O'ZBEKISTON RESPULIKASI
TASHQI IQTISODIY ALOQALAR,
INVESTITSIYALAR VA SAVDO
VAZIRLIGI

MINISTRY FOR FOREIGN
ECONOMIC RELATIONS,
INVESTMENTS AND TRADE OF THE
REPUBLIC OF UZBEKISTAN

AGENTLIGI **«UZBEKTENDERCONSULTING»** AGENCY

100077 Tashkent, Mustakillik Ave., 107 tel./fax: (99871)2385342, 2682596, e-mail: info@uztender.uz

Information on the bidding for procurement of equipment and commodity and material valuables within the Exploration Work Program for 2012 for needs of the Scientific and Production Center "Precious metals and uranium geology" of the State Enterprise «Navoi MMC»

1. Name of Purchaser organization: State Enterprise «Navoi Mining Metallurgical Complex» (hereinafter referred to as the **«Customer»**).

2. Name of the working body of the Interdepartmental Bidding Commission: Agency «Uzbektenderconsulting» at the Ministry for Foreign Economic Relations, Investments and Trade of the Republic of Uzbekistan (hereinafter referred to as the **«Agency»**). Address: 107, Mustakillik ave., Tashkent, 100077, Republic of Uzbekistan. Telephone: (+998 71) 238-53-42; Fax: (+998 71) 268-25-96; e-mail: info@uztender.uz

3. Type of the bidding - open.

4. The bidding may involve both foreign companies and organizations (non-residents of the Republic of Uzbekistan), and domestic manufacturers (suppliers), including small-scale business entities (hereinafter referred to as "**Applicant**"), that have complied with the conditions required to participate in the bidding and are experienced in supplying relevant volumes of products to be purchased on the bidding basis, as well as those who are manufacturers of the products offered and/or their authorized suppliers (possessing a relevant power of attorney of the manufacturer of the products offered).

5. Domestic manufacturing enterprises shall be offered price preferences in accordance with the applicable laws of the Republic of Uzbekistan.

6. In the qualification selection the following companies and organizations shall not be allowed to participate in the bidding:

- ✓ those at the stage of reorganization, liquidation or bankruptcy;
- ✓ those failed to provided, within the prescribed period, the documents required for qualification selection;
- ✓ those improperly fulfilled undertaken obligations under earlier entered into contracts with the Customer.
- ✓ those established less than 6 months prior to bidding announcement;
- ✓ those at the stage of judicial or arbitration proceedings with the Customer;
- ✓ those not meeting requirements of the bidding commission on commercial and financial indicators.
- ✓ Those registered in offshore zones according to **Appendix №1.**

Deadlines for qualification selection of applicants to participate in the bidding: until opening envelopes with technical part of bids.

7. Subject matter of the bidding:

Subject matter of the bidding, name, quantity, maximum prices of products to be purchased for each separate item are specified in Table №1.

Table №1

Item №	Name of equipment	Maximum price per unit, USD thousand	Quantity
1.	**Bidding №UTC-12/17** «Pneumatic hydroficated drilling rig for bar-rigged on-land drilling with minimum Ø 59 mm, depth of not less than 1000 m.»	483,3	3

2.	**Bidding №UTC-12/18** «Drilling rig with drilling depth of not less than 1500 m»	383,9	3
3.	**Bidding №UTC-12/19** «Self-propelled drilling rigs»		
3.1	Self-propelled rig for combined drilling of not less than 300 m. with good cross-country ability based on motor vehicle	601,2	1
3.2	Self-propelled rig for core drilling of not less than 800 m. with good cross-country ability based on motor vehicle	750,6	1
4.	**Bidding №UTC-12/20** «Set of drilling tools»		
4.1	Bullet complexes with removable core recovery tubes N((CCK)76) to drill wells to the depth of 800m.	240,2	2
4.2	Bullet complexes with removable core recovery tubes N((CCK)76) to drill wells to the depth of 1200m.	278,3	1
5.	**Bidding №UTC-12/21** «Supplemental drilling equipment»		
5.1	Drilling pump with feed of not less than 162 l/min	13,2	9
5.2	Pump piston unit	41,7	10
6.	**Bidding №UTC-12/22** «Accumulator-type electric locomotive» (gage 600 mm)	393,0	2
7.	**Bidding №UTC-12/23** «Scraper-loading hoist»	34,2	11
8.	**Bidding №UTC-12/24** «Tunnelling equipment»		
8.1	Rock loading machine	84,3	3
9.	**Bidding №UTC-12/25** «Laboratory equipment»		
9.1	Roll crushing equipment	9,2	3
9.2	Jaw crushing equipment	15,6	3
9.3	Grinder	10,0	3
9.4	Screen analyzer in a set with sieves	12,5	2
10.	**Bidding №UTC-12/26** «Compressor equipment»		
10.1	Diesel compressor	117,4	3
10.2	Electric compressor	80,7	4
11.	**Bidding №UTC-12/27** «Mobile diesel power plant»	46,6	8
12.	**Bidding №UTC-12/28** «Wheel-mounted tractor»	234,1	2
13.	**Bidding №UTC-12/29** «Excavator»	281,2	2
14.	**Bidding №UTC-12/30** «Bulldozer»	599,5	2
15.	**Bidding №UTC-12/31** «Automobile with cross-country all-metal body»	23,0	5
16.	**Bidding №UTC-12/32** «Software»		
16.1	Mining-and-geological information system for exploration work	29,5	10
16.2	Geological survey data processing and storage system	28,2	10

8. Source of financing: funds of the State budget of the Republic of Uzbekistan.

9. Terms of reference (characteristics) and quantity of products to be purchased according to **Appendix №2.**

10. Bidders may submit bids both for the whole list of equipment and for individual items.

11. Warrantee maintenance period for each type of products to be purchased is specified in the Terms of Reference.

12. Payment terms:

- for foreign suppliers: 100% irrevocable, unconfirmed, documentary letter of credit;

- *for domestic supplier:* advance payment of 15% of the total delivery amount within the agreed time, upon signature of the contract, the remaining 85% shall be paid within 90 banking days upon receipt of products.

14. Currency of payment:

- for foreign suppliers: US dollars, Euro;

- for domestic suppliers: soums of the Republic of Uzbekistan.

15. Delivery terms (according to INCOTERMS-2010):

- for domestic suppliers: DDP Customer warehouse in the city of Navoi, Republic of Uzbekistan;

- for foreign suppliers: CIP railway station «Tinchlik» city of Navoi, Republic of Uzbekistan.

16. delivery period: 90-150 days since opening the letter of credit (for foreign suppliers) or since advance payment (for domestic suppliers).

17. Deadline for acceptance of bids: **until 15-00 o'clock of Tashkent time, on May 28, 2012.**

18. A package of the bidding documents may be acquired by concerned persons from the Agency, upon payment of irrevocable proper amount for each individual bidding and submission of an application to participate in the bidding according to **Appendix №3.** Payment of the cost of the bidding documents shall be made on the basis of the invoice to be issued by the Agency. The cost of the bidding documents for each individual bid is specified in **Table №2.**

Domestic bidders shall pay for the bidding documents in the national currency of the Republic of Uzbekistan (in equivalent) at the exchange rate of the Central Bank on the date of payment.

