

|                                                                                                                                                                                                                                                                                                 |  |                           |  |                       |      |        |      |       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------|--|-----------------------|------|--------|------|-------|
| <div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 10px;"> <sup>92</sup><br/> <b>ELIS</b> </div> <div>             arhitectura<br/>             proiectare<br/>             inginerie<br/>             consultanta tehnica           </div> </div> |  | <b>Progressive cavity</b> |  | REQUISITION No. _____ |      | REV. 0 |      |       |
|                                                                                                                                                                                                                                                                                                 |  |                           |  | SHEET 2 OF 2          |      |        |      |       |
|                                                                                                                                                                                                                                                                                                 |  |                           |  | REV.                  | DATA | BY     | CH'D | APP'D |
|                                                                                                                                                                                                                                                                                                 |  |                           |  |                       |      | N.R.   | S.B. | A.I.  |
| <input type="radio"/> INDICATES DATA COMPLETED BY PURCHASER <input type="checkbox"/> BY MANUFACTURER<br><input checked="" type="checkbox"/> BY MANUF. OR PURCHASER                                                                                                                              |  |                           |  |                       |      |        |      |       |

| <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">CONSTRUCTION CONTINUED</div> <div> <input type="checkbox"/> CASING<br/> <input type="checkbox"/> MAXIMUM ALLOWABLE PRESSURE _____ (kPa)(barg) @ _____ (°C)<br/> <input type="checkbox"/> HYDROSTATIC TEST PRESSURE _____ (kPa)(barg)<br/> <input type="checkbox"/> STEAM JACKET PRESSURE _____ (kPa)(barg) @ _____ (°C)<br/>           ROTOR MOUNT    <input type="checkbox"/> BETWEEN BEARINGS    <input type="checkbox"/> OVERHUNG<br/>           TIMING GEAR    <input type="checkbox"/> YES    <input type="checkbox"/> NOT<br/>           BEARING TYPE    <input type="checkbox"/> RADIAL    <input type="checkbox"/> THRUST<br/>           LUBRICATION TYPE:    <input type="radio"/> CONSTANT LEVEL OILERS<br/> <input type="checkbox"/> PUMPED FLUID    <input type="checkbox"/> RING OIL    <input type="checkbox"/> OIL MIST<br/> <input type="checkbox"/> EXTERNAL    <input type="checkbox"/> OIL FLOOD    <input type="checkbox"/> GREASE<br/> <input type="checkbox"/> LUBRICANT TYPE _____<br/> <input type="radio"/> MECHANICAL SEALS<br/> <input type="checkbox"/> MANUFACTURER AND MODEL _____<br/> <input type="checkbox"/> MANUFACTURER CODE _____<br/> <input type="radio"/> API 682 SEAL FLUSH PLAN _____<br/> <input type="checkbox"/> API 682 SEAL CODE _____<br/> <input type="radio"/> PACKING    <input type="radio"/> LANTERN RING<br/> <input type="checkbox"/> MANUFACTURER AND TYPE _____ <input type="checkbox"/> NO. OF RINGS _____         </div> | <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">MATERIALS</div> <div> <input type="checkbox"/> CASING STEEL<br/> <input type="checkbox"/> STATOR NITRILE RUBBER<br/> <input type="checkbox"/> END PLATES CHROME<br/> <input type="checkbox"/> ROTOR(S) STAINLESS STEEL<br/> <input type="checkbox"/> VANES<br/> <input type="checkbox"/> SHAFT<br/> <input type="checkbox"/> SLEEVE(S)<br/> <input type="checkbox"/> GLAND(S)<br/> <input type="checkbox"/> BEARING HOUSING<br/> <input type="checkbox"/> TIMING GEARS<br/> <input type="radio"/> SPECIAL MATERIAL TEST (2.9.1.3)<br/> <input type="radio"/> LOW AMBIENT TEMP. MATERIAL TEST (2.9.5)         </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       |                       |     |     |             |                       |                       |                       |                |                       |                       |                       |             |                       |                       |                       |      |                       |                       |                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----|-----|-------------|-----------------------|-----------------------|-----------------------|----------------|-----------------------|-----------------------|-----------------------|-------------|-----------------------|-----------------------|-----------------------|------|-----------------------|-----------------------|-----------------------|
| <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">DRIVE MECHANISM</div> <div> <input type="radio"/> DIRECT-COUPLED    <input type="radio"/> V-BELT    <input type="radio"/> GEAR<br/> <input type="checkbox"/> COUPLING MANUFACTURER _____         </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">QA INSPECTION AND TEST</div> <div> <input type="radio"/> COMPLIANCE WITH INSPECTORS CHECKLIST<br/> <input type="radio"/> CERTIFICATION OF MATERIALS<br/> <input type="radio"/> FINAL ASSEMBLY CLEARANCES<br/> <input type="radio"/> SURFACE AND SUBSURFACE EXAMINATION<br/>               <input type="radio"/> RADIOGRAPHY<br/>               <input type="radio"/> ULTRASONIC<br/>               <input type="radio"/> MAGNETIC PARTICLE<br/>               <input type="radio"/> LIQUID PENETRANT<br/> <input type="radio"/> CLEANLINESS PRIOR TO FINAL ASSEMBLY<br/> <input type="radio"/> HARDNESS OF PARTS, WELD &amp; HEAT AFFECTED ZONES<br/> <input type="radio"/> FURNISH PROCEDURES FOR OPTIONAL TEST         </div>                                                                                                                                                                                                                                                                                                                                                                                                     |                       |                       |     |     |             |                       |                       |                       |                |                       |                       |                       |             |                       |                       |                       |      |                       |                       |                       |
| <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">DRIVERS</div> <div> <input type="radio"/> MOTOR<br/> <input type="checkbox"/> MANUFACTURER<br/> <input type="checkbox"/> TYPE<br/> <input type="checkbox"/> FRAME NO.<br/> <input type="radio"/> CONSTANT SPEED<br/> <input type="radio"/> VARIABLE SPEED<br/> <input type="checkbox"/> KW max. 75    RPM<br/> <input type="radio"/> VOI TS 400    PHASE<br/> <input type="radio"/> HERTZ 50    SERVICE FACTOR<br/> <input type="radio"/> ENCLOSURE<br/> <br/> <input type="radio"/> STEAM TURBINE<br/> <input type="radio"/> OTHER (SEE SEPARATE DATA SHEET)         </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">TEST RESULTS</div> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">TEST</th> <th style="text-align: center;">REQ'D</th> <th style="text-align: center;">WIT</th> <th style="text-align: center;">OBS</th> </tr> <tr> <td>HYDROSTATIC</td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> </tr> <tr> <td>MECHANICAL RUN</td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> </tr> <tr> <td>PERFORMANCE</td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> </tr> <tr> <td>NPSH</td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> </tr> </table> | TEST                  | REQ'D                 | WIT | OBS | HYDROSTATIC | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | MECHANICAL RUN | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | PERFORMANCE | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | NPSH | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| TEST                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | REQ'D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | WIT                   | OBS                   |     |     |             |                       |                       |                       |                |                       |                       |                       |             |                       |                       |                       |      |                       |                       |                       |
| HYDROSTATIC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <input type="radio"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <input type="radio"/> | <input type="radio"/> |     |     |             |                       |                       |                       |                |                       |                       |                       |             |                       |                       |                       |      |                       |                       |                       |
| MECHANICAL RUN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <input type="radio"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <input type="radio"/> | <input type="radio"/> |     |     |             |                       |                       |                       |                |                       |                       |                       |             |                       |                       |                       |      |                       |                       |                       |
| PERFORMANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <input type="radio"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <input type="radio"/> | <input type="radio"/> |     |     |             |                       |                       |                       |                |                       |                       |                       |             |                       |                       |                       |      |                       |                       |                       |
| NPSH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <input type="radio"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <input type="radio"/> | <input type="radio"/> |     |     |             |                       |                       |                       |                |                       |                       |                       |             |                       |                       |                       |      |                       |                       |                       |
| <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">OTHER PURCHASER REQUIREMENT</div> <div>           NAMEPLATE UNITS    <input type="radio"/> CUSTOMARY    <input type="radio"/> SI<br/> <input type="radio"/> RELIEF VALVES BY PUMP MFGR    <input type="radio"/> INTERNAL    <input type="radio"/> EXTERNAL<br/>           PIPING FOR SEAL FURNISHED BY:<br/> <input type="radio"/> PUMP VENDOR    <input type="radio"/> OTHERS<br/>           PIPING FOR COOLING / HEATING FURNISHED BY:<br/> <input type="radio"/> PUMP VENDOR    <input type="radio"/> OTHERS<br/> <input type="radio"/> PROVIDE TECHNICAL DATA MANUAL         </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">PREPARATION FOR SHIPMENT</div> <div> <input type="radio"/> DOMESTIC    <input type="radio"/> EXPORT    <input type="radio"/> EXPORT BOXING REQ'D<br/> <input type="radio"/> OUTDOOR STORAGE MORE THEN 6 MONTHS         </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |                       |     |     |             |                       |                       |                       |                |                       |                       |                       |             |                       |                       |                       |      |                       |                       |                       |
| <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">WEIGHT (KG)</div> <div> <input type="checkbox"/> PUMP    <input type="checkbox"/> GEAR<br/> <input type="checkbox"/> BASE    <input type="checkbox"/> DRIVER         </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">BASEPLATE</div> <div> <input type="radio"/> BY PUMP MANUFACTURER    <input type="radio"/> SUITABLE FOR EPOXY GROUT<br/> <input type="radio"/> EXTENDED FOR _____<br/> <input type="radio"/> SUBSOLE PLATES BY PUMP MANUFACTURER<br/> <input type="radio"/> DRAIN-RIM    <input type="radio"/> DRAIN-PAM         </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                       |                       |     |     |             |                       |                       |                       |                |                       |                       |                       |             |                       |                       |                       |      |                       |                       |                       |

