

International bidding for
mechanical and electrical
products
Tender documents

(Volume 2)

Project Name: X-ray Fluorescence Spectrometer

Procurement Project

Tenderer: Tianjin heavy industries research&development
co., ltd.

Tender Number: 5256-264TGJTB1166

Tianjin Jiantong Engineering Consulting Co., Ltd

July 2026

Cataloging

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Chapter 5 Invitation to Bid

Date: July 1, 2026

Tender Number: 5256-264TGJTB1166

Project Name: Procurement Project of X-ray Fluorescence Spectrometer

Tianjin Jiantong Engineering Tendering & Consulting Co., Ltd. has been entrusted by Tianjin heavy industries research&development co.,ltd.. to conduct an international open competitive tender for the following products and services. Tender announcement is issued on July 1, 2026. The tender will be conducted in the traditional way and qualified bidders are invited to participate in the tender.

1. Tender Conditions

1.1 Project Overview: Tianjin heavy industries research&development co.,ltd.. pre-purchases one set of X-ray fluorescence spectrometer.

1.2 Availability of funds or availability of funding sources: Funds have been secured.

1.3 Statement that the project is ready for tendering: The project is ready for tendering.

2. Tender Content

2.1 Project Implementation Location: 20 Haixing Street, Tianjin Economic-Technological Development Area

2.2 List of tender products:

Serial Number	Product Name	Quantity	Delivery date	Place of Delivery	Notes
1	X-ray fluorescence spectrometer procurement project	1 set	Six months after the contract is signed	CIP Tianjin	

2.3 Brief technical specifications:

2.3.1 This equipment includes the main unit, analysis software, regulated power supply, cooling circulating water machine, consumables, auxiliary equipment, etc. Measurement range: boron (5B) to uranium (92U) elements using wavelength dispersive sequential scanning. Content range: 0.0001% to 100%.

2.3.2 The equipment shall be manufactured in accordance with national standard, American standard, European standard, ISO and other test and instrument standards. The measurement units of the instruments and meters shall be international system units and have metrological qualification certificates. Real-time data shall be displayed in international system units during the test process. The metrological verification and control methods of the equipment shall also comply with the requirements of the above standards.

2.3.3 The equipment shall have sufficient strength, rigidity, reliable stability and high precision. Ensure that the system has good dynamic quality.

2.3.4 The equipment must be an advanced and mature design in the industry in recent years, manufactured using advanced processes, materials and technologies, with high quality reliability, good operability and maintainability, and capable of long-term stable and continuous operation.

2.3.5 The equipment must comply with China's environmental protection and safety standards.

For specific requirements, see Chapter 8 of this document: List of Cargo Requirements and Technical Specifications.

3. Bidder Qualification Requirements

3.1 Qualifications or achievements that bidders should possess:

*1) The bidder must be a manufacturer of professional equipment related to X-ray fluorescence spectrometers or its authorized agent. If the bidder is a manufacturer, a manufacturer's certification must be provided. If the goods being tendered by the bidder are not manufactured by the bidder itself, the bidder shall provide a formal letter of authorization from the manufacturer (see the format of the Bidding Documents for international Tendering of Mechanical and Electrical Products (Volume 1)). The tenderer only accepts authorization from the manufacturer to the bidder and authorization from the manufacturer's trading company or general agent in China to the bidder.

*2) The bidder must provide the original or a copy of the credit certificate issued by the opening bank of its basic account within three months prior to the bid opening date (if the credit certificate clearly states that photocopies are invalid, the original must be provided, and the tendering authority reserves the right to review the original);

*3) Performance requirements: The bidder must have actual successful supply experience of X-ray fluorescence spectrometers to China, and provide proof materials such as supply agreements, which should at least show that the bidder is the supplier and the model of the supplied products, etc. The complete configuration system of the product model being bid and the corresponding functional accessories must have at least three supply contracts in China, and copies of the contracts must be provided. The attached contracts must not be concealed except for the contract price (the supplier in the contract can be the manufacturer or agent of the product being bid);

*4) After-sales service: **There are professional repair stations or after-sales**

service institutions in China for the products being bid, and the manufacturer shall provide relevant proof materials.

3.2 Whether consortium bids are accepted: No.

3.3 Potential bidders who have not registered with Tianjin Jiantong Engineering Tendering Consulting Co., Ltd. and obtained the tender documents shall not participate in the bidding.

4. Purchase of tender documents

Tender document purchase start time: 09:00 AM on July 1, 2026 (Beijing time)

Tender document purchase closing time: 16:00 PM on July 8, 2026 (Beijing time)

Bidding document purchase location: Front desk of Tianjin Jiantong Engineering Bidding Consulting Co., LTD. (3rd floor, Business Building No. 2, Optoelectronic Industrial Park, 335 Jinjiang Road, Tanggu Ocean Science and Technology Park, Binhai New Area, Tianjin)

Whether to sell the tender documents online: No

Method of obtaining the tender documents: On-site or by mail

Bidding document price: RMB 1000 / USD 147

Other notes:

4.1 Any bidder who is capable of undertaking this project and meets the prescribed qualifications shall provide the following information as required:

4.1.1 Domestic bidders: (1) Business license of enterprise; (2) Proof of identity of the legal person or power of attorney of the legal person and the identity card of the authorized agent; (3) Provide proof of the manufacturer or agent. Please provide copies of the above materials with the official seal affixed.

4.1.2 Foreign bidders: (1) Legal and valid proof documents of the enterprise; (2) Power of attorney of the enterprise; (3) Legal and

valid identification of the authorized agent; (4) Provide proof materials from the manufacturer or agent. Please provide copies of the above materials with the official seal affixed.

4.2 Time for obtaining the tender documents: from July 1, 2026 to July 8, 2026, 9:00 a.m. - 11:30 a.m. and 1:30 p.m. - 4:00 p.m. (Beijing time, except for legal holidays).

4.3 Obtain the tender documents by mail or in person.

4.3.1 To obtain the bidding documents by mail, bidders who are capable of undertaking this project shall send color scanned copies of all materials required in 4.1 to tjjtzbzx003@163.com and call 022-66595088 to obtain the "registration form for bidders" and the account information for the telegraphic transfer of the bidding document fee.

4.3.2 On-site acquisition of the bidding documents: Bidders who are capable of undertaking this project shall register and obtain the bidding documents at the front desk of Tianjin Jiantong Engineering Consulting Co., Ltd. (Address: 3rd floor, Business Building 2, Optoelectronic Industrial park, 335 Jinjiang Road, Ocean Science and technology park, tanggu, Binhai New Area, Tianjin) in accordance with all the paper documents required in 4.1.

5. Submission of the tender documents

5.1 Bid submission deadline (bid opening time) : 09:30 a.m. on July 22, 2026 (Beijing time)

5.2 Bid submission Location: Bid Opening Room on the third floor of Business Building 2, Optoelectronic Industrial Park, 335 Jinjiang Road, Tanggu Ocean Science and Technology Park, Binhai New Area, Tianjin

5.3 Bid opening Location: Bid Opening Room, 3rd Floor, Business Building 2, Optoelectronic Industrial Park, No. 335 Jinjiang Road, Tanggu Ocean Science and Technology Park, Binhai New Area, Tianjin

6. The media where the announcement is made

6.1 This announcement is simultaneously published on China International Bidding Network and China Tendering & Bidding Public Service Platform.

7. Contact Information

Tenderer: Tianjin heavy industries research&development co.,ltd.

Address: 20 Haixing Street, Tianjin Economic-Technological Development Area

Contact: Zhang Yu

Contact Information :022-58808796

Bidding agency: Tianjin Jiantong Engineering Bidding and Consulting Co., LTD

Address: 3rd Floor, Business Building 2, Optoelectronic Industrial Park, 335 Jinjiang Road, Tanggu Ocean Science and Technology Park, Binhai New Area, Tianjin

Contact: Zhang Xinhui

Contact Information :022-25855230, 022-66595088

E-mail: tjjtzbzx003@163.com

8. This project operates on China International Bidding Network. Bidders are required to complete registration on China International Bidding Network before submitting their bids. The winning results will be announced on China International Bidding Network and China Tendering & Bidding Public Service Platform.

9. Other Supplementary Notes

Document fee remittance information

Account Name: Tianjin Jiantong Engineering Consulting Co., Ltd

RMB account opening Bank: China Construction Bank Tianjin Guangzhou

Road Branch

RMB account number: 12050167045200000254

Account Name: Tianjin Jiantong Engineering Consulting Co., Ltd

Tianjin Jiantong Engineering Bidding Consulting Co.,Ltd

Foreign currency (USD) bank: China Construction Bank Co., LTD.

