

## JOB ROLE OVERVIEW

### Fitter Instrumentation (ISC/Q1102)

#### Role Description

This job is all about installing, dismantling, removing, replacing a range of components down to subassembly level right from pick-up unit / point of measurement and linking either directly to the instrument or to the instrument panel. This also involves making suitable slot on panel and fixing instrument and its associated parts under supervision of Technician Instrumentation.

#### Version

1.0

#### NSQF Level

3

#### Minimum Educational Qualifications

10th standard (Science) Pass

#### Maximum Educational Qualifications

ITI Pass

#### Training

(Suggested but not mandatory)

- Hand/power Tools & metallurgy to understand strength of fixing and fixed devices
- Component Drawings / Documents and Instrumentation
- Mechanical detectors, Inductive detectors, Optical detectors, Transducers, Transmitters, Control Valves, Actuators, Thermocouples and similar measuring devices
- Layout and Installation of Tubing and Piping Systems and joint boxes for troubleshooting
- Latest techniques of punching holes in panels without causing denting and disturbing other adjacent instruments

#### Minimum Job Entry Age

18 years

#### Experience

In lieu of minimum qualification the incumbent should have minimum 24 months of relevant working experience in the similar field / function

#### Applicable National Occupational Standards (NOS)

1. **ISC/N1102:** Carry out maintenance activities under the guidance and supervision of Technician Instrumentation
2. **ISC/N1103:** Periodically check measuring equipment for operation and ensure proper calibration
3. **ISC/N0008:** Use basic health and safety practices at the workplace
4. **ISC/N0009:** Works effectively with others

#### Assessment Guidelines

1. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below)
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criteria.
5. To pass the Qualification Pack, every trainee should score a minimum of 60% in every NOS.
6. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.



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MINISTRY OF SKILL DEVELOPMENT  
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**Skill India**  
कौशल भारत - कुशल भारत

**PMKVY**  
PRADHAN MANTRI KAUSHAL VIKAS YOJANA

## PLACEMENT OPPORTUNITIES

  
**TATA STEEL**

  
सेल SAIL  
स्टील अथॉरिटी ऑफ इण्डिया लिमिटेड  
STEEL AUTHORITY OF INDIA LIMITED

  
**JINDAL**  
STEEL & POWER

  
**MDHANI**

  
**JSW**

  
राष्ट्रीय इस्पात निगम लिमिटेड  
BASTRIYA ISPAT NIGAM LIMITED  
**VIZAG STEEL**  
Pride of Steel

एन एम डी सी  
  
**N M D C**

  
**SIMA**  
Sponge Iron Manufacturers  
Association

  
THE INSTITUTE  
OF INDIAN  
FOUNDRYMEN

  
**IFAPA**  
The Indian Ferro Alloy Producers' Association

  
**TRF Limited**  
A TATA Enterprise

  
**TVS**

  
**EUREKA  
FORBES**

  
**ESSAR**  
STEEL



  
**Reliance**  
RETAIL  
Aapki khushi. Hamari khushi.

  
**L&T Hydrocarbon**

  
**C&S**  
electric

  
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INDUSTRIES  
Since 1956

  
**YAMAHA**

  
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**Godrej**

  
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**ALPINE**  
Electrical  
Specialists in domestic electrical installation