50 **Remarks:**    1. Electric motors are used  
 51                    existing  
 52                    2. It will consult safety data sheet crude oil before the order.  
 53  
 54  
 55  
 56  
 57  
 58  
 59  
 60  
 61  
 62

REABILITARE RAMPA DE  
INCARCARE IMENI - IMECI, JUDETUL  
COVASNA

REQUISITION No.

A636.3-MC-SP-P1

REV.  
0

SHEET 1 OF 2

REV. DATA BY CH'D APP'D  
0 N.R. S.B. A.I.

JOB No: PURCH. ORDER NO. DATE  
ENQUIRY NO. BY

1 APPLICABLE TO: ☐ PROPOSALS ☐ PURCHASE ☐ AS BUILT

2 FOR CRUDE OIL

3 SITE STATIA IMENI - IMECI COVASNA

4 NUMBER 2 PCS

5 MANUFACTURER

6 NOTES: INFORMATION BELOW TO BE COMPLETED: ☐ PURCHASER ☐ BY MANUFACTURER ☒ BY MANUF. OR PURCH.

7 ☐ GENERAL

8 NO. MOTOR DRIVEN OTHER DRIVEN TYPE

9 PUMP ITEM NO'S PUMP ITEM NO'S

10 MOTOR ITEM NO'S DRIVER ITEM NO'S GEAR ITEM NO'S

11 MOTOR PROVIDED BY DRIVER PROVIDED BY GEAR PROVIDED BY

12 MOTOR MOUNTED BY DRIVER MONTED BY GEAR MONTED BY

13 MOTOR DATA SHEET NO. DRIVER DATA SHEET NO. GEAR DATA SHEET NO.

14 ☐ OPERATING CONDITIONS ☐ LIQUID

15 ☐ CAPACITY @ PT (m<sup>3</sup>/h): 200

16 MAXIMUM 210 MINIMUM RATED

17 ☐ DISCHARGE PRESSURE (kPa)(bar g):

18 MAXIMUM 7 bari MINIMUM 5 bari

19 ☐ SUCTION PRESSURE (kPa)(bar g):

