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List Of PPE' s	 **Safety Helmet**	 **Safety Shoe**	 **Safety Goggles**	 **Florescent Jacket**	 **Safety Gloves**	 **Ear Plug**	 **Co Detector**	 **Dust Mask**	 **Full Body Hardness**
During Pre Start-up Job activity.	✓	✓	✓	✓	✓	✓	✓	✓	✓
During On Job	✓	✓	✓	✓	✓	✓	✓	✓	✓

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Step No.	Activity (WHAT)	Associated Requirements/Hazards/Impacts	Responsibility (WHO)	Process / tools / PPEs (HOW)	Remarks / Reference
1.	Take work permit for scaffolding erection and dismantling. Identify and fill Six direction Check List	SAFETY: 1. Collapse of scaffold 2. Electrocution from overhead lines. 3. Struck by falling objects, 4. Hazards of confined space, 5. Hazard at all six directions. 6. Names of all scaffolders must be correct as per written in the gate pass. 7. Poor health conditions, body discomfort, short term & long-term illness.	Youngman Scaffolding Supervisor	1. Take the clearance in prescribed form EHSMSM/WORKS/446/4007. 2. Clearance will be taken on job site. Job will be shown by the TATA Steel Personal. 3. Ensure the six-directional hazard form is filled on site by the departmental representative and also check the 6 directions before starting work for any other hazards. 4. Look for any running machines, cranes, ladles, loco track, gas line, power line cables etc. Look for any corroded structure and unstable objects or concrete hanging at top. 5. Ensure that all scaffolders have read and understood any restrictions andrequirements. 6. Job to be started after receiving the clearance. 7. Ensure that the power cutting no. is noted in the clearance form if any power cutting of machine is required to erect or dismantle scaffolding. 8. Renew the clearance at every shift. 9. Do fix positive isolation lock at the energy source. 10. Take road safety clearance no. on the form if scaffolding is to be erected beside rail track. 11. Gas clearance no. is to be noted on the clearance form if scaffolding is to be erected at a gaseous area. 12. Confined space permit is to be taken on the clearance form if scaffolding is to be erected inside a confined space. 13. After completion of job the clearance is returned to the department. 14. Work permit should be kept neat and clean. 15. Site supervisor verify the crew members about health & wellness condition. Ensure no person will engage at work in poor health condition or bodily discomfort position. Pre-Health checks of each employee should be done. Before pre-start of work or during TBT	
		ENVIRONMENT: Gas Hazards Area			
		QUALITY:			

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2.	Working at height	SAFETY: 1. Fall of man and material from height. 2. Power rails and electric cables at height 3. Rainfall during erection. 4. Risk of being hit by exposed parts of scaffolds 5. Unstable structure 6. Falling objects- improper barriers of exclusion zones	Youngman Scaffolding Supervisor	1. Ensure all staff are suitably trained in the safe use of access and safety equipment 2. Staff must not over-reach on ladders and platforms 3. In Youngman scaffolding system vertical straight ladder is used and for stairway it should be inclined between 35 to 55 degree. 4. Makeshift ladders or access equipment is not to be used under any circumstances. 5. Set out an exclusion zone around the work area with hard barricades before working at height to ensure other working personals keep away from falling objects zone. 6. Cordon off/Hard barricades the below area to restrict access of others during multiagency involve in the work area. 7. Board out the first lift from a safe location (i.e. the ground.) Board out and removeall boards while working from the platform below. 8. Fully board and guard rail all working platform. 9. Progressively install scaffolding components creating a safe working platform asyou go. Progressively fix ladders as you go. 10. Traversing at exposed edges must be avoided at all times. 11. It is mandatory to secure the safety harness while using the trapdoor (3T method). Once at the working height, the worker should secure it at the first available point. 12. When doing additional works, major alterations or dismantling. Do not turn boards with debris on them. 13. Adopt good housekeeping and stacking procedures. 14. Do notoverload scaffold with dismantled equipment. 15. Temporary working platforms must have >3 boards while erection or dismantling of scaffolds 16. Stable, secure positions must be adopted when lifting materials onto scaffolds during erection. 17. Safety harness should be worn and use retractable fall arrestor were needed and anchored where there is a danger of falling with an overhead ledger or a rigid structure with no sharp edges. 18. Do not allow the person to work at height having high blood pressure, giddiness, weak vision, drunk, height phobia.	

