


INTER PLANT STANDARD IN STEEL INDUSTRY		
 IPSS	<b>SAFETY PROCEDURE FOR WORKING AT HEIGHT BY CONTRACTOR'S WORKERS</b>	<b>IPSS: 1-11-005-19</b> <b>(Second Revision)</b>
	Corresponding IS does not exist	Formerly IPSS: 1-11-005-14 (First Revision)

## 0. FOREWORD

0.1 This Inter Plant Standard formulated by the Standards Committee on Safety Appliances and Procedures, IPSS 1:11, with the active participation of the representatives of steel plants and associated organizations in the field, was adopted in July 1998. The standard was first revised in October, 2014 followed by **second revision in April, 2019**.

0.2 This is one in the series of Inter Plant Standards in the area of safety in steel plants with a view to providing guidance to all concerned in accident prevention.

## 1. SCOPE

1.1 This Inter Plant Standard provides guidance in carrying out work at heights at 2.0 m and above from ground level or wherever there is likelihood of fall at site, in a safe way to avoid accidents.

## 2. TERMINOLOGY

2.1 For the purpose of this Standard, the definitions given in IPSS:1-11-001-19 'Definition of Terms Related to Safety' shall apply.

## 3. NECESSARY DOCUMENTATION

3.1 Height Pass - A document to be issued to a worker for working at height after imparting him the necessary training asserting his medical Fitness and passing skill test. (see clause 4). A specimen is given at **Appendix-A**.

3.2 Safety Requirements/Precautions - Before starting a work at height, all the safety requirements (like Full body harness with double lanyard, fall arrester, protective helmets and safety nets) shall be decided as per the need of the work area/site by the executing agency in collaboration with the safety officer and the contractor. These shall be documented; a suggested checklist is given at **Appendix-B**. The integrity & the soundness of the safety equipments must be ensured before start/ restart of height job.

## 4. REQUIREMENTS OF WORKERS FOR WORKING AT HEIGHT

- 4.1 Every worker to be deployed for working at height shall be examined and certified by a Registered Medical Practitioner for physical and mental fitness, which shall include general fitness and freedom from epilepsy, high blood pressure, obesity and vertigo.
- 4.2 Every worker, before deployment for working at height shall be imparted the training for working at height which shall include competency in the use of Full body harness with double lanyard fall arrester, and allied equipment. This training shall be in addition to the general safety training imparted by the Safety Engineering Department (SED).
- 4.3 After successful completion of training and skill tests, the worker shall be issued a Height Pass which shall be valid for a maximum period of one year. On expiry, it shall be reissued/ renewed after the worker fulfill all the prerequisite requirement laid down in the standard once again.

## 5. EXECUTION OF WORK AT HEIGHT

- 5.1 Height work procedure shall be made applicable for compliance by contractors whenever they deploy workers.
- 5.2 All safety precautions prescribed in document mentioned at 3.2 shall be complied with by the executing agency.
- 5.3. 100% tie off to be ensured through availability of anchorage points. Provision of lifelines to be ensured for work requiring movement at height.
- 5.4 Safety net shall be used wherever considered necessary by the executing officer and safety officer. Safety net made of preferable material shall be used where there is a possibility of welding spark, molten material, burning spark or material, etc, falling on it.
- 5.5 Daily Permit to Work as per 'IPSS No. 1-11-007-14' should be taken for all height jobs.
- 5.6 Before starting the day's work, the site shall be inspected by the executing officer for ensuring compliance of all safety aspects. After ensuring compliance of all safety aspects, the Contractor, the Executing Officer and the Safety Officer should sign the document given at. **Appendix-B** giving clearance for starting the work. In the event of discontinuation of the work and before re-starting, the site inspection shall be re-done, as above by the executing officer.
- 5.7 100% Supervision of all height jobs is to be ensured by supervisor(s) or Executive(s).
- 5.8 Work at height shall be permitted only when a reasonable level-of natural sunlight is available as per the discretion of the contractor, the executing officer and the safety officer. When work at height is done indoors, there shall be adequate illumination of 55 LUX or above. In case of exigency of Job/ work, where height job is required to be done at outdoor during darkness, minimum illumination of 55 LUX or above with power back-up to be ensured. However height job during dark hours should be discouraged. The illumination arrangements/ positioning of lights should ensure prevention of glare to the workers. The work shall not be permitted in

- inclement weather conditions like, Heavy Rain, Lightning, scorching heat, Thunder storm, high wind velocity etc.
- 5.9 Proper scaffolding and working platform with hand railing and foot boards as per relevant Indian Standard before taking up any height job.
  - 5.10 Proper means of access and egress to be ensured for all work at height.
  - 5.11 Underneath area to be barricaded for providing protection against hazards due to falling objects.
  - 5.12 Adequate Safety signage's / caution board to be conspicuously displayed for alerting personnel about imminent hazards.
  - 5.13 It is advisable not to use mobile phones while working at height.
  - 5.14 Tool Box talk / safety talk to be imparted to all personnel engaged in height job and a record of same to be maintained.
  - 5.15 Proper arrangements for rescue to be ensured to meet the emergency requirements.