Tianjin Tanggu Branch

CHINA CONSTRUCTION BANKCORPORATION TIANJIN

TANGGU SUB-BRANCH

Foreign currency (US dollar) account number:

A/C:12050167590000003788

Foreign (RMB) account opening bank: China Construction Bank Corporation, Tanggu Branch, Tianjin

CHINA CONSTRUCTION BANKCORPORATION TIANJIN

TANGGU SUB-BRANCH

Overseas (RMB) account: A/C:12050167590000003787

Bank Address:

1 Huanghai Road, Tianjin Economic-Technological Development Area

NO.1 HUANGHAI ROAD, TEDA, TIANJIN CHINA, TIANJIN CHINA

SWIFT CODE:PCBCCNBJTJX

Registered Address of Tianjin Jiantong Engineering Tendering &

Consulting Co., LTD. : Room 215, Building B, Beitang Construction

& Development Building, No. 3 Quanzhou Road, Binhai-Zhongguancun

Science Park, Tianjin Economic-Technological Development Area

Room 215, Block b, No.3 Quanzhou Road, Binhai Zhongguancun Science

Park, Tianjin Economic-Technological Development Area

Attachment:

Special Notice

Potential bidders:

This project can be obtained on-site or by mail. The following is a special notice regarding the acquisition of the tender (procurement) document/qualification review document (hereinafter referred to as the "tender Document") :

(一) Online registration: Whoever intends to obtain the electronic tender potential bidders, please before the end of the project bidding documents receiving and purchasing time, should be in before the bid shall be connected to the Internet (<https://www.ebnew.com>) or tendering and bidding of mechanical and electronic products electronic trading platform (<https://www.chinabidding.com>) to complete registration. Potential bidders only need to register once, and different agents can create multiple accounts. The trading platform is responsible for checking the consistency of the bidder's registration information with the scanned copy of the information provided.

(二) Bidders who are capable of undertaking the project shall send color scanned copies of all required documents to tjtzbx003@163.com and call 022-66595088 to obtain the "bidder registration form" and the account information for the telegraphic transfer of the bidding document fee. To obtain the bidding documents on-site, bidders who are capable of undertaking the project shall register and obtain the bidding documents at the front desk of Tianjin Jiantong Engineering Consulting Co., Ltd. (Address: 3rd floor, Business Building 2, Optoelectronic Industrial park, 335 Jinjiang Road, Tanggu

Ocean Science and Technology Park, Binhai New Area, Tianjin) in accordance with all the required paper documents.

(三) Potential bidders may choose to obtain the bidding documents on-site or by email, but they still need to complete the free registration.

(四) Other Matters

1、 The home page help center of the trading platform provides the operation manual, which potential bidders can download and follow the instructions in the operation manual to register, log in, purchase and download the electronic version of the tender documents online, pay the download fee, issue and collect invoices, etc.

2、 In case of any operational issues with the platform, you can call the unified service hotline of the trading platform: 400-0606-000. The hotline service hours are from 9:00 a.m. to 12:00 p.m. and from 1:30 p.m. to 5:00 p.m. on working days.

Chapter 6 Bidding Information Sheet

The specific information about the goods to be purchased in this tender information sheet is a supplement and modification to the instructions to bidders. In case of any discrepancy, this information sheet shall prevail. Specific contents or terms not covered in this tender information sheet shall be subject to the corresponding contents and terms of the instructions to bidders in the Bidding documents for international Tendering of Mechanical and electrical Products (Volume I). The relevant options in this form shall be subject to a black "■" or a checkmark "√" in the "□".

Clause Number	Contents
I. Instructions	
1.1	Tenderer: Tianjin heavy industries research&development co.,ltd. Source of funding: Secured Tenderer Tel: 0086-22-58808796 Tenderer fax: / Tenderer's email address: / Tenderer's address: No. 20 Haixing Street, Economic-Technological Development Area, Tianjin
1.2	Name of the tendering agency: Tianjin Jiantong Engineering Consulting Co., Ltd Contact person of the bidding agency: Zhang Xinhui Bidding agency Tel: 0086-22-25856848 Tender fax: / E-mail: tjitzbzx003@163.com Address: 3rd Floor, Business Building 2, Optoelectronic

	Industrial Park, 335 Jinjiang Road, Tanggu Ocean Science and Technology Park, Binhai New Area, Tianjin (postal code: 300450)
1.3	<p>Project Overview and nature of funds:</p> <p>Tianjin heavy industries research&development co.,ltd.. intends to purchase 1 set of <u>X-ray</u> fluorescence spectrometer.</p> <p>The nature of the funds for this project: The funds have been secured.</p>
Ii. Tender Documents	
5.2	<ul style="list-style-type: none"> ■ The tender documents for this project shall be prepared in Chinese or in both Chinese and English. When written in both Chinese and English, both languages shall have equal validity; In case of any discrepancy between the Chinese and English versions, the Chinese version shall prevail. ■ The electronic version of the bidding documents is provided simultaneously for this project. The electronic version of the tender document has the same legal effect as the paper version. In case of any discrepancy, the paper version of the tender document shall prevail.
6.1	If a bidder has any objection to the tender documents, it shall be raised to the tenderer or tendering agency 10 days before the tender closing time.
Iii. Preparation of Tender Documents	
8.1	Language of the bid: The bid documents shall be written in Simplified Chinese. If the bid documents are accompanied by supporting materials in other languages, the bidder shall provide

	the Chinese translation, which shall be used for evaluation.
10.3	No alternative proposals will be accepted for this tender.
11.2	<ul style="list-style-type: none"> ● Bidders shall provide a list of supply products, itemized quotations and total prices on the bid itemized quotation sheet. ● Bids for this project are not allowed to have missing items, otherwise it will result in the rejection of the bid.
11.5	<p><u>A maximum bid limit of RMB 2.6 million is set for this tender.</u></p> <p><u>The maximum bid limit or calculation method for this tender: Not applicable to this project.</u></p>
* 11.6.1	<p>1) Bid price (for goods manufactured within customs territory) : <u>Price of goods to the buyer's project site (including tax).</u></p> <p>Related costs: <u>The bidder shall specify in the quotation sheet (including but not limited to) the ex-factory price (EXW) of the goods and all related costs such as transportation, loading and unloading, insurance, installation and commissioning, training, and third-party equipment inspection fees to the destination.</u></p> <p>2) Bid price (for goods already imported before the bid closing time) : <u>Sales price (including import tax and sales tax).</u></p> <p>Related expenses: <u>The bidder shall specify in the quotation sheet (including but not limited to) the CIP price of the goods (Tianjin), customs clearance fees (including all expenses incurred at the port of arrival), transportation and insurance fees to the final destination, loading and unloading fees, customs duties, value-added tax, commodity inspection fees, installation and commissioning fees, training fees, third-party equipment calibration fees, and all related expenses. Fill in the International Tender Product Information Form (format is attached) at the same time.</u></p>

* 11.6.2	<p>Bid price (for goods from outside the customs territory of the People 's Republic of China) : CIP price of the goods (Tianjin).</p> <p>Related costs: Bidders should list in the quotation sheet (including but not limited to) the <u>cost plus freight and insurance payment to Tianjin</u>, as well as all related costs such as installation and commissioning fees, training fees, third-party equipment calibration fees, equipment moving fees, etc., but excluding customs duties and value-added tax.</p> <p>Note: 1) The bidder shall enter into an import equipment purchase contract with the foreign trade agency (First Heavy Industries International Resources Co., LTD.) designated by the tenderer (end user) at the winning bid price, and the end user shall be specified in the contract.</p> <p>2) Inland transportation fees, loading and unloading fees, equipment handling fees, insurance fees, customs clearance fees and all other local accompanying expenses incurred from the port of entry to the final destination shall be borne by the foreign trade agent designated by the tenderer, "First Heavy Industries International Resources Co., LTD." The tender offer does not include such expenses.</p>
11.7	<p>Price terms such as EXW, CIF, CIP and DDP shall be interpreted in accordance with the current latest version of Incoterms of the International Chamber of Commerce in Paris.</p>
11.9	<p>The bid price quoted by the bidder is fixed and unchangeable during the execution of the contract and may not be changed for any reason. Any bid that contains a request for price adjustment will be rejected as a non-substantial response.</p>
12.1	<p>Tender currency for goods provided within the territory of the People's Republic of <u>China: Renminbi</u>.</p>
12.2	<p>Tender currency for goods provided from outside the territory of</p>

