



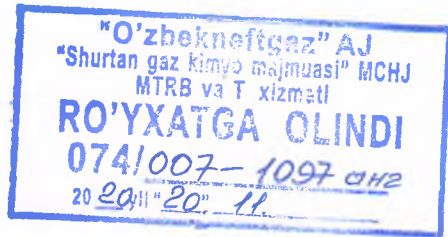
**CONFIRM**

Chief metrologist of Shurtan GCC LLC

Kh. A. Makhmudov



2020.



**TECHNICAL ASSIGNMENT**  
**for purchasing servo solenoid valves**  
**for the needs of Shurtan GCC LLC**

## 1. GENERAL INFORMATION

<b>1.1. Name</b>
The present technical assignment is developed for purchasing proportional valves for pallet production unit.
<b>1.2. Basis and purpose of purchasing goods</b>
Basis: Approved annual request for purchasing spare parts, materials, and equipment at the instrumentation and automation unit for 2020. Purpose: Existing servo solenoid valves are used in process control applications for continuous operation, core puller control in a pallet production unit
<b>1.3 Information about novelty (year of production/manufacture of goods)</b>
The supplied goods must be new, not previously used, and produced no earlier than 2020 and meet safety and quality standards according to the law of the Republic of Uzbekistan.
<b>1.4 FTP code and other international codes, if applicable</b>
The manufacturer of the goods should provide the FTP code or other international codes.

## 2. SCOPE OF APPLICATION

Existing servo solenoid valves are used in process control applications for continuous operation, core puller, cylinder, and oil pressure control or partially open or closed on demand signal. Sliding-stem valves.
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## 3. OPERATING CONDITIONS

<b>3.1 Basic operating conditions</b>
Working site - indoors with forced ventilation; Ambient temperature range: from +5 to +55°C; Ambient relative humidity: from 5% to 80%; Valve parts are subject to normal wear and should therefore be periodically inspected and replaced as necessary. The periodicity of maintenance inspections depends on the severity of the operating condition
<b>3.2 Additional/special requirements for operation</b>
The valves are widely used, depending on actual temperatures, pressures and other operating conditions.

## 4. TECHNICAL REQUIREMENTS

<b>4.1. Basic technical requirements</b>			
<b>Technical Specifications</b>			
№	Name of goods and materials and equipment	Brief description of the equipment	Unit
1	3-way solenoid servo valve for pallet production plants	pc.	1
2	Controlled solenoid servo-driven valve OBE for pallet production unit	pc.	1
3	Direct operated solenoid servo valve OBE for pallet production unit.	pc.	1
4	p/Q- servo solenoid valve with OBE for pallet production plants	pc.	1
<b>3-way solenoid servo valve for pallet production plants 1 pc</b>			
Construction	3/2-way cartridge servo solenoid valve, pilot operated main stage		

Actuation	Servo solenoid valve NG6, on the block as a separate pilot valve
Type of mounting	Cartridge type, see installation dimensions
Installation position	Horizontal, or position transducer facing downwards
Size	NG 32
Symbol valve	
Pressure fluid	Hydraulic oil to DIN 51524...535, other fluids after prior consultation
Pressure fluid temperature	-20...+80°C
Flow characteristic	Non-Linear
Rated flow	380 l/min
Ambient temperature	-20...+50°C
Max. working pressure	Port P,A,T,X,Z: 315 bar
Position transducer DC/DC technology	Supply: +15 V/35 mA Signal: 0...±10 V
item number:	0811 402 611
Seal material	NBR
<b>Controlled solenoid servo-driven valve OBE 1 pc</b>	
Size	6
Design	Spool valve, direct operated, with steel sleeve
Actuation	Proportional solenoid with position control, OBE
Connection type	Subplate mounting, porting pattern according to ISO 4401-03-02-0-05
Installation side of the inductive position transducer	Valve side B(standard)
Symbol	
Rated flow	24 l/min
Flow characteristics	Linear
Weight	2.7 kg
Maximum operating pressure	Port A,B,P – 315 bar Port T – 250 bar
Leakage flow	<500 sm <sup>3</sup> /min
Ambient temperature	-20...+50°C
Supply voltage of the control electronics	24V DC voltage
Electrical	Without mating connector; connector DIN 43563-AM6