**APPENDIX – A**  
(Clause 3.1)

**SPECIMEN OF HEIGHT PASS**

\_\_\_\_\_ Plant  
Safety Engineering department

Photo of worker  
with seal of  
issuing authority

**HEIGHT PASS**

No. \_\_\_\_\_ Dated \_\_\_\_\_

This is to certify that the undermentioned person has been permitted to work at height.

Name \_\_\_\_\_

Father's Name \_\_\_\_\_

Designation \_\_\_\_\_

Mobile No. \_\_\_\_\_

Age \_\_\_\_\_ yrs.

Gate Pass/ Safety Pass No. - \_\_\_\_\_

Work Order No. - \_\_\_\_\_

Validity up-to \_\_\_\_\_ (Maximum up-to One Year)

\_\_\_\_\_  
Signature/Left Thumb

Impression of worker.

\_\_\_\_\_  
Signature of Authorized

Executive of Safety Engg Department.

Name & Seal

Safety Sign in green colour

**APPENDIX – B**

(Clause 3.2)

**DAILY CHECKLIST OF REQUIREMENTS/PRECAUTIONS FOR  
WORKING AT HEIGHT**

\_\_\_\_\_ **Steel Plant**

1. Name of Department executing the job: \_\_\_\_\_
2. Name of Departmental representative(s): \_\_\_\_\_
3. Name (s) of Contractor’s supervisor(s) : \_\_\_\_\_
4. Name of Contractor
5. Exact location of work
6. Brief description of work
7. No. of persons deployed for the job.
8. Names of persons deployed to do  
the job at height
9. No. of persons issued height passes :.
10. Ref No. of height .passes issued
- .11. All persons have been imparted : Yes / No  
training for working at height  
by Safety Engineering Department
  
12. Head of Operation Deptt. has been  
informed of this job : Yes / No
  
13. Shut down of following operating equipment  
have been obtained  
EOT Crane : Yes/No.  
Belt conveyor : Yes/No.  
Gas Lines : Yes/No.  
Bus bars : Yes/No.  
Pusher car : Yes/No.  
\_\_\_\_\_ : Yes/No.  
\_\_\_\_\_ : Yes/No.  
\_\_\_\_\_ : Yes/No.  
\_\_\_\_\_ : Yes/No.

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- |     |   |   |                      |
|-----|---|---|----------------------|
| 14. | Checking of scaffoldings/ladders<br>Done and found with required<br>Strength & properly secured   | : | Yes/No.              |
| 15. | Availability & Usage of full body<br>harness ensured  | : | Yes/No.              |
| 16. | Usage of protective helmets<br>ensured.   | : | Yes/No.              |
| 17  | Provision of lifeline/ anchorage points   | : | Yes/No.              |
| 18. | Provision of safety nets for arresting<br>Fall of personnel   | : | Made / Not necessary |
| 19. | Weather is clear to do the job<br>(outdoor work)  | : | Yes/No               |
| 20  | Underneath area barricaded  | : | Yes/No               |
| 21. | Illumination is adequate to do the job<br>(indoor work)   | : | Yes/No               |
| 22  | Safety Signage's provided   | : | Yes/No               |
| 23. | Satisfactory house-keeping condition :<br>(Sharp objects, redundant cables &<br>structurals, slippery objects like.<br>oils and lubricants do not exist<br>and shall not be allowed in the<br>working-area) | : | Yes / No             |
| 24. | Safety Talk imparted and record kept  | : | Yes/ No              |
| 25. | Use/ Carrying of mobile phones prohibited:  |   | Yes/ No              |
| 26. | Permit to work is taken:  |   | Yes/ No              |

**Special remarks:**

- a) This checklist is valid for today only. However, for working beyond normal working hours, separate job clearance to be taken from executing agency and safety officer.
  
- b) Job to start only after compliance to all checklist points.

Signature :	Contractor or His authorized Representative	Executing officer	Safety officer
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Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Contact/ Mobile No. \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_