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				19. All the scaffolders & supervisors must carry (Xerox) "Work at height" training certificate/fitness at all times. 20. Gap between two Trapdoor should be 2/2.5 meter for safe access to height.	
		ENVIRONMENT: Gas Hazards Area			
		QUALITY:			
3.	Manual handling of scaffolding materials	SAFETY: 1. Strain injury when manually handling scaffold tubes boards and fittings. 2. Splinters / banding from scaffold boards causing cuts. 3. Metal burrs on scaffold tubes causing cuts. 4. Crushing injuries to fingers, hands, feet. 5. Fall of bracing/trapdoor/frames on person standing on lower platform. 6. Fall of bracing/board During manual material handling at staircase on account of miscommunication	Youngman Scaffolding Supervisor	1. Suitable slip resistant gloves should be worn at all times when handling scaffold materials. 2. Ensure proper co-ordination between scaffolders when passing materials from bottom to top while erecting and top to bottom while dismantling. 3. All materials must be securely stored. All required materials should be kept only designated area provided by Tata area owner/dept. 4. Ensure that all scaffolding materials are properly maintained, and damaged components are removed from service. 5. Safety boots and helmet Hi-visibility jacket and gloves to be worn. 6. Material will be delivered and returned by lorry and unloaded manually. 7. Material lifting will be done through passing from downwards to upward at every 2-meter platform scaffolder will be passing it to other scaffolder. 8. Manually stack components as close to the job as practical. 9. Carefully plan work to minimize movement, lifting and carrying of materials. 10. Where practicable limit maximum load manually handled to < 25 Kg. 11. Use recommended best practice methods of handling scaffolding materials. 12. Only physically fit persons to carry out lifting and carrying operations. 13. Standing in Zig -Zag manner to avoid being in line of fall of materia as the risk still persist during manual shifting of materials by using plan stairs.Keep maintain proper communication and twist & tug method must be followed. 14. Passing single material at a time. 15. Restricting underneath area by barricading. (Defining Exclusion zone) 16. Overhead Deck protection system should be used while passing material in human chain.	

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		ENVIRONMENT:			
		QUALITY:			
4.	Shifting of scaffolding materials to sites by truck.	SAFETY 1. Handling of frames/ bracing/ trapdoor, Bolts& Nuts with proper care. 2. Select proper way to shift the material from truck to site. Miscommunication between workers and inattentiveness to work.	Youngman Scaffolding Supervisor	1. Material should not extend to the body of truck more than 1 meter. 2. Assess or determine the weight of the load to ensure that it is within the capacity of the lift truck. 3. **Ensure vehicle stopper during- loading-unloading and Parking** 4. **Ensure traffic safety cone from the front and back during Loading, unloading and parking.** 5. Material to be unloaded at site only if clearance is received. 6. Trained banks men to supervise each lift. 7. The load will be secured on the bed of the truck before moving. 8. Daily checks of the condition of the condition of the trucks to be carried out by the operator. 9. Materials to be properly stacked at the site within barricaded area.	
		ENVIRONMENT:			
		QUALITY			
5	Erection of scaffolds	SAFETY 1. Collapse of scaffold 2. Electrocution from overhead lines. 3. Struck by falling objects 4. Fall of men & materials, scaffold ladder and another scaffold equipment's- Tubes, verticals, ledgers can swing fall. 5. Hand injury, cut, strain, sprain, physical injury. 6. Ergonomic hazards, muscle cramp etc. 7. Poor health conditions, body discomfort, short term & long-term illness. 8. Covid-19 risk of infection	Youngman Scaffolding Supervisor	1. Check ground for trenches, ducts, lightweight manhole covers etc 1a) Do not overload scaffold with scaffold materials. 1b) Check all scaffold materials for condition and fitness for purpose. 1c) Ensure that no part of the scaffold structure projects into roadways and vehicle entrances. If necessary, ensure proper road clearance taken or clearly mentioned the status on to PTW and hard barricading installed with lighting arrangements to avoid vehicle interference. 1d) Ensure that the foundations for the scaffold are adequate to carry and spread the load of the scaffold at each standard and for the whole scaffold. 1e) Ensure that adequate ties are fixed as the scaffold is being erected. Stabilizers are fixed vertically on or above 4 meters. 1f) Ensure the bracings which are connected in frames must be intact properly in straight lines. 1g) Where ties are impracticable adequate, rakers or supporting structures should be provided. 1h) Ensure that all bracings are in place. Ensure that the scaffold design is adequate for the anticipated loading on the scaffold.	