19. To participate in the bidding an applicant shall make an advance payment (amount of money) securing irrevocability of a bid and compliance with bidding conditions. The amount of the bid bond for each individual bid is specified in **Table №2.**

The advance payment by domestic suppliers shall be made in the national currency of the Republic of Uzbekistan (in equivalent) at the exchange rate of the Central Bank on the date of payment.

20. Bank details of the Agency to make payments to the bidding documents:

in US dollars:
Agency «Uzbektenderconsulting» Uzbekistan, Tashkent
acc. No 20210840803214033007
POJSCB «InFinBank» SWIFT Code: INFBUZ2X
18b, Navoi Str., Tashkent, Uzbekistan
Correspondent beneficiary banks:
- RAIFFEISEN ZENTRALBANK OSTERREICH, SWIFT Code: RZBAATWW,
VIENNA, AUSTRIA, Corr. account: 70-55.085.997/001
- COMMERZBANK AG, SWIFT Code: COBADEFF
GERMANY, Corr. account: 400886729300USD

In Euro:
Agency «Uzbektenderconsulting» Uzbekistan, Tashkent
acc. No 20210978303214033004
POJSCB «InFinBank» SWIFT Code: INFBUZ2X
18b, Navoi Str., Tashkent, Uzbekistan
Correspondent beneficiary banks:
- RAIFFEISEN ZENTRALBANK OSTERREICH, SWIFT Code: RZBAATWW
VIENNA, AUSTRIA, Corr. account: 1-55.085.997/100
- COMMERZBANK AG, SWIFT Code: COBADEFF
GERMANY, Corr. account: 400886729300EUR

in rubles of the Russian Federation:
Agency «Uzbektenderconsulting» Uzbekistan, Tashkent
acc. No 20210643903214033004
POJSCB «InFinBank» SWIFT Code: INFBUZ2X
18b, Navoi Str., Tashkent, Uzbekistan
Correspondent beneficiary banks:
- OJSC "PROMSVYAZBANK", SWIFT Code: PRMSRUMM
MOSCOW, RUSSIA. Corr. account: 30111810310000217501
- JSC "ASIA-INVEST BANK", SWIFT Code: ASIJRUMM
MOSCOW, RUSSIA. Corr. account: 30111810400000002253

in soums of the Republic of Uzbekistan:
Agency «Uzbektenderconsulting» Uzbekistan, Tashkent,

TIN: 202407521, acc. No 20210000503214033006
POJSCB «InFinBank» MFO: 01041
18b, Navoi Str., Tashkent, Uzbekistan.

21. The bids sent by applicants without any advance payment (amount of money) and payment of the cost of the bidding documents shall not be permitted for consideration.

Table №2

Item №	Name of equipment	Cost of bidding documents, US dollars	Amount of advance payment, US dollars
1.	Bidding №UTC-12/17 «Pneumatic hydroficated drilling rig for bar-rigged on-land drilling with minimum Ø 59 mm, depth of not less than 1000 m.»	700	22 000
2.	Bidding №UTC-12/18 «Drilling rig with drilling depth of not less than 1500 m»	550	17 000
3.	Bidding №UTC-12/19 «Self-propelled drilling rigs»	650	20 000
4.	Bidding №UTC-12/20 «Set of drilling tools»	350	12 000
5.	Bidding №UTC-12/21 «Supplemental drilling equipment»	250	8 000
6.	Bidding №UTC-12/22 «Accumulator-type electric locomotive» (gage 600 mm)	400	12 000
7.	Bidding №UTC-12/23 «Scraper-loading hoist»	200	6 000
8.	Bidding №UTC-12/24 «Tunnelling equipment» (Rock loading machine)	100	4 000
9.	Bidding №UTC-12/25 «Laboratory equipment»	50	2 000
10.	Bidding №UTC-12/26 «Compressor equipment»	350	10 000
11.	Bidding №UTC-12/27 «Mobile diesel power plant»	200	6 000
12.	Bidding №UTC-12/28 «Wheel-mounted tractor»	250	7 000
13.	Bidding №UTC-12/29 «Excavator»	250	9 000
14.	Bidding №UTC-12/30 «Bulldozer»	500	18 000
15.	Bidding №UTC-12/31 «Automobile with cross-country all-metal body»	50	2 000
16.	Bidding №UTC-12/32 «Software»	300	9 000

22. A winner of the bidding, when entering into the contract, upon agreement of the parties, shall provide a performance bond in a form of a monetary advance payment to account of the Customer and bank guarantee having correspondent accounts with the bank serving the customer in the amount of 1 to 10 percents of the contract value, securing performance of undertaken contractual obligations.

23. For additional information and explanations on conditions of the bidding to be held one should apply to the Agency according to the above details.

Appendix №1
to bidding information

APPENDIX to Resolution
dated 12.09.2003, GOC N 2003-67,
SCC N 01-02/19-36 and CB N 240-B,
registered by Ministry of Justice on
04.10.2003. N 1281

LIST
of states and territories providing preferential tax treatment and (or) not providing for disclosure and presentation of information when making financial information (offshore zones)

1. Principality of Andorra
2. Antigua and Barbuda
3. Commonwealth of the Bahamas
4. Barbados
5. State of Bahrain
6. Belize
7. State of Brunei Darussalam
8. Republic of Vanuatu
9. Territories depending in the United Kingdom of Great Britain and Northern Ireland:
- Anguilla
- Bermuda Islands
- British Virgin Islands
- Montserrat
- Gibraltar
- British Indian Ocean Territory (Chagos Islands)
- South Georgia and the South Sandwich Islands
- Turks and Caicos Islands
- Cayman Islands
10. Individual administrative units of the United Kingdom of Great Britain and Northern Ireland:
- Channel Islands (Guernsey**,** Jersey, Sark Islands)
- Isle of Man
11. Grenada
12. Republic of Djibouti
13. Dominican Republic
14. Ireland (Dublin, Shannon)
15. Republic of Cyprus
16. People's Republic of China:
- Xianggang (Hongkong)
- Aomin (Macao)
17. Republic of Costa Rica
18. Cook Islands (New Zealand)
19. Republic of Liberia
20. Lebanese Republic
21. Principality of Liechtenstein
22. Grand Duchy of Luxembourg
23. Republic of Mauritius
24. Malaysia (Labuam Island)
25. Maldive Republic
26. Republic of Malta
27. Republic of the Marchall Islands
28. Republic of Nauru
29. Netherlands Antilles
30. Niue (New Zealand)

31. United Arab Emirates (Dubai)
32. Republic of Panama
33. Portuguese Republic (Madiera Island)
34. The Independent State of Samoa
35. Republic of Seychelles
36. Federation of Saint-Kigs and Nevis
37. Saint Lucia
38. Saint Vincent and the Grenadines
39. USA:
- United States Virgin Islands
- Commonwealth of Puerto Rico
- State of Wyoming
- State of Delaware
40. Kingdom of Tonga
41. Sovereign Democratic Republic of Fiji
42. French Republic:
- Kerguelen Island
- French Polynesia
43. Democratic Socialist Republic of Sri Lanka
44. Swiss Confederation:
- Canton of Geneva
- Canton of Neuchatel
- Canton of Friburg
- Canton of Zug
45. Jamaica
46. Republic of Palau (Pacific Ocean)

Appendix №2
to bidding information

TERMS OF REFERENCE

1. Bidding №UTC-12/17 «Pneumatic hydroficated drilling rig for bar-rigged on-land drilling with minimum Ø 59 mm, depth of not less than 1000 m.» in the quantity of 3 pcs.

