of

	Agreement in case of local agent.	Trading House/ Exporter /Stockiest etc.	Company/
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16. **Inspection Authority.** CINS, Joint Inspection will be carried out by INS, Consignee & Specialist User or a team nominated by Pakistan Navy. CINS inspection shall be as prescribed in DP-35 and PP & I (Revised 2017) or as per terms of the contract.

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17. **Condition of Stores.** Brand new stores will be accepted on Firm's Warranty/Guarantee Form DPL-15 enclosed with contract.

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18. **Documents Required.** Following documents are required to be submitted along with the quote:

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a. OEM/Authorized Dealer/Agent Certificate along with OEM Dealership Evidence.

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b. The firm/supplier shall provide correct and valid e-mail and Fax No to CINS and DP(N). Supplier/contracting firm shall either provide OEM Conformance Certificate to CINS or is to be e-mailed to CINS under intimation to DP (Navy). Hard copy of COC must follow in any case through courier. On receipt, CINS shall approach the OEM for verification of Conformance Certificates issued by OEM. Companies/firms rendering false OEM Conforming Certificates will be blacklisted.

c. Original quotation/Principal/OEM proforma invoice.

d. In case of bulk proforma invoice, a certificate that prices indicated in the bulk proforma invoice have not been decreased since the date of bulk proforma invoice from the manufacturers/suppliers.

e. Submit breakup of cost of stores/services on the following lines:

(i) Imported material with break down item wise along-with import duties.

(ii) Variable business overheads like taxes and duties imposed by the federal/provincial government as applicable:-

(1) General Sales Tax

(2) Income Tax

(3) Custom Duty. PCT code along with photocopy of the related page is to be attached where applicable.

(4) Any other tax/duty.

(iii) Fixed overhead charges like labour, electricity etc.

(iv) Agent commission/profit, if any.

(v) Any other expenditure/cost/service/remuneration as asked for in the tender.

19. **Rejection of Stores/Services.** The stores/services offered as a result of contract concluded against this tender may be rejected as follows:

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a. 1st rejection on Govt. expense

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- b. 2nd rejection on supplier expense
- c. 3rd rejection contract cancellation will be initiated.

20. **Security Deposit/Bank Guarantee** . To ensure timely and correct supply of stores the firm will furnish an unconditional Bank Guarantee(BG) from a schedule Bank for an amount upto 10 % of the contract value (excluding Taxes, duties/freight handling charges) on a Judicial Stamp Paper (All pages) of the value of (Rs 100.00) as per prescribed format or in shape of CSD/Bank draft. The Bank Guarantee shall be endorsed in favour of CMA (DP) Rawalpindi who is the Accounts Officer specified in the contract. The CMA (DP) Rawalpindi has the like power of seeking encashment of the Bank Guarantee as if the same has been demanded by the purchaser himself. The Bank Guarantee shall be produced by the supplier within 30 days from the date of issue of the contract and remain valid for upto 60 days after completion of warranty period and remain in force till one year ahead of the delivery date given in the contract. If delivery period is extended, the supplier shall arrange the extension of Bank Guarantee within 30 days after the original delivery period to keep its validity always one year ahead of the extended delivery period. The BG form can be obtained from DP(N) on e-mail address given on page 1. Format of BG is enclosed at Annex B.

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21. **Integrity Pact.** There shall be “zero tolerance” against bribes, gifts, commission and inducement of any kind or their promises thereof by Supplier / Firm to any Government official / staff whether to solicit any undue benefit, favour or otherwise. Following provisions must be clearly read & understood for strict compliance:

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a. Integrity Pact shall be applicable to all tenders / contracts irrespective of their financial value. However, a written Integrity Pact shall be signed for contracts exceeding Rs 10 Million between the procuring agency and the supplier / contractor i.a.w Rule-7 of PPRA-2004. The form is available at www.ppra.org.pk or can be requested at dpn@paknavy.gov.pk

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b. If a Supplier / Contractor is found involved in any unbusiness-like / unethical activity, same would be considered a serious breach of the Integrity Pact. DP (Navy) shall take severe disciplinary action against that person(s) and the firm / company, which may include, but not limited to, **PERMANENT BLACKLISTING** of firm / company through DGDP and legal action against the individual (s) involved as per Pakistan’s Code of Criminal Procedure.