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				1i) Ensure adequate lighting conditions. 1j) Do not erect scaffolding in adverse weather conditions. 2.Check site for hazards such as overhead power cables, telephone lines etc. 2a Ensure 3.5 meter. Distance maintained from open overhead powercables. 2b Do not erect scaffolding on drainage covers or muddy ground. 3a) Ensure materials are safely stacked prior and during erection4.Arrange materials from site store. While Erecting, area Hard Barricades/Cordon off the Exclusion zones in to1:3 / 1:4ratio accordance with height of scaffold and display appropriate warning sign. Our tower height of scaffolding is 15 meters. While erecting the tower of the same height we will maintain a ratio of 1: 3 from base to height and should be tie it up the tower witha coupler & pipe every 4 meters whenever it goes beyond 1 meters height and 3.2 meter to 6.2 meter SP7, 6.2 meter to 9.2meter SP10, 10.2 meter to 14.2 SP15 even prior if there is a wind effect (<27mph).	

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When work is to be carried out in areas with darkness or during nighttime, a lux meter should be used, and for general work, the lighting should be between 150 to 300 lux.

In high-noise areas, use a noise meter, and if the noise level exceeds 85 dB, earplugs should be used.

XO Plus

A. Ensure the ground is level, stable, and free of obstacles. Clear away any debris, rocks, or mud.
B. Position the base plates or screw jacks at the marked locations. Adjust the screw jacks so that they are level and firmly in contact with the ground. Use a spirit level to ensure they are horizontal.
C. A red tag will be placed on the scaffolding while it's being erected.
D. Place the vertical posts (standards) onto the base plates or screw jacks. Ensure that each post is positioned correctly.
E. Lock the posts into place to prevent any movement.
F. Attach the horizontal bars (ledgers) to the vertical posts at the desired height. These bars provide horizontal support for the scaffolding.
G. Use a spirit level to check that the ledgers are straight and level. Adjust as necessary to ensure they are horizontal.
H. Secure the Ledgers: Lock the ledgers in place using the XO Plus locking system or clamps. Ensure all connections are tight and secure.
I. Install diagonal braces between the vertical posts and ledgers to add stability and prevent swaying.
J. Use the locking mechanism to fix the braces in place. Verify that they are tight and correctly installed.
K. Place scaffolding platforms (planks) on the horizontal bars to create work surfaces. Ensure that platforms cover the entire working area.
L. Fasten the platforms to the ledgers or horizontal bars using appropriate clamps or supports. Check that the platforms are stable and do not move.

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				M. Attach guardrails around all open sides of each platform to prevent falls. Ensure the guardrails are at the proper height and securely fastened N. Install toe boards along the edges of the platforms to prevent tools or materials from falling off. Ensure the toe boards are flush with the platform edges and securely attached. O. Erect the first level and install a scaffolding ladder to reach that level. A large ladder should be secured in 3 sections (top-middle-bottom), and a standard ladder in 2 sections (top-bottom). P. The scaffolding should be completely covered with steel boards and have a single railing for passing the material from out side Q. If the scaffolding height exceeds four times its width, secure it with ties to a solid part of the building or structure. R. Install ties every 4 meters vertically and every 9 meters horizontally to ensure stability. Use appropriate fixings and ensure all ties are tight and secure. S. The maximum height for Xo plus scaffolding is 15 meters. Be cautious of strong winds. This tower is rated as a freestanding structure for wind speeds up to 27 mph (43 kph, 12 m/s). If higher wind speeds are expected, dismantle it. T. Scaffolders should use their, FBSH and other safety gear. U. No sheets, tarps, or signage should be attached to the outside of the tower V. Each height level of the scaffolding should have progressive double railings and be secured with toe guards all around. W. Conduct a thorough inspection of the entire scaffolding structure. Check for stability, secure connections, and proper installation of all components.	