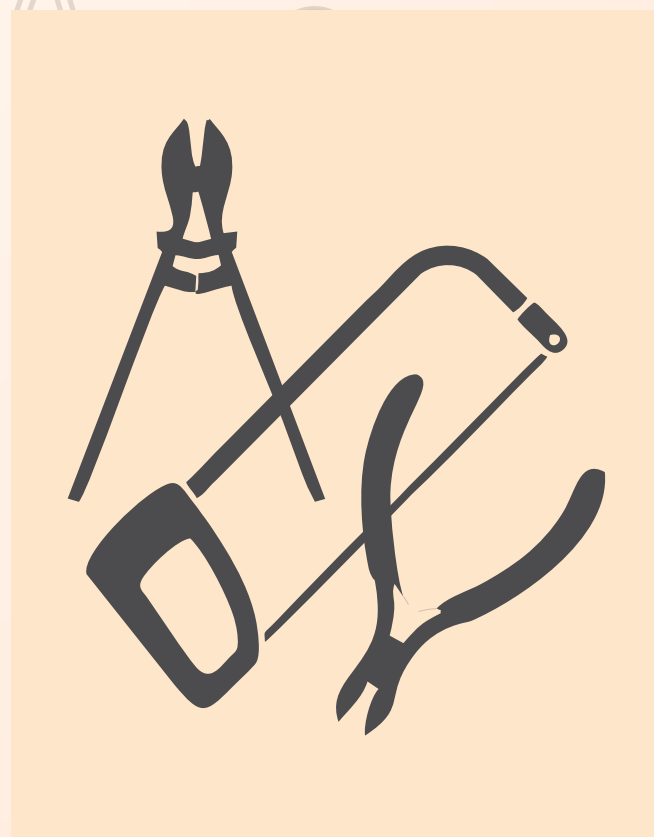
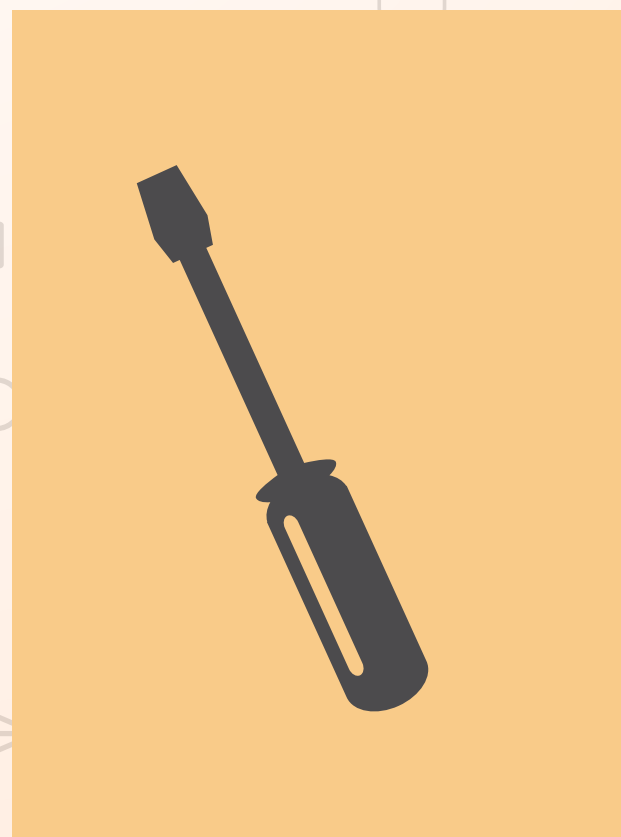
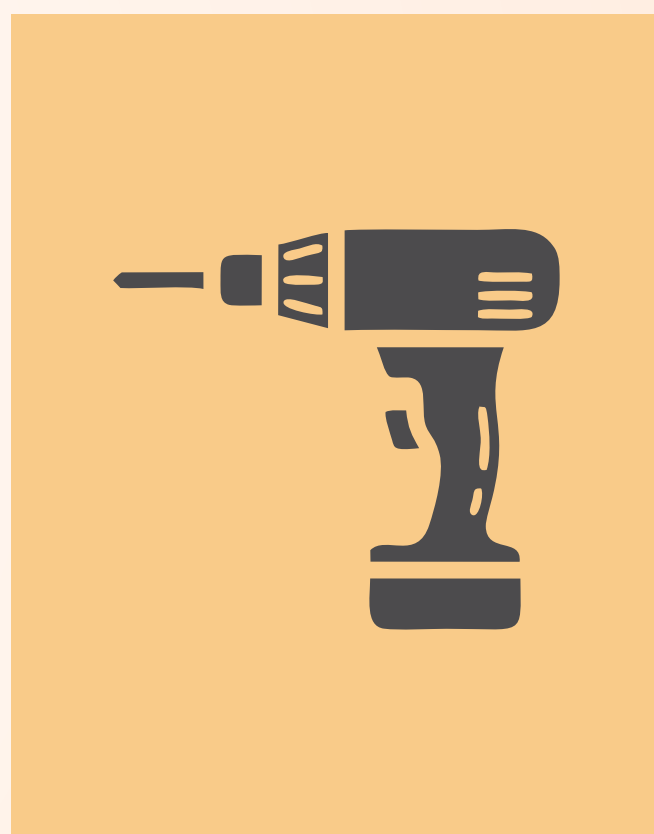
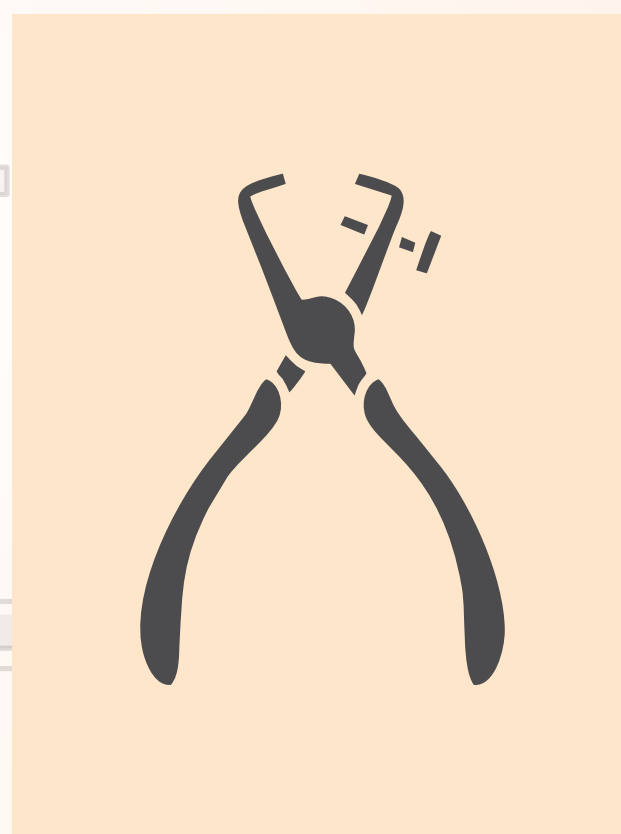
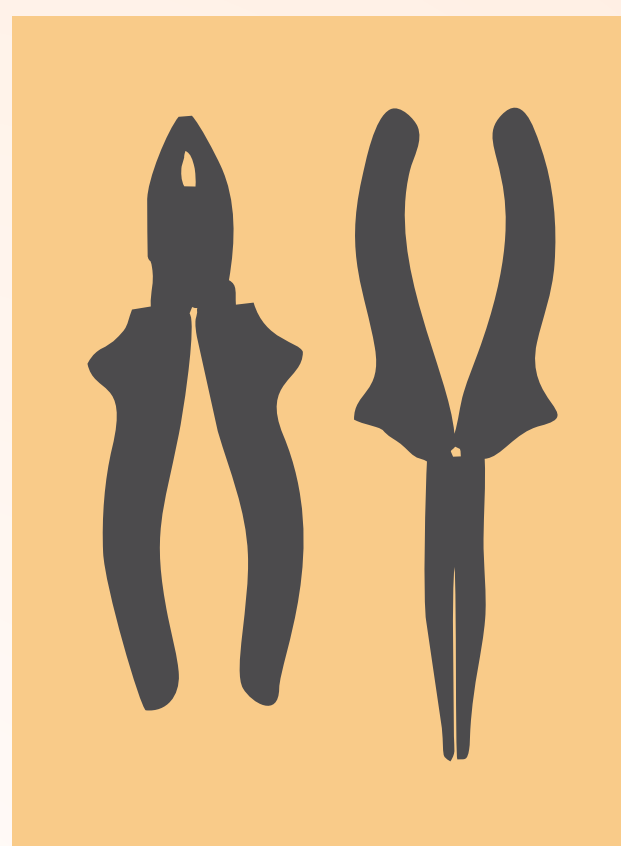
  
