

"AGREED"

Deputy General Director

for Production of "SGCC", LLC



_____ U. Isaev

_____ 2022/

"APPROVE"

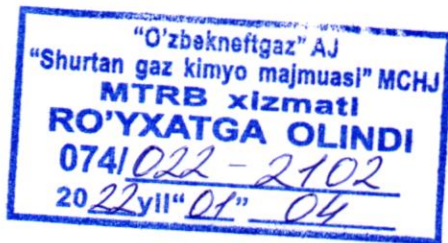
Deputy General Director

for Construction of "SGCC", LLC



_____ G. Ibadullayev

_____ 2022.



Technical assignment

for purchasing of the electrical insulating joint

for the needs of "Shurtan GCC", LLC

"Shurtan GCC", LLC – 2022.

1. GENERAL INFORMATION.

1.1 Name.

The electrical insulating joint.

1.2 Basis and purpose of goods purchasing.

Basis: Unscheduled application for 2022.

Purpose: To provide electrical disconnection of cathodic protected object from unprotected, grounded or having its own electrochemical protection system, as well as electrical sectioning of pipelines passing in areas affected by stray currents.

1.3 Information about the novelty of the goods.

The delivered goods shall be new, produced not earlier than 2021 (which was not in use, not restored, which have not restored its consumer properties).

1.4 Documents for Development/Fabrication.

As per the manufacturer's normative - technical documentation and design documentation.

2. SCOPE OF USE.

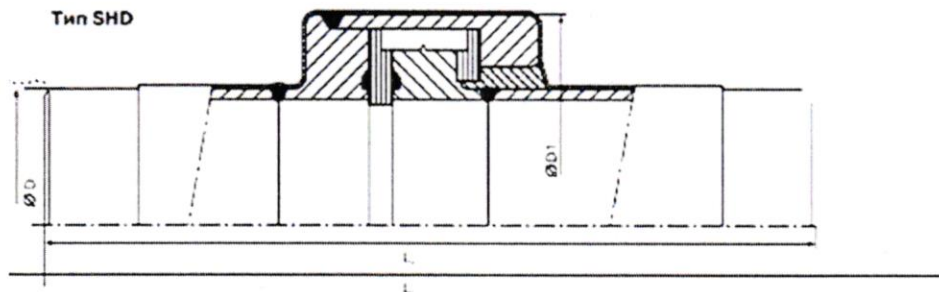
The electrical insulating joint is designed to provide electrical disconnection of the object protected by cathode protection from unprotected, grounded or having its own electrochemical protection system, as well as electrical sectioning of pipelines passing in areas affected by stray currents.

3. OPERATING CONDITIONS.

The electrical insulation joint is designed to create an electrical disconnection of the pipeline system. It allows you to separate protected communication from an unprotected constructions and to partition the highway, which runs at the location of stray currents. The main purpose of their use is to prevent the development of electrochemical corrosion processes.

4. TECHNICAL REQUIREMENTS.

4.1 4.1 Basic Technical Requirements.



Inches	DN (nominal diameter)	PN (design pressure) MPa	SHD Type (welded connection on both sides) Shape 22, DIN 2599			Кол-во комп.
			D	LE	D1	
12	300	3.5	323.9	700		1
20	500	6.4	508.0	1000		1



Design conditions			
DN 300		DN 500	
Operating pressure	3.5 MPa	Operating pressure	6.4 MPa
Transported medium	Pure gas	Transported medium	Pure gas
Operating temperature min/max.	450C	Operating temperature min/max.	450C
Soil temperature	From 50C to 250C	Soil temperature	From 50C to 250C
Installation place	Underground	Installation place	Underground
Material of the connected pipeline	ASTM A106 Gr.B	Material of the connected pipeline	ASTM A106 Gr.B
Outer diameter of the connected pipeline mm	323,9	Outer diameter of the connected pipeline mm	508
Wall thickness of the connected pipeline mm	9,53	Wall thickness of the connected pipeline mm	12,7
Bevel welding of the connection pipes	As per ASME B 16.25	Bevel welding of the connection pipes	As per ASME B 16.25
External Coating	Factory Insulation of Three Layer Reinforced Type	External Coating	Factory Insulation of Three Layer Reinforced Type
Internal Spark Discharge Coating	Internal	Internal Spark Discharge Coating	Internal

4.2 Design requirements, installation and technical requirements.

Before the manufacture of the electrical insulating joint - Manufacturer shall agree on the design drawing with indication of all dimensions, with the Customer.

Flexible and strong welded construction ready for installation.

- preliminary assembly and factory testing.
- Tensile tests (guarantee maximum strength).
- Wear resistant, non-electrically conductive two-component inner coating with thickness of 100 microns will avoid shunting (shorting) in case of dirt settling on the surface of the inner coating.
- External corrosion protection by means of heat shrinkable sleeve according to DIN 30672 or polyurethane (DIN 30671), solvent-free vacuum thermomechanical two-component coating.