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Repeat the process until the desired height is reached, from section A to L Tools: Hammer, Measuring Tape

At least one Tie require up to 6 meter tower and above 6 meter minimum to tie mandatory. (This is not applicable in indoor area

H Frame XO

A. Push the caster into the adjustable leg of the H-frame and insert the caster/adjustable leg assembly into the span frame. Lock the caster. Repeat this process with the ladder frame. It's recommended to leave a 50mm gap between the leg and the adjustable nut for easier leveling.
B. Fit a horizontal brace (red) onto a span frame, just above the lower run, with the claw facing outwards. The frame is now self-supporting. All locking claws should be opened before fitting.
C. Attach the other end of the horizontal brace to the vertical brace (just above the lower run). To square the tower, fit another horizontal brace on the opposite side of the frame between the lower runs.
D. Fit two additional end frames, ensuring that the frames interlock properly. Fit two diagonal braces (blue) between the first and third rungs in opposite directions. Check the frame's vertical alignment and level using a spirit level and adjust the legs as needed. Use leg adjustments only to level the tower, not to add extra height.

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				E. Fit the next pair of diagonal braces between the third and fifth rungs in opposite directions. Install a trapdoor platform at the fourth rung (2.0 meters) next to the ladder. Ensure the trapdoor swings outward from the tower as shown. From the protected position of the trapdoor, fit vertical braces on the 5th and 6th rungs on both sides of the platform in the same sequence. Vertical braces should be 0.5 meters and 1.0 meters (1 and 2 rungs) above the platform level when used as railings. Do not climb onto the platform until all railings are properly fitted. F. Fit stabilizers. G. Continue the process until the desired height is reached. Add the final frame, diagonal braces, and trapdoor platform as shown in the previous steps. At each platform level, add vertical braces as railings from the protected trapdoor position. Fit the final platform, and place toe boards.	

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			Youngman Scaffolding Supervisor	**Physical distancing during scaffold activity-** • Scaffold teams should be as small as practical. • For larger works small teams can be split up into separated areas. • Good communication and organization is essential amongst the team. • SOP briefings are to be undertaken with small teams and in the open air where 2m social distancing can be maintained. • Long materials over 2.1m (7ft) can be passed vertically or horizontally hand to hand using our normal methods to chain material. • Shorter materials less than 2.1m are to be placed by one operative who then retreats to maintain 2m social distancing before the second operative picks up the material. Material must always be secured against movement on all lifts and applied on each job application. • Shorter materials less than 2.1m are to be transferred vertically using a light line. • The exclusion zone established for the works will ensure that 3rd parties are not at risk of encroaching within the 2m social distancing area of the scaffold team. • Supervision will monitor the working conditions to ensure that personnel are maintaining social distancing and will maintain their own safe distance to the crew or any other third-party employees.	
		ENVIRONMENT: 1. Hazards. Plant & machineries 2. Multi-level works create risk potentials of physical injury. Other agency or people can enter scaffolding exclusion zones.	Scaffolding supervisor	a) Do not work in multi-level activity, ensure no persons works above or below during scaffold erection dismantle or modifications. Install hard barricading in the peripheral area of scaffolding works, there is potentials of swing fall of ladder and other scaffold components.	
		QUALITY: 1. Check for any corroded scaffolding materials and plant support structures.		Check the stability or integrity of plant support structures and scaffolding materials before each use.	

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6	Scaffold dismantling	SAFETY: 1. Collapse of scaffold 2. Electrocution from overhead lines. 3.Struck by falling objects 4.Fall of men & materials, scaffold ladder and another scaffold equipment's-Tubes, verticals, ledgers can swing. Hand injury, cut, strain, sprain, physical injury. Ergonomic hazards, muscle cramp etc. Poor health conditions, body discomfort, short term & long-term illness.	Youngman Scaffolding Supervisor	1.Check stability of scaffold before dismantling starts. 1a) Check for alterations and damage. 1b) Check that all ties are in place. 1c) Ensure that all scaffold platforms are free from materials and waste and that no objects have been placed in tube ends. 1d) Ensure that any necessary permits to work have been obtained and all scaffolders have read and understood any restrictions and requirements 1e) It may be necessary to install temporary rakers during dismantling. 2.Check site for hazards such as overhead power cables, telephone lines etc. 2a) Ensure that electric lighting or supplies have been disconnected and Removed. 3. **Lower all materials by mechanical means, by gin wheel and rope.** Throwing of materials is not permitted. 3a) Cordon off area during dismantling of scaffold and display appropriate warning signs. 3b) Ensure materials are safely stacked during dismantling and that platforms are not overloaded. 3c) Dismantled scaffold materials to be stacked properly at designated area. **4. Scaffold Dismantling process/steps: -** a) While dismantling area Hard Barricades/Cordon off the Exclusion zones in to 1:3/1:4 ratio accordance with height of scaffold and display appropriate warning signs. it will be applicable as reasonable as practicable. b) Scaffolding to be provide with Scaffolding tag (Red). c) Start dismantling from an end bay/platform. d) Remove ties progressively as the scaffold is dismantled e) Dismantle guardrails, mid-rails, bracing, transoms, Toe guards and standards from the level above. f) Move down to the platform below dismantle top platform planks. g) While dismantle Scaffold full covered with steel boards and except-minus-1 board with single guardrails for scaffolders to pass materials. h) Dismantle access ladder from the attached platform levels and ladder sizes will be reduced progressively as down the structure.	