	the People's Republic of <u>China: Renminbi</u> .
* 13.1	Does this tender accept joint bids: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
13.3	<p>Bidders are required to provide the following supporting documents:</p> <p>*1) The bidder must be a manufacturer of professional equipment related to X-ray fluorescence spectrometers or its authorized agent. If the bidder is a manufacturer, a manufacturer's certification must be provided. If the goods being tendered by the bidder are not manufactured by the bidder itself, the bidder shall provide a formal letter of authorization from the manufacturer (see the format of the Bidding Documents for international Tendering of Mechanical and Electrical Products (Volume 1)). The tenderer only accepts authorization from the manufacturer to the bidder and authorization from the manufacturer's trading company or general agent in China to the bidder.</p> <p>*2) The bidder must provide the original or a copy of the credit certificate issued by the opening bank of its basic account within three months prior to the bid opening date (if the credit certificate clearly states that photocopies are invalid, the original must be provided, and the tendering authority reserves the right to review the original);</p> <p>*3) Performance requirements: The bidder must have actual successful supply experience of X-ray fluorescence spectrometers to China, and provide proof materials such as supply agreements, which should at least show that the bidder is the supplier and the model of the supplied products, etc. The complete configuration system of the product model being bid and the corresponding functional accessories must have at least three supply contracts in China, and copies of the contracts must be provided. The attached contracts must not be concealed except for the contract price (the</p>

	<p>supplier in the contract can be the manufacturer or agent of the product being bid);</p> <p>*4) After-sales service: There are professional repair stations or after-sales service institutions in China for the products being bid, and the manufacturer shall provide relevant proof materials.</p>
14.3	<p>2) A list of spare parts and special tools required for continuous operation for <u>2</u> years after the expiration of the warranty period shall be included in the total bid price and in the details.</p>
14.3	<p>*4) Forms of technical support materials: printed materials publicly released by the manufacturer, or test reports issued by testing institutions, or product descriptions on the manufacturer's Internet homepage, or datasheets, or technical explanations signed by the person in charge of the manufacturer and stamped with the official seal, etc.</p>
* 15.1	<p>Bid bond amount</p> <p>■ Fixed amount: RMB: <u>Twenty</u> thousand yuan only</p> <p style="padding-left: 40px;"><u>Or US dollars: \$2,944.</u></p> <p>□ Proportional range:.</p>

<p>* 15.3</p>	<p>Form of bid bond: (One of the following specified forms is acceptable)</p> <ul style="list-style-type: none"> ■ Bank guarantee or irrevocable letter of credit □ Bank promissory note □ Confirmed check □ Sight draft ■ Other forms: telegraphic transfer. <p>Note: 1) For domestic bidders whose bid security is submitted by telegraphic transfer, the bid security must be transferred from the basic account of the bidder, and the name and purpose of the bid project should be noted at the time of telegraphic transfer. A copy of the telegraphic transfer voucher and a copy of the account opening permit (or proof of basic deposit account information) should be attached to the bid document.</p> <p>2) If the bid bond of an overseas bidder is submitted by telegraphic transfer, the bid bond must be transferred from the basic account of the bidder and the name and purpose of the project being bid should be noted at the time of telegraphic transfer. A copy of the telegraphic transfer voucher (which must show the bidder 's name and account information; if the telegraphic transfer voucher does not show the bidder' s name and account information, other supporting documents such as water slips must be provided), the account opening permit (or proof of basic deposit account information), and the business license of the enterprise (foreign bidders shall provide legal and valid proof documents of the enterprise) should be attached to the tender documents.</p> <p>3) If the bid bond is submitted in the form of a bank guarantee or an irrevocable letter of credit, a copy of the bank guarantee or irrevocable letter of credit shall be attached to the bid document.</p> <p>4) The bidder shall reasonably consider the actual arrival time of the bid bond and ensure that it arrives before the deadline for submission of the bid documents.</p>
<p>* 16.1</p>	<p>Bid validity period: <u>90</u> days. Bids with an insufficient bid validity period will be considered non-substantive responses and will be rejected.</p>

17.1	<p>Number of original copies: <u>1</u>;</p> <p>Number of copies: <u>4</u>;</p> <p>Electronic: <u>2</u> copies of <u>the tender document in word format and a color scanned copy of the original with the official seal in PDF format.</u></p> <p>If the electronic version of the document does not match the other paper version, the original paper version shall prevail.</p>
* 17.2	<p>The original tender document shall be printed or written in non-fading ink and signed by the legal representative or the representative duly authorized by him. The authorized representative shall attach the letter of authorization from the person in charge of the unit (format as shown in Volume 1) in writing to the tender document.</p> <p><input type="checkbox"/> Each page of the tender document shall be signed by the legal representative or his authorized representative by surname or initials.</p> <p><input checked="" type="checkbox"/> The quotation section of the tender document, responses to important commercial and technical terms (parameters) (terms or parameters marked with an asterisk), and <u>technical support materials</u> shall be signed page by page by the legal representative or his authorized representative with the surname or initials, otherwise the tender will be rejected.</p>
<p>4. Submission of the tender documents</p>	
18.1	<p>The summary of bids and the bid security should be submitted separately in a sealed envelope with the words "Summary of Bids" and "Bid Security" marked on it.</p>
18.2	<p>1) Bids should be submitted to the Bid Opening Room on the third floor of Business Building 2, Optoelectronic Industrial Park, 335</p>

	Jinjiang Road, Tanggu Ocean Science and Technology Park, Binhai New Area, Tianjin.
18.2	2) Project Name, title and number of Invitation to bid: <u>Project Name: Procurement Project of X-ray Fluorescence Spectrometer;</u> <u>Tender Number 5256-264TGJTB1166.</u>
19.1	Bid submission deadline: <u>July 22, 2026 (Beijing time).</u> Bid submission deadline: <u>09:30 a.m. (Beijing time).</u>
V. Bid Opening and Evaluation	
22.1	Bid opening date: <u>July 22, 2026 (Beijing time).</u> Bid opening time: <u>09:30 a.m. (Beijing time).</u> Bid opening location: <u>Bid Opening Room on the third floor of Business Building 2, Optoelectronic Industrial Park, 335 Jinjiang Road, Tanggu Ocean Science and Technology Park, Binhai New Area, Tianjin.</u>
23.1	Bid Evaluation method <input checked="" type="checkbox"/> Lowest bid price method <input type="checkbox"/> Comprehensive evaluation method
* 24.5.1	Bids will be rejected if any of the following circumstances occur during the business evaluation process: 1、The bidder or its manufacturer has a stake with the tenderer that may affect the fairness of the tender; 2、The bidder participates in the pre-project consultation or the preparation of the tender documents; 3、Where the legal representatives of different bidders are the same person or there is a controlling or management relationship; 4、The tender documents are not signed as required by the tender documents; 5、Where a consortium of bidders fails to submit a joint bid

agreement;

- 6、 Bidders' tender documents and qualification certificates are not provided, or do not comply with national regulations or the requirements of the tender documents;
- 7、 Where the same bidder submits two or more different proposals or quotations, except where the tender documents require alternative proposals to be submitted;
- 8、 The bidder fails to submit the bid bond as required by the tender documents or the amount of the bond is insufficient, the validity period of the bond is insufficient, the form of the bid bond or the bank issuing the bid bond does not conform to the requirements of the tender documents;
- 9、 The tender documents do not meet the requirements of the important business terms marked with an asterisk (" * ") in the tender documents;
- 10、 The bid price is higher than the maximum bid limit set in the tender documents;
- 11、 The validity period of the bid is insufficient;
- 12、 Bidders who have engaged in illegal acts such as collusive bidding, fraud, bribery, etc.
- 13、 There are other commercial terms in the tender documents that disqualify bids.

The materials listed in the preceding paragraph shall not be clarified or supplemented after the opening of bids; If the tender documents require the original documents, the original documents shall be provided; otherwise, the bid will be rejected.