4.3 Requirements for factory test.

1. Pneumatic tests 06 ± 0.2 Mpa.
2. Hydraulic tests P (test) = 1.5 P (operating) during 120 min.
3. Hydraulic tests for cyclic fatigue of 40 cycles with pressure from 1.0 MPa to P (test) cycle = P (test) 85% for 15 min.
4. Measurement of electrical resistance at DC voltage of 1000V.
5. Electrical strength test with 5kW. of AC during 1 min.
6. Measurement of thickness and dielectric continuity of the coating.
7. 100% inspection of welded joints.



8. Magnetic powder inspection of connecting pipes' ends.
9. Hydraulic tests before loss of tightness or $P(\text{test}) = 3 P(\text{operating})$.

4.4 Material Requirements.

According to the manufacturer's normative technical documentation and design documentation. Provide material certificates for manufacturing.

4.5 Requirements for dimensions and packing.

The goods shall be packed in an export standard package (closed, sealed, serviceable) of the manufacturer, ensuring its complete safety from all kinds of damage during long-term storage and transportation of products, taking into account several transshipments in transit. Packing shall be designed for handling of cargo by cranes and manually.

The Seller shall be liable for all losses and/or losses arising from improper and/or negligent packing or equipment protection.

Other variants and dimensions of packing shall be subject to additional agreement with the Customer, provided that they are acceptable.

5. REQUIREMENTS FOR ACCEPTANCE AND DELIVERY RULES

5.1 Delivery and Acceptance Procedure

Acceptance and incoming control of the Products according to quantity, quality and dimensions shall be performed 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 incoming quality control, the Supplier shall replace it within the period specified in the contract. Transportation costs for goods replacement shall be borne by the Supplier of the Goods.

5.2 Requirements for the handing over of technical and other documents to the customer during the delivery of goods.

Each participating company shall consider the inclusion of the following information in the technical proposal:

- certificate of conformity of the goods;
- international certificates of ISO 9001, ISO 14001, ISO 45001 (if available);
- Certificates of international, recognized laboratories and test centers;
- invoice (invoice) of the Seller with description of the goods, indication of the quantity, price of the unit of goods and total amount;
- consignment note issued in the name of the consignee with the indication of the departure station and the destination, the name of the Customer, the number and the date of signing of the existing contract;
- Certificate of the country of origin indicating the invoice number and date;
- packing list;
- certificate on the quality of goods issued by the manufacturer;
- product safety passport.

5.3 Equipment Insurance Requirements



The goods shall be insured in accordance with the norms and laws of the Republic of Uzbekistan.

6. WARRANTY REQUIREMENTS

The Supplier shall provide on the Manufacturer's form a document which sets out the conditions for performance of warranty obligations.

Prior to the delivery of the goods, the customer is provided with a detailed drawing for the delivered goods for approval.

Bidders shall submit technical drawings and commercial proposals to the Customer. Production of the goods shall begin after the technical conclusion of the Customer.

Shelf life and warranty period of goods quality is not less than - 2 years.

7. TRANSPORTATION REQUIREMENTS

The goods shall be transported in packaged form on the way by water, road or rail in accordance with the rules for the carriage of goods acting on the corresponding mode of transport and approved in accordance with the established procedure.

8. ENVIRONMENTAL AND SANITARY REQUIREMENTS

The goods must comply with international of quality and environmental safety requirements. The goods shall not cause any damage to the environment.

9. SAFETY REQUIREMENTS

The goods shall be safe during their operation, storage and disposal.

The goods shall comply with the established standards and specifications of the manufacturer and be confirmed by a certificate of factory tests issued by the manufacturer.

10. QUALITY AND CLASSIFICATION REQUIREMENTS

The quality of the goods shall comply with the established standards and specifications of the manufacturer and be confirmed by a certificate of factory tests issued by the manufacturer.

The quality of the product shall ensure that it can be used for its intended purpose without negative consequences.

Certificates (certificate of origin, manufacturer's quality certificate and/or other certificates of international, recognized laboratories and test centers) must be provided.

11. REQUIREMENTS FOR QUANTITY, COMPLETING, AND DELIVERY TIME (PERIODICITY)

Quantity according to item 4.1 of this technical assignment.

The delivery period of the goods is 1 month (30 calendar days) after the conclusion of the contract.

Wagon Delivery/Container Delivery: DAP - Railway station Kengsoy (station code - 732602), "Uzbekistan Temir Yullari", SJSRC.

Transport supply: DAP - Republic of Uzbekistan, Kashkadarya region, Guzar district, Shurtan settlement, 180300.

12. EACH BIDDER SHALL INCLUDE THE FOLLOWING INFORMATION IN THE TECHNICAL PROPOSAL:

The technical proposal submitted shall be in Uzbek or Russian and duplicated in English.

The technical proposal submitted shall have a copy on electronic media (CD/DVD discs or USB media).



The public information about the manufacturer company (company site) shall be provided.

* Note: The developer is responsible for the correctness of filling and blank items.

Developers:

Engineer of the Chief mechanical engineer department:

B. Meiliev

**Lead engineer of The Material and
technical resource management service:**

U. Khidirov

Head of the capital construction service:

B. Muradov

Group leader:

Yu. Holmuradov

Technical supervision engineer of capital construction service:

S. Orzukulov



перевод: Мустафоев Шамарон *SH*