The terms of reference to supply pneumatic hydroficated drilling rigs for drilling on-land expendable wells with the depth of at least 1000 m on rocks of III-XII drilling category, with final diameter of at least 59 mm (a set with a diesel engine) in the quantity of 3 pieces.

1. Purpose.

Production of high-powered drilling (efficiency coefficient-0,9) of on-land vertical and inclined expendable wells for solid minerals with the depth of at least 1000m with final diameter of at least 59mm practically under all conditions of complicated exploration work with provision of the necessary process mode of working of modern drilling systems (complexes) used to obtain high-quality drilling samples.

2. Technical possibilities.

2.1. There is a requirement for modern hydroficated drilling rigs with movable rotators on chain transmission of the new generation (standard diagram of installation attached). The standard diagram of the drilling rig of the new generation includes: power-unit, machine (frame, feed, rotator with fluid-power motor, floor clamp with fluid-power motor, removable core receiver hoist with fluid-power motor, mast), drilling pump with fluid-power motor, off-vehicle control panel. An option is possible at which machine, power-unit, drilling pump and control panel are on a single pneumatic platform.

2.2. Weight of one standard drilling rig with a movable rotator shall be more than 7 tons.

2.3. Application of different modern drilling systems (complexes) with drilling diameters B, N, H, P.

2.5. Power of diesel engine of the rig shall be within 90 to 160 kW or 118 to 220h.p.

2.6. Lifting capacity of removable core receiver hoist shall be within 50 to 120 kN.

2.7. Provide for a special steel rope (cable) with the length of at least 1000 m to works with the для работы с removable core receiver.

2.8. The rig shall have a relevant mast arrangement of reinforced performance to work with 3-meter drilling pipes.

3. Technological possibilities.

3.1. Continuously-variable ranges of frequency of rotator rotation shall be within 0 to 1500 r/min:

a) low ranges of frequency of rotator rotation shall be 0 to 500 r/min;

b) average ranges of frequency of rotator rotation shall be 500 to 1000 r/min;

c) high ranges of frequency of rotator rotation shall be 1000 to 1500 r/min.

3.2. Feed force of the rotator to the rock destruction tool shall be within 20 to 100 kN.

3.3. Drilling pipe on the fluid-power motor with the continuously-variable system to feed the amount of drill fluid fed shall be within 20 to 140 l/min at the pressure of at least 4 mPa.

3.4. Length of mast feeding (feeder) 2200 mm.

4. Operation conditions.

4.1. Stable operation of the rig in desert and mountainous areas of production of drilling works.

4.2. Stable operation of the rig under difficult climate conditions of production of drilling works (in summer + 50 °C, in winter - 30 °C).

5. Special conditions.

5.1. Performance of commissioning works and practical training of drilling personnel to basics of production of drilling works on the drilling rig to be supplied.

5.2. A supplier shall mandatory provide relevant documentation for the drilling rig (certificates) and an authorized letter from the manufacturer about guarantee provision.

5.3. Provision of specifications in a complete set with the drilling rigs offered taking into account 1 year of warrantee maintenance.

Note. **Don not offer** drilling rigs on the basis of drive rod machines with regular non-hydroficated drilling pipes without the system of smooth regulation of feeding drill fluid down the hole!

2. Bidding №UTC-12/18 «Drilling rig with drilling depth of not less than 1500 m.» in the quantity of 3 pcs.

The terms of reference for procurement of a core drilling rig with drilling depth of not less than 1500 m.

The core drilling rig is designed to drill vertical and inclined expendable wells for solid minerals with the depth of at least 1500m, when applying drilling pipes with the diameter of (42;50;54;63,5mm), with the use of diamond cores and insert bits. Also, the rig is designed to be operated in the open air, all-the-year-around, in macro-climate areas with moderate climate, with the temperature of surrounding air from minus 40°C to plus 40°C.

The rig shall ensure:

-drilling of expendable wells by a rotary system.

- bottomhole cleaning from drilled solids using circulating fluids.
- recovery of core of passable rocks using a removable rectilinear core barrel.

Specifications:

Nominal drilling depth, m	
with final well diameter of 93 mm, not less than	1500
with final well diameter of 59 mm, not less than	2000
Range of rotator inclination, degrees	($80^o \div 90^o$)
Diameter of drilling pipes, mm	42; 50; 54; 63,5
Rotator	
auger system rotation frequency, r/min	
- minimum	85,5; 40*
- maximum	820,7; 1500*
Length of feeding stroke, mm	600
Forcing, developed by rotator cylinders, kN (ts)	
- up	150 (15)
- down	120 (12)
Rotation chuck for boring bars	spring-actuated-hydraulic
Hoisting power, maximum, kN (ts) , not less than	45 (4,5)
Wirerope spooling speed on hoist drum, m/sec	1,055...11,516; 0,46...17,48*
Operating pressure in hydraulic system, MPa (kg/cm2), not less than	6,0 (60)
Power of electric engine of machine, kW, not less than	55
Weight of drilling rig with electric engine, kg, not less than	5100
Dimensions of the drilling rig, mm	
length, not less than	3310
width, not less than	1380
height, not less than	2215

3. Bidding №UTC-12/19 «Self-propelled drilling rigs»

Item 3.1. The terms of reference for procurement of a self-propelled drilling rig to drill at least 300m, with high passability on the basis of motor vehicle in the quantity of 1 pc.:

Self-propelled combination drilling rig with high passability on the basis of motor vehicle is designed to drill stratigraphic test wells, water wells, for exploration of solid minerals and geological engineering survey. Also, the rig is designed for operation in the open air, all-the-year-around, in macro-climate areas with moderate climate, with the temperature of surrounding air from minus 40°C to plus 40°C.

The rig shall ensure:

-drilling of expendable wells by a rotary system.

- bottomhole cleaning from drilled solids using circulating fluids, blowing-down or transportation of broken ground to the surface by augers.

-lifting (pulling down) of drilling mast, its installation at the ordered angle of drilling using the hydraulic system.

Specifications of the self-propelled drilling rig:

Transport base	cross-country chassis
Drive	From chassis engine
Recommended drilling depth, m. (by pipes/auger), not less than	300/50
Recommended drilling diameter, mm.	
with washing/blowing, initial	190
with washing/blowing, final	118
by augers	135
Mast	welded, with stability jacks
Mast height to crown block axis, m.	10,5
mast elevation	by cylinder
Rotator	Hydraulic, back-folding
auger system rotation frequency, r/min.	34,69,103,200,300
rotation torque, maximum, kg/m, not less than	400
tool hoisting speed, m/s.	0,18-1,30+10%
Feeding stroke, m, not less than	6,8
Operating hoist	hydraulically actuated
rope capacity of hoist drum, m, not less than	100
traction power at lower drum wrap, kgs, not less than	3200
speed of descent/lifting, m/s, not less than	2,2/1,5
Dimensions of rig, mm, not more than	
In operating position	9790x2500x9990
In transport position	9670x2500x3560

Additional obligatory requirements:

- compressor (KV 10/10;KV 12/10),
- drilling pipe (NB-32, NB-50),
- welding generator (GD 4004-12),
- drill tool for all types of drilling.