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				i) Remove all vertical diagonal braces on all 4 sides of scaffold. j) Remove Horizontal/ledgers at square base of scaffold) Progressively repeat this procedure until dismantling can be completed from the ground. l) Dismantle base plate/screw jack, cup vertical to remove base.	
		1. ENVIRONMENT: Gas, dust and overhead cable hazards. Plant machineries. 2. Multi-level works create risk potentials of physical injury.	PM, Scaffolding Supervisor And Scaffolder	1. Do not work in multi-level activity, ensure no persons works above or below during scaffold erection dismantle or modifications. 2. Install hard barricading in the peripheral area of scaffolding works, there is potentials of swing fall of ladder and other scaffold components.	
		QUALITY: Check for any corroded scaffolding materials and plant support structures.		Check the stability or integrity of plant support structures and scaffolding materials before each use.	
7.	ESI- Energy source identification	**REQUIREMENTS: -** a) All energy sources are to be isolated – Electrical power, Gas and Fluid energy. **SAFETY: -** a) Miscommunication b) Slip trip fall hazard Hand tools safety	Scaffolding Supervisor & Safety Supervisor	• Ask requirement of ESI from executing agency. • Carefully read and understand and discuss the ESI chart given in the area. • Get all kinds of energy isolation clearance, power cutting, gas, fluid from permit issuer. • Positive isolation of all energy sources are to be isolated by executing agency. Ensure all energy sources are isolated. • Power cutting no, hydraulic/pneumatic and fluid isolation done properly and isolation no. properly mentioned on permit to work by permit issuer. • Carefully follow the ESI requirement given on chart and do the isolation in correct manner. • Pre to start work asks ESI sheet from operation team, should be completed and communicated properly to all crew members. Keep safe distance from suspended load.	

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				• Take ESI-Energy isolation sheet or chart to safe operating lock out tag process and controls. • while working nearby any energy source area ensure ESI should be Identified and power cutting to be done and LOTO applied. • Use Blue pad lock and fix the lock on to right place at right box. Double ensure the lock fixed on to right box, as required also put lock onto group isolation box. • Mention the blue lock no on permit in right column for power cutting and fluid isolation. Ensure blue lock is properly labeled with sup. Name and contact no. • All working personnel to be given a safety talk regarding ESI procedure and compliance by the site supervisor. Check condition of PPEs and tools/tackles before each use.	
		ENVIRONMENT: - a. High temperature zone. b. dust & fume c.CO gas d. Chances of catching fire e. Slurry water f. Sludge/Muck		Don't work more than 50ppm, Keep CO & O2 gas monitor in good working condition. For working at gaseous area ensure that the person holding the gas detector within the group enter first and go last. Heavy Dust deposition of platforms. Do not work on heavy dust deposition area; ensure mitigation in place to minimize dust, use dust mask in dusty condition. No person is allowed to work in poor illumination, use fire retardant jackets.	
		QUALITY All fluid sources are to be isolated properly		Follow ESI rules and procedures	
8.	Working in confined spaces	SAFETY: Hazards arising from the normal use of the confined space, or from venting and cleaning before use, e.g. (a) Toxic gases, flammable gases, lack of oxygen, Excess oxygen. (b) Moving components	Scaffolding Supervisor & Safety Supervisor	1. Confined space should not be entered unless an entry permit has been issued, following the appropriate checks for the hazards which may be present. 2. The checks could include tests for toxic or flammable gases, toxic substances, and oxygen levels, isolation of electrical, mechanical liquid or gaseous supplies. 3. The entry permit should include any requirements for PPE, e.g. respiratory or breathing apparatus, protective clothing etc. Adequate, intrinsically safe lighting should be provided. 4. Provision of intrinsically safe ventilation system. 5. Use of safety lines.	