20 MAXIMUM 36,7 / 0,367 MINIMUM

21 ☐ DIFFERENTIAL PRESSURE (kPa)(bar g):

22 MAXIMUM MINIMUM

23 ☐ NPSH AVAILABLE (m) 4,65

24 ☐ HYDRAULIC POWER (Kw)

26 ☐ PERFORMANCE

27 ☐ RATED CAPACITY (m<sup>3</sup>/h)

28 ☐ NPSH REQUIRED (m)

29 ☐ RATED SPEED (rpm)

30 ☐ DISPLACEMENT (m<sup>3</sup>/h)

31 ☐ VOLUMETRIC EFFICIENCY (%)

32 ☐ MECHANICAL EFFICIENCY (%)

33 ☐ KW @ MAXIMUM VISCOSITY

34 ☐ KW @ RELIEF VALVE SETTING

35 ☐ MAXIMUM ALLOWABLE SPEED (rpm)

36 ☐ MINIMUM ALLOWABLE SPEED (rpm)

37

38 CONSTRUCTION EX.

39

40

41 CONNECTIONS SIZE ANSI RATING FACING POSITION

42 SUCTION max.200

43 DISCHARGE max.125

44 GLAND FLUSH

45 DRAINS yes

46 VENTS yes

47 JACKET no

48

49 PUMP TYPE:

50

51 ☐ INTERNAL GEAR ☐ TWIN-SCREW ☐ VANE

52 ☐ EXTERNAL GEAR ☐ THREE-SCREW ☐ PROGRESSING CAVITY

53 GEAR TYPE

54 ☐ SPUR ☐ HELICAL

55 ☐ OTHER

56

57

58 Notes :

59 The pumps shall be suitable for running with the existing electrical motors, namely: U=400V; Pmax= 75kW; Model no.

60 Pompa se va achizitiona pentru montajul motorului in pozitie orizontala

61

62

63

☐ TYPE OR NAME OF LIQ CRUDE OIL

☐ PUMPING TEMPERATU (°C)

NORMAL 40 MAX 60 MIN. 30

☐ DENSITY 15grd.C (g/cm<sup>3</sup>) MAX. 0,8555 MIN.

☐ SPECIFIC HEAT Cp (KJ/kg°C)

☐ VISCOS 20grd.C (cSt) 68,34

☐ CORROSIVE/EROSIVE AGENT

☐ CHLORIDE CONCENTRATION

☐ H2S CONCENTRATION

LIQUID TOXIC ☐ FLAMMABLE OTHER

☐ SITE AND UTILITY DATA

LOCATION ☐ INDOOR 0

☐ HEATED ☐ UNHEATED 0

☐ ELECTRICAL AREA CLASS 2 ☐ GROUP 0

☐ WINTERIZATION REQD. ☐ TROPICALIZATION REQ.

SITE DATA

☐ RANGE OF AMBIENT TEMPS: MIN./MAX / (°C)

UNUSUAL CONDITIONS

☐ DUST ☐ FUMES ☐ SALT ATMOSPHERE

☐ OTHER

☐ UTILITY CONDITIONS

ELECTR DRIVERS HEATING OL WN

VOLTAGE

HERTZ

KW

COOLING W/ INLET RETURN DESIGN MAX.Δ

TEMP MAX.

PRESS. (kPa)(bar g) MIN.

SOURCE

INSTRUMENT AIR MAX. MIN

PRESS. (kPa)(bar g)

APPLICABLE SPECIFICATION

☐ API 676 POSITIVE DISPLACEMENT PUMPS - ROTARY

☐ GOVERNING SPECIFICATION (IF DIFFERENT)

REMARKS: ATEX IP60



**Progressive cavity**

REQUISITION No. A636.3-MC-SP-P2 REV. 0

SHEET 2 OF 2

| REV. | DATA | BY   | CH'D | APP'D |
|------|------|------|------|-------|
|      |      | N.R. | S.B. | A.I.  |
|      |      |      |      |       |
|      |      |      |      |       |

- ☐ INDICATES DATA COMPLETED BY PURCHASER ☐ BY MANUFACTURER  
☒ BY MANUF. OR PURCHASER

**CONSTRUCTION CONTINUED**

1 CASING

2 ☐ MAXIMUM ALLOWABLE PRESSURE \_\_\_\_\_ (kPa)(barg) @ \_\_\_\_\_ (°C)

3 ☐ HYDROSTATIC TEST PRESSURE \_\_\_\_\_ (kPa)(barg)

4 ☐ STEAM JACKET PRESSURE \_\_\_\_\_ (kPa)(barg) @ \_\_\_\_\_ (°C)

5 ROTOR MOUNT ☐ BETWEEN BEARINGS ☐ OVERHUNG

6 TIMING GEAR ☐ YES ☐ NOT

7 BEARING TYPE ☐ RADIAL ☐ THRUST

8 LUBRICATION TYPE: ☐ CONSTANT LEVEL OILERS

9 ☐ PUMPED FLUID ☐ RING OIL ☐ OIL MIST

10 ☐ EXTERNAL ☐ OIL FLOOD ☐ GREASE

11 ☐ LUBRICANT TYPE \_\_\_\_\_

12 ☐ MECHANICAL SEALS

13 ☐ MANUFACTURER AND MODEL \_\_\_\_\_

14 ☐ MANUFACTURER CODE \_\_\_\_\_

15 ☐ API 682 SEAL FLUSH PLAN \_\_\_\_\_

16 ☐ API 682 SEAL CODE \_\_\_\_\_

17 ☐ PACKING ☐ LANTERN RING

18 ☐ MANUFACTURER AND TYPE \_\_\_\_\_ ☐ NO. OF RINGS \_\_\_\_\_

**DRIVE MECHANISM**

21 ☐ DIRECT-COUPLED ☐ V-BELT ☐ GEAR

22 ☐ COUPLING MANUFACTURER \_\_\_\_\_

**DRIVERS**

25 ☐ MOTOR

26 ☐ MANUFACTURER \_\_\_\_\_

27 ☐ TYPE \_\_\_\_\_

28 ☐ FRAME NO. \_\_\_\_\_

29 ☐ CONSTANT SPEED

30 ☐ VARIABLE SPEED

31 ☐ KW max. 75 RPM

32 ☐ VOLTS 400 PHASE

33 ☐ HERTZ 50 SERVICE FACTOR

34 ☐ ENCLOSURE \_\_\_\_\_

35 ☐ STEAM TURBINE

36 ☐ OTHER (SEE SEPARATE DATA SHEET)