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c. It is strictly forbidden to socialize, call or meet any official / staff of DP (Navy) in private or during off hours. If any official / staff from Purchaser side asks for any undue favour or gratification directly or indirectly, the matter is to be immediately brought to the personal notice of Director Procurement (Navy) on Tel: 051-9267412 or through a personal meeting in office. Privacy of firms and their Reps sharing such information will be guaranteed without any prejudice to their normal business activities.

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22. **Correspondence.** All correspondence will be addressed to the Purchaser i.e. DP (Navy). Correspondence with regard to payment or issue of

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delivery receipt may be addressed to CMA Rawalpindi & Consignee respectively with copy endorsed to the DP (Navy).

23. **Pre-shipment Inspection.** PN may send a team of officers including DP(N) member for the inspection of major equipments and machinery items at OEM premises as per terms of contract. If not already provided for and mentioned in the I.T, firm(s) must clarify the place, number of persons, duration and whether expenses on such visits would be borne by the Purchaser or Contractor. In case contractor is responsible for bearing such expenses, detailed breakdown of the same should be given separately in the commercial offer.

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24. **Amendment to Contract.** Contract may be amended/modified to include fresh clause (s) modify the existing clauses with the mutual agreement by the supplier and the purchaser; such modification shall form an integral part of the contract.

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25. **Discrepancy.** The consignee will render a discrepancy report to all concerned within 60 days after receipt of stores for discrepancies found in the consignment. The quantities found short are to be made good by the supplier, free of cost.

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26. **Price Variation.**

a. Prices offered against this tender are to be firm and final.

b. Where the prices of the contracted stores/raw material are controlled by the government or an agency competent to do so on government behalf then price increase/decrease will be allowed at actual on case to case basis on production of government notification by the Supplier for the subject stores where the firms are contractually obliged and bound to produce the stores from raw materials supplied by government/State controlled departments in consultation with Military Finance.

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c. Except for calculation or typographical errors, the rates of the contracts not having a price variation clause PVC clause will not be increased subsequently. But when such an increase is considered desirable in the interest of expeditious supply of stores and is necessitated by the circumstances beyond the control of the Supplier, the case may be decided accordingly.

27. **Force Majeure.**

a. The supplier will not be held responsible for any delay occurring in supply of equipment due to event of Force Majeure such as acts of God, War, Civil commotion, Strike, Lockouts, Act of Foreign Government and its agencies and disturbance directly affecting the supplier over which events or circumstances the supplier has no control. In such an event the supplier shall inform the purchaser within 15 days of the happening and within the same timeframe about the discontinuation of such circumstances/happening in writing. Non-availability of raw material for the

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manufacture of stores, or of export permit for the contracted stores from the country of its origin, shall not constitute Force Majeure.

b. The Supplier shall provide the Purchaser with all the necessary proof of the occurrence of the events and its effect on the contract performance within 30 days from the start to force majeure event.

c. The Purchaser shall be entitled to conduct investigation into the cause of delay reported by the Supplier.

d. Where the delay was due to genuine force majeure event it shall extend the delivery for a period of equal to the period in which such force majeure remains operative.

e. Such extension in delivery period, due to force majeure, shall not entitle the Suppliers to claim any extra from the Purchaser.

28. **Arbitration.** Parties shall make their attempt to settle all disputes arising under this contract through friendly discussions in good faith. In the event that either party shall perceive such friendly discussion to be making insufficient progress towards settlement of dispute (s) at any time, then such party may be written notice to the other party refer the dispute (s) to final and binding arbitration as provided below:

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a. The dispute shall be referred to Secy (DP) for his discussion.

b. The venue of the arbitration shall be the place as the purchaser at his discretion may determine.

c. Decision of Secy (DP) shall be final and binding on both the parties.

d. In course of arbitration the contract shall be continuously be executed except that part which is under arbitration

e. All proceedings under this clause shall be conducted in English language and in writing

29. **Court of Jurisdiction.** In case of any dispute only court of jurisdiction at Rawalpindi, Pakistan shall have jurisdiction to decide the matter.

