TENDER DOCUMENT FOR PROCUREMENT OF SUPPLY OF SPARES & INSTALLATION FOR OVERHAULING OF, LANG IMPALA 400, CNC ENGRAVING MACHINE ON PAC BASIS.

Unit: India Government Mint, Hyderabad of Security Printing and Minting Corporation of India Limited

Firm's Reference		Quotation No: Dated.		**Date**	22.01.2026
E-mail	purchase.igmh@spmcil.com IGMH.Hyderabad@spmcil.com	***PAC Procurement***		Address: P.B. NO. 10, H.C.L. POST, I.D.A. PHASE - II, CHERLAPALLY, HYDERABAD – 500 051. (TELANGANA)	
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Telex					
M/s. LANG GmbH & Co. KG. Dillstraße 4 D-35625 Hüttenberg, Germany.		**Enquiry No and Date**		6000019544, Dated: 22.01.2026	
		Date of Tender Opening		21st February, 2026 at 03:00 PM (IST).	

Please submit on or before 3:00 PM on date of tender opening, your quotation for following goods/Services, in accordance with the Terms and Conditions printed overleaf, in a sealed cover, marked on top with – Enquiry No, Date of Tender opening.

Yours Sincerely

(V.Kiran Kumar)
Joint General Manager(Materials)

Tender Schedule

S No	Description and Specification of Material / Part No	Quantity	Unit	In figure and in words Euros (€).		Taxes & Duties
				Rate Per Unit (€)	Value (€)	
1.	SUPPLY OF SET OF PRECISION PRESSURE CONTROLLER FOR WEIGHT COMPENSATION	1	SET			
2.	SUPPLY OF SET OF WEIGHT COMPENSATION CYLINDER	1	SET			

3.	SUPPLY OF X AXIS BALL SCREWS & ACCESSORIES	1	SET			
4.	SUPPLY OF Y AXIS BALL SCREWS & ACCESSORIES	1	SET			
5.	SUPPLY OF Z AXIS BALL SCREWS & ACCESSORIES	1	SET			
6.	DIGITIZING SYSTEM LDIGIT EXPRESS	1	SET			
7.	LASER DISPLACEMENT SENSOR 20MM - LANG IMPALA 400 i. Supply of Laser compact displacement sensor with integrated controller, measuring range: 20 mm	1	SET			
8.	INSTALLATION/OVERHAULING CNC ENGRAVING MC	1	AU			

Enclosed Specifications/ Drawings/ Special Conditions of Contract:

Scope of Supply and Work (Deliverables)

1. **Upgradation to LNC express for IMPALA 400 MCG with enclosure.**

Performance extension to the high resolution 4 axis step motor control

LNC express for the existing machine for
- higher speed,
- higher acceleration
- more flexibility and comfort during machine operation.

This will consist of the following:

I. Exchange of the existing control with LNC-Express control.
II. Exchange of the existing control panel.
III. Exchange of the existing PC including TFT-monitor with a new IPC and monitor.
IV. Exchange of the motors and connecting lines if required.
V. Exchange of the limit switches and connecting lines if required.
VI. Exchange of the existing spindle generator with new generator SD2S.
VII. New hand-held control unit with hand wheel encoder and tip-mode
VIII. Replace the present power electronics with a new standing Control cabinet (EMC trouble free structure).

IX. Current output software LDriver (Dongle will be replaced with a new one during upgrade).
X. Control equipment
   i. 4-axis servo- and step motor control LNC express in switch cabinet case.
   ii. 32 digital in- and outputs.
   iii. Servo- and step motor operation.
   iv. Encoder analysis in all axis.
XI. Control concept
   i. Hand-held control unit with hand wheel encoder and tip- mode
   ii. Complete security concept with speed control, shutdown- and spindle shutdown monitoring system.
   iii. Spindle rotation speed potentiometer with ±50% override.
   iv. Control elements: emergency shutdown, key switch, enable button, tool cooling button and hand- held control.
XII. Technical data-
   i. Resolution: 1638.4 micro steps/motor rotation in servo mode (<1 nm).
   ii. Feed rate: maximum speed of 9 m/min
   iii. Rapid traverse: maximum speed of 9 m/min
XIII. Acceleration: maximum acceleration of 1700 mm/s2.

NB:
i. Built-in motors to be replaced with up-to-date servo motors, if necessary. Compatible spindle generators are to be provided for use.
ii. Control cabinet of appropriate dimensions is to be provided.

2. Supply of latest Digitizing System LDIGIT express as well as the latest version of the LANG software package Relief-Designer Scan for scanning and digitizing 3D free-form surfaces and relief models.