**OTHER PURCHASER REQUIREMENT**

40 NAMEPLATE UNITS ☐ CUSTOMARY ☐ SI

41 ☐ RELIEF VALVES BY PUMP MFR ☐ INTERNAL ☐ EXTERNAL

42 PIPING FOR SEAL FURNISHED BY:

43 ☐ PUMP VENDOR ☐ OTHERS

44 PIPING FOR COOLING / HEATING FURNISHED BY:

45 ☐ PUMP VENDOR ☐ OTHERS

46 ☐ PROVIDE TECHNICAL DATA MANUAL

**MATERIALS**

☐ CASING STEEL

☐ STATOR NITRILE RUBBER

☐ END PLATES CHROME

☐ ROTOR(S) STAINLESS STEEL

☐ VANES

☐ SHAFT

☐ SLEEVE(S)

☐ GLAND(S)

☐ BEARING HOUSING

☐ TIMING GEARS

☐ SPECIAL MATERIAL TEST (2.9.1.3)

☐ LOW AMBIENT TEMP. MATERIAL TEST (2.9.5)

**QA INSPECTION AND TEST**

☐ COMPLIANCE WITH INSPECTORS CHECKLIST

☐ CERTIFICATION OF MATERIALS

☐ FINAL ASSEMBLY CLEARANCES

☐ SURFACE AND SUBSURFACE EXAMINATION

☐ RADIOGRAPHY

☐ ULTRASONIC

☐ MAGNETIC PARTICLE

☐ LIQUID PENETRANT

☐ CLEANLINESS PRIOR TO FINAL ASSEMBLY

☐ HARDNESS OF PARTS, WELD & HEAT AFFECTED ZONES

☐ FURNISH PROCEDURES FOR OPTIONAL TEST

| TEST           | REQ'D                 | WIT                   | OBS                   |
|----------------|-----------------------|-----------------------|-----------------------|
| HYDROSTATIC    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| MECHANICAL RUN | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| PERFORMANCE    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| NPSH           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**PREPARATION FOR SHIPMENT**

☐ DOMESTIC ☐ EXPORT ☐ EXPORT BOXING REQ'D

☐ OUTDOOR STORAGE MORE THEN 6 MONTHS

**WEIGHT (KG)**

☐ PUMP ☐ GEAR

☐ BASE ☐ DRIVER

**BASEPLATE**

☐ BY PUMP MANUFACTURER ☐ SUITABLE FOR EPOXY GROUT

☐ EXTENDED FOR \_\_\_\_\_

☐ SUBSOLE PLATES BY PUMP MANUFACTURER

☐ DRAIN-RIM ☐ DRAIN-PAM

Remarks:

1. It will consult safety data sheet salt water contaminated with oil before the order.

REABILITARE RAMPA DE  
INCARCARE IMENI - IMECI, JUDETUL  
COVASNA

REQUISITION No.

A636.3-MC-SP-P2

REV.  
0

SHEET 1 OF 2

REV. DATA BY CH'D APP'D  
0 N.R. S.B. A.I.

JOB No: PURCH. ORDER NO. DATE  
ENQUIRY NO. BY

1 APPLICABLE TO: ☐ PROPOSALS ☐ PURCHASE ☐ AS BUILT

2 FOR SAULT WATER CONTAMINATED WITH OIL

3 SITE STATIA IMENI COVASNA

4 NUMBER 2 PCS

5 MANUFACTURER

6 NOTES: INFORMATION BELOW TO BE COMPLETED: ☐ PURCHASER ☐ BY MANUFACTURER ☒ BY MANUF. OR PURCH.

7 ☐ GENERAL

8 NO. MOTOR DRIVEN OTHER DRIVEN TYPE

9 PUMP ITEM NO'S PUMP ITEM NO'S

10 MOTOR ITEM NO'S DRIVER ITEM NO'S GEAR ITEM NO'S

11 MOTOR PROVIDED BY DRIVER PROVIDED BY GEAR PROVIDED BY

12 MOTOR MOUNTED BY DRIVER MONTED BY GEAR MONTED BY

13 MOTOR DATA SHEET NO. DRIVER DATA SHEET NO. GEAR DATA SHEET NO.

14 ☐ OPERATING CONDITIONS

15 ☐ CAPACITY @ PT (m³/h): 32

16 MAXIMUM MINIMUM RATED

17 ☐ DISCHARGE PRESSURE (kPa)(bar): 3500 / 35

18 MAXIMUM bari MINIMUM bari

19 ☐ SUCTION PRESSURE (kPa)(bar):

20 MAXIMUM MINIMUM

21 ☐ DIFFERENTIAL PRESSURE (kPa)(bar g):

22 MAXIMUM MINIMUM

23 ☐ NPSH AVAILABLE (m)

24 ☐ HYDRAULIC POWER (Kw)

26 ☐ PERFORMANCE

27 ☐ RATED CAPACITY (m³/h)

28 ☐ NPSH REQUIRED (m)

29 ☐ RATED SPEED (rpm)

30 ☐ DISPLACEMENT (m³/h)

31 ☐ VOLUMETRIC EFFICIENCY (%)

32 ☐ MECHANICAL EFFICIENCY (%)

33 ☐ KW @ MAXIMUM VISCOSITY

34 ☐ KW @ RELIEF VALVE SETTING

35 ☐ MAXIMUM ALLOWABLE SPEED (rpm)

36 ☐ MINIMUM ALLOWABLE SPEED (rpm)