* 24.5.2	<p>Bids shall be rejected in any of the following circumstances during the technical evaluation process:</p> <ol style="list-style-type: none"> 1、 The bid documents do not meet the requirements of the important terms (parameters) marked with an asterisk (" * ") in the technical specifications of the tender documents, or the important terms (parameters) marked with an asterisk (" * ") are not supported by the technical data that meet the requirements of the tender documents. 2、 The general parameters in the technical specifications of the tender document exceed the maximum allowable deviation range or the maximum number of items; 3、 The responses in the technical specifications of the tender documents do not conform to the facts or are false tenders; 4、 Bidders who copy relevant parts of the technical specifications of the tender documents as part of their tender documents; 5、 Where there are other technical provisions in the tender documents that disqualify the bid.
25.1	Currency for evaluation: <u>Renminbi</u> .
26.2	<p>The total bid price shall be calculated based on the arrival of the goods at the installation location designated by the tenderer. If there is a price adjustment, the calculation of the total bid price shall include the deviated markup. When calculating the deviated markup for domestic products, deduct the relevant taxes and fees included in the bid price. The calculation of the total bid price is as follows:</p> <ol style="list-style-type: none"> 1) For overseas products: CIP price + missing item surcharge + technical business deviation surcharge + other expenses

(installation and commissioning fee, training fee, third-party equipment calibration fee, equipment transportation fee, etc.)

2) For products within customs territory: Factory price (including value-added tax) + consumption tax (if applicable) + transportation and insurance fees + additional charges for missing items + additional charges for technical and business deviations + other expenses (installation and commissioning fees, training fees, third-party equipment calibration fees, equipment moving fees, etc.).

Special Notes: If the bidders' products are manufactured within the territory of the Republic of China and the relevant taxes and fees are included in the bid price, in order to ensure that the bid price after deducting the relevant taxes and fees can be used as the benchmark bid price during the price evaluation process, each bidder is requested to separately provide the total amount and itemized amount of the relevant taxes and fees included in the bid price, The bid evaluation committee will confirm its reasonableness. If deemed reasonable, the bid evaluation committee will use the price after deducting the total amount as the benchmark bid price. If it is found unreasonable or the bidder does not quote separately, the bid evaluation benchmark price after deducting relevant taxes and fees shall be calculated using the simplified formula given in this tender document. The specific formula is: Bid evaluation benchmark price (deducting relevant taxes and fees) = bid price (including relevant taxes and fees)/(1+ VAT rate + consumption tax rate)

3) For products imported before the bid submission deadline: Sales price (including import link tax and sales link value-added tax)

	<p>+ transportation, insurance + surcharge for missing items + surcharge for technical and commercial deviations + other expenses.</p> <p>Special Notes: Bidders' products have been imported before the bid closing time, and if the bid price includes import link tax, sales link value-added tax and other related taxes and fees, in order to ensure that when the general terms (parameters) of bidders deviate from the markup in the price evaluation stage, the bid price after deducting the relevant taxes and fees may be used as the benchmark bid price for evaluation, Each bidder is requested to separately provide the total amount and itemized amount of taxes already included in the bid price, or to fill in the CIP quotation separately for the evaluation committee to confirm its reasonableness. If it is confirmed to be reasonable, the evaluation committee will use the price after deducting the total amount (related taxes and fees) as the benchmark bid. If it is confirmed to be unreasonable or the bidder does not provide a CIP quotation separately, the bid price of the bidder will be used as the benchmark quotation for evaluation (the bid price will be deemed not to include the relevant taxes at the time of evaluation).</p>
26.4.1	<p>Inland transport, insurance and other accompanying services bidders shall provide:</p> <p>(1) Estimated dimensions and transport weight for each packing box.</p> <p>(2) The ex-factory price (EXW) and landed price (CIF) of each packing box, "freight, insurance paid to... Price "(CIP)</p>
26.4.2	<p>Deviation in delivery time</p> <p>Selected option:</p> <p>■ Option 1) : Instructions to Bidders, Volume 1 of the tender documents, Section 26.4.2.1)</p>

	<p><input type="checkbox"/> Option 2) : Instructions to Bidders, Volume 1 of the tender documents, 26.4.2.2)</p> <p><input type="checkbox"/> Option 3) : Instructions to Bidders, Volume 1 of the tender documents, 26.4.2.3)</p> <p><input type="checkbox"/> Other options: _____</p> <p>Percentage for adjustment (%) : For <u>each week of delay (less than one week counted as one week) after the delivery time required in the tender documents, the bid price will increase by 0.5 percent (0.5%)</u> on top of the bid price for the equipment.</p>
26.4.3	<p>Deviation of payment terms</p> <p>Selected option:</p> <p><input type="checkbox"/> Option 1) : Instructions to Bidders, Volume 1 of the tender documents, Section 26.4.3.1)</p> <p style="padding-left: 40px;">Among them: The percentage used for adjustment (%) : <u>1%</u></p> <p><input type="checkbox"/> Option 2) : Instructions to Bidders, Volume 1 of the tender documents, Section 26.4.3.2)</p> <p style="padding-left: 40px;">Among them: Annual interest rate for adjustment: _____</p> <p><input checked="" type="checkbox"/> Option 3) : Payment terms are not allowed to deviate; any deviation will result in the rejection of the bid.</p>
26.4.4	<p>Costs for parts and spare parts</p> <p>Selected options:</p> <p><input checked="" type="checkbox"/> Option 1) : Instructions to Bidders, Volume 1 of the tender documents, Section 26.4.4.1)</p> <p><input type="checkbox"/> Option 2) : Instructions to Bidders, Volume 1 of the tender documents, 26.4.4.2)</p> <p><input type="checkbox"/> Option 3) : Instructions to Bidders, Volume 1 of the tender documents, 26.4.4.3)</p> <p><input type="checkbox"/> Option 4) : Other options.</p>
26.4.5	Bidder's domestic spare parts and after-sales service facilities;

	See detailed provisions in Chapter 8 Technical Specifications and Requirements.
26.4.6	Estimated operating and maintenance costs: Not applicable
26.4.7	Equipment performance and productivity: Not applicable
26.4.8	<p>Other additional evaluation factors and criteria:</p> <ol style="list-style-type: none"> 1. Provisions that are clearly stipulated by national laws and regulations and specified in the tender documents (Volume 1 and Volume 2) that may result in the rejection of the bid, any non-compliance with these provisions will result in the rejection of the bid. 2. The technical indicators and commercial terms marked with an asterisk (*) in the tender documents (Volume II) are important technical indicators and important commercial terms. Any non-compliance with these important technical indicators and terms will also result in the rejection of bids. 3. If the equipment, spare parts, service terms, etc. are within the acceptable range stipulated in the tender documents, adjustments will be made based on the actual conditions stipulated in the tender documents; if they exceed the acceptable range, the bid will be rejected. 4. Negative deviation of general technical terms (parameters) will increase the bid price by 0.5 percent for each item on the basis of the bid price of the equipment. The calculation method for deviation of commercial terms such as delivery time and payment terms may be separately stipulated in the tender documents. 5. A bid will be rejected if the cumulative number of negative deviations from the general commercial and technical terms (non-* parameters) is ≥ 5. 6. The Technical Specification Response/Deviation Sheet must be

	<p>filled out item by item in accordance with the specific requirements of Chapter 8 of the tender document, based on the bidder's own product manual and samples; For terms that can be expressed in quantitative form, the bidder must answer clearly or in a functional description. Any bid that simply copies the technical specification requirements in the tender documents or simply marks "comply" or "satisfy" will be rejected. Any deviation not listed in the Technical Specification Response/Deviation Table shall be deemed full compliance with the requirements of the tender document. If the evaluation committee finds a deviation elsewhere in the tender document, regardless of how the bidder responds in this table, it shall be regarded as a deviation from the provisions of the tender document.</p>
26.5	Number of shortlisted candidates: <u>3</u>
27	Comprehensive evaluation method: <u>(Not applicable).</u>
6. Grant the same	
34.1	<p>Within 30 days from the date of issuance of the Notice of Award, the successful bidder shall enter into a written contract in accordance with the tender documents and the bid documents of the successful bidder. The successful bidder shall not enter into any other agreement with the tenderer that deviates from the substantive content of the contract.</p>
36.1	<p>Tender service fee:</p> <p>The winning bidder shall pay the winning bid service fee to the tendering agency in accordance with the following standards and regulations:</p> <p>A service fee shall be charged to the successful bidder.</p> <p>After winning the bid, the successful bidder shall pay the bidding agency service fee and the expert review fee to the bidding agency. The bidder should</p>

comprehensively consider the relevant fees in the bid price and not list them separately. The relevant pricing methods are as follows:

(1) Tender agency service fee

Bidding agency fee: It is calculated at 40% of the fee standard stipulated in Document No. 1980 [2002] of the National Development Planning Commission and Document No. 534 [2011] of the National Development and Reform Commission.

