

REQUEST FOR QUOTATION

Supplier Name:

GOODS

X

SERVICE

X

RFQ Number	iLABS/RFQ 2024/25:46
Date Issued:	5 June 2024
Description of Services/ Goods:	Laser welding of Rubidium Metal target 316 Stainless Steel and Inconel 625 capsules to iThemba LABS, Faure, Western Cape, for 60 months as and when required
Closing Date:	20 June 2024
Closing Time:	11:00 am
Delivery Address:	iThemba LABS, ATT: SCM Department, Old Faure Road, Faure, 7131
Submit RFQ to:	Scm3@tlabs.ac.za (quotes / proposals must be sent via email only)
Date Goods or Service Required:	As and when required
For More Information (Technical):	Mr. Eugene Isaacs (scm3@tlabs.ac.za)
For More Information (Supply Chain Management):	Mr. Odwa Mxenge (scm3@tlabs.ac.za)

THE FOLLOWING CONDITIONS WILL APPLY:

- **Where quotations/proposals are R 2 000.00 or more, the preferential Procurement System Applicable is 80/20**
- Price(s) quoted must be valid for at least sixty (60) days from closing date of the RFQ.
- Price(s) quoted must be firm and must be inclusive of VAT.
- **No advance payment without a payment guarantee**
- **Payment terms are 30 days from date if invoice received**
- A firm delivery period **must** be indicated.
- Late proposals/quotations / bids will be not be accepted.
- **Submit your B - BBEE Certificate as accredited with SANAS or Sworn affidavit if you are claiming for specific goals.**

- Bidder / service provider / supplier that fails to provide mandatory RFQ requirements may be disqualified.
- Changes made by the / service provider/supplier to the RFQ template and its terms and conditions will not be considered after the closing date and time
- Provide CSD Summary Report (www.csd.gov.za)
- The attached forms to be completed by the Bidder (where applicable):
 - SBD 4 – Bidder disclose
 - SBD 6.1 – Preference Points Claim (South African Companies Only)
- This request for formal quotation is subject to the Preferential Procurement Policy Framework Act (PPPFA) and The Preferential Procurement Regulations, 2022, **The General Conditions of Contract (GCC and, if applicable, any other special Conditions of Contract.**

REGISTRATION ON THE CENTRAL SUPPLIER DATABASE (CSD):

The bidder must be on the National Treasury's Central Supplier Database in order to do business with the NRF and for the NRF to award a bid and sign the subsequent contract. Registration on the CSD (www.csd.gov.za) is compulsory and bids from unregistered bidders are not considered.

National Treasury Contact Details: +27 (0) 12 406 9222 or email csd.support@treasury.gov.za

SCHEDULE 1 – SPECIFICATION

Introduction to the NRF

The National Research Foundation ("NRF") is a juristic person established in terms of the National Research Foundation Act, Act 23 of 1998, and a Schedule 3A Public Entity in terms of the Public Finance Management Act. The NRF is the government's national agency responsible for promoting and supporting research and human capital development through funding researchers, provision of the National Research Platforms, and science outreach platforms/programs to the broader community. The NRF provides these services in all fields of science and technology, including natural science, engineering, social science, and humanities.

The NRF is a schedule 3A entity under the PFMA (Act 29 of 1999), which is required to plan and report on its activities and organizational performance, and which is to be audited by the AGSA on an annual basis. As part of the AGSA audit requirements, the NRF has to collect / document and store details, data and/or information of all persons and activities that form part of its performance record as proof thereof. In terms of this requirement, all persons making use of NRF facilities, platforms, equipment, tools etc., for research and related purposes are required to provide their personal details/data/information as per the template below or other similarly appropriate format. By completing your information in the template/register/record below and appending your signature thereto, you confirm your consent, in line with the Protection of Personal Information Act 4 of 2013, whereby the NRF and any of its business units may process (collect, receive, record, organize, collate, share, store, update, modify, retrieve, alter, consult, use, disseminate, distribute, merge, link, erase or destroy) the personal information you provide within and amongst its business units/functions for the purpose of fulfilling its statutory mandate, public accountability and other regulatory/legal requirements.