38 CONSTRUCTION EX.

39

40

41 CONNECTIONS SIZE ANSI RATING FACING POSITION

42 SUCTION max. 100

43 DISCHARGE max. 80

44 GLAND FLUSH

45 DRAINS yes

46 VENTS yes

47 JACKET no

48

49 PUMP TYPE:

50

51 ☐ INTERNAL GEAR ☐ TWIN-SCREW ☐ VANE

52 ☐ EXTERNAL GEAR ☐ THREE-SCREW ☐ PROGRESSING CAVITY

53 GEAR TYPE SELF-PRIMMING

54 ☐ SPUR ☐ HELICAL

55 ☐ OTHER

56

57

58 Notes :

59

60 Pompe se vor achizitiona impreuna cu motorul de actionare, antrenare cu reductor, pentru U=400V; Pmax=75kW

61

62

63

☐ LIQUID

☐ TYPE OR NAME OF LIQ SAULT WATER WITH OIL

☐ PUMPING TEMPERATU (°C)

NORMAL 40 MAX 60 MIN. 30

☐ DENSITY (g/cm³) 1,12

☐ SPECIFIC HEAT Cp (KJ/kg°C)

☐ VISCOS 20grd.C (cSt)

☐ CORROSIVE/EROSIVE AGENT

☐ CHLORIDE CONCENTRATION

☐ H2S CONCENTRATION

☐ SALINITY 1900-2000 Kg/vagon

LIQUID TOXIC ☐ FLAMMABLE OTHER

☐ SITE AND UTILITY DATA

LOCATION ☐ INDOOR ☐ 0

☐ HEATED ☐ UNHEATED ☐ 0

☐ ELECTRICAL AREA CLASS 2 ☐ GROUP ☐ 0

☐ WINTERIZATION REQ. ☐ TROPICALIZATION REQ.

SITE DATA

☐ RANGE OF AMBIENT TEMPS: MIN./MAX / (°C)

UNUSUAL CONDITIONS

☐ DUST ☐ FUMES ☐ SALT ATMOSPHERE

☐ OTHER

☐ UTILITY CONDITIONS

ELECTR DRIVERS HEATING OL WN

VOLTAGE

HERTZ

KW

COOLING W/ INLET RETURN DESIGN MAX.Δ

TEMP MAX.

PRESS. (kPa)(bar g) MIN.

SOURCE

INSTRUMENT AIR MAX. MIN

PRESS. (kPa)(bar g)

APPLICABLE SPECIFICATION

☐ API 676 POSITIVE DISPLACEMENT PUMPS - ROTARY

☐ GOVERNING SPECIFICATION (IF DIFFERENT)