This project is a goods project, and the total amount of the winning bid as determined in the notice of winning bid shall be used as the basis for calculating the charge.

(2) Expert review fee: The expert review fee is settled based on the actual amount incurred.

2. The currency of the winning bid service fee shall be the same as the currency in which the winning bid contract is signed.

3. The account for collecting the tender service fee and document fee is as follows:

Account Name: Tianjin Jiantong Engineering Consulting Co., Ltd

RMB account opening Bank: China Construction Bank Tianjin Guangzhou Road Branch

RMB account number: 12050167045200000254

Account Name: Tianjin Jiantong Engineering Consulting Co., Ltd

Tianjin Jiantong Engineering Bidding Consulting Co.,Ltd

Foreign currency (USD) bank: China Construction Bank Co., LTD. Tianjin Tanggu Branch

CHINA CONSTRUCTION BANKCORPORATION TIANJIN TANGGU
SUB-BRANCH

Foreign currency (USD) account number: A/C:12050167590000003788

Foreign (RMB) account opening bank: China Construction Bank Corporation, Tanggu Branch, Tianjin

CHINA CONSTRUCTION BANKCORPORATION TIANJIN TANGGU

SUB-BRANCH

Overseas (RMB) account: A/C:12050167590000003787

Bank Address:

1 Huanghai Road, Tianjin Economic-Technological Development Area

NO.1 HUANGHAI ROAD, TEDA, TIANJIN CHINA, TIANJIN CHINA

SWIFT CODE:PCBCCNBJTJX

Registered Address of Tianjin Jiantong Engineering Tendering & Consulting Co.,

LTD. : Room 215, Building B, Beitang Construction & Development Building, No.

3 Quanzhou Road, Binhai-Zhongguancun Science Park, Tianjin Economic-

Technological Development Area

Room 215, Block b, No.3 Quanzhou Road, Binhai Zhongguancun Science

Park, Tianjin Economic-Technological Development Area

4. The account for receiving the bid bond is as follows:

Account Name: Tianjin Jiantong Engineering Consulting Co., Ltd

Account Name: Tianjin Jiantong Engineering Consulting Co., Ltd

Bank: Central Business District Branch of Tianjin Binhai Rural Commercial

Bank

RMB account number: 101192000212673

Account Name: Tianjin Jiantong Engineering Consulting Co., Ltd

Tianjin Jiantong Engineering Bidding Consulting Co.,Ltd Foreign
currency (USD)

Bank: China Construction Bank Corporation, Tanggu Branch, Tianjin

CHINA CONSTRUCTION BANKCORPORATION TIANJIN
TANGGU SUB-BRANCH

Foreign currency (USD) account number: A/C:12050167590000003788

Foreign (RMB) account opening bank: China Construction Bank Corporation,
Tanggu Branch, Tianjin

CHINA CONSTRUCTION BANKCORPORATION

TIANJIN TANGGU SUB-BRANCH

Overseas (RMB) account: A/C:12050167590000003787

Bank Address:

1 Huanghai Road, Tianjin Economic-Technological Development Area

NO.1 HUANGHAI ROAD, TEDA, TIANJIN CHINA

SWIFT CODE:PCBCCNBJTJX

Registered Address of Tianjin Jiantong Engineering Tendering & Consulting Co., LTD. : Room 215, Building B, Beitang Construction & Development Building, No. 3 Quanzhou Road, Binhai-Zhongguancun Science Park, Tianjin Economic-Technological Development Area

Room 215, Block b, No.3 Quanzhou Road, Binhai Zhongguancun Science Park, Tianjin Economic-Technological Development Area

Call 25292406

Additional changes applicable to this Instructions to Bidders: None

Chapter 7 Special Terms for Contracts

The specific requirements of this table regarding the purchase of goods are supplementary and modified to the terms of the contract. In case of any contradiction, this table shall prevail.

Clause Number	Contents
1.1	<p>Buyer Name: <u>Tianjin heavy industries research&development co.,ltd..</u> <u>(First Heavy Industries Group International Resources Co., LTD.)</u>.</p> <p>Buyer's Address: <u>No. 20 Haixing Street, Tianjin Economic-Technological Development Area.</u></p> <p>Seller's name:.</p> <p>Seller's address:.</p> <p>Name of import agent (if required) :</p> <p>Project Site: <u>20 Haixing Street, Tianjin Economic-Technological Development Area.</u></p>
7.1	Performance bond amount: <u>Not applicable to this project.</u>
7.3	Form of performance bond: <u>Not applicable to this project</u>
11	Project site: <u>The delivery location for both foreign and domestic goods is the buyer's designated location.</u>
16	Additional services to be provided: <u>See details in Chapter 8 Technical Specifications and Requirements.</u>
17.1	2) In the event of the cessation of production of spare parts, the Seller shall notify the Buyer in writing of the plan to cease production three months in advance, allowing the buyer sufficient time to purchase the required spare parts.
17.2	<p>Spare parts requirements:</p> <p><input type="checkbox"/> Bidders shall separately prepare a list and unit price of spare parts</p>

	<p>required for daily maintenance. The cost shall not be included in the total bid price, nor in the contract price. Spare parts provided within one year after the end of the quality guarantee period shall not increase in price. The bidder shall undertake to supply spare parts and consumables for the year starting from the date of acceptance.</p> <p>■ The price of consumable parts provided shall not increase within three years after the end of the quality guarantee period.</p>
18.2	Quality guarantee period: <u>12</u> months from the date when both parties accept the product as qualified and issue the acceptance certificate.
18.4	Repair response speed: <u>See detailed provisions in Chapter 8 Technical Specifications and Requirements.</u>
20.1	Payment methods and conditions: <u>See the detailed specifications Chapter 8 Technical Specifications and Requirements.</u>
25	The Seller shall not subcontract this contract in whole or in part to any third party.
27	<p>The Seller shall make a detailed production plan, strictly implement the production plan to ensure the delivery time and shall not delay the delivery time due to the payment cycle. The Seller shall take all flexible measures to ensure that the delivery is not delayed due to the influence of international relations. Otherwise, the Seller shall bear all losses arising therefrom to the buyer.</p> <p>Except in cases of force majeure (international trade frictions are not included), if the Seller fails to deliver the goods at the time stipulated in the contract, the Buyer may agree to the Seller's delay of delivery on the condition of payment of a fine. The fine may be deducted by the paying bank when negotiating the payment, and the total fine shall not exceed 15% of the total value of the delayed delivery of the goods. If the Seller delays delivery for more than 15 weeks as stipulated in the contract, the Buyer shall have the right to request the agent company to cancel the contract. In such case,</p>

	<p>the Seller shall still pay the fine to the buyer as stipulated above and cancel the payment of the goods. The original payment shall be returned to the buyer's agent company within one month. At the same time, the Seller shall indemnify the buyer for all losses incurred thereby, and the relevant expenses shall be borne by the seller.</p>
32.1	<p>All disputes related to the contract and its implementation shall be settled through consultation between the parties. If the consultation fails to settle within 60 days after the commencement of the consultation, either party shall have the right to bring a lawsuit to the people's court where the tenderer is located. The laws of the People's Republic of China shall apply to the interpretation of the Contract and the settlement of disputes.</p>
32.2	<p>The arbitration shall be conducted in Beijing by the China International Economic and Trade Arbitration Commission (CIETAC) in accordance with its arbitration rules and procedures. Unless otherwise agreed by both parties, the official language of the arbitration shall be Chinese.</p>
32.3	<p>The arbitration award shall be final and binding on both parties</p>
32.4	<p>Arbitration costs shall be borne by the losing party.</p>
32.5	<p>During the period of arbitration, the remaining parts of this contract shall continue to be performed except for the parts under arbitration.</p>
35.1	<p>Notice Address: <u>No. 16 Luoda Road, Tianjin Development Zone.</u></p>
36.2	<p>The title of the reciprocal agreement is: "Agreement between the Government of the People's Republic of China and the Government of the Seller State on the Avoidance of Double Taxation and the Prevention of Tax Evasion on Income Tax and Property Tax"</p>

Additional changes applicable to the General terms of this Contract:

1. The Seller undertakes that all information (including written, oral and otherwise) provided to the Buyer during the process of entering into this contract (including but not limited to bidding, negotiation and signing) and during the performance of this contract is true, valid and complete. There is no provision of false or inaccurate enterprise qualification and reputation certification documents, or intentional concealment of important facts and other false information related to the conclusion and performance of the contract.