30. **Liquidated Damages(LD).** Liquidated Damages upto 2% per month are liable to be imposed on the suppliers by the purchaser in accordance with DP-35, if the stores supplied after the expiry of the delivery date without any valid reasons. Total value of LD shall not exceed 10% of the contract value.

31. **Risk Purchase.** In the event of failure on the part of supplier to comply with the contractual obligations the contract will be cancelled at the Risk and Expense (RE) of the supplier in accordance with DP-35.

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| <p>32. <u>Compensation Breach of Contract.</u> If the contractor fails to supply the contracted stores or contract is cancelled either on RE or without RE or contract become ineffective due to default of supplier / seller or stores / equipment declared defective and caused loss to the Government, contractor shall be liable to pay to the Government compensation for loss or inconvenience resulting for his default or from the rescission of his contract when such default or rescission take place such compensation will be in excess to the RE amount, if imposed by the competent authority. Compensation amount in terms of money will be decided by the purchase officer and will be deposited by contractor / seller in Government treasury in the currency of contract.</p> | <p>Understood
agreed</p> <input data-bbox="1372 199 1421 252" type="checkbox"/> | <p>Understood
not agreed</p> <input data-bbox="1518 199 1567 252" type="checkbox"/> |
| <p>33. <u>Gratuities/Commission/Gifts.</u> No commission, rebate, bonus, fee or compensation in any form shall be paid to any local or foreign agent, consultant representative, sales promoter or any intermediary by the Manufacturer/Supplier except the agent commission payable as per the agent commission policy of the government and as amended from time to time and given in the contract. Any breach of such clause(s) of the contract by Manufacturer/Supplier and/or their sole nominated representative may result in cancellation of the contract blacklisting of the Manufacturer/Supplier financial penalties and all or any other punitive measure which the purchaser may consider appropriate.</p> | <p>Understood
agreed</p> <input data-bbox="1372 630 1421 682" type="checkbox"/> | <p>Understood
not agreed</p> <input data-bbox="1518 630 1567 682" type="checkbox"/> |
| <p>34. <u>Termination of Contract.</u></p> | | |
| <p>a. If at any time during the currency of the contract the Purchaser decides to terminate the contract for any reason whatsoever (other than for reasons of Non-Delivery) he shall have right to do so by giving the Supplier a registered notice to that effect. In that event the Purchaser will accept delivery at the contract price and terms of such stores/goods/services which are in the actual process of manufacture that is completed and ready for delivery within thirty days after receipt by the Supplier of such notice.</p> | <p>Understood
agreed</p> <input data-bbox="1372 1071 1421 1123" type="checkbox"/> | <p>Understood
not agreed</p> <input data-bbox="1518 1071 1567 1123" type="checkbox"/> |
| <p>b. In the case of remainder of the undelivered stores/goods/services the Purchaser may elect either:</p> | | |
| <p>(i) To have any part thereof completed and take the delivery thereof at the contract price or.</p> | | |
| <p>(ii) To cancel the remaining quantity and pay to the Supplier for the articles or sub-components or raw materials purchased by the Supplier and are in the actual process of manufacture at the price to be determined by the Purchaser. In such a case materials in the process of manufacture shall be delivered by the Supplier to the Purchaser.</p> | | |
| <p>(iii) No payment shall however be made for any materials not yet in the actual process of manufacture on the date notice of cancellation is received.</p> | | |
| <p>c. Should the Supplier fail to deliver goods/services in time as per quality terms of contract or fail to render Bank Guarantee within the</p> | | |

stipulated time period or any breach of the contract the Purchaser reserves the right to terminate/cancel the contract fully or any part thereof at the risk and expense (RE) of the Supplier.