REMARKS: ATEX IP60



COD:33.603E-95-2  
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|                                                                                            |  |                                                                                                                    |  |                                      |  |                                                                                              |  |                                                         |  |
|--------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------|--|--------------------------------------|--|----------------------------------------------------------------------------------------------|--|---------------------------------------------------------|--|
| <b>ELIUS<sup>92</sup></b><br>arhitectura<br>proiectare<br>inginerie<br>consultanta tehnica |  | REABILITARE RAMPA DE<br>INCARCARE TITEI MARGHITA, JUD.<br>BIHOR                                                    |  | REQUISITION No.                      |  | A636.4-MC-SP-P                                                                               |  | REV.<br>0                                               |  |
|                                                                                            |  |                                                                                                                    |  | SHEET 1 OF 2                         |  |                                                                                              |  |                                                         |  |
| JOB No:                                                                                    |  | PURCH. ORDER NO.                                                                                                   |  | DATE                                 |  | REV.                                                                                         |  | DATA                                                    |  |
| ENQUIRY NO.                                                                                |  | BY                                                                                                                 |  |                                      |  | BY                                                                                           |  | CH'D                                                    |  |
|                                                                                            |  |                                                                                                                    |  |                                      |  | N.R.                                                                                         |  | S.B.                                                    |  |
|                                                                                            |  |                                                                                                                    |  |                                      |  |                                                                                              |  | A.I.                                                    |  |
| 1                                                                                          |  | APPLICABLE TO:                                                                                                     |  | <input type="radio"/> PROPOSALS      |  | <input type="radio"/> PURCHASE                                                               |  | <input type="radio"/> AS BUILT                          |  |
| 2                                                                                          |  | FOR                                                                                                                |  | CRUDE OIL                            |  |                                                                                              |  |                                                         |  |
| 3                                                                                          |  | SITE                                                                                                               |  | STATIA MARGHITA BIHOR                |  |                                                                                              |  |                                                         |  |
| 4                                                                                          |  | NUMBER                                                                                                             |  | 2 PCS                                |  |                                                                                              |  |                                                         |  |
| 5                                                                                          |  | MANUFACTURER                                                                                                       |  |                                      |  |                                                                                              |  |                                                         |  |
| 6                                                                                          |  | NOTES: INFORMATION BELOW TO BE COMPLETED:                                                                          |  | <input type="radio"/> PURCHASER      |  | <input checked="" type="checkbox"/> BY MANUFACTURER                                          |  | <input checked="" type="checkbox"/> BY MANUF. OR PURCH. |  |
| 7                                                                                          |  |                                                                                                                    |  | <input type="radio"/> GENERAL        |  |                                                                                              |  |                                                         |  |
| 8                                                                                          |  | NO. MOTOR DRIVEN                                                                                                   |  |                                      |  | OTHER DRIVEN TYPE                                                                            |  |                                                         |  |
| 9                                                                                          |  | PUMP ITEM NO'S                                                                                                     |  |                                      |  | PUMP ITEM NO'S                                                                               |  |                                                         |  |
| 10                                                                                         |  | MOTOR ITEM NO'S                                                                                                    |  |                                      |  | DRIVER ITEM NO'S                                                                             |  | GEAR ITEM NO'S                                          |  |
| 11                                                                                         |  | MOTOR PROVIDED BY                                                                                                  |  |                                      |  | DRIVER PROVIDED BY                                                                           |  | GEAR PROVIDED BY                                        |  |
| 12                                                                                         |  | MOTOR MOUNTED BY                                                                                                   |  |                                      |  | DRIVER MONTED BY                                                                             |  | GEAR MONTED BY                                          |  |
| 13                                                                                         |  | MOTOR DATA SHEET NO.                                                                                               |  |                                      |  | DRIVER DATA SHEET NO.                                                                        |  | GEAR DATA SHEET NO.                                     |  |
| 14                                                                                         |  | <input type="radio"/> OPERATING CONDITIONS                                                                         |  |                                      |  | <input type="radio"/> LIQUID                                                                 |  |                                                         |  |
| 15                                                                                         |  | <input type="radio"/> CAPACITY @ PT (m³/h) : 200                                                                   |  |                                      |  | <input type="radio"/> TYPE OR NAME OF LIQ. CRUDE OIL                                         |  |                                                         |  |
| 16                                                                                         |  | MAXIMUM 210 MINIMUM RATED                                                                                          |  |                                      |  | <input type="radio"/> PUMPING TEMPERATU (°C)                                                 |  |                                                         |  |
| 17                                                                                         |  | <input type="radio"/> DISCHARGE PRESSURE (kPa)(bar g):                                                             |  |                                      |  | NORMAL 40 MAX 60 MIN. 30                                                                     |  |                                                         |  |
| 18                                                                                         |  | MAXIMUM 7 barl MINIMUM 5 barl                                                                                      |  |                                      |  | <input type="radio"/> DENSITY 15grd.C (g/cm³) MAX. 0,8333 MIN.                               |  |                                                         |  |
| 19                                                                                         |  | <input type="radio"/> SUCTION PRESSURE (kPa)(bar g):                                                               |  |                                      |  | <input type="radio"/> SPECIFIC HEAT Cp (KJ/kg°C)                                             |  |                                                         |  |
| 20                                                                                         |  | MAXIMUM 7,5 / 0,075 MINIMUM                                                                                        |  |                                      |  | <input type="radio"/> VISCOS 20grd.C MAX. MIN. 48.26                                         |  |                                                         |  |
| 21                                                                                         |  | <input type="radio"/> DIFFERENTIAL PRESSURE (kPa)(bar g):                                                          |  |                                      |  | <input type="radio"/> CORROSIVE/EROSIVE AGENT                                                |  |                                                         |  |
| 22                                                                                         |  | MAXIMUM MINIMUM                                                                                                    |  |                                      |  | <input type="radio"/> CHLORIDE CONCENTRATION                                                 |  |                                                         |  |
| 23                                                                                         |  | <input type="radio"/> NPSH AVAILABLE (m) 1,69                                                                      |  |                                      |  | <input type="radio"/> H2S CONCENTRATION                                                      |  |                                                         |  |
| 24                                                                                         |  | <input type="radio"/> HYDRAULIC POWER (Kw)                                                                         |  |                                      |  | LIQUID TOXIC <input type="radio"/> FLAMMABLE OTHER                                           |  |                                                         |  |
| 26                                                                                         |  | <input type="checkbox"/> PERFORMANCE                                                                               |  |                                      |  | <input type="radio"/> SITE AND UTILITY DATA                                                  |  |                                                         |  |
| 27                                                                                         |  | <input type="checkbox"/> RATED CAPACITY (m³/h)                                                                     |  |                                      |  | LOCATION <input type="radio"/> INDOOR 0                                                      |  |                                                         |  |
| 28                                                                                         |  | <input type="checkbox"/> NPSH REQUIRED (m)                                                                         |  |                                      |  | <input type="radio"/> HEATED <input type="radio"/> UNHEATED 0                                |  |                                                         |  |