Item 3.2. The terms of reference for procurement of self-propelled drilling rig for core drilling of at least 800m, with high passability on the basis of motor vehicle in the quantity of 1 pc.

The self-propelled core drilling rig based on motor vehicle with high passability is designed to drill vertical and inclined expendable wells for solid minerals with the depth of at least 800m, while using drilling pipes with the diameter B, N, H (~59-89mm), with the application of diamond cores and insert bits. Also, the rig is designed for operation in the open air, all-the-year-around, in macro-climate areas with moderate climate, with the temperature of surrounding air from minus 40°C to plus 40°C.

The rig shall ensure:

-drilling of expendable wells by a rotary system.

- bottomhole cleaning from drilled solids using circulating fluids.

- recovery of core of passable rocks using a removable rectilinear core barrel

- lifting (pulling down) of drilling mast, its installation at the ordered angle of drilling using the hydraulic system.

Specifications of the self-propelled drilling rig:

1.	Maximum hook-load capacity, *kN* (ts), not less than	80 (8,0)
2.	Power of actuating motor of machine, *kW*	30 to 140
3.	Auger system rotation frequency, s-1 (*r/min*), min: not less than	1,45 (87)
4.	Nominal range of rotator inclination, degrees	(45º ÷ 90º)
5.	Drilling pipe productivity, *l /min*, not less than	60
6.	Circulating fluid delivery pressure, *MPa* (*kgs /cm*^{2}), max	3-7
7.	Method of mast lifting	hydraulic
8.	Electric power supply	electric, diesel
9	Mast for directional drilling	90º to -45º

Additional obligatory requirements:

- drilling pipe;
- hoist (steel rope min Ø=7 ÷ 9*mm*, min-1000 m*)*;
- pipe support and pipe screwing device;
- diesel engine power plant -100kW

4. Bidding №UTC-12/20 «Set of drilling tools»

Item 4.1. Bullet complexes with removable rectilinear core barrels N((CCK)76) to drill wells with the depth of up to 800m. (set of components, units and spare parts according to appendix №1);

Item 4.2. Bullet complexes with removable rectilinear core barrels N((CCK)76) to drill wells with the depth of up 1200m. (set of components, units and spare parts according to appendix №2).

Basic requirements:

1. 2 types of complete drilling complexes of N (d=70mm, thickness 5mm) are required:

N type complex ((CCK)76) to drill to the depth of up to 1200 m – 1 set;

N type complex ((CCK)76) to drill to the depth of up to 800 m – 2 sets;

2. The above complexes shall be completed taking into account drilling of at least 8000 running meters.

2.1. Spare parts, tools and consumables for 8000 running meters.

3. A supplier shall mandatory submit documents of origin of N type complex ((CCK)76) and an authorized letter from the manufacturer on provision of a guarantee.

Additional requirements:

1. Basic geological-and-technical conditions of operation of 1200 and 800 m completed N type complexes ((CCK)76):

1.1. Drilling of on-land inclined and vertical wells for rocks of VI – XII drilling categories;

1.2. Abrasive ability of rocks – from moderate to heavily abrasive;

1.3. At the depth from 20 m to 500 m resorptions are possible (from partial to catastrophic);

1.4. At the depth from 50 m to 300 m waterways are possible (from moderate to heavy mineralization).

Appendix №1

Set of components, units of the drilling complex N ((CCK)76) for 800 m.

Names of components and units	Totally in a set, requirement for 1 set	Requirements for 2 sets
Drillpipe N 1,5m (d-70 mm)	5	10
Drillpipe N 3 m (d-70 mm)	266	532
Thread lubricant (bucket 3.8 l), l	5	10
Drillpipe lubricant (bucket 17 kg), kg	8	16
Outside barrel key N ((CCK)76)	4	8
Tap ф 70 (right)	2	4
Rotatable drill pipe 3,0 m--	2	4
Core recovery tube in a complete set 3,0	2	4
Top of core recovery tube	2	4
Core recovery tube cap in assembly	5	10
Thrust bearing	5	10
Drive rod centralizer	5	10
Suspension bearing	5	10
Oil cup	30	60
Corer friction ring	10	10
Corer ring	100	200
Core-catcher case	20	40
Pressure ring	10	10
Inner barrel stabilizer	15	30
Outside barrel 3,0 m	6	12
Hard outside barrel 3,0m	6	12
Outside barrel 1,5m	6	12
Inner barrel 3,0m	6	12
Inner barrel 1,5 m	2	4
Connector of inner barrels	2	4
Reamer shall	5	10
Reducing coupling	5	10
Overshot assembled	2	4
Bearing box	5	10
Reducing coupling from seal gland (drive rod) to drillpipe	3	6
Universal seal gland	3	6
Seal	3	6
O-ring.	10	20
Transverse bearing	5	10
Drive rod tube	2	4
Thrust bearing	5	10
Corner adapter.	2	4
Reducing coupling from seal gland to drillpipe	3	6
Standard hoisting plug 4500 kg	2	4
Hoisting plug bearing box	2	4
Hoisting plug with lifting capacity of 13500kg	2	4
Hoisting plug bearing box with lifting capacity of 13500 kg	2	4
Reducing coupling from hoisting plug to drillpipe	3	6
Priming pump	2	4
Priming pump hose	2	4
Priming pump bushing	5	10
Thread brush	2	4

Bearing mount assembly	3	6
Inner barrel key	3	6
Drillpipe key	3	6
Outside barrel key	3	6
Reducing coupling with external thread to tap	2	4
Drill pipe cutter	1	2
Drill pipe cutter incisors	6	12
Reducing coupling with external thread BQ to pipe cutter (blank part)	3	6
Dog (for copper tubes)	1	2
Oval copper tubes	20	40

Spare parts to drilling complex N ((СКК)76) for 800 *m*

Names of components and units	Totally in a set, requirement for 1 set	Requirements for 2 sets
Cap spring	5	10
Cap plunger piston	5	10
Lock pin d. 11x25 mm	10	20
Lock pin d. 13x51 mm	10	20
Bolt	10	20
Arresting device prong	5	10
Arresting device	20	40
Rein	20	40
Lock pin d. 13x38 mm	10	20
Steel ball d 22 mm	5	10
Seating indicator plug	10	20
Landing ring	5	10
Nut	5	10
Drive rod	5	10
Alarm device gasket, firm	20	40
Alarm device gasket, soft	40	80
Selflocking nut	5	10
Fluid detention plug	5	10
Fluid detention spring, weak	5	10
Fluid detention spring, medium	5	10
Castle nut	5	10
Cotter	10	20
Nut	5	10
Latch spring	5	10
Overshot arresting device	10	20
Arresting device toe	5	10
Lock pin d 6x44 m	5	10
Fastening screw	5	10
Locking washer	10	20
Retainer ring	10	20