2. In case the terms of the contract, the special terms of the contract are inconsistent with the technical requirements in Chapter 8 of Volume 2, the technical requirements in Volume 2 shall prevail.

Chapter 8 List of Goods Requirements and Technical Specifications

Section 1: List of Goods Requirements

(1) X-ray fluorescence spectrometer

Name of goods	Quantity	Place of delivery	Buyer
X-ray fluorescence spectrometer	1 set	CIP Tianjin	Tianjin heavy industries research&development co., ltd.

Delivery period: 6 months after the contract is signed.

* Bids must be made for all goods in the package being bid on.

Section 2 Technical Specifications and Requirements

1 Equipment name and quantity

1.1 Name: X-ray Fluorescence Spectrometer

1.2 Quantity: 1 set

2 Equipment Functions

It is mainly used for qualitative, quantitative and non-standard sample quantitative analysis of major and trace elements in metallic materials, non-metallic materials, bulk samples, glass flake samples and powder pellet samples.

3 Working environment of the equipment

3.1 Voltage and Frequency: AC 220V±10%, 50/60Hz±1Hz

3.2 Ambient temperature: 10°C–35 °C

3.3 Relative humidity: 20%–80%

4 General Requirements

*4.1 This equipment includes the main unit, analysis software, regulated power supply, cooling circulating water machine, consumables, auxiliary equipment, etc. Measurement range: boron (5B) to uranium (92U) elements using wavelength dispersive sequential scanning. Content range: 0.0001% to 100%.

4.2 The manufacture of the equipment shall comply with national standards, American standards, European standards, ISO and other test and instrument standards. The measurement units of the instruments and meters adopted shall be international system units and have metrological qualification certificates. Real-time data during the test shall be displayed in international system units, and the metrological verification and control methods of the equipment shall also comply with the requirements of the above standards.

4.3 The equipment shall have sufficient strength, rigidity, reliable

stability and high precision. Ensure that the system has good dynamic quality.

4.4 The equipment must be an advanced and mature design in the industry in recent years, manufactured with advanced processes, materials and technologies, featuring high-quality reliability, good operability and maintainability, and capable of long-term stable and continuous operation.

4.5 The equipment must comply with China's environmental protection and safety standards.

5 Technical Requirements

*5.1 Instrument Type: Wavelength Dispersive sequential scanning X-ray fluorescence spectrometer. Measurement range: Elements from boron (5B) to uranium (92U). Content range: 0.0001% to 100%.

5.2 X-ray generator

*5.2.1 Maximum output power $\geq 4\text{kW}$;

Maximum rated voltage $\geq 60\text{kV}$, continuously adjustable 1kV between 20 and 60kV;

Maximum output current $\geq 150\text{mA}$, 1mA continuously adjustable.

(The model of the equipment and the corresponding voltage and current parameters are required to be in the list of exemption filing documents published on the official website of the Ministry of Ecology and Environment. The corresponding model and voltage and current parameters in the exemption filing documents shall be used as proof. The website query link and screenshot proof materials shall be provided in the response document.)

*5.2.2 Stability: Less than $\pm 0.0005\%$ when the external power supply fluctuates $\pm 1\%$.

5.3 X-ray tube

5.3.1 Form: Ceramic composite Rh target X-ray tube.

5.3.2 Irradiation form: Top irradiation (the X-ray tube is located above the sample) or bottom irradiation. Lower irradiation requires at least two light tubes or a dust-proof device for the spectral chamber.

*5.3.3 The thickness of the beryllium window for the light tube is no more than 75 μ m.

5.3.4 Filters: ≥ 4 types, with automatic filter interchangeability.

5.4 Spectrometer and sample requirements

5.4.1 Sample types: Direct analysis of metal block samples, powder pressed tablets, and fused tablets.

*5.4.2 Equipped with a 10-position spectrophotometric crystal automatic dual-phase rotating exchange mechanism.

5.4.3 Configure no less than 8 crystals, covering elements: boron (B5) to uranium (92U), including at least LiF200, LiF220, Ge crystals, PET crystals, 0-Mg analytical crystals and boron, silicon, carbon analytical crystals.

5.4.4 Collimators: Program-controlled, auto-switching, with no less than 3 collimators, each for different light and heavy elements.

*5.4.5 Configure ≥ 6 collimator masks of different sizes, $\phi 0.5\text{mm}$ to $\phi 35\text{mm}$, for testing samples of different sizes.

5.4.6 Temperature stability: Under ambient temperature conditions of 10 to 40 ° C, the spectral chamber and the crystal are temperature-controlled separately, with a constant temperature accuracy of less than 0.05 ° C.

5.5 Goniometer

5.5.1 Goniometer form: $\theta/2\theta$ independent drive, optical positioning system.

5.5.2 Goniometer Angle accuracy: $\leq 0.001^\circ$;

Goniometer Angle reproducibility: $\leq \pm 0.0001^\circ$.

5.5.3 The maximum speed of the goniometer $\geq 2400^\circ/\text{min}$;

The scanning speed of the goniometer is $\geq 600^\circ/\text{min}$.

5.6 Detector

*5.6.1 Flow gas proportional counting gas and scintillation counter;
Maximum count per second (1% nonlinearity) : flow-gas proportional counter $\geq 3000\text{Kcps}$;

Scintillation counter $\geq 1600\text{Kcps}$.

5.6.2 Automatic attenuator system: IN-OUT automatic switching (attenuation rate 1/10).

5.6.3 Flow gas proportional counter P10 gas density automatic stabilization system with automatic core wire cleaning mechanism.

5.7 Vacuum system

5.7.1 Vacuum chamber: A separate double vacuum chamber is required, with temperature stability fluctuation $\leq \pm 0.05^\circ\text{C}$.

*5.7.2 With vacuum automatic stabilization system: including vacuum pump, frequency converter and vacuum automatic stabilization system.

5.8 Technical requirements for automatic samplers

5.8.1 Fully automatic sampler with a sample cup loading capacity of no less than 48 positions simultaneously, capable of quick insertion and monitoring positions.

5.8.2 Sample cups: Configured with no less than 48 original standard sample boxes, provide no less than 36 original small size sample boxes, with detailed description of sample box parameters required.

*5.8.3 Direct electric drive injection without the need for an external air compressor.

5.9 Analysis software

5.9.1 Operating software: Chinese/English operating software.

5.9.2 Analysis software provides comprehensive operation control of the instrument for qualitative and quantitative analysis. The software must be available in Chinese. The software can monitor the status of

the instrument, has automatic diagnostic function, online help function, automatic correction function, automatic discrimination of interfering spectral lines function, has theoretical coefficient, empirical coefficient, coefficient and basic parameter calculation function, and has automatic display and alarm function when the analysis results exceed the warning line.

5.9.3 Quantitative analysis program without standard sample: Must be capable of quantitative and semi-quantitative analysis without standard sample and have analysis software. It should have full-spectrum scanning and fixed-point measurement capabilities. Instrument calibration samples and no-standard sample analysis database calibration samples are required.

5.9.4 Analysis assistance software system: Capable of providing the best analytical parameters for the selected element based on the instrument configuration. Rapid scanning of the selected element with the best spectral lines and analytical parameters. Use the best spectral lines and analytical parameters for energy tracing of the selected elements. Analysis programs can be established with the best element lines and analysis parameters based on sensitivity, selected elements, and possible spectral line overlaps.

5.9.5 Metal material analysis program: Establish iron-based and nickel-based analysis curves on-site. It can accurately analyze the major, secondary and trace elements in iron-based and nickel-based metal materials.

5.9.6 Mineral and raw material analysis procedures: On-site establishment of material analysis curves for siliceous refractory materials, magnesia refractory materials, aluminaceous refractory materials, slag, fluorite, etc.

5.9.7 Configure the correction programs for the loss on ignition and

the increase in ignition of the glass melt sheet.

5.10 Computers and printers

5.10.1 The computer is a mainstream brand, with an i7 processor, 16G memory, 1T solid-state drive, 24-inch LCD display, and 64-bit windows operating system.

