The image looks like a logo, symbol, font, graphics

AI-generated content may be incorrect.

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| **“AGREED”**  **KGC CJSC Vice-chairman**  **of the Management Board**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Mayliev B. B.**  **\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2025** | **“APPROVED”**  **KGC CJSC Underground Mining Manager**    **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Moldoibraev B.T.**  **\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2025** |

**TERMS OF REFERENCE**

for the purchase of rigid friction anchors of the Stiff Split Set Stabilizers bolts type for the underground development of Kumtor Gold Company CJSC

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| **#** | **List of basic data and requirements** | **Basic data and requirements** |
| 1. | Place of delivery | Kumtor Gold Company CJSC. Kyrgyz Republic, Balykchy town, Naryn Highway Street, 9. |
| 2. | General Provisions | The subject of the Terms of Reference is the purchase of rigid friction anchors of the Stiff Split Set Stabilizers bolts type for underground mining operations to strengthen the rocks of the massif, ensuring its safety and stability.  This frictional anchor consists of a tube with a longitudinal slot and a tapered end for easier installation into the borehole. The design includes outer and inner tubes of the same type. At the other end, there is a welded flanged ring component that holds the bearing plate, as well as extending the service life of workings through additional grouting and frictional bonding with the rock. |
| 3. | Customer | Kumtor Gold Company CJSC. |
| 4. | Supplier | It is determined according to the tender. |
| 5. | Purpose | The purpose of purchasing rigid anchors of the **Stiff Split Set Stabilizers bolts** type is to provide reliable and efficient support of mine workings in conditions of moderately stable, unstable, and fractured rocks. The use of anchors is aimed at increasing the stability of rock masses, reducing the risk of collapse, and improving the safety of underground mining. |
| 6. | Subject of purchase and their completeness,  as well as their amount | 1. The set consists of:  * Rigid anchoring type Stiff Split Set Stabilizers bolts – length 3.0 m – 1pc; (*The design includes the same type of outer and inner tube).* * Combined base plate (washer) with a thickness of 6 mm – 1 pc. * Washer dimensions. * #1 - large; Ø 300x280mm * #2 - small; Ø 150x150mm   Note: *Washers must be pre-welded into one set.*   * Cement cartridge – 5 pcs. * Rubber seal -1 pc.  1. In total 7500 pcs. |
| 7. | **Product requirements** | |  |  | | --- | --- | | **Characteristic** | **Value** | | Case Diameter (mm) / Friction Bolt Diameter (mm) | Ø46 – Ø49 | | Borehole diameter (mm) / Hole size (mm) | Ø 41-43 | | Length (m) / Bolt size (m) | 3,0 | | Typical ultimate tensile load (kN) | 100 -160 | | Minimum yield load (kN) | 30-40 | | Material High-strength steel | SUPRAFORM MC 420, and its Russian analogue according to GOST is 09G2S | | Elongation | ≥16% | | Corrosion protection | Galvanized | | Anchor wall thickness (mm) | 3,0-3,5 | | Bolt mass (kg) | ~2.8 kg/m (for Ø46mm) | | Size of combined support washers (mm) | No1 - Large; Ø 300x280  No2 - small; Ø150x150 | | The size of the rubber seal (mm) | - | | Combined support plate (washer) with a thickness of at least (mm) | #1 - Large; Ø 2  #2 - Small Ø 4 | |
| 7.1. | Typical characteristics | The product must be ready for use in underground workings.  Compatible with existing anchor load-testing device *MDX Pull* *Tester Enerpac* based on an electro-hydraulic system, with a maximum loading capacity of 350 kN. |
| 7.2. | Physical and mechanical characteristics of cement cartridge | Work with cement cartridges must be carried out in accordance with the Manufacturer’s instructions, as well as the requirements of GOST 12.3.002-2014 “SSBT. General Safety Requirements for Production Processes.” |
| 8. | Packaging & Transportation | Products must be packaged and protected from mechanical damage.  The packaging must indicate complexity, operating safety instructions, warranty period, shelf life, and storage conditions. All transport documents (waybill, certificates, etc.) must accompany the cargo. |
| 9. | Documentation requirements | The Supplier is obliged to provide the following documents for each batch of supplied material:  Product quality certificate (indicating all characteristics and test results).  Certificate of conformity or declaration of conformity of products to international requirements; |
| 10. | Operating and storage conditions | The products must be suitable for use in my underground workings.  Products should be stored in dry, protected from direct sunlight and heat sources at temperatures from -35°C to +35°C.  Products must have a shelf life from the date of production. |
| 11. | Requirements and criteria for quality assessment of the Supplier | Provide technical specifications and product passport.  Provide operating and storage instructions.  Provide a certificate of commission in accordance with the standards.  The Supplier is responsible for the quality of the products. |
| 12 | Acceptance | Acceptance of funds is carried out jointly with the Customer and Supplier at the Kumtor mine.  The Supplier undertakes to replace defects and defective goods identified after acceptance. |
| 13. | Quality compliance | The Supplier undertakes to provide all necessary information about its product. |
| 14. | Applicability | The Supplier must provide a trial batch of material and jointly carry out pilot tests.  The Supplier undertakes to provide an opinion on the conformity and applicability of the product in the rocks of underground mining of the Kumtor deposit, as well as the effectiveness of the strengthening properties of the rock mass. |
| 15. | Payment terms and delivery times | Payment terms: according to the contract.  Delivery is carried out according to the contract.  Terms of delivery: according to the contract.  Place of delivery: Kyrgyz Republic, Balykchy town, 9 Naryn Highway Street.  Delivery time: discussed at the stage of concluding the contract. |
| 16. | Non-disclosure obligation | The recipient of the documentation undertakes not to transfer, disclose or use the information received related to the products to third parties without the written consent of the copyright holder. |

UG Chief Engineer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Zaichkin P.

UG Area Head Deputy \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_A. Usonakunov

UG Geotechnical engineer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Kuramaev Y.

UG Production Control Coordinator

and Accounting \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Osmonbekov Ch.

**Illustrative photo from the Internet**

The image looks like a stylus, office supplies, stationery, tool

AI-generated content may be incorrect.The image looks like a fire hydrant, red, cylinder

AI-generated content may be incorrect.Rubber seal

The image looks like text, screenshot, line, parallel

AI-generated content may be incorrect.

CEMENT CARTRIDGE

SUPPORT WASHER

INNER ROD

HOLE

OUTER ROD

#2

#1

The image looks like black and white, the design

AI-generated content may be incorrect.