Features-

I. Clamping table with movement range (X) 400 mm.
II. Portal axis for scanning laser with (Y, Z) 400 x 150 mm
III. Scanning area (X, Y) from 300 up to 397 mm (depends on scan resolution) by 400 mm
IV. Machine enclosure with viewing windows
V. Maximum load of the table: 20 kg
VI. Clamping possibility with breadboard bore holes M6, Grid spacing 75mm
VII. Laser system Micro-Epsilon with protection class 2
VIII. Motor control unit: LANG LStep PCI express
IX. Maximum machine speed: 800 mm / s
X. Maximum acceleration: 10 m/ s^2 at 3 kg load

XI. Electrically adjustable z-axis in connection with recognition of an automatic detection of the measuring range and the pseudo-measuring range
XII. Mains supply: 230 V/16A
XIII. Supply voltage: (AC) 230V /16A / 50-60 Hz /max. 1.2kVA

XIV. Base frame for LDIGIT express
  i. The base frame consists of a welded steel design in order to guarantee the stability of the digitizing system.
  ii. Dimensions base frame: approx. W x D x H: 1.110 x 830 x 760 mm
  iii. The frame is produced in the color RAL 7035 (grey).
  iv. Frame with anti-slip column bases and adaptive bolt for seating the upper machine part.
  v. Machine dimension including base frame approx. W x D x H:1.110 x 830 x 1.800 mm
  vi. Machine weight with base frame (complete machine) 335 kg.

XV. Machine Industrial-PC
  i. ATX with Intel CPU
  ii. HDD 240GB SSD
  iii. 4 x USB 3.0 and LAN RJ45 interfaces
  iv. 19 Touchscreen monitor

XVI. Relief-Designer Scan - Digitizing program for LANG digitizing systems

Program for the digitizing of models
  i. 3D Digitization of free form surfaces
  ii. User can specify the desired X, Y resolution through the software
  iii. Select and digitize concept
  iv. Handy functions for selecting relief points
  v. Digitization report
  vi. Digitization summary in relief
  vii. User-friendly wizards and dialogs
  viii. Verify Z position of digitization dialog
  ix. Automatic and manual movement of machine axis with software and joystick
  x. Digitization is possible in different shapes - Rectangle, Circle or Polygon
  xi. Digitization area can be entered through keyboard or by "Teach-In" with laser
  xii. Automatically saves the surface data after digitization
  xiii. Handling of data in LANG LR2 format

xiv. Possibility of exporting as STL data record
xv. Possibility of saving and reloading all parameters of a digitization
xvi. Actual measuring range (Focus position of sensor) can be found automatically
xvii. Several different materials can be digitized in a sequential order in a single start
xviii. Auto exposure function
xix. Automatic power-off after work end

XVII. Processing functions
i. Marking of individual relief points or relief areas
ii. Modification of the scanned values (individual points, marked areas)
iii. Various filter functions (total relief, marked areas)
iv. Raising/lowering of relief areas
v. Horizontal alignment based on individual points or marked areas
vi. Calculation of scanned values for other relief resolutions
vii. Relief transformation (Mirroring, Rotating, Moving, Scaling, Shearing, Inverting)
viii. Relief processing (circular arc, cylinder, truncated cone)

XVIII. Interfaces
i. Areas: Lang relief formats (*.LR2, *.RLF), STL
ii. Heights as gray scales for photo software (*.TIF)
iii. Contours: *.LG1

XIX. Display functions
i. Grey steps
ii. Rainbow view
iii. Isohypses view
iv. Lighting simulation

XX. Others
i. Maximum file size: 2GB
ii. Compatible with OS- Windows 8.1Pro (64-bit) and Windows 10 (64-bit) in English language.

Item/ Tender Specific Conditions of this tender:

1. Payment terms: 100% Payment will be made, via DBT, within 30 days after Supply, Installation, acceptance and approval by Mint authorities.
2. Warranty - 12 Months from the date of Final Acceptance and approval by Mint authorities.
3. Delivery: The entire supply and installation to be completed within 24 weeks from date of issue of Purchase Order (PO).
4. The terms and conditions, guidelines of SPMCIL Procurement Manual Version 3.0 will be applicable to this bid at any stage to avoid any conflict at later stage. Kindly refer to GIT and GCC of SPMCIL Procurement Manual Version 3.0 for additional terms and condition as per the links given below:
   A. General Instruction to Tenderer(GIT):
   https://spmcil.com/uploaddocument/GIT3.0.pdf
   B. General Conditions of Contract GCC):
   https://spmcil.com/uploaddocument/GCC3.0.pdf
5. The bidder needs to submit duly signed, stamped and sealed Bid document, GIT & GCC as a token of acceptance of all the terms and conditions of the tender without any deviation.
6. The Bidder should also provide an undertaking on the firm Letter head, duly signed and stamped, as a token of confirmation of after sales support for corresponding replacement, supply and service for the next 10 Years, from the date of Final acceptance of Mint Authorities.

I/ We engage to supply the material(s)/service(s) to your office and comply the following:

1. Tender Schedule and Technical Specification indicated
2. Item/ Tender specific conditions for this tender.
3. Terms and Conditions printed overleaf
4. General conditions of Contract signed by me at the time of Vendor Registration (for registered vendors)
5. I/ we confirm that set off for the GST etc. paid on the inputs have been taken into consideration in the above quoted Price and further agree to pass on such additional duties as sets offs as may become available in future under GST etc.
6. This offer is valid for 120 days from the date of opening of tender.

Signature & seal Place & Date:		Name of Authorized Signatory:	
Address:		Tel. No/ Fax. No / Mobile No Email ID:	