**N.S.D.C**  
National  
Skill Development  
Corporation  
Transforming the skill landscape



## EQUIPMENT LIST

### Fitter-Electrical Assembly (ISC/Q1001)

1.	Steel tape, 15 m length	x10
2.	Plier insulated, 150 mm	x10
3.	Screw driver, 100 mm	x10
4.	Electrician connector, screw driver insulated handle thin stem, 100 mm	x10
5.	Knife double bladed electrician	x10
6.	Neon tester	x10
7.	Hammer, cross peen with handle	x10
8.	Spanner adjustable 150 mm, 300mm	x2
9.	Hand drill machine	x1
10.	Allen key	x1
11.	Crimping tool	x2
12.	Wire stripper 20 cm	x2
13.	Hacksaw frame 200 mm 300 mm adjustable	x2
14.	Pliers flat nose 150 mm	x2
15.	Gauge, wire imperial	x2
16.	Soldering iron 25 watt, 65 watt, 125 watt	x1
17.	Multi meter (analog) 0 to 1000 m ohms, 2.5 to 500 v	x2
18.	Digital multi meter	x5
19.	A.C. Voltmeter M.I. 0 -500V A.C	x1
20.	Ammeter MC 0-5 A, 0- 25 A	x1
21.	Three phase transformer, shell type oil cooled with all mounting 3 kva, 415/240 V, 50 hz, (delta/star)	x10



## CAREER MAP FOR ELECTRICAL MAINTENANCE DEPARTMENT

### Electrical Maintenance Department in Iron & Steel Industry

- Fitter - Electrical Assembly
- Fitter - Electronic Assembly
- Fitter - Instrumentation

