

TECHNICAL SPECIFICATION  
for the purchase of an axial piston pump for the needs of  
LLC "Shurtan GCC"

## 1. GENERAL INFORMATION

1.1 Name
Axial-piston pump
1.2 The basis and purpose of the purchase of goods
Basis: Annual application of the polyethylene production workshop for 2021. Purpose: Replacement of a failed axial piston pump.
1.3 Information about the novelty (year of production / release of the product)
The equipment must be new, not previously used. All components, assemblies, parts and components must be manufactured no earlier than 2021.
1.4 Stages of development / manufacture
According to the NTD and CD of the manufacturer.
1.5 Documents for development / manufacture
According to the NTD and CD of the manufacturer.

## 2. SCOPE OF APPLICATION

The axial-piston pump GA-2150 is used to seal the reactor system installed in the Reaction and recycling plant, designed to supply Indopol-H25 sealing oil to the autoclave stirrer of the reactor.
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## 3. OPERATING CONDITIONS

3.1 General operating conditions
Place of operation: Polyethylene production workshop, reaction and recycling plant of LLC "Shurtansky GCC". Pump operation mode: Continuous operation, 8000 hours per year.

## 4. TECHNICAL REQUIREMENTS

4.1 Basic technical requirements
<b>Operating mode of the axial piston pump GA-2150:</b> Working environment: Int 25; Suction temperature: 60 °C; Capacity: 0.48 m <sup>3</sup> /h; Pump RPM: 1500 min <sup>-1</sup> Inlet pressure: P=700 kPa; Outlet pressure: P=20600 kPa; Difference: P=19900 kPa. <b>Construction:</b> Model: PF1004-J680; Type: Piston. Cylinder positions: Horizontal. Number of pistons: 2 pieces;
4.2 Main technical, economic and operational indicators
For stable operation of the axial piston pump, the repair period and replacement of spare parts should be no more than once in 2 years. The axial piston pump must comply with the technical and operational characteristics of the "DYNEX RIVETT" pump, the polyethylene production shop currently uses the pump of this company. A similar product, completely identical in function, application, brand, model, quality and technical characteristics of the above pump can be provided.
4.3 Design requirements, installation and technical requirements
The axial piston pump offered by the companies must correspond to the location of the axial piston pump installed in the polyethylene production shop.



#### 4.5 Marking requirements

The marking must comply with the requirements of the state standards of the Republic of Uzbekistan, which do not contradict and are not inferior to international generally accepted standards. The marking of the goods must contain the decrypted name of the equipment, the name of the manufacturer, the address of the manufacturer's location, the release date and other necessary information. The basic marking data must contain:

- name or trademark of the manufacturer;
- symbol equipment;
- designation of the standard or technical conditions;
- nominal values of feed, head (pressure) and speed;
- serial number of the pump according to the system of the manufacturer;
- year of manufacture of the equipment.

#### 4.6 Size and packaging requirements

The dimensions of the goods according to the regulatory and technical documents of the manufacturer.

Packaging should be carried out in such a way as to exclude the movement of cargo in containers during loading, transportation and unloading. The container must be marked in accordance with the requirements of GOST 14192-96.

#### 4.7 Requirements for SPA and wear parts

In addition to the axial piston pump, a set of two-year spare parts provided by the companies must be supplied, as indicated below:

№	Name of the spare part	Technical data	Unit	Qty
1	Shaft seal	Part № 00014760	Pieces	4
2	Set screw	Part № 10780270	Pieces	4
3	Spring (piston)	Part № 02371402	Pieces	8
4	Piston assembly	Part № 90019000	Pieces	4
5	O-ring	Part № 00005030	Pieces	8
6	Outlet seat	Part № 90002900	Pieces	8
7	Outlet check ball	Part № 10110160	Pieces	4
8	Spring	Part № 00261830	Pieces	4
9	Seal	Part № 11142030	Pieces	2
10	Cover kit	Part № KP10029050	Pieces	2
11	Bearing	Part № 10811550	Pieces	2
12	Barrel	Part № 11370500	Pieces	2
13	O-ring (Barrel)	Part № 11532030	Pieces	2
14	Spring return plate	Part № 02374180	Pieces	8
15	Cam plate	Part № 10303500	Pieces	2
16	Bearing	Part № 90001550	Pieces	2
17	Retaining ring	Part № 10980490	Pieces	2
18	Key	Part № 10303500	Pieces	2