connection	
Interfaces of the control electronics	Command value input $\pm 10$ V
item number:	0811 404 602
Seal material	NBR
<b>Controlled solenoid servo-driven valve OBE 1 pc</b>	
Size	6
Design	Spool valve, direct operated, with steel sleeve
Actuation	Proportional solenoid with position control, OBE
Connection type	Subplate mounting, porting pattern according to ISO 4401-03-02-0-05
Installation side of the inductive position transducer	Valve side B(standard)
Symbol	
Rated flow	40 l/min
Flow characteristics	Linear
Weight	2.7 kg
Maximum operating pressure	Port A,B,P – 315 bar Port T – 250 bar
Leakage flow	<500 sm <sup>3</sup> /min
Ambient temperature	-20...+50°C
Supply voltage of the control electronics	24V DC voltage
Electrical connection	Without mating connector; connector DIN 43563-AM6
Interfaces of the control electronics	Command value input $\pm 10$ V
item number:	0811 404 603
Seal material	NBR
<b>p/Q- servo solenoid valve with OBE for pallet production plants 1 pc</b>	
Voltage supply of trigger electronics	24V DC
Construction	Spool type valve, operated directly
Actuation	Proportional solenoid with position control, OBE
Type of mounting	Subplate, mounting hole configuration NG10 (ISO 4401-05-04-0-94)
Size	D05(NG 10)
Symbol valve	
Flow type	Relief
Flow characteristic	Linear
Rated flow	70 l/min

Ambient temperature	-20...+50°C
Pressure rating	4570 psi
Pressure differential	500 psi
Flow	18 gpm
Amplifier	OBE
Approximate weight	7.1 kg
Interface for trigger electronics	Setpoint input $\pm 10$ V
item number:	0811 402 107
Seal material	NBR
Electrical connection	Without line socket ith plug to DIN 43563-AM6

#### 4.2 Main technical, economic and operating characteristics

Not required

#### 4.3 Reliability requirements

The average life of spare parts per year, for the operation of the corrosive environments, the service life depends on the properties of the corrosive environment, operating conditions, and materials used.

#### 4.4 Design requirements, installation, and technical requirements

For replacing parts, it is necessary to use only parts produced and supplied by the company item numbers and names of spare parts are indicated per the manufacturer's technical documentation attached to the present technical assignment

#### 4.5 Requirements for materials

See technical data in item 4.1

#### 4.6 Requirements for stability and parameters exposure to environmental factors

At exposed to environmental factors, avoid harmful effects such as high temperature and corrosive environment. Protect against mechanical damage during storage, transportation, and packing.

#### 4.7 Requirements for power supply

Not required

#### 4.8 Requirements for instrumentation and automation

Not required

#### 4.9 Requirements for components, initial and operational materials

see technical data in item 4.1

#### 4.10 Requirements for labeling

Equipment must be labeled in Russian and should be clearly indicated. The manufacturer, batch number, and date of manufacture are also indicated. The labeling must remain for the entire service life of the supplied equipment.

#### 4.11 Requirements to sizes and packing

The goods are delivered in containers/packing. Containers and packing should have a presentation to ensure the safety of goods from mechanical damage during loading and unloading, during transportation, in addition to long-term storage (as per the manufacturer's requirements). Protect against mechanical damage during storage, transportation, and packing.



#### 4.12 Requirements for spare parts and wearing parts

Not required

### 5. REQUIREMENTS TO RULES FOR DELIVERY AND ACCEPTANCE

#### 5.1 Order of delivery and acceptance

The goods should be accepted after incoming inspection and drawing up a report following the contract.