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| <p>35. <u>Rights Reserved.</u> Directorate of Procurement (Navy), Rawalpindi reserves full rights to accept or reject any or all offers including the lowest. Grounds for such rejections may be communicated to the bidder upon written request, but justification for grounds is not required as per PPRA Rule 33 (1).</p> | <p>Understood
agreed</p> <input data-bbox="1364 304 1421 367" type="checkbox"/> | <p>Understood
not agreed</p> <input data-bbox="1510 304 1567 367" type="checkbox"/> |
| <p>36. <u>Secrecy/Non-Disclosure Agreement (NDA).</u> The Supplier shall undertake as per attached Annex-C, that any information about the sale/purchase of stores under this contract shall not be communicated to any person other than the manufacturer of the stores, or to any press or Agency not authorized by DP(N) to receive it. Any breach of it shall be punishable under the Official Secrets Act, 1923 in addition to termination of the contract at the risk of the Supplier.</p> | <p>Understood
agreed</p> <input data-bbox="1347 483 1404 546" type="checkbox"/> | <p>Understood
not agreed</p> <input data-bbox="1494 483 1550 546" type="checkbox"/> |
| <p>37. <u>Acknowledgment.</u> Firms will send acknowledgement slips within 07 days from the date of downloading of IT from the PPRA Website i.e. WWW.PPRA.ORG.PK</p> | <p>Understood
agreed</p> <input data-bbox="1364 798 1421 850" type="checkbox"/> | <p>Understood
not agreed</p> <input data-bbox="1510 798 1567 850" type="checkbox"/> |
| <p>38. <u>Disqualification.</u> Offers are liable to be rejected if:-</p> <ul style="list-style-type: none"> a. Received later than appointed/fixed date and time. b. Offers are found conditional or incomplete in any respect. c. There is any deviation from the General /Special/Technical Instructions contained in this tender. d. Forms DP-1, DP-2 (along with Annexes), and DP-3 duly signed, are NOT received with the offers. d. Taxes and duties, freight/transportation and insurance charges NOT indicated separately as per required price breakdown mentioned at Para 17. e. Treasury challan is NOT attached with the offer. f. Multiple rates are quoted against one item. g. Manufacturer"s relevant brochures and technical details on major equipment assemblies are not attached in support of specifications. j. Subject to restriction of export license. k. Offers (commercial/technical) containing non-initialed/unauthenticated amendments/corrections/overwriting. l. If the validity of the agency agreement is expired. m. The commercial offer against FOB/CIF/C&F tender is quoted in local currency and vice versa. n. Principals invoice in duplicate clearly indicating whether prices quoted are inclusive or exclusive of the agent commission is not enclosed. p. Earnest money is not provided. q. Earnest Money is not provided with the technical offer (or as specified). r. If validity of offer is not quoted as required in IT or made subject to confirmation later. s. Offer made through Fax/E-mail/Cable/Telex. t. If offer is found to be based on cartel action in connivance with other sources/ participants of the tender. | <p>Understood
agreed</p> <input data-bbox="1364 997 1421 1060" type="checkbox"/> | <p>Understood
not agreed</p> <input data-bbox="1510 997 1567 1060" type="checkbox"/> |

- u. If OEM and principal name and complete address is not mentioned.
- v. Original Principal Invoice is not attached with offer.

39. **Appeals by Supplier/Firm.** Any aggrieved Supplier/Firm against the decision of DP (N) or CINS or any other problematic area towards the execution of the contract may prefer an Appeal to Standing Appeal Committee (SAC) comprising PN Officers and military finance rep at Naval headquarters, Islamabad. The detail and timeline for preferring appeals is given below:

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S.No.	Category of Appeal	Limitation Period
a.	Appeals for liquidated damages	Within 30 days of decision
b.	Appeals for reinstatement of contracts	Within 30 days of decision
c.	Appeals for risk & expense amount	Within 30 days of decision
d.	Appeals for rejection of stores	Within 30 days of decision
e.	Appeals in all other Cases	Within 30 days of decision

40. **Limitation.** Any appeal received after the lapse of timelines given in para 39 above shall not be entertained.