Appendix №2

Set of components, units of drilling complex N ((ССК)76) for 1200 m

Name of components and units	Total complex requirement for 1 set
Drillpipe N 1,5m (d-70 mm)	5
Drillpipe N 3 m (d-70 mm)	400
Thread lubricant (bucket 3.8 l), l	5
Drillpipe lubricant (bucket 17 kg), kg	8
Outside barrel key N ((ССК)76)	4
Tap ф 70 (right)	2
Rotatable drill pipe 3,0 m	2
Core recovery tube in a complete set 3,0	2
Top core recovery tube	2
Core recovery tube cap in assembly	5
Thrust bearing	5
Drive rod centralizer	5
Suspension bearing	5
Self-locking nut	5
Oil cup	30
Corer friction ring	10
Corer ring	100
Core-catcher case	20
Pressure ring	10
Inner barrel stabilizer	15
Inner barrel 3,0 m	6
Hard outside barrel 3,0m	6
outside barrel 1,5m	6
Inner barrel 3,0m	6
Inner barrel 1,5 m	2
Connector of inner barrels	2
Reamer shall	5
Reducing coupling	5
Overshot assembled	2
Bearing box	5
Reducing coupling from seal gland (drive rod) to drillpipe	3
Universal seal gland	3
Seal	3
O-ring.	10
Transverse bearing	5
Drive rod tube	2
Thrust bearing	5
Corner adapter.	2
Reducing coupling from seal gland to drillpipe	3
Standard hoisting plug 4500 kg	2
Hoisting plug bearing box	2
Hoisting plug with lifting capacity of 13500kg	2
Hoisting plug bearing box with lifting capacity of 13500 kg	2
Reducing coupling from hoisting plug to drillpipe	3
Priming pump	2
Priming pump hose	2

Priming pump bushing	5
Thread brush	2
Bearing mount assembly	3
Inner barrel key	3
Drillpipe key	3
Inner barrel key	3
Reducing coupling with external thread to tap	2
Drill pipe cutter	1
Drill pipe cutter incisors	6
Reducing coupling with external thread BQ to pipe cutter (blank part)	3
Dog (for copper tubes)	1
Oval copper tubes	20

Spare parts to drilling complex N ((ССК)76) for 1200 m

Name of components and units	Total complex requirement for 1 set
Cap spring	5
Cap plunger piston	5
Lock pin d. 11x25 mm	10
Lock pin d. 13x51 mm	10
Bolt	10
Arresting device prong	5
Arresting device	20
Rein	20
Lock pin d. 13x38 mm	10
Steel ball d 22 mm	5
Seating indicator plug	10
Landing ring	5
Nut	5
Drive rod	5
Alarm device gasket, firm	20
Alarm device gasket, soft	40
Fluid detention plug	5
Fluid detention spring, weak	5
Fluid detention spring, medium	5
Castle nut	5
Cotter	10
Nut	5
Latch spring	5
Overshot arresting device	10
Arresting device toe	5
Lock pin d 6x44 m	5
Fastening screw	5
Locking washer	10
Retainer ring	10

5. Bidding №UTC-12/21 «Supplementary drilling equipment»

Item 5.1. Drilling pipe with feeding of at least 162 l/min in the quantity of 9 pcs.:

The drilling pipe is designed to discharge circulating fluid into a well in order to wash the same in exploratory drilling performed by rotary and rotary-jar method.

The pump is designed to operate in climate conditions at the temperature of -50ºC to +40ºC.

Clay mud, emulsion and water may be used circulating fluid.

Drilling pipe specifications:

Item №	**Parameters**	**Unit of measurement**	**Values**
1	Feeding with giving with plunger piston from 60 to 75mm (±10%), not less than	*l/min*	162
2	Maximum output pressure with plunger piston 70 mm, not less than	*MPa (kgs/cm^2)*	7 (70)
3	Vacuum gage suction lift, *m.water.coulumn*. (output pressure), not less than	*kPa (kgs/cm^2)*	50 (0,5)
4	Weight, max	*kg*	700
5	Drive electric motor		
6	- power	*kW*	5÷20
7	- rotary speed	*r/min*	1200÷1700
8	- voltage	*V*	220/380
9	Average life until first overhaul, not less than	*hour*	6500

A set of tools to maintain the unit including spare parts of rapid wear (pistons, cylinder liners, rods, valves, etc.) ensuring operation within the year.

Item 5.2. Pumping piston unit in the quantity of 10 sets:

Pumping piston unit is designed to discharge circulating fluid in drilling exploratory wells.

1. Drill pipe characteristics:

- Pressure limit 4 MPa;
- maximum volumetric feed – 600 l/min;
- input power, not more than – 32 kW.

2. Pump unit composition:

- drill piston pump, horizontal, with renewable liners;
- electric engine;
- starting equipment;
- frame, where pump and electric engine installed;
- multiple V-belt drive;
- enclosure of multiple V-belt drive.

The set of pumping piston units shall include a continuously controlled electric drive allowing to continuously change pumping capacity within from 15-20 l/min to maximum.

Step-by-step feeding regulation from minimum 15-20 l/min shall be allowed through installation of a speed box.

3. A set of tools to maintain the unit including spare parts of rapid wear (pistons, cylinder liners, rods, valves, etc.) ensuring operation within the year.

4. Operation in desert areas in complicated climate conditions (in summer +50 C, in winter -30 C).

6. Bidding №UTC-12/22 «Accumulator type electric locomotive» (gage 600 мм) in the quantity of 2 pcs.:

The accumulator type electric locomotive with 600 mm gage is designed for transportation on underground mine tunnels of mined rock and process materials. Also, the accumulator type electric locomotive is designed for operation in the open air, all-the-year-around, in macro-climate areas with moderate climate, with the temperature of surrounding air from minus 40°C to plus 40°C.

Specifications of accumulator type electric locomotive:

Adhesive weight, N, not less than	45000
Traction engine:	
voltage, V	80
Power of one engine, kW, not less than	6
Number of engines	2
Traction power in hourly mode, N	7500
Travelling speed in hourly mode, km/h, not less than	6,44
Accumulator:	
type	66ТЖН-350
electric charge, Кл*10^4	108
reducer	-
slowdown	-
rigid wheel base, mm	900
clearance, mm	95
Dimensions, not more than:	
Length	3300
Width	1000
Height	1350
Track gage, mm	600
Minimum negotiation radius, mm	900
Weight, kg, not more than	7000

7. Bidding №UTC-12/23 «Scraper-loading hoist» in the quantity of 11 pcs.

The scraper-loading hoist is designed for transportation of broken-up mined rock in underground mine tunnels all-the-year-around, in macro-climate areas with moderate climate, with the temperature of surrounding air from minus 40°C to plus 40°C.