5.10.2 The printer is a mainstream configuration in the market, a mainstream brand laser printer.

5.15 Safety standards

5.15.1 Exemption Certificate: To ensure the safety of the equipment, in accordance with the regulations on the safety and Protection of Radioactive Isotopes and Radiation Devices, the model of the instrument being tendered must be on the list announced by the Ministry of Ecology and Environment, meet the exemption effect requirements, and apply for exemption conditions with a power of no less than 4KW. Customers do not need to apply for exemption filing certificates one by one. Provide screenshots of the list of the Ministry of Ecology and Environment and affix the supplier's fresh seal. All losses resulting from the exemption from filing shall be borne by the goods provider.

5.16 Installation and acceptance

5.16.1 Installation and commissioning shall be the responsibility of the bidder, and instrument acceptance shall be agreed upon by both the buyer and the seller. Special items required for installation, commissioning and acceptance shall be prepared and provided free of charge by the bidder. The warranty period of the instrument shall be calculated from the date on which both parties shall sign for approval after the final acceptance of the instrument.

5.16.2 Complete set of technical documents for installation, operation and maintenance. Basic structure and user manual of the main unit and each functional component, maintenance and repair manual. Measure the

parameters of the instrument according to the factory standards to meet the requirements of the manual and the tender documents.

5.16.3 Instrument accuracy and precision, element detection limit and verification method report shall meet but not be limited to JJG810 mainframe technical requirements: The counting rate, stability, precision check of the instrument shall meet the A-class instrument standards in the national wavelength dispersive X-ray fluorescence spectrometer verification regulations.

6 Configuration Checklist

Serial Number	Configuration list	Quantity
6.1	X-ray fluorescence spectrometer equipment host	1 unit
6.2	Analysis and testing software	1 set
6.3	Regulated power supply (15kVA or more)	1 unit
6.4	Cooling circulation water machine	1 unit
6.5	Standard-free quantitative analysis program	1 set
6.6	Glass melt loss correction and burn increment correction procedures	1 set
6.7	A program for automatically setting quantitative analysis parameters	1 set
6.8	Spectral grinding machine	1 unit
6.9	Tablet press (with 2 sets of tungsten carbide sample press discs)	1 set
6.10	Grinding machine (including 2 sets of tungsten carbide bowl bodies)	1 set
6.11	Pressure reducing valve for P10 gas cylinders	1
6.12	Sample cups of all sizes (48 standard sample cups and 36 small sample cups)	1 set
6.13	5-year spare parts and consumables package	1 set

6.14	Standard samples for instrument calibration	1 set
6.15	Standard samples for calibration of non-standardized quantitative software	1 set
6.16	Electric heating blower drying oven (10-250 ° C, volume no less than 20 liters)	2 units
6.17	Muffle furnaces (not less than 1150 ° C, chamber size not less than 17L)	1 unit
6.18	Carbon and sulfur element analysis device	1 set
6.19	Rapid X-ray semi-quantitative analysis apparatus	1 set
6.20	Ultrasonic cleaner (capacity 6L)	2 units
6.21	Mineral standard samples (1 set each of JRRM221-232, JRRM321-332, and JRRM 401-410)	3 sets
6.22	Spectral standard samples	30 pieces
6.23	Computers and printers	1 set
6.24	Supporting tools	1 set
6.25	Random files	3 sets
Note: To ensure functionality, the supplier may provide no less than the above quantity of configurations.		

7 Random technical documentation

7.1 The Seller shall provide three sets each of the Chinese and English versions of the instruction manual (including complete operation manual, maintenance manual, installation and commissioning guide, requirements for laboratory environment and matching, structural diagram and electrical schematic diagram of the equipment, etc., as well as instructions for use of all components, order number and order method, configuration list, etc.).

7.2 Factory inspection list of equipment, accessories and spare parts,

product inspection certificates of conformity, pre-factory verification data of equipment and verification certificates.

7.3 CD-ROM of computer operating system, CD-ROM of application software.

8 Bid Price

8.1 The language of the bid must be Chinese.

8.2 The bid price is a fixed tax-exempt RMB price. If a foreign currency quotation is adopted, it must be converted into a fixed RMB price at the exchange rate on the bid date for evaluation.

8.3 The bid price includes all related costs such as CIP price under the import contract, installation and commissioning, training, third-party equipment inspection, etc. The beneficiary of the relevant insurance is the buyer.

8.4 Itemized quotations:

8.4.1 Provide itemized quotations for each device unit under the standard configuration list.

8.4.2 Provide a list of vulnerable parts and itemized quotations.

8.5 The Seller shall enter into a purchase contract for imported equipment with the agent company (First Heavy Industries International Resources Co., LTD.) designated by the buyer (end user) at the winning bid price, specifying the end user in the contract.

9 Quality assurance and packaging requirements

9.1 The Seller shall guarantee that the goods are brand new, unused and that all assemblies and components are brand new standard products. The Seller shall guarantee that the goods provided shall be properly installed, properly operated and maintained and shall have satisfactory performance throughout their service life.

9.2 For the equipment being bid on, the manufacturer must conduct operational commissioning at the place of origin, and the equipment must undergo various technical parameter and functional tests and be

qualified before leaving the factory.

9.3 All the goods provided by the seller are precision equipment and shall be packaged in accordance with the protective measures stipulated in international standards to ensure that the packaging is suitable for long-distance transportation, moisture-proof, shock-proof, rust-proof and rough handling, and to ensure that the goods arrive at the site safely and undamaged. The Seller shall be responsible for any rusting, damage or loss of the goods caused by improper or inappropriate packaging, and shall bear all losses to the buyer as a result. If packed in wooden cases, quarantine certificates must be provided to prove that fumigation treatment has been carried out.

9.4 A detailed packing list and a certificate of conformity should be attached to each packing case.

9.5 The Seller shall mark each packing box with non-fade paint in both Chinese and English, including box number, size, gross weight, net weight and, if necessary, words such as "Do not invert", "Keep dry", "Handle with care" and lift position.

10 Mode and place of delivery

10.1 After the Seller is responsible for delivering the equipment to Tianjin Airport or Port, the Seller is still obligated to assist the buyer's agent company in handling domestic transportation matters to ensure the safe transportation of the goods.

10.2 The final destination is 20 Haixing Street, Tianjin Economic-Technological Development Area. All components shall arrive at the final destination before the specified date.

11 Installation, commissioning and training

11.1 Within 10 days after the contract takes effect, the Seller shall be responsible for conducting a pre-installation site survey of the Buyer's equipment laboratory and presenting equipment installation requirements and drawings. If necessary, the Seller shall propose

corrective measures for the laboratory.

11.2 After the purchased equipment arrives at the buyer, the Seller shall send experienced technical and installation personnel for overall installation and commissioning within 3 days of receiving the Buyer's notice. The tools required for installation and commissioning shall be provided by the Seller itself. On-site inspection shall be carried out in accordance with the product configuration list, with complete configuration, undamaged packaging, good appearance quality of equipment and components, and no surface damage, crush or deformation, and the "three guarantees" service shall be implemented. The buyer has the right to reject the goods in case of damage or non-conformity, and the seller shall bear all losses arising therefrom. After installation and commissioning, the equipment shall be calibrated by a qualified calibration institution in accordance with the requirements of the verification regulations/methods.

12.3 Training

12.3.1 Basic Training: It can be conducted during the installation and commissioning phase. The training content includes: safe operation of equipment, maintenance and upkeep, general fault handling, etc. At the training site, low alloy steel working curves, stainless steel working curves, nickel-

based working curves, refractory material working curves, etc. are established, and users are guided to establish methods. Through the technical training, the tenderer's operators should be able to operate the equipment independently and correctly and use the analysis software, and be able to identify and handle various simple faults. The total training for the installation and commissioning of the equipment shall not exceed 15 days.

11.3.2 Enhanced Training: The tenderer shall attend 2 training courses held by the successful bidder's application laboratory in China free of charge. Training materials and other materials shall be provided free of charge. Transportation, accommodation and meals shall be borne by the tenderer. Training content: Basic principles of the instrument, structure and composition of the instrument, review and consolidation of instrument operation, advanced training on instrument operation, and post-maintenance of the instrument.

11.4 The Seller shall be responsible for equipment transportation, installation, commissioning, third-party calibration and related costs.

12 Product Acceptance

12.1 Acceptance Criteria: Acceptance shall be conducted item by item in accordance with the technical agreement and the corresponding

national or product technical standards (whichever is stricter). The acceptance plan shall be formulated by the buyer.