Introduction to the Business Unit responsible for this RFQ

iThemba LABS (Laboratory for Accelerator-Based Sciences) is a multi-disciplinary research laboratory based at two sites in the Western Cape and Gauteng respectively, these provide facilities for:

- Basic and applied nuclear physics research using particle beams
- Research Radiation Biophysics
- The supply of accelerator-produced radioactive isotopes for nuclear medicine and research

Evaluation Process

- Evaluation of proposals:

All proposals will be evaluated by Supply Chain Management for administrative compliance, functionality, price and B-BBEE. Based on the results of the evaluation process and upon successful negotiations, iThemba LABS will approve the awarding of the contract to the successful bidder.

- Preference points system:

The 80/20 preference point system will be used where 80 points will be dedicated to price and 20 points to B-BBEE status. “If all bids received are more than R 1 000 000.00, this request is automatically cancelled”.

Subject to section 2(1)(f) of the PPPFA, the contract will be awarded to the tenderer scoring the highest points.

Supplier Response

Name of Supplier:	
Address of Supplier:	
Contact Person:	
Contact Tel:	
Email Address:	
CSD Supplier Number:	MAAA.....
Lead Time for delivery	
Currency:	ZAR
Payment terms:	30 days from the date of receiving invoice

Administrative Compliance Returnable Documents (M – Mandatory); (O – Optional)	Submitted	
Bidders Disclosure (SBD 4), signed and completed.	M	☐ Yes ☐ No
Preference Points Claimed (SBD 6.1), signed and completed with BBBEE certificate or sworn affidavit (applicable for local bidders).	O	☐ Yes ☐ No
The service provider must submit a company profile and portfolio that demonstrates their welding capabilities, skills, and certifications/qualifications.	M	☐ Yes ☐ No
(M – Mandatory); (O – Optional)	Submitted	
Pricing completed	M	☐ Yes ☐ No

SPECIFICATIONS:

SPECIFICATIONS:

BACKGROUND

The Radionuclide Production Department (RPD) manufactures high-grade radiopharmaceuticals used for diagnostic applications in nuclear medicine. It produces these radiopharmaceuticals under Good Manufacturing Practice principles that are the requirements for the South African Pharmacy Council and South Africa Health Products Regulatory Authority and has distribution agreements with companies around the world. Therefore, products supplied by the Radionuclide Production Department should be of a high and consistent quality.

The production of Strontium82 radioisotopes starts with the encapsulation of cold material (Rubidium Metal) within 316 Stainless Steel and Inconel 625 metal capsules – hereafter known as Production Targets. During the irradiation process the 316 Stainless Steel and Inconel 625 encapsulated Production Targets are irradiated with a proton beam and water cooled in order to produce the required radioisotopes. The sealing of the Production Targets capsules as per attached drawings is accomplished using laser beam welding techniques.

DETAILED SCOPE OF WORK

1. Laser Beam Welding Services

iThemba LABS seek to appoint a service provider who is capable of performing Laser Beam Welding Services of Rubidium Metal raw material encapsulated in 316 Stainless Steel and Inconel 625 target capsules.

See attached drawing for dimensions and specifications.

Validation production runs are to be performed on the 316 stainless steel and Inconel 625 capsules. As a very high demand is placed on the integrity of the welded joint, which should be defect free and of a uniform weld bead geometry, the following criteria is used for the welding and quality assessment of the capsules which cannot be deviated from.

- Use of Nd:YAG-laser based welding techniques
- Use of advanced robotic positioning of the capsule components
- Use of evaluation of finished welds by 3D thermal neutron computed tomography

2. Research and Development of new Production Targets

iThemba LABS is developing and expanding their range of radiopharmaceuticals and requires research and development (R&D) services in the field welding, Laser Beam Welding and metallurgy in order to develop the next generation of Production Targets.