Specifications of scraper-loading hoist:

Traction power, kgs, not less than	1600
Rope speed, m/s, not less than:	
operating	1,26
vacant	1,74
Rope diameter, mm, not less than	14
Drum capacity, m, not less than	60
Engine capacity, kW, not less than	15-30
Weight without rope, kg, not less than	760
Overall dimensions, mm, not less than	1550×650×632

8. Bidding №UTC-12/24 «Tunnelling equipment»

Item 8.1. Rock loading machine in the quantity of 3 pcs.:

The machine will be used to load blows up mined rock of any strength onto mine cars, in drifting horizontal mine tunnels on developed underground mineral deposits.

The machine shall make loading of mined rock with size of chumps up to 30 mm in diggings with the height of at least 2,3m from the rail head.

The main units are: chassis, rotating platform, elevation reducer, actuating device, a case with control panel installed thereon, steering device and spray system.

The machine shall be driven by two air-powered motors.

Specifications:

Technical efficiency, m3·min, not less than	1,25*
Minimum bucket capacity, m3, not less than	0,25
Minimum grasp width , mm	2200
Minimum loading height , mm	1300
Gage, mm	600
Drive	pneumatic
Minimum power of air-powered motors, kW	20*
Maximum overall dimensions, mm. length width transport height maximum height	 3000 1150 1500 2250

Note: *at compressed air pressure of 0,5 MPa

9. Bidding №UTC-12/25 «Laboratory equipment»

Item 9.1. Roll crushing equipment in the quantity of 3 pcs.:

The crushing equipment is designed for fine crushing of average strength fragile materials. It is mainly used to prepare mining and nonmetallic feed for research before the operations on breaking or deterioration of samples.

Specifications:

Roll dimensions, mm	
Diameter	200
Length	125
Maximum size of chump of loaded materials, mm	12
Width of output slit, mm	0,5 - 8,0
Efficiency (depending on the size of output slit and features of material processed), t/h	Up to 0,8
Power of electric engine, kW	2x0,55
Overall dimensions, mm	
Length	640
Width	465
Height	790
Weight, kg	210

Item 9.2. Jaw crushing equipment in the quantity of 3 pcs.:

The crushing equipment is designed for crushing average strength fragile materials. It is used in operations on crushing mined rocks, construction materials.

Specifications:

Feed opening, mm, not more than	
Width	120
Length	200
Size of initial feeding, mm, not more than	100
Size of relieve slot, mm	5...25
Size of crushed products, mm	10...35
Efficiency with relieve slot of 10 mm, not more than, kg/h	1000
Power of engine, kW	3,0
Overall dimensions, mm, not more than	
Length	1490
Width	600
Height	910
Weight, kg, not more than	510

Item 9.3. Grinder in the quantity of 3 pcs.:

The grinder is designed for breaking (grinding) average strength fragile materials. It is mainly applied in the process of preparation of samples of mining and nonmetallic feed for chemical and mineralogical analysis of material composition.

Specifications of grinder:

Disc diameter, mm	175
Throat size, mm	0...5
Size of initial feeding, mm, not more than	6
Size of finished products, mm	0,08...5
Grinder efficiency, kg/h	30...100
Disc rotary speed, r/min.	920
Power of engine, kW	1,5
Overall dimensions, mm, not more than	
Length	800
Width	430
Height	930
Weight, kg, not more than	120

Item 9.4. Screen analyzer in a set with sieves in the quantity of 2 sets:

Maximum size of particles of dispersed material, mm	8
Number of sieves, pcs.	1-6
Sieve diameter, mm	200
Chamber width, mm	300
Sieve height, mm.	38/50
Dimensions of sieve cells, applied in sieves, mm	0,04...2.8
Amplitude (semispan) of oscillation of drive table (depending on weight, installed on the table) mm	0,25...1,5
Frequency of rotation of motor shaft at frequency of alternating-current of 50Hz, r/min	1500
Power of electric engine, W	25
Number of electric engines, pc.	2
Power supply voltage of electric engines, V	220
Power of drive, kW	2x0,04
Overall dimensions, mm, not more than	
Length	385
Width	350
Height	610
Weight, kg	26

Model sieves:

Cell size, mm	Material of sieve
1) Gauze sieves with square cells under GOST 3826 (stainless steel), TU 14-4-507 (stainless steel), GOST 6613 (nonferrous metal):	
0,04	B, S
0,045	B
0,05	B
0,056	B, S
0,063	B
0,064	S

0,071	Br, S
0,08	Br, S
0,09	Br
0,094	S
0,1	Br
0,112	Br
0,125	Br
0,14	Br, S
0,16	Br, S
0,18	Br
0,2	Br, S
0,25	Br, S
0,28	Br, S
0,315	Br, S
0,355	Br, S
0,4	Br, S
0,45	Br, S
0,5	Br, S
0,56	Br
0,63	Br, S
0,7	Br, S
0,8	Br, S
0,9	Br, S
1,0	Br, S
1,1	S
1,2	S
1,25	Br, S
1,4	Br, S

1,5	S
1,6	Br, S
1,8	S
2,0	Br, S
2,2	Br, S
2,8	S
3,2	S
3,5	S
4,0	S

2) Perforated sheets with square holes:

5,0	S
6,0	S
8,0	S
10,0	S

3) Perforated sheets with round holes:

0,8	S
1,5	S
2,0	S
2,5	S
3,0	S
4,0	S
5,0	S
6,0	S
7,0	S
7,5	S
10,0	S

Sieves for screen analyzers are additional equipment.

S — Stainless steel

Br — Brass

B — Bronze

10. Bidding №UTC-12/26 «Compressor equipment»

Item 10.1. Diesel compressor in the quantity of 3 pcs.:

Major technical requirements:

To obtain authentic information on testing for underground waters inflow by actuating aquiferous stratum compressors are required for average depths of wells up to 500-600 m.

The compressor shall be in a form of primary power plant of diesel type, cooling system – oil, is able to move – can be pull-type (*two or single-axis*) or towed.

The value of produced operating pressure of compressed air, *bar*, not less than – 12.

Delivery capacity, m^3/min not less than – 25.

Diesel power shall ensure uninterrupted compressor operations.

Additional requirements:

1. The compressor shall differ with length of life and reliability – specified service life until overhaul shall be not less than 28000 hours.

2. The compressor shall be designed for operation at the environmental temperature of the air from - 35ºC to + 50ºC, in mountainous operation conditions with relatively rarefied air space.

Item 10.2. Electric compressor in the quantity of 4 pcs.:

Major technical requirements:

The compressor shall be equipped with the system of automated efficiency regulation, automated unloading in start-up and shutdown, automated emergency shutdown control.

Efficiency, m^3/min, not less than	20
Excess pressure, kgs/cm^2, not less than	8
Drive power, *kW*	Up to 132
Cooling water mass flow (m^3/h, not less than):	12
Mass flow of oil to lubricate cylinders and glands, *g/h*, not more than	50
Compressor cylinder cooling	liquid

Additional requirements (*desirable*):

Cylinder lubricating shall be performed – from the multiplunger pump. The compressor construction shall be convenient for installation and replacement of high-wear parts without application of special tools and devices. Emergency shutdown of the compressor shall be accompanied by sound and light signals.