The Customer accepts the goods according to the quantity, quality, complete of the lot, and the external signs of the safety of the goods (mechanical damage, visible deformation, and other similar damage) following the transport and enclosed documents, the manufacturer's quality certificates.

Being parties agree that the visual inspection of the goods carried out by the Customer representative must be absolute and final for the parties to determine the conformity according to quantity, complete and external signs of goods safety during transportation.

Goods should have certificates of conformity and certification test reports confirming the applied for characteristics, accompanied by documentation for installation, commissioning and operation.

All accompanying documentation should be drawn up in Russian or English and handed over to the Customer along with the supplied goods. The equipment supplied should be designed to operate continuously around the clock under specified conditions for specified service life. Equipment must be labeled in Russian and clearly indicated. The manufacturer, batch number and date of manufacture are also indicated. The labeling must remain for the entire service life of the supplied equipment. Versions of technical parameters and characteristics of equipment and materials offered by the Bidder that are not specified in the technical assignment are agreed additionally.

At receiving the goods from the carrier, the Customer (consignee) should check the conformity of the goods with the information specified in the contract, specifications, or additional agreements to it, as well as in transport, enclosed documents, and the manufacturer quality certificates.

In case receiving the goods from the carrier, if non-conformity of the goods according to quality/quantity is determined, the Customer (consignee) has to stop receiving the goods. Take measures to ensure the safety of the goods and prevent mixing with other uniform goods as well as notify the Seller about this in writing within 5 (five) working days from the date of finding the shortage.

The Seller is obliged to send the Customer (consignee), no later than 10 (ten) working days from the date of receipt of the notification, a response about the participation of his representative in the further acceptance of the goods. The Seller's representative must participate in the acceptance of the goods within a reasonable time, not exceeding 20 (twenty) calendar days from the date of receipt of the notification.

#### 5.2 Requirements for transfer of technical and other documents to the Customer at goods supply

The Supplier has to provide the following documents confirming the compliance of the goods with the established requirements:

Certificates (bills) of compliance with the requirements of GOST and safety;  
Specification of the main equipment accessories with an indication of manufacturers, as well as the attachment of certificates of conformity to them;  
Installation, commissioning and operation documentation in Russian or English;  
All supplied equipment passes through incoming control for receipt of the equipment at the warehouse.

The goods must be accompanied by the following documentation:

- it is necessary to provide a certificate of conformity of the goods;
- Seller's invoice with a description of the goods, indicating the quantity, unit price,

and total amount;

- a bill of lading issued in the name of Consignee, name of Customer, the number and date of signing of the existing contract;
- certificate of origin of the country of the goods indicating the number and date of the invoice;
- packing list;
- certificate of quality of the goods issued by the manufacturer;
- safety data sheet

#### 5.3 Requirements for insurance of goods

The goods must be insured. The equipment supplied must be designed to operate continuously around the clock under specified conditions for a specified service life.

### 6. TRANSPORTATION REQUIREMENTS

After the manufacture of spare parts, pack in a box and protect against mechanical damage.

The goods should be shipped in the manufacturer standard packing (sealed, tight, and duly packaged) ensuring its full safety from all kinds of damage during long-term storage and transportation of products, taking into account several overloads in transit.

Other options and package sizes are subject to additional approval by the Customer to their acceptability.

Delivery of equipment is carried out by delivery of goods by road and-or railway transport at the expense of the Supplier to the Consignee address and, other methods of the shipment can be made only with the written approval of the Customer.

In case of faulty delivery of the equipment to a wrong address, the Supplier, at his own charge, readdresses the goods to the destination point specified in the contract.

Consignee: Customer - Shurtan gas chemical complex LLC, [www.sgcc.uz](http://www.sgcc.uz), [sgcc@sgcc.uz](mailto:sgcc@sgcc.uz) 180300, Shurtan settlement, Guzar district, Kashkadarya region, the Republic of Uzbekistan

### 7. REQUIREMENTS FOR STORAGE

At storage spare parts, avoid harmful effects such as high temperature and corrosive environment and protect against mechanical damage.