## 5. REQUIREMENTS FOR THE RULES OF DELIVERY AND ACCEPTANCE

### 5.1 The order of delivery and acceptance, additional requirements of the Customer

The goods are accepted after the test, in accordance with the technical parameters of paragraphs 4.1 and 4.7 of this TA, after that an acceptance certificate is issued in accordance with the contract.

Acceptance and input control of Products for compliance with quantity, quality and size is carried out at the Customer's warehouse. In case of non-conformity of the delivered goods with the ordered specification or if the goods have not passed the entrance quality control, the Supplier is obliged to replace it within the period specified in the delivery contract. The transportation costs for the replacement of the goods are borne by the Supplier of the goods.

### 5.2 Requirements for the transfer of technical and other documents to the customer when delivering the goods.

The product must be accompanied by the following documentation:

- certificate of conformity of the goods;
- certificate for materials for manufacturing;
- technical data sheets of the goods;
- manufacturer's test certificate;
- invoice (invoice) Seller with a description of the goods, indicating the quantity, unit price and total amount;
- a bill of lading issued in the name of the consignee with a mark of the departure station and a mark of the destination, the name of the Customer, the number and date of signing of the current contract;
- certificate of origin of the country of the goods indicating the invoice number and date;
- packing list;
- the test certificate of the goods of an independent inspection company (third party)
- the certificate of quality of the goods issued by the manufacturer;
- product safety data sheet.

## 6. 6. QUALITY AND CLASSIFICATION REQUIREMENTS

7. The product must be of high quality, the quality guarantee period is at least 2 years.
8. It is necessary to provide certificates (international standards ISO 9001, 14001, 45001, 50001, manufacturer's quality certificate and/or other certificates of international, recognized laboratories and test centers).
9. The service life of the product in accordance with the regulatory and technical documentation is 4 years.

## 10. REQUIREMENTS FOR QUANTITY, CONFIGURATION, AND DELIVERY TIME (PERIODICITY)

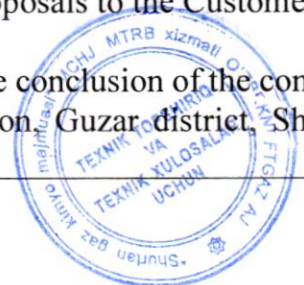
№	Product name	Technical data	Unit	Qty
1	Axial piston pump GA-2150	Model: PF1004-J680	Pieces	2
2	Two-year spare parts : position 4.7			

Before delivery of the axial piston pump, the Customer is provided with a detailed drawing of the axial piston pump for approval.

The participating companies present their technical and commercial proposals to the Customer. The customer must give a technical conclusion.

The delivery period of the goods is 2 months (60 calendar days) after the conclusion of the contract.

Transport delivery: CIP - Republic of Uzbekistan, Kashkadarya region, Guzar district, Shurtan settlement, 180300