11. Bidding №UTC-12/27 «Mobile diesel power plant» in the quantity of 8 pcs.

ASSIGNMENT

The diesel-engine driven generator with the capacity of 100 kW to be applied as a major power supply source for industrial consumers.

SCOPE OF APPLICATION

The diesel-engine driven generator for drilling rigs and fields.

SPECIFICATIONS

Major technical features:

1. The diesel-engine driven generator shall ensure continuous and uninterrupted power supply to industrial consumers at varying load conditions and include the following:

1.1. Control panel of the generator, ensuring manual launching of the generator with generator and engine control panels, in particular:

a) Voltage meter to control voltage of all the three generator phases;

b) Amperometer to control current of all the three generator phases;

c) Frequency meter;

d) Machine hour counter;

e) Oil-pressure sensor;

f) Engine temperature sensor;

g) DC system voltage meter;

h) Lunching control switch;

i) Emergency damping button;

j) Button to check emergency lamps;

1.2. Alarm control and generator protection unit with individual alarm lamps for:

a) Low pressure in engine lubrication system;

b) High engine temperature;

c) Launch failure;

d) Overspeed;

The generator plant shall be equipped with a built-in fuel tank, a capacity sufficient for operation of the generator plant at full load for at least 8 hours.

The delivery set shall include tools for generator plant maintenance, a set of spare parts and consumables for two years of operation.

Summary table of major parameters of generator plants 100 kW.

Name of parameters	Values
Generator plant model	3x phased
Nominal electric power (kW)	100
Nominal voltage (V)	400/230
Voltage deviation, %	0,5
Nominal frequency (Hz)	50
Engine power, kW	not less than 160
Oil consumption through burning (g/kW hour)	0,48

Brake Specific Fuel Consumption, not more than 100% 75% 50%	34 26 18
Run-up of engine	electric
Engine protection system on temperature	as one set
Engine protection system on oil pressure	as one set
Protection system on overspeed	as one set
Life between overhauls (until the first rebuilding /overhaul) machine hours	12000/30000
Technical documents	In Russian
Aggregate execution	
Stationary, open type	
In-frame, on damping subs	
Fuel tank is built in the frame	
Manual electrostatics device	
Control and automatic equipment board	
Control and protection system	
Dampener	
Set of accumulators	

12. Bidding №UTC-12/28 «Wheel-mounted tractor» in the quantity of 2 pcs.

The wheel-mounted tractor with high passability is designed to perform works on transportation of drilling and supplementary equipment. Also, the tractor is designed for operation in the open air, all-the-year-around, in macro-climate areas with moderate climate, with the temperature of surrounding air from minus 40°C to plus 40°C.

Technical data of the wheel-mounted tractor:

1. Engine

1) Engine capacity, kW (h.p.), not less than - 220 (300)

2) Traveling speed, km/h – transport up to 30, operating up to 12

2. Transmission

1) Gearbox unit – Mechanical with constant-mesh gears and hydraulic transmission shift without power current rip at each mode.

2) Number of transmissions - forward drive - 16, backward drive - 8

3) Shaft drives – Open type needle bearings.

4) Tires - FD-12 28.1 R26

5) Steering system - Hydrostatic steering system. Adjustable steering column.

6) Breaking system - Dual-braking, pedal brakes are pneumatically controlled, of drum type, parking brake - with pneumo-spring brake.

7) Fuel tank capacity - 2x320 l

8) Cabin - all-metal, two-seat, sealed with noise and heat insulation, with built-in safety frame, protecting an operator from machine turnover (ROPS) and falling down objects (FOPS).

3. Overall dimensions

1) Length without lift-type system, mm – 6550*50

2) Length with an agricultural hanging, mm – 7100*50

3) Width, mm – 2850*50

4) Height, mm – 3550*50

5) Weight without operating equipment (constructive), kg - 11450*2,5%

6) Weight with an agricultural hanging, kg – 12600*2,5%

13. Bidding №UTC-12/29 «Excavator» in the quantity of 2 pcs.

The excavator is designed to perform works of trenching and cleaning without preliminary loosening of mined rocks. Also, the excavator is designed for operation in the open air, all-the-year-around, in macro-climate areas with moderate climate, with the temperature of surrounding air from minus 40°C to plus 40°C.

Specifications of excavator:

Operating weight, t.	18
Overall dimensions in transport position, mm:	
- length	9550
- width	2500
- height	3680
Maximum digging depth, m	Up to 5,8
Maximum digging radius, m	Up to 9,2
Loading height, м	Up to 6,5
Bucket capacity, nominal, m3	0,8-1,0
Maximum frequency of platform rotation, r/min.	12
Maximum digging force, kN (ts)	111 (11,1)
Bucket capacity, m3	0,85; 1,05
Width in case of operation on folding-back supports, m	3,7
Excavator traveling speed, km/h	
- I-st step	8
- II-nd step	25
Admissible in operation inclination, radian (o)	0,09(5o)
Gradeability of hard dry tract, radian (o)	0,35(20o)
Engine	
Power (nominal), kW (h.p)	110 (150)
Rotary speed of output shaft (at nominal power), r/min.	1700
Electric equipment	
Voltage, V	24
Accumulator, pc.	2
Generator, pc.	1
Starter, pc.	1
Undercarriage	
Type - wheeled, bridge, with two drive axles, drive axle can be controlled	
Base, m	2,8
Gage, m	1,9
Clearance, m	0,34
Dual-slop wheels, tubular	

Tires, type - tubular, radial, 10,00R-20(280R-508), pc.	8
Tire pressure, MPa (kgs/cm2)	0,79...0,84 (7,9...8,4)
Built-in operating equipment of excavator	
Pump unit	
Water supply, m3/hour	100
Total pressure, m	20

14. Bidding №UTC-12/30 «Bulldozer» in the quantity of 2 pcs.

1. Description

Crawler bulldozer with hydraulic power control

2. Technical specifications

Description	Unit of measurement	Value
Bulldozer type		Crawler Bulldozer with hydraulic power control
Assignment		The bulldozer is designed for development of I-IV category non-frozen ground, as well as preliminary broken rock and frozen ground within the temperature range from plus 40 ºC to minus 20 ºC.
Engine power, rotary speed	kW (r/min)	110-150 1800-2000
Fuel type		diesel
Weight of mechanism, not more than	tn	20,0
Blade type		Semispherical
Blade dimensions, not less than - length - height	mm	 3100 1150
Mechanism control		hydraulic
Type of movement		Crawler type
Track width, not less than	mm	500,0
Number of road wheels (on each side), not less than	pc.	6
Number of return rollers (on each side), not less than	pc.	2
Height of blade lift	mm	800,0-1100,0
Depth of blade burial	mm	400,0-600,0
Blade tilt		to the right, neutral, to the left
Cramp angle, not less than	degree	±7
Blade capacity, not less than	m^3	4,3-4,8
Cutting angle	degree	55,0-60,0
Climb grade	degree	30
Hydraulic system		For operation bulldozers should be filled with oil, which viscosity will be maintained at the temperature plus 40 ºC to minus 40 ºC
Cooling system		For operation bulldozers should be filled with cooling fluid - antifreeze agent, not freezing at the temperature minus 40 ºC
Bulldozer cabin		Should be equipped with air conditioner for operation in hot weather conditions, heating system for operation in winter period, a digital display

		ensuring obtaining information on bulldozer operation in Russian.