| 29                                                                                         |  | <input type="checkbox"/> RATED SPEED (rpm)                                                                         |  |                                      |  | <input type="radio"/> ELECTRICAL AREA CLASS 2 <input type="radio"/> GROUP 0                  |  |                                                         |  |
| 30                                                                                         |  | <input type="checkbox"/> DISPLACEMENT (m³/h)                                                                       |  |                                      |  | <input type="radio"/> WINTERIZATION REQD. <input type="radio"/> TROPICALIZATION REQ.         |  |                                                         |  |
| 31                                                                                         |  | <input type="checkbox"/> VOLUMETRIC EFFICIENCY (%)                                                                 |  |                                      |  | SITE DATA                                                                                    |  |                                                         |  |
| 32                                                                                         |  | <input type="checkbox"/> MECHANICAL EFFICIENCY (%)                                                                 |  |                                      |  | <input type="radio"/> RANGE OF AMBIENT TEMPS: MIN./MAX. / (°C)                               |  |                                                         |  |
| 33                                                                                         |  | <input type="checkbox"/> KW @ MAXIMUM VISCOSITY                                                                    |  |                                      |  | UNUSUAL CONDITIONS                                                                           |  |                                                         |  |
| 34                                                                                         |  | <input type="checkbox"/> KW @ RELIEF VALVE SETTING                                                                 |  |                                      |  | <input type="radio"/> DUST <input type="radio"/> FUMES <input type="radio"/> SALT ATMOSPHERE |  |                                                         |  |
| 35                                                                                         |  | <input type="checkbox"/> MAXIMUM ALLOWABLE SPEED (rpm)                                                             |  |                                      |  | <input type="radio"/> OTHER                                                                  |  |                                                         |  |
| 36                                                                                         |  | <input type="checkbox"/> MINIMUM ALLOWABLE SPEED (rpm)                                                             |  |                                      |  | <input type="radio"/> UTILITY CONDITIONS                                                     |  |                                                         |  |
| 37                                                                                         |  |                                                                                                                    |  |                                      |  | ELECTR DRIVERS HEATING OL WN                                                                 |  |                                                         |  |
| 38                                                                                         |  | CONSTRUCTION EX.                                                                                                   |  |                                      |  | VOLTAGE                                                                                      |  |                                                         |  |
| 39                                                                                         |  |                                                                                                                    |  |                                      |  | HERTZ                                                                                        |  |                                                         |  |
| 40                                                                                         |  |                                                                                                                    |  |                                      |  | KW                                                                                           |  |                                                         |  |
| 41                                                                                         |  | CONNECTIONS                                                                                                        |  | SIZE                                 |  | ANSI RATING                                                                                  |  | FACING                                                  |  |
| 42                                                                                         |  | SUCTION                                                                                                            |  | max.200                              |  |                                                                                              |  |                                                         |  |
| 43                                                                                         |  | DISCHARGE                                                                                                          |  | max125                               |  |                                                                                              |  |                                                         |  |
| 44                                                                                         |  | GLAND FLUSH                                                                                                        |  |                                      |  |                                                                                              |  |                                                         |  |
| 45                                                                                         |  | DRAINS                                                                                                             |  | yes                                  |  |                                                                                              |  |                                                         |  |
| 46                                                                                         |  | VENTS                                                                                                              |  | yes                                  |  |                                                                                              |  |                                                         |  |
| 47                                                                                         |  | JACKET                                                                                                             |  | no                                   |  |                                                                                              |  |                                                         |  |
| 48                                                                                         |  |                                                                                                                    |  |                                      |  |                                                                                              |  |                                                         |  |
| 49                                                                                         |  | PUMP TYPE:                                                                                                         |  |                                      |  | COOLING W/ INLET RETURN DESIGN MAX.Δ                                                         |  |                                                         |  |
| 50                                                                                         |  |                                                                                                                    |  |                                      |  | TEMP. MAX. MIN.                                                                              |  |                                                         |  |
| 51                                                                                         |  | <input type="checkbox"/> INTERNAL GEAR                                                                             |  | <input type="checkbox"/> TWIN-SCREW  |  | <input type="checkbox"/> VANE                                                                |  |                                                         |  |
| 52                                                                                         |  | <input type="checkbox"/> EXTERNAL GEAR                                                                             |  | <input type="checkbox"/> THREE-SCREW |  | <input type="checkbox"/> PROGRESSING CAVITY                                                  |  |                                                         |  |
| 53                                                                                         |  | GEAR TYPE                                                                                                          |  |                                      |  | PRESS. (kPa)(bar g) MIN.                                                                     |  |                                                         |  |
| 54                                                                                         |  | <input type="checkbox"/> SPUR                                                                                      |  | <input type="checkbox"/> HELICAL     |  | SOURCE                                                                                       |  |                                                         |  |
| 55                                                                                         |  | <input type="checkbox"/> OTHER                                                                                     |  |                                      |  | INSTRUMENT AIR MAX. MIN                                                                      |  |                                                         |  |
| 56                                                                                         |  |                                                                                                                    |  |                                      |  | PRESS. (kPa)(bar g)                                                                          |  |                                                         |  |
| 57                                                                                         |  |                                                                                                                    |  |                                      |  |                                                                                              |  |                                                         |  |
| 58                                                                                         |  | Notes :                                                                                                            |  |                                      |  | APPLICABLE SPECIFICATION                                                                     |  |                                                         |  |
| 59                                                                                         |  | The pumps shall be suitable for running with the existing electrical motors, namely: U=400V; Pmax= 75kW; Model no. |  |                                      |  | <input type="radio"/> API 676 POSITIVE DISPLACEMENT PUMPS - ROTARY                           |  |                                                         |  |
| 60                                                                                         |  | Pompa se va achizitiona pentru montajul motorului in pozitie orizontala                                            |  |                                      |  | <input type="radio"/> GOVERNING SPECIFICATION (IF DIFFERENT)                                 |  |                                                         |  |
| 61                                                                                         |  |                                                                                                                    |  |                                      |  | REMARKS: ATEX IP60                                                                           |  |                                                         |  |
| 62                                                                                         |  |                                                                                                                    |  |                                      |  |                                                                                              |  |                                                         |  |
| 63                                                                                         |  |                                                                                                                    |  |                                      |  |                                                                                              |  |                                                         |  |

