



**National Council for Cement and Building Materials**  
**Interlaboratory Services**  
**(India's First NABL Accredited PT Services Provider)**



Interlaboratory Services  
NABL Accredited Laboratories  
Certificate No.: PC-1007

**NCB PROFICIENCY TESTING SCHEME ON STEEL BAR**  
**(ILS/PT/37)**

**PROTOCOL**

**1.0 PROFILE**

**1.1 Background**

NCB is the apex body providing R&D and technical services in cement and allied building materials. In 2013, **Interlaboratory Services (ILS) of NCB was granted NABL accreditation as per ISO 17043:2010 for providing PT services. The present scope of accreditation in mechanical field covers cement, fly ash, aggregate, building brick, tile (ceramic), steel bar and mortar/concrete cube.**

**1.2 PT Scheme on Steel Bar**

Now, ILS is launching PT scheme on steel bar. The study is being coordinated by Dr. S. K. Breja (Joint Director-CQC). The scheme envisages testing of two samples of steel bar as per Indian standard methods of testing. About 25 laboratories would be accommodated in the study. The registration for participation would be done on first-come-first-served basis. The programme would be conducted as per ISO 17043:2010. The channels of communication with all the participants will remain open through out the programme implementation period.

**1.3 Salient Features of the New Scheme**

Each participating laboratory would be provided two test samples. Salient features of the current scheme are as under:

- Simultaneous participation
- Sourcing of material
- Sample preparation and checking for acceptance
- Testing for homogeneity and statistical check of homogeneity
- Safe delivery of samples to participating laboratories
- Testing and reporting of results by participating labs in the prescribed time frame
- Data analysis as per ISO 17043:2010 and ISO 13528:2015(E)
- Feedback of performance to participating laboratories
- Data confidentiality

All the PT activities will be coordinated by ILS. Sample preparation and testing for sample acceptance will be subcontracted by ILS to other laboratories/departments of NCB. Activities like statistical checks, compilation and analysis of results and report preparation will not be subcontracted. Complete confidentiality will be observed in the implementation of the scheme.

## 2.0 TECHNICAL DETAILS

### 2.1 Material Selection and Preparation of PT Items

The material used in concrete will be sourced. The quality of the material will be checked for suitability.

### 2.2 Sample Packaging and Delivery

The PT items (test samples) would be packed properly and safely for dispatch to the participants. Each participating laboratory would be provided two test samples, each comprising three specimen. Necessary instructions and data reporting sheets will be provided. Replacement would be provided in case of damage or loss during transit.

### 2.3 Sample Testing

The scheme covers testing of samples of steel bar as per IS specification, for the following test parameters at participants' laboratories:

PT Item	Test Parameter	IS Code
Steel bar (12 mm)	Mass per metre	IS 1786:2008 & IS 1608:2005
	Yield stress	
	Elongation	
	Tensile strength	

**Note:** The participating laboratories are required to ensure availability of trained personnel, calibrated equipment and maintain required environmental conditions during testing. Conformance to the respective test procedures will have to be ensured.

### 2.4 Reporting of Results

The participating laboratories will be required to conduct tests to the accuracy mentioned in the standard procedure; deviation, if any, will have to be reported in the result reporting sheet. Test results would have to be sent to the coordinator through e-mail for quick transmission, followed by hard copy, within the prescribed time frame.

### 2.5 Analysis of Results

Received test results will be evaluated as per ISO 17043:2010 and ISO 13528:2015(E). The test results would be evaluated for Z-score ( $Z_A$  and  $Z_B$ ) for each parameter of sample 'A' and 'B'. The laboratory's performance would be indicated in terms of Z-score.

### 2.6 Statement of Confidentiality

All laboratories would be given code number upon receipt of test results by NCB. Confidentiality of received data, analysis and feedback would be ensured. Identity (list) of participants will not be disclosed. However, it may be disclosed to NABL, if required.

### 2.7 Report

Report containing details of the scheme, evaluation, laboratory performance sheet would be prepared and sent to the participating laboratories. Copy of the report may be given to NABL, if required.

### 2.8 Feedback

All the participating laboratories will be individually conveyed the status of their performance, with remarks.

### **3.0 REGISTRATION FOR PARTICIPATION**

The laboratories having facilities for testing of steel bar can register by sending filled up Form 1 (attached) to NCB, for participation in the scheme.

### **4.0 TIMELINE**

The last date for registration is **15<sup>th</sup> January, 2018**. The test samples would be dispatched to participants by **31<sup>st</sup> January, 2018**. The study is scheduled to be completed by **31<sup>st</sup> March, 2018**.

### **5.0 PARTICIPATION FEE**

Rs. 25,000.00 (Twenty Five Thousand) plus GST @ 18%.

### **6.0 POST-PROGRAMME SUPPORT**

Laboratories willing to take assistance for improving their performance in the aftermath of the programme would receive support at the cost agreed upon.

Date: 19.12.2017

Dr. S.K. Breja  
Joint Director  
(PT Coordinator)

### **Contact Details of PT Coordinator:**

**Dr. S. K. Breja**

**Joint Director & Head  
Centre for Quality Management,  
Standards and Calibration Services  
National Council for Cement and Building  
Materials  
34 Km Stone, Delhi-Mathura Road (NH-2)  
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**National Council for Cement and Building Materials  
Interlaboratory Services**

**CONSENT FORM FOR PARTICIPATION IN PT SCHEME**

**TITLE: NCB PROFICIENCY TESTING SCHEME ON STEEL BAR  
(MECHANICAL PARAMETERS): ILS/PT/37**

Name of the Laboratory.....

Address: .....

.....

Pin code: .....

Telephone: ..... e-mail: .....

Name of the Contact Person: .....

Designation: ..... e-mail: .....

Telephone: ..... Mobile: .....

We are interested to participate in the above scheme.

The participation fee alongwith applicable taxes for the scheme is being made as per the following:

**Payment details:** NEFT\*/SB Collect\*\* ----- dated -----  
for **Rs.** .....

Date:

Authorized Signatory

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Participation Fee : Rs. 25,000.00

GST @ 18% : Rs.

**Total** : **Rs.**

PAN No.: AAATN2477N; GST No. 06AAATN2477N1Z6

\***NEFT:** Saving Bank Account No. 10383962218, State Bank of India, Address – Cement Research Institute of India, Sector-4, Faridabad 121004 (Haryana), India, Branch Code-03794, MICR Code – 110002194 and IFSC Code SBIN0003794.

\*\***SB Collect:** [www.onlinesbi.com](http://www.onlinesbi.com) → SBI collect → Proceed → State of corporate/Institution: (All India) → Type of corporate/Institution: (Govt. Department) → National Council for Cement and Building Materials → Proficiency Testing → Submit.

Please forward scanned copy of payment details separately.

Form 1 Date of Issue: 19.12.17 Revision: 00
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