Bulldozer operation requires:

- the hydraulic system shall be filled with oil which viscosity will be maintained at the temperature plus 40 ºC to minus 40 ºC;

- the cooling system shall be filled with cooling fluid, not freezing at the temperature minus 40 ºC.

Each bulldozer shall be certified in accordance with International standards.

Bulldozer cabins shall be thermo- and noise-isolated.

3. Transmission, chassis

Gearbox unit – mechanical, with switching four steps without power current rip within each of four modes. Chassis is hard.

4. Tools

A standard set of tools for repair of the delivered mechanism in accordance with the operation manual.

5. Warrantee

A manufacturer shall provide warrantee for one year or 2000 machine hours of operation of bulldozers.

6. Documents and manual required in delivery of products

Operation and maintenance manual until the first overhaul (8000 machine hours), operator's manual in Uzbek or Russian and a catalogue of spare parts, operating drawings.

7. Commissioning

A supplier shall perform commissioning of the delivered equipment in accordance with the plan of implementation agreed upon by the parties. Commissioning of a final user shall be completed not later than three weeks since the date of notice to the Buyer of delivery of machines to the final user.

8. Personnel training

A supplier shall train at least one operator of the final user. Training shall be provided during commissioning of machines and shall include operation on the machines, maintenance and small repairs. Training shall be in Russian or Uzbek.

15. Bidding №UTC-12/31 «Automobile with cross-country all-metal body» in the quantity of 5 pcs.

Major requirements:

Dual-purpose vehicles with cross-country with an engine of not less than 100 h.p. capacity and volume of at least 2450 cm3 required which is easy in operation, reliable, cost-effective.

Major technical requirements:

1	Body type	- cargo-and-passenger, with double cabin
2	Number of seats	- not less than 7
3	Type of chairs	- automobile seats or collapsible seats
4	Saloon	- heated, lighting
5	Engine	- gasoline carburettor or diesel
6	Power, kW (h.p.)	- not less than 80 (100)
7	Operating volume, cm^3	- not less than 2450
8	Wheel arrangement	- 4×4
9	Road clearance, mm	- not less than 220,0
10	Fordable depth, mm	- not less than 450
11	Fuel tank capacity, l	- not less than 75
12	Mechanical gearbox	- not less than 4-stepped
13	Braking system	- dual-braking, with vacuum booster, drum and/or disc-type

Additional requirements:

1.The automobile will be used at facilities with impassibility conditions, located in desert and mountainous areas, in operation from 40 to +50ºC.

2. The automobile shall be completed with a spare wheel, a hand screw, and keys for small current repairs.

16. Bidding №UTC-12/32 «Software»

Item 16.1. Mining-and-geological information system for exploration works in the quantity of 10 pcs.:

A possibility of 3D viewing
Compatibility with different formats of other systems
A possibility of graphical interpretation of wells and other data sources
A possibility of visualization of all types of data
Availability of tools for static processing and transformation of coordinate systems
A possibility to create processes for presentation of information not requiring special technical skills using animation of “flight” or VRML scenes
A possibility to use built-in models allowing to create a drawing within several seconds
A possibility of applying several coordinate systems
A possibility of viewing horizontal sections of cuts
A possibility to make calculations on wells, including various composite options
A possibility to make statistic and geostatic calculations
An available possibility to work with angular diagrams and process structural drilling data, 3D contours
A possibility to model digital surfaces and their calculation, including edge-point linking and volume calculation
An availability of the functional allowing to create simple of complicated skeleton models using different data sources, with their instant verification
A possibility to make reports on tonnage and contents, using data on wells or block model
An availability of tools for the processes of crossover of two or more skeletons, or picking up skeleton conjunction options
A possibility to create contours based on skeleton models, using cuts or skeleton section by consecutive intersections in any direction
A possibility to change skeleton coordinates through rotation, dimensional scaling, translation or conversion of geographic values
A possibility of calculation of points of crossover of wells and skeleton
A possibility to create optimal contours of pits due to calculation of the most cost-effective contours of the pit taking into account metal prices, losses and attenuation, processing data and other costs
A possibility of analysis and discounting inserted covers of pits taking into account discount rates, capital investments and output rate of the factory and extraction, and taking into account ore stock piles
A possibility of making reports on block models
An availability of tools on pit optimization, considering variable values of angles of slope, loss and attenuation coefficients and costs of contaminated soil remediation
An availability of the system of evaluation of extracted reserves
A possibility of creating block models and interpolation of contents by different modern methods
An availability of tools by classification, defining quantity, and reports on contents and geological ore reserves
A possibility to build and model any types of variograms
An availability of processes allowing to unwind, straighten block models of complicated structures of ore bodies
A possibility of using Methods of interpolation: back distances, reverse and poly-indicator Kriging, and a possibility to apply a polygonal method
An availability of supporting the method of building plane polygons for extremely simple and extremely complicated deposits
An availability of tools for modeling bedded deposits

Item 16.2. Geological survey data processing and storage system in the quantity of 10 pcs.:

The geological survey data processing and storage system is designed for the system controlling geologic exploration data, ensuring collection, verification, storage and access to digital information from different sources.

All incoming information on wells, and ditches shall be reflected in tabular and graphical form.

At that, there should be a possibility to use lithological codes, hatching, descriptive fields, histograms and diagrams.

There should be a possibility to review and establish interdependence between different data categories. An availability of fully adjustable verification procedures.

A possibility to organize integrated management. An availability of security facilities on the basis of lists of users and groups in OS Windows. An availability of Visual request tools, a possibility of providing plans, import and export. Software medium shall support a modular architecture – for a possibility to select the necessary and optimal quantity functional.

The following functional possibilities shall be required:

-Automated data verification at input point.

-Automatic data loading into local, regional and corporate databases.

-A possibility of synchronization of corporate data with regional ones.

-A possibility of configuration of permits for official duties and upon location.

-Advanced possibilities of reporting, being web-applications.

- Advanced possibilities of distribution of reports– to subscribers and under schedule.

-Standardization of management of operating data flows.

-A possibility of integration with MICROMINE without data loss.

-A possibility of integration with GIS, with software including a function of three dimension modeling and other applications.

-Safe control over group access.

-Special training and documentation system for each client.

-Access to Global support.

Appendix №3
to bidding information

(on company letterhead)

To: Agency «Uzbektenderconsulting»

Application for participation in bidding _____
(indicate subject matter and number of bidding)

from: _____

(indicate full name of an applicant, filing an application)

1. Having considered and examined the information on the bidding for delivery of (subject matter of the bidding) we, the company _____, intend to participate in the bidding announced.

2. Upon payment of the cost of the bidding documents, we request you to send the bidding documents to the address: _____or transfer to our authorized representative (indicate position, full name and passport data of the authorized representative).

3. Executed on «___» _____ 2012.

4. Full name, address of an applicant to participate in the bidding, contact phone numbers, e-mail, contact person and bank details:

_____
_____

_____

(full name, position and signature of the authorized person)

Seal.