|                                                                                                                                                                                        |  |                    |  |                 |  |        |  |      |  |      |  |       |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------|--|-----------------|--|--------|--|------|--|------|--|-------|--|
| <div style="display: inline-block; vertical-align: middle; margin-left: 10px;"> <b>arhitectura</b><br/> <b>proiectare</b><br/> <b>inginerie</b><br/> <b>consultanta tehnica</b> </div> |  | Progressive cavity |  | REQUISITION No. |  | REV. 0 |  |      |  |      |  |       |  |
|                                                                                                                                                                                        |  | SHEET 2 OF 2       |  | REV.            |  | DATA   |  | BY   |  | CH'D |  | APP'D |  |
|                                                                                                                                                                                        |  |                    |  | N.R.            |  | S.B.   |  | A.I. |  |      |  |       |  |
| <input type="checkbox"/> INDICATES DATA COMPLETED BY PURCHASER <input type="checkbox"/> BY MANUFACTURER<br><input checked="" type="checkbox"/> BY MANUF. OR PURCHASER                  |  |                    |  |                 |  |        |  |      |  |      |  |       |  |

| CONSTRUCTION CONTINUED |                                                                                                                |  |  | <input type="checkbox"/> MATERIALS                            |  |  |  |
|------------------------|----------------------------------------------------------------------------------------------------------------|--|--|---------------------------------------------------------------|--|--|--|
| 1                      |                                                                                                                |  |  |                                                               |  |  |  |
| 2                      | CASING                                                                                                         |  |  | <input type="checkbox"/> CASING STEEL                         |  |  |  |
| 3                      | <input type="checkbox"/> MAXIMUM ALLOWABLE PRESSURE _____ (kPa)(barg) @ _____ (°C)                             |  |  | <input type="checkbox"/> STATOR NITRILE RUBBER                |  |  |  |
| 4                      | <input type="checkbox"/> HYDROSTATIC TEST PRESSURE _____ (kPa)(barg)                                           |  |  | <input type="checkbox"/> END PLATES CHROME                    |  |  |  |
| 5                      | <input type="checkbox"/> STEAM JACKET PRESSURE _____ (kPa)(barg) @ _____ (°C)                                  |  |  | <input type="checkbox"/> ROTOR(S) STAINLESS STEEL             |  |  |  |
| 6                      | ROTOR MOUNT <input type="checkbox"/> BETWEEN BEARINGS <input type="checkbox"/> OVERHUNG                        |  |  | <input type="checkbox"/> VANES                                |  |  |  |
| 7                      | TIMING GEAR <input type="checkbox"/> YES <input type="checkbox"/> NOT                                          |  |  | <input type="checkbox"/> SHAFT                                |  |  |  |
| 8                      | BEARING TYPE <input type="checkbox"/> RADIAL <input type="checkbox"/> THRUST                                   |  |  | <input type="checkbox"/> SLEEVE(S)                            |  |  |  |
| 9                      | LUBRICATION TYPE: <input type="radio"/> CONSTANT LEVEL OILERS                                                  |  |  | <input type="checkbox"/> GLAND(S)                             |  |  |  |
| 10                     | <input type="checkbox"/> PUMPED FLUID <input type="checkbox"/> RING OIL <input type="checkbox"/> OIL MIST      |  |  | <input type="checkbox"/> BEARING HOUSING                      |  |  |  |
| 11                     | <input type="checkbox"/> EXTERNAL <input type="checkbox"/> OIL FLOOD <input type="checkbox"/> GREASE           |  |  | <input type="checkbox"/> TIMING GEARS                         |  |  |  |
| 12                     | <input type="checkbox"/> LUBRICANT TYPE _____                                                                  |  |  | <input type="radio"/> SPECIAL MATERIAL TEST (2.9.1.3)         |  |  |  |
| 13                     | <input type="radio"/> MECHANICAL SEALS                                                                         |  |  | <input type="radio"/> LOW AMBIENT TEMP. MATERIAL TEST (2.9.5) |  |  |  |
| 14                     | <input type="checkbox"/> MANUFACTURER AND MODEL _____                                                          |  |  |                                                               |  |  |  |
| 15                     | <input type="checkbox"/> MANUFACTURER CODE _____                                                               |  |  |                                                               |  |  |  |
| 16                     | <input type="radio"/> API 682 SEAL FLUSH PLAN _____                                                            |  |  |                                                               |  |  |  |
| 17                     | <input type="checkbox"/> API 682 SEAL CODE _____                                                               |  |  |                                                               |  |  |  |
| 18                     | <input type="radio"/> PACKING <input type="radio"/> LANTERN RING                                               |  |  |                                                               |  |  |  |
| 19                     | <input type="checkbox"/> MANUFACTURER AND TYPE _____ <input type="checkbox"/> NO. OF RINGS _____               |  |  |                                                               |  |  |  |
| 20                     |                                                                                                                |  |  |                                                               |  |  |  |
| 21                     | DRIVE MECANISM                                                                                                 |  |  |                                                               |  |  |  |
| 22                     | <input type="radio"/> DIRECT-COUPLED <input type="radio"/> V-BELT <input type="radio"/> GEAR                   |  |  |                                                               |  |  |  |
| 23                     | <input type="checkbox"/> COUPLING MANUFACTURER _____                                                           |  |  |                                                               |  |  |  |
| 24                     |                                                                                                                |  |  |                                                               |  |  |  |
| 25                     | DRIVERS                                                                                                        |  |  |                                                               |  |  |  |
| 26                     | <input type="radio"/> MOTOR                                                                                    |  |  |                                                               |  |  |  |
| 27                     | <input type="checkbox"/> MANUFACTURER _____                                                                    |  |  |                                                               |  |  |  |
| 28                     | <input type="checkbox"/> TYPE _____                                                                            |  |  |                                                               |  |  |  |
| 29                     | <input type="checkbox"/> FRAME NO. _____                                                                       |  |  |                                                               |  |  |  |
| 30                     | <input type="radio"/> CONSTANT SPEED                                                                           |  |  |                                                               |  |  |  |
| 31                     | <input type="radio"/> VARIABLE SPEED                                                                           |  |  |                                                               |  |  |  |
| 32                     | <input type="checkbox"/> KW max.75 RPM                                                                         |  |  |                                                               |  |  |  |
| 33                     | <input type="radio"/> VOLTS 400 PHASE                                                                          |  |  |                                                               |  |  |  |
| 34                     | <input type="radio"/> HERTZ 50 SERVICE FACTOR                                                                  |  |  |                                                               |  |  |  |
| 35                     | <input type="radio"/> ENCLOSURE                                                                                |  |  |                                                               |  |  |  |
| 36                     |                                                                                                                |  |  |                                                               |  |  |  |
| 37                     | <input type="radio"/> STEAM TURBINE                                                                            |  |  |                                                               |  |  |  |
| 38                     | <input type="radio"/> OTHER (SEE SEPARATE DATA SHEET)                                                          |  |  |                                                               |  |  |  |
| 39                     |                                                                                                                |  |  |                                                               |  |  |  |
| 40                     | OTHER PURCHASER REQUIREMENT                                                                                    |  |  |                                                               |  |  |  |
| 41                     | NAMEPLATE UNITS <input type="radio"/> CUSTOMARY <input type="radio"/> SI                                       |  |  |                                                               |  |  |  |
| 42                     | <input type="radio"/> RELIEF VALVES BY PUMP MFGR <input type="radio"/> INTERNAL <input type="radio"/> EXTERNAL |  |  |                                                               |  |  |  |
| 43                     | PIPING FOR SEAL FURNISHED BY:                                                                                  |  |  |                                                               |  |  |  |
| 44                     | <input type="radio"/> PUMP VENDOR <input type="radio"/> OTHERS                                                 |  |  |                                                               |  |  |  |
| 45                     | PIPING FOR COOLING / HEATING FURNISHED BY:                                                                     |  |  |                                                               |  |  |  |
| 46                     | <input type="radio"/> PUMP VENDOR <input type="radio"/> OTHERS                                                 |  |  |                                                               |  |  |  |