The service provider should be able to provide the following services:

- R&D welding processes to join ferrous metals, light metals, precious metals and alloys.
Examples include Niobium and Inconel 625
- Consultation and design services in welding, metallurgy and engineering and fabrication

The service provider must submit a company profile and portfolio that demonstrates their welding capabilities, skills, and certifications/qualifications.

The shipping cost of the targets: iThemba LABS will be responsible for the courier of the targets to and from the service provider premises.

PRICING SCHEDULE

- Bidders must price in accordance with the pricing schedules below, this will enable iThemba LABS to compare priced offers.
- Bidders may also provide a separate detailed pricing proposal, indicating their fee proposals for each stage based on a percentage of the estimated project cost together with any discounts offered.
- Failure to submit a priced offer using the prescribed schedules will make the bid liable for disqualification.
- Do not leave any area blank in the pricing schedules.
- All payments will be made 30 days of receipt of invoice.

No	Description	Quantity	Unit of Measure	Price unit (Incl. VAT)	Amount for 300 Targets
1.	Service offered as per above requirements (page 4, paragraph 1) 60 per (year 1)	60	Per Target	R	R
2.	Service offered as per above requirements (page 4, paragraph 1) 60 per (year 2)	60	Per Target	R	R
3.	Service offered as per above requirements (page 4, paragraph 1) 60 per (year 3)	60	Per Target	R	R
4.	Service offered as per above requirements (page 4, paragraph 1) 60 per (year 4)	60	Per Target	R	R
5.	Service offered as per above requirements (page 4, paragraph 1) 60 per (year 5)	60	Per Target	R	R
6.	R & D Services: Price per hour (Consultation and design services)	100 (estimate)	Hour	R	R
	Total Bid Price for 5 Years (Inclusive of all items above)				R

STANDARD BIDDING DOCUMENT (SBD) 4

BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. Bidder's declaration

- 2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest¹ in the enterprise, employed by the state? **YES/NO**

- 2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

¹ the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

2.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

2.2.1 If so, furnish particulars:

.....
.....

2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? **YES/NO**

2.3.1 If so, furnish particulars:

.....
.....

3 DECLARATION

I, the undersigned, (name)..... in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium² will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

² Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of bidder

STANDARD BIDDING DOCUMENT (SBD) 6.1

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 To be completed by the organ of state

a) The applicable preference point system for this tender is the 80/20 preference point system.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
- (b) Specific Goals.

1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	100

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20	or	90/10
$P_s = 80 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right) \text{ or}$		
$P_s = 90 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right)$		

Where

- P_s = Points scored for price of tender under consideration
- P_t = Price of tender under consideration
- P_{min} = Price of lowest acceptable tender

3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

3.2.1. POINTS AWARDED FOR PRICE

A maximum of 80 or 90 points is allocated for price on the following basis:

$$\begin{array}{ccc} 80/20 & \text{or} & 90/10 \\ \\ Ps = 80 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right) & \text{or} & \\ Ps = 90 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right) & & \end{array}$$

Where

- Ps = Points scored for price of tender under consideration
Pt = Price of tender under consideration
Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
- (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
 - (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender (B-BBEE Status Level of Contributor)	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
1	10	20		
2	9	18		
3	6	14		
4	5	12		
5	4	8		
6	3	6		
7	2	4		
8	1	2		
Non-compliant contributor	0	0		

B-BBEE certificate or sworn affidavit must be submitted as evidence for points claimed.

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm.....