12.2 The equipment shall be calibrated or verified by a third party in accordance with national and international standards. The Seller shall provide all the equipment completion documents. After the on-site acceptance is qualified, both parties shall sign the final acceptance report. The whole machine is guaranteed for one year from the date of acceptance, and X-ray tubes are still subject to free repair and replacement within four years after the warranty period.

13 After-sales Service

13.1 During the warranty period, in case of product quality problems, the Seller shall respond within 24 hours upon receiving the user's equipment failure report, guide the user or send free personnel to repair within 48 hours, promptly eliminate the fault, and all costs incurred shall be borne by the seller. The warranty period shall be extended based on the time of delay agreed upon in writing by both parties. In addition, the Seller shall provide free maintenance for the equipment for half a year and one month before the expiration of the warranty period, and provide on-site guidance to the user for any problems encountered during use.

13.2 After the warranty period, the manufacturer provides lifetime maintenance for the instrument. The supplier after-sales service shall respond within 24 hours after the user sends written or electronic notice, guide the user or send engineering technicians to the site within 48 hours to solve the problem, and ensure that the maintenance personnel do not leave the site until the fault is eliminated (except for parts that need to be replaced), and the time for the final resolution of the problem shall be confirmed by both parties.

13.3 Beyond the warranty period, the seller will provide free lifetime software upgrade services and free solutions to any software issues that arise, provided that the hardware upgrade or repair of the instrument is not involved.

13.4 The Seller shall have professional maintenance or after-sales service institutions within the territory of China, with no less than 5 after-sales maintenance engineers and technical support engineers each with no less than 2 years of relevant working experience, and the Seller shall provide proof that it can provide long-term technical support for the equipment being bid.

14 Payment

14.1 Method of payment: 90% letter of credit payment, 10% cash balance (check, wire transfer, etc.).

14.2 For the portion paid by letter of credit, an irrevocable letter of credit of 90% of the total contract amount in favor of the seller shall be issued by the buyer's agent company, and the document presentation period shall be 7 days after the date of the air waybill (the letter of credit shall be valid one month after the final acceptance report is signed between the seller and the buyer).

15.3 90% of the total contract amount shall be negotiated by the following documents after the Seller delivers the goods:

- ① A complete set of clean air waybills or sea waybills that have been shipped with the consignee being the Buyer's agent company and the notifying party being the buyer (end user) and its agent company, marked "Freight paid";
- ② Five copies (3 originals / 2 copies) of double payout invoices issued by the seller/manufacturer containing 90% of the total contract amount and 100% of the total contract amount, with the contract number, credit certificate number and shipping mark;
- ③ Three original and two copies of the packing list issued by the

seller/manufacturer, indicating the quantity, net weight, gross weight, volume and the corresponding invoice number and date;

④ Full insurance policy/certificate, 1 original and 2 copies, payout in China at 110% of the contract amount, in the contract currency, blank endorsement, insured with International Chamber of Air Transport (A)/All Risks (CIC) and war risk;

⑤ Three original copies of quality and quantity certificates issued by the seller/manufacturer;

⑥ One original and two copies of the certificate of origin issued by the seller/manufacturer/third party;

⑦ Notify the buyer and his agent company by fax or email within 3 working days after shipment, along with electronic versions of documents ① to ⑥;

14.4 10% of the total contract amount shall be paid after the final acceptance of the equipment by TT with the following documents: ① Commercial invoice issued by the seller/manufacturer for 10% of the total contract amount, the amount equal to the payment amount, 1 original and 1 copy, indicating the contract number and the bill of lading number;

② Final acceptance report of the equipment signed by both the seller and the end user;

③ A document signed by the buyer (end user) certifying that there are no quality issues during the warranty period, to be paid after verification by the agent company.

14.5 Payment to the winning bidder does not imply that the tenderer acknowledges that the goods or the services provided by the winning bidder comply with the relevant regulations.

15 Damages for Breach of Contract

15.1 The seller shall formulate a detailed production plan, strictly

implement the production plan to ensure the delivery date, and shall not delay the delivery date due to the payment cycle. The Seller shall take all flexible measures to ensure that the delivery is not delayed due to the influence of international relations. Otherwise, the Seller shall bear all losses arising therefrom to the buyer. Except in cases of force majeure (international trade frictions are not included), if the Seller fails to deliver the goods at the time stipulated in the contract, the Buyer may agree to the Seller's delay of delivery on the condition of payment of a fine. The fine may be deducted by the paying bank when negotiating the payment, and the total fine shall not exceed 15% of the total value of the delayed delivery of the goods. If the Seller delays delivery for more than 15 weeks as stipulated in the contract, the Buyer shall have the right to request the agent company to cancel the contract. In such case, the Seller shall still pay the fine to the buyer as stipulated above and cancel the payment of the goods. The original payment shall be returned to the buyer's agent company within one month. At the same time, the Seller shall indemnify the buyer for all losses incurred thereby, and the relevant expenses shall be borne by the seller.

16 Arbitration

16.1 The Buyer and the Seller shall settle all disputes arising from or in connection with the performance of this Contract through friendly consultation. If consultation fails, either party may submit the dispute to the China International Economic and Trade Arbitration Commission in Beijing for arbitration in accordance with the Commission's arbitration rules. The arbitration award shall be final and binding on both parties. Arbitration costs shall be borne by the losing party.

Annex 1

International Tender Product Information Filling Form

Serial Number	Goods Name	Specifications and models	Manufacturer's name/Nationality or region	Manufacturer's Address	Quantity of products	Equipment price (FOB/FOA unit price)	Domestic shipping fees	CIF/CIP total price	Customs duty %	Tariff (yuan)	VAT %	VAT (yuan)	Total price including tax
Total								/		/			

Bidders (seal) :

Signature of the bidder's representative:

Date:

Annex 2

Bid Itemized quotation sheet

Serial Numbers	Name	Quantity	Brand	Model	CIP unit price (yuan)	Xiao Ji (Yuan)
6.1	X-ray fluorescence spectrometer equipment host	1 unit				
6.2	Analysis Test software	1 set				
6.3	Regulated power supply (15kVA or more)	1 unit				
6.4	Cooling circulation water machine	1 unit				
6.5	Standard-free quantitative analysis program	1 set				
6.6	Glass melt loss correction and burn increment correction procedures	1 set				

6.7	A program for automatically setting quantitative analysis parameters	1 set				
6.8	Spectral grinding machine	1 unit				
6.9	Tablet press (with 2 sets of tungsten carbide sample press discs)	1 set				
6.10	Grinding machine (with 2 sets of tungsten carbide bowls)	1 set				
6.11	Pressure reducing valve for P10 gas cylinders	1				
6.12	Sample cups of all sizes (48 standard sample cups and 36	1 set				

	small sample cups)					
6.13	5-year spare parts and consumables package	1 set				
6.14	Standard samples for instrument calibration	1 set				
6.15	Standard samples for calibration of non-standardized quantitative software	1 set				
6.16	Electric heating blower drying oven (10-250 ° C, volume no less than 20 liters)	Two units				
6.17	Muffle furnaces (not less than 1150 ° C, chamber size not less than	1 unit				

	17L)					
6.18	Carbon-sulfur analysis apparatus	1 set				
6.19	Rapid X-ray semi-quantitative analysis apparatus	1 set				
6.20	Ultrasonic cleaner (capacity 6L)	2 units				
6.21	Mineral standard samples (1 set each of JRRM221-232, JRRM321-332, and JRRM 401-410)	3 sets				
6.22	Spectral standard samples	30 pieces				
6.23	Computers and printers	1 set				
6.24	Supporting tools	1 set				
6.25	Random files	3 sets				
Note: To ensure functionality, the supplier may provide no less than the above number of configurations.						

Note: Bidders shall respond to each of the above items.

Bidder (seal) :

Signature of the bidder's representative:

Date:

Annex 3

List of vulnerable parts and itemized quotation sheet

Serial Numbers	Name	Units	Brand	Model	DDP unit price (yuan)
1	Counter window film	a			
2	Grease for the goniometer	a			
3	High vacuum grease	a			
4	Counters use core wires	a			
5	Filter core	a			

Bidders (seal) :

Signature of the bidder's representative:

Date:

Annex 4 Summary of Performance Contracts

Serial Numbers	Contract Name	Device name	Device Model	Number of devices	User Name	User Address	Date of Contract signing

Note: The bidder guarantees the authenticity of the information provided; The bid evaluation committee reserves the right to verify the authenticity of the information. Any false information will result in the rejection of the bid.

Bidders (seal) :

Signature of the bidder's representative:

Date: