

# **Inspection & Test Procedure**

## **ITP –01**

### **Installation of Couplers**

#### **1. Purpose And Scope of Works**

To set out the process for inspection and testing procedure and maintaining records for mechanical splicing system by the Bar- break coupler.

#### **Applies to**

Sprocs Couplers

#### **2. Procedure**

Inspection and testing process for mechanical splicing system by the Bar- break coupler comprise of the following three areas.

#### **Coupler Installation (tightening and fixing)**

The site engineer shall check the joints as tightened by contractor preferably with a wrench. During the check, if any joint is found loose, then all the remaining joints will be checked as given below.

**Step 1.** The coupler bar tightening will be checked by site engineer and verified by QA/QC

**Step 2.** Site engineer will check once again the tightening of all the joints if any one the coupler joint found loose and request for verification.

## METHOD STATEMENT FOR INSTALLATION

### 1. PURPOSE AND SCOPE OF WORKS

This method statement describes the process for mechanical splicing system by Sprocs couplers. Reinforcement cutting / threading and installation for Sprocs couplers.

### 2. MATERIAL

Rebar size as per requirement.

### 3. TOOLS & PLANT

Rebar Cutting Machine.....	1
Bar Threading Machine	1
Pipe Wrench .....	1.
Sprocs Couplers .....	As required
Sprocs Coupler Gauge-----	all sizes

### 6. INSTALLATION PROCEDURE

The couplers will be supplied by Sprocs Formworks.. The work of threading of rebars would be carried out by Sprocs and the installation and tightening of the couplers will be carried out by the Customer. In one end of the bar couplers can be tightened by Sprocs operators with the help of customers labour after threading operation. This coupled bar is cast in concrete first as this minimizes the chances of thread damage. The coupler would be capped on the other end. The other end of bar would also be capped so that threads do not get damaged.

#### 6.1 Cutting and Threading of Reinforcement steel

Reinforcement steel bars are cut at steel bar yard by mechanical cutter onto the working platform where threading operations would be performed.

#### 6.2 Threading of Reinforcement

- (a) Workers will place the reinforcement onto reinforcement threading stands. The machine operator will then start threading work. It is better that the threading is done before bending of rebars due to convenience in operations.
- (b) A coupler on one end shall then be fully tightened to the rebars.. The tightened coupler with the anchor bar will then be sent to bar bending yard.
- (c) The threaded bar shall be protected by the plastic cover.
- (d) Prepared bars shall be stored properly before using.

### **6.3 Installation of Bars**

1. Ensure couplers used are of correct size. Always keep inner threads of couplers clean and free from grease.
2. Screw couplers onto threaded bar by hand ( Roughly 5 Turns). Complete tightening by using pipe wrench to achieve full tightening of joints.

## **7 QUALITY ASSURANCE**

The work of cutting & threading of coupled rebars will be inspected and tested in accordance with Inspection and Test Procedure ITP-01.

## **8. SAFETY MEASURE**

Pre-work briefing will be given to all workers engaged in the works. All persons engaged in cutting and threading work will be provided with and wear safety helmet, safety foot wear and gloves at all times.

**TECHNICAL SPECIFICATIONS FOR SPROCS COUPLERS.**

<b>SIZE</b>	<b>DIMENSIONS ( L X OD )</b>
16MM	40 X 25 MM
20MM	50 X 32 MM
25MM	60 X 40 MM
28MM	70 X 44 MM
32MM	80 X 50 MM
36MM	90 X 54 MM
40MM	100 X 58 MM

**ALL SPROCS CONNECTIONS ARE DESIGNED TO  
WITHSTAND A BREAKING STRENGTH OF ATLEAST 700 N/mm<sup>2</sup>  
WHICH IS WELL ABOVE THE DESIGN STRENGTH OF REINFORCEMENT  
BARS.**