4.4. Company registration number:

4.5. TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
- ☐ One-person business/sole propriety
- ☐ Close corporation
- ☐ Public Company
- ☐ Personal Liability Company
- ☐ (Pty) Limited
- ☐ Non-Profit Company
- ☐ State Owned Company

[TICK APPLICABLE BOX]

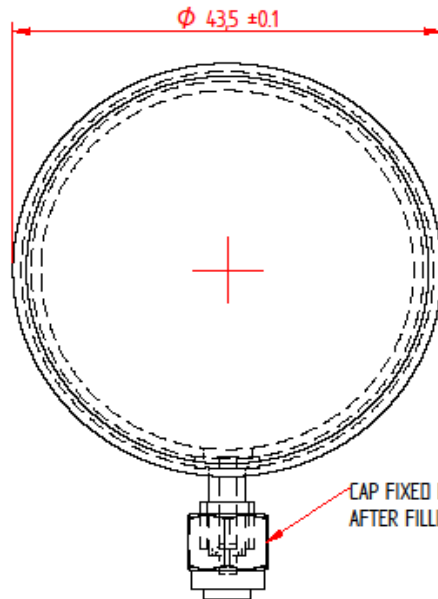
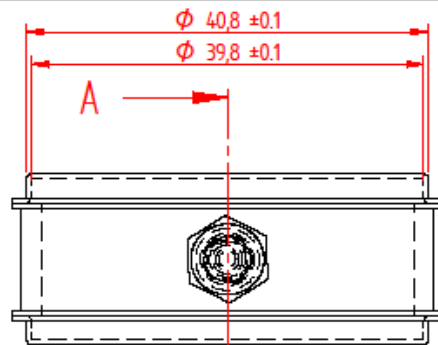
4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that

the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

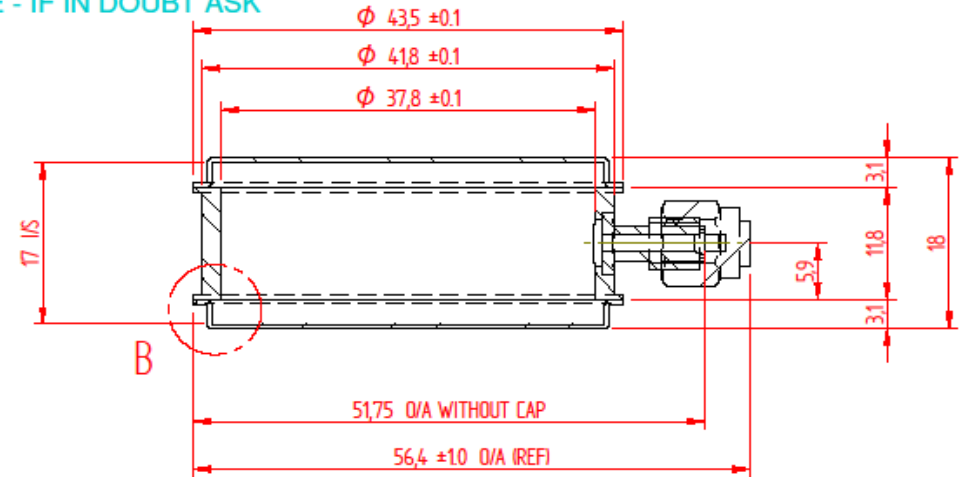
- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
 - (a) disqualify the person from the tendering process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution, if deemed necessary.

SURNAME AND NAME:	 SIGNATURE(S) OF TENDERER(S)
DATE:	
ADDRESS:	

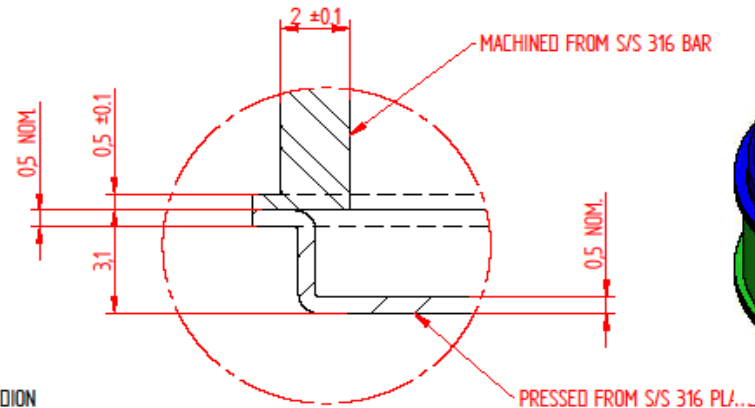
Note: It is advised that documents be returned in PDF