## 11.1 LIST OF APPLICATIONS

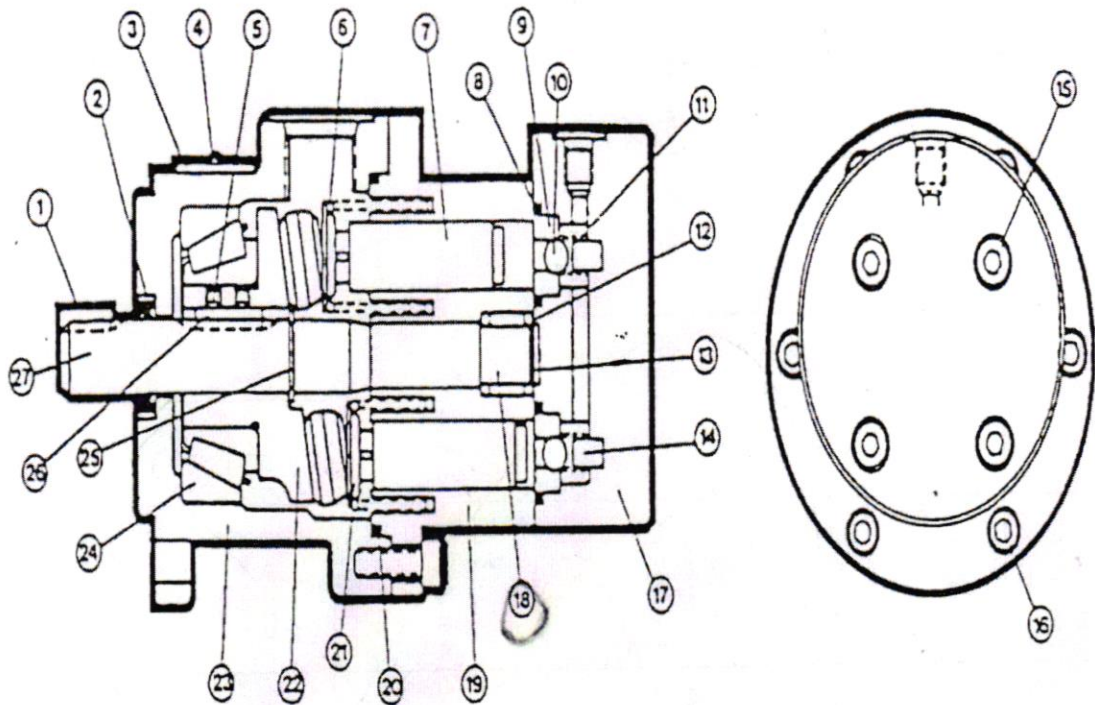
№	Name of the application	Number of sheets
1	Drawing of axial piston pump	1 (one) sheet

*\*If there is a misunderstanding or an error in the English version of the terms of reference, use the Russian version.*





# FIXED DISPLACEMENT CHECKBALL PUMPS

Model: PF1004 *J68C*

## PARTS LIST

Item	Part Number	Description	Quantity Required	Item	Part Number	Description	Quantity Required
1	10183250	Key (Shaft)	1	15	10730280	Capscrew (Cover) torque 48 ft. lbs.	4
2	<del>90044760</del>	Shaft Seal <i>11384760</i>	1	16	13490280	Capscrew (Barrel) torque 27 ft. lbs.	6
3	50000260	Nameplate	1	17	KP10029050	Cover Kit	1
4	10010030	Screw (Nameplate)	2	18	10811550	Bearing	1
5	10480270	Set Screw, torque 32-34 in. lbs.	2	19	11370500	Barrel	1
6	02371702	Spring (Piston)	4	20	<del>34535030</del>	O-Ring (Barrel) <i>1.5" 32030</i>	1
7	90019000	Piston Assembly	4	21	02374180	Spring Return Plate	4
8	<del>99995090</del>	O-Ring (Outlet Seal) <i>12112030</i>	4	22	10303500	Cam (Wobble) Plate	1
9	90002900	Outlet Seat	4	23	11242770	Housing	1
10	10110160	Outlet Checkball	4	24	90001550	Bearing	1
11	00261830	Spring (Outlet)	4	25	10980490	Retaining Ring	1
12	<del>11464760</del>	Seal <i>11142030</i>	1	26	10163250	Key (Internal Shaft)	1
13	14985620	Thrust Washer	1	27	11082880	Shaft	1
14	Included with #17						

Seal Kit - KP10029010