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41. **For Firms not Registered with DGDP.** Firms not registered with DGDP undertake to apply for registration with DGDP prior signing of Contract. Details can be found on DGDP website www.dgdp.gov.pk. These firms can participate in tender iaw paras 12 and 14 above and provision of documentary proof regarding financial status of the firm alongwith NTN and GST registration copies.

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42. Firms which are not registered with DGDP should initiate provisional registration in accordance with Para 41. Besides, ground check by Field Security (FS) Team will be made for security clearance related to participation in the tender after technical opening. Firms undertake to provide following documents for ground check by FS Team:

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- a. NTN
- b. Income Tax Return
- c. Sales Tax Return
- d. Sales Tax Certificate
- e. Chamber of Commerce Industry Certificate
- f. Professional Tax Certificate (Excise & Taxation)
- g. Office/Home/Ware House Property documents
- h. Utility Bills (Phone/Electricity)
- j. Firm Vehicle/Personal Vehicle
- k. CEO Visiting Card/NIC Copy, 03Xspecimen signature of CEO
- l. DGDP Registration letter
- m. Firm Bank Statement
- n. Non Black List Certificate
- p. 2 X Witness + CNIC and Mobile Numbers
- q. Police Verification
- r. Agency Agreement
- s. OEM Certificate
- t. ISO Certificate
- u. Stock List with value

- v. Company Profile/Broachers
- w. Employees List
- x. Firm Categories
- y. Sole Proprietor Certificate
- z. Partnership Deed
- aa. Pvt Limited
- ab. Memorandum of Articles
- ac. Form 29 and Form A
- ad. Incorporation Certificate

43. We solemnly undertake that all IT clauses marked as "Understood & Agreed" shall not be changed / withdrawn after tender opening. The IT provisions accepted shall form the baseline for subsequent contract negotiations.

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44. The above terms and conditions are confirmed in total for acceptance.

45. Format of DPL-15 (warranty form) and PBG are enclosed as Annex A & B.

Sincerely yours,

(To be Signed by Officer Concerned)

Rank: _____

NAME: _____

DPL-15 (WARRANTY)

FIRM'S NAME: M/s _____

1. We hereby guarantee that the articles supplied under the terms of this contract are produced new in accordance with approved drawings/specification and in all respect in accordance with the terms of the contract, and the materials used whether or not of our manufacture are in accordance with the latest appropriate standard specifications, as also in accordance with the terms of complete of good workmanship throughout and that we shall replace FOR/DDP Karachi free of cost every article or part thereof use or in use shall be found defective or not within the limits and tolerance of specifications requirement or in any way not in accordance with the terms of the contract.
2. In case of our failure to replace the defective stores free of cost within a reasonable period, we shall refund the relevant cost FOR/DPP Karachi (As the case may be in currency in with received).
3. This warranty shall remain valid for **01 Year** after the acceptance of stores by the end user

The signature must be the same as that on the tender/contract, or if otherwise must be shown to be the signature of a person capable of giving a guarantee on behalf of the contractor



SIGNATURE_____

DATE_____

PLACE_____

**BANK GUARANTEE FOR PERFORMANCE ON
JUDICIAL STAMP PAPER OF RS. 100/- OR
AS SUITABLE TO THE AMOUNT OF BG**

- (i) Contract No. _____ dated _____
(ii) Name of Firm/Contractor _____
(iii) Address of Firm/Contractor _____
(iv) Name of Guarantor _____
(v) Address of Guarantor _____
(vi) Amount of Guarantee Rs. _____
(_____)
(in words)
(vii) Date of expire of Guarantee _____

**To: The President of Islamic Republic of Pakistan through the
Controller of Military Accounts (Defence Purchase) Rawalpindi.**