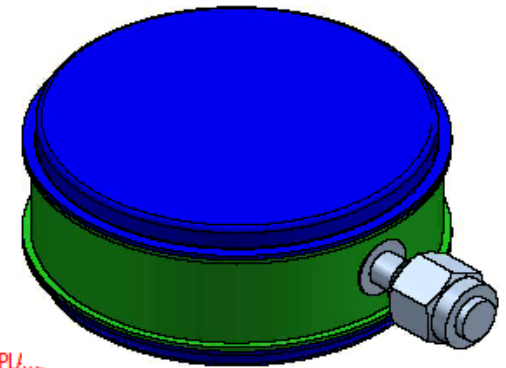
DO NOT SCALE - IF IN DOUBT ASK



SECTION A-A



DETAIL B



RESTRICTED

METRIC SYSTEM: mm

REMOVE ALL BURRS & SHARP EDGES

DRAWN saald

UNSPECIFIED MACHINE SURFACES

ACCEPTED

UNTOLERANCED DIMNS/ANGLES LIMITS

APPROVED

DIMNS X ± 0.50 mm

DATE 2016/11/28

DIMNS X.X ± 0.25 mm

SCALE 5:1

DIMNS X.XX ± 0.10 mm

TREATMENT

ANGLES X ± 30°

Error: No reference

ANGLES X.X ± 20°

ANGLES X.XX ± 10°

FIRST ANGLE PROJECTION

DRAWN TO SABS 0111



TITLE
TARGET CAPSULE 2 ASSY
RUBIDIUM (Rb) VBTS/ NORDION

MATERIAL

DRAWING No

RPG-DRW-0141

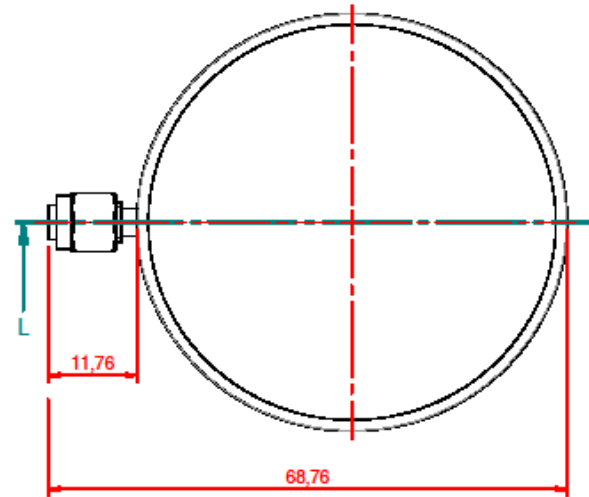
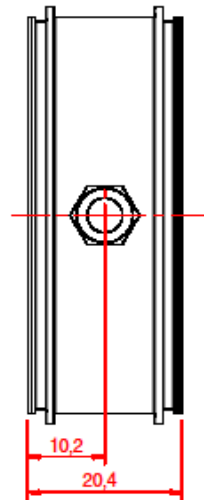
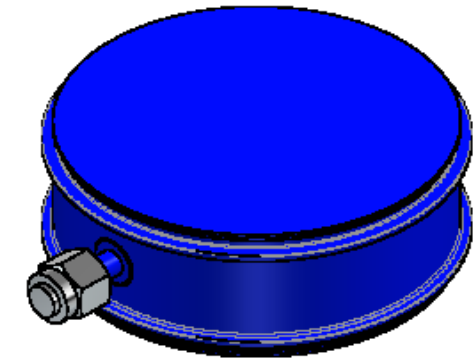
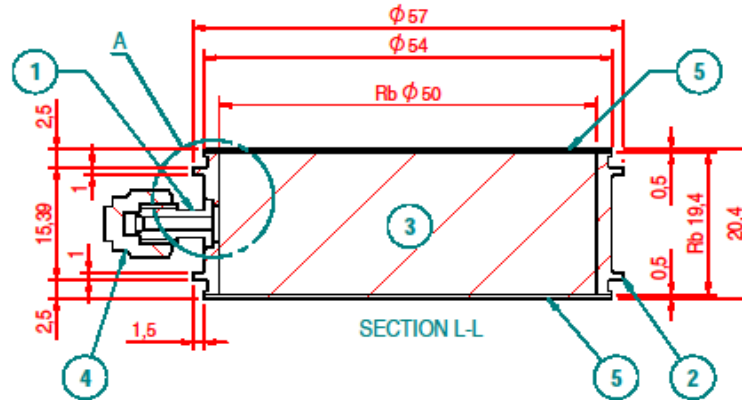
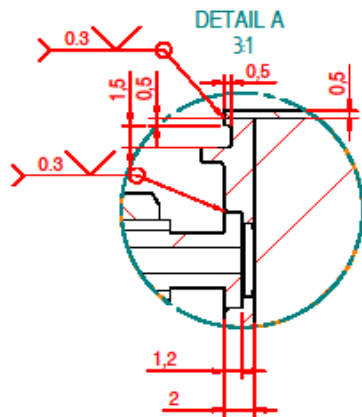
Rev0