### 8. REQUIREMENTS FOR SCOPE AND-OR GUARANTEE PERIOD

The guarantee period for the supplied materials and equipment is as per the certificate of origin, but not less than 12 months. The start time for calculating the guarantee period is the start-up of the equipment.

The Supplier must, at his own expense and within the duration of an agreement with the customer, eliminate any defects in the supplied equipment, materials identified during the guarantee period. In the event of equipment failure, the Supplier has to send his representative to participate in drawing up a report according to settled defects, agree on the procedure and terms for their rectification. In this case, the warranty period is extended accordingly for the period of rectification.

### 9. REQUIREMENTS FOR REPAIRABILITY

Not required

### 10. MAINTENANCE REQUIREMENTS

#### 10.1 Maintenance requirements

Spare parts supplied must be designed to operate continuously around the clock under specified conditions for specified service life.

#### 10.2 Service requirements

Not required



## 11 ENVIRONMENTAL AND HEALTH REQUIREMENTS

The goods should not cause any damage to the environment.

## 12. REQUIREMENTS FOR ENERGY EFFICIENCY

The quality of the goods should ensure the possibility of its intended use without negative consequences.

## 13. SAFETY REQUIREMENTS

The goods should be safe during its operation, storage, and disposal

## 14. REQUIREMENTS FOR QUALITY AND CLASSIFICATION

The quality and completeness of the supplied goods should comply with the terms of the contract the requirements of the regulatory document. The quality of goods is certified by a certificate of quality and other documents provided by current law, confirming the quality of goods. In case of variations, the goods are returned to the Supplier at his own expense. Goods replacement should be fulfilled within 14 calendar days.

If the participant offers goods for delivery according to other regulatory and technical documentation (analog, equivalent); it is necessary to attach certified documents to the participant's application in the request for prices: a certificate/ bill of conformity, copy from the specifications for the goods, and any other certified documents at the option of the participant in the purchasing procedure, confirming the compliance of the technical characteristics of the goods intended for delivery of the Customer's requirements.

## 15. ADDITIONAL (OTHER) REQUIREMENTS

Not required

## 16. REQUIREMENTS FOR QUANTITY, EQUIPMENT, PLACE AND TIME (PERIODICITY) OF DELIVERY

The scope of the present technical assignment requires the supply of spare parts for valves and pneumatic actuators: item numbers and names of spare parts are indicated in paragraph 4.1 of the present technical assignment of the manufacturer's technical documentation (item numbers and names of spare parts are indicated in the attached technical assignment as per the manufacturer's technical documentation.

Delivery of equipment is carried out by delivery of goods by road and-or railway transport at the expense of the Supplier to the Consignee address and, other methods of the shipment can be made only with the written approval of the Customer.

In case of faulty delivery of the equipment to a wrong address, the Supplier, at his own charge, readdresses the goods to the destination point specified in the contract.

Consignee: Customer - Shurtan gas chemical complex LLC, [www.sgcc.uz](http://www.sgcc.uz), [sgcc@sgcc.uz](mailto:sgcc@sgcc.uz) 180300, Shurtan settlement, Guzar district, Kashkadarya region, the Republic of Uzbekistan



17. REQUIREMENT FOR RELATED SERVICES FOR DELIVERY OF EQUIPMENT

Not required

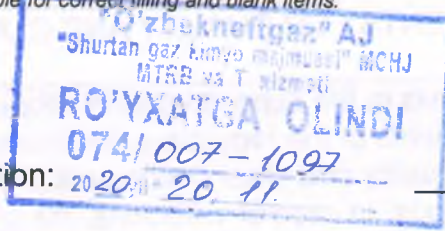
18. REQUIREMENT FOR THE FORM OF SUBMITTED INFORMATION

Not required

19. LIST OF ACCEPTED ABBREVIATIONS

No.	Abbreviation	Key to Abbreviations
1	RD	Regulatory documentation
2	TA	Technical assignment

\*Note: The developer is responsible for correct filling and blank items.



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