Sir,

1. Whereas your good self have entered into Contract No. _____ dated _____
_____ with Messer"s _____

(Full Name and Address)
hereinafter referred to as our customer and that one of the conditions of
the Contract is the submission of unconditional Bank Guarantee by our
customer to your good self for a sum of Rs. _____
Rupees/FE (as applicable) _____

2. In compliance with this stipulation of the contract, we hereby agree
and undertake as under: -

a. To pay to you unconditionally on demand and/or without any
reference to our Customer and amount not exceeding the sum or Rs. _____
_____ Rupees or FE (as applicable)
_____ as would be mentioned in your
written Demand Notice.

b. To keep this Guarantee in force till _____.

c. That the validity of this Bank Guarantee shall be kept one clear
year ahead of the original/extended delivery period or the warrantee of the
stores which so ever is later in duration on receipt of information from our
Customer i.e. M/s _____ or from your office. Claim,
if any must be duly received by us on or before this day. Our liability
under this Bank Guarantee shall cease on the closing of banking hours on
the last date of the validity of this Bank Guarantee. Claim received
thereafter shall not be entertained by whether you suffer a loss or not. On
receipt of payment under this guarantee, this document i.e. Bank
Guarantee must be clearly cancelled, discharged and returned to us.

d. That we shall inform your office regarding termination of the validity of this Bank Guarantee one clear month before the actual expiry date of this Guarantee.

e. That with the consent of our customer you may amend/alter any term/clause of the contract or add/delete any term/clause to/from this contract without making any reference to us. We do not reserve any right to receive any such amendment/alternation or addition/deletion provided such like actions do not increase our monetary liability under this Bank Guarantee which shall be limited only to Rs. _____ (Rupees _____).

f. That the Bank Guarantee herein before given shall not be affected by any change in the constitution of the Bank or Customer/Seller or Vendor.

g. That this an unconditional Bank Guarantee, which shall be encashed on sight on presentation without any reference to our Customer/Seller or Vendor.

Guarantor

Dated: _____

(Bank Seal and Signatures)

UNDERTAKING / NON – DISCLOSURE CERTIFICATE

I _____
(Name & Appointment)

On behalf of _____
(Name for firm / Contractor)

(With address and Telephone number)

2. Do hereby submit an under taking to abide by the provision of Official Secrets Act 1923 and conditions hereinafter contained. Breach of these provisions on my part or any employee of the firm, in addition to any other penalty under law, will render immediate ceasing of further interaction and meetings.

Sig _____
Status/
Appointment _____
Place _____
Date _____

1. Signature of witness _____
Name (in block capital) _____
CNIC No _____
(Please attach photocopy)
Address _____

Seal & Date

2. Signature of witness _____
Name (in block capital) _____
CNIC No _____
(Please attach photocopy)
Address _____

Seal & Date

NECESSARY DATA FOR ISSUANCE OF CONTRACTS ON EARNEST MONEY

IMPORTANT

Each column must be filled in with BLOCK CAPITAL LETTERS, incompleteness shall render disqualification.

1. Name : _____
2. Father's Name : _____
3. Address (Residential) : _____
4. Designation in Firm : _____
5. CNIC : _____
(Attach Copy of CNIC)
6. NTN : _____
(Attach Copy of NTN)
7. Firm's Address : _____
8. Date of Establishment of Firm : _____
9. Firm's Registration Certificate with FBR/Chamber of Commerce/Registrar of Companies.
(Attach Copy of relevant CERTIFICATE)
10. In case PARTNERSHIP (Attach particulars at serial 1,2,3,4,5 and 6 of each partner).

(Kindly fill in the above form and forward it under your own letter head with contact details)

CHECK OFF LIST

Tender Control No: 340

Firm Name: M/s

Opening Date: _____

Documents Attached	Yes
Technical offer in duplicate	
Commercial offer	
Technical Specs	
Earnest Money (Original+ Copy)	
Bank Challan	
DP-1 Form	
DP-2 Form	
DP-3 Form	
Tax Filling Proof	
DGDP Registration Letter	
Authorization Letter	
Principal Invoice	

Sig_____