A3

SHEET 1 OF 1

DO NOT SCALE - IF IN DOUBT ASK

DIMENSIONS WITHOUT TOLERANCE INDICATION (TO ISO 2768 MEDIUM SERIES)					
NOMINAL DIMENSIONS	0.5 TO 3	OVER 3 TO 30	OVER 30 TO 120	OVER 120 TO 315	OVER 315 TO 1000
PERMISSIBLE VARIATIONS	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8
					± 1.2



- 1 ALL ITEMS WILL BE SUPPLIED FOR LASER WELD CONSTRUCTION.
- 2 QTY: TO BE CONFIRMED UPON ORDER.
- 3 WELDS TO CONFORM TO TLABS QUALITY ASSURANCE CRITERIA, SEE SPECIFICATION.
- 4 NO SCRATCHES OR BUMPS DUE TO HANDLING OR TRANSPORTATION.

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	MASS (g)	QTY.	DENSITY
1	6027-0333-G	FILLING PORT	Stainless Steel, 316	1.401	1	8027.0 kg/m³
2	6200-1941-D	INCONEL TARGET BODY	Inconel 625	53.794	1	8192.0 kg/m³
3	6200-1942-A	RUBIDIUM 19.4 INNER	Rubidium	58.366	1	1532.0 kg/m³
4	6200-1950-A	SS-100-P-SWAGelok SUPERLOK PLUG 1/16"	Stainless Steel, 316	2.472	1	8027.0 kg/m³
5	6200-1951-C	INCONEL TARGET LID	Inconel 625	9.381	2	8192.0 kg/m³

METRIC SYSTEM: mm

REMOVE ALL BURRS & SHARP EDGES

DRAWN sbaard

UNSPECIFIED MACHINE SURFACES

CHECKED

UNTOLERANCED DIMS/ANGLES LIMITS

APPROVED

DIMNS X ± 0.50 mm

DIMNS X.X ± 0.25 mm

DIMNS X.XX ± 0.10 mm

ANGLES X ± 30°

ANGLES X.X ± 20°

ANGLES X.XX ± 10°

DATE 2023/10/10

SCALE 1.5:1

TREATMENT



iThemba LABS
Laboratory for Accelerator
Based Sciences

TITLE

70MeV RUBIDIUM TARGET
CAPSULE ASM

MATERIAL

DRAWING No

6200-1952-D

A3

SHEET 1 OF 1

THIRD ANGLE PROJECTION

DRAWN TO SABS 0111