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				6. Maintaining of the scaffolder entry and exit register. 7. Presence of confined space guardian outside entry point. 8. Availability of appropriately equipped rescue team. 9. Only personnel with the necessary temperament, capable of working in confined spaces should be selected for the work. 10. If specific risk assessments identify the need breathing apparatus should be worn by persons trained in its use	
		ENVIRONMENT:			
		QUALITY:			
9.	Scaffolding in the vicinity of chemical contamination	SAFETY: Chemical contamination causing acid/ caustic burns, or toxic effects.	Scaffolding Supervisor	1. Clients permit to work system should identify the presence of chemical contamination and should specify precautionary measures. 2. Permits to work must be read, fully understood and any safety precautions specified must be adhered to. 3. If contaminants are present which are not referred to in any permit to work, these should be reported to the client for advice before work starts. 4. If chemical contaminants are found during a job, work should stop until the client's advice has been obtained. 5. The client's site safety plan should be studied. 6. Activities of the client or other contractors which interrupt on scaffold erection or dismantling should be identified. 7. The control and precautionary procedures, specified in risk assessments for those activities relevant to scaffolding, should be adhered to.	
		ENVIRONMENT: Toxic			
		QUALITY:			
10.	Scaffolding around live plant & Machinery	SAFETY: 1. Rotating, reciprocating or moving components. 2. Electrical hazards. 3. Noise 4. Heat and hot components Conveyor Belt.	Youngman Scaffolding Supervisor	1. Clients permit to work system should identify the presence of the various types of hazards and should specify precautionary measures. 2. Permits to work must be read, fully understood and any safety precautions specified must be adhered to. 3. Work should not be carried out inside machinery protection barriers or guards unless the machinery has been switched off or isolated, or a specific risk assessment and method statement have been prepared. 4. Hearing protection must be used in hearing protection zones or where noise levels are likely to exceed 85 db. 5. The client's site safety plan should be studied. 6. Activities of the client or other contractors which interrupt on scaffold	

				erection or dismantling should be identified. 7. The control and precautionary procedures, specified in risk assessments for those activities relevant to scaffolding, should be adhered to.	
		ENVIRONMENT:			
		QUALITY:			
11.	Unauthorized adaptations of users	SAFETY: 1. Interference by others 2. Unauthorized modification by other contactors. 3. Removal of scaffold fittings from structure. 4. Cutting/using ladders without permission of scaffold provider. 5. Misuse of scaffold equipment's, ladder, boards, clamps etc. 6. Scaffold structure removed from one place to other location with the help of mechanical machines. 7. Scaffold structure hit by moving machines etc.		1. Pre-use inspection paying particular attention to ties, guardrails and boards. 2. Advise client of any unauthorized modifications to the scaffold in mail for avoiding undesirable occurrences. 3. Ensure avoiding unauthorized modifications like removal of tags for tag holders, lifting of platforms boards from its place, removing of toe guards etc.	
		ENVIRONMENT:			
		QUALITY:			
12	Driving & transport	SAFETY: Driving and Transport (a) On-site 1. Driver/passengers 2. Pedestrians 3. Vehicle Interference 4. Wrong Parking 5. Risk of being trapped near the entry door of Passenger vehicles during entry and exit.	Drivers. Scaffolding Supervisor & Safety Supervisor	1. Only persons with a current driving license appropriate to vehicle, appointed by site management are permitted to drive site vehicles. 2. Only authorized drivers must drive the vehicles inside TATA Steel works. 3. A valid vehicle pass should be required to drive inside the TATA STEEL LTD 4. All site instructions for vehicle access, movements and speed limits Speed limits not more than 35 Km/hours must be adhered to. 5. All vehicles to be maintained in a road worthy condition, especially with regard to rear view mirrors.	

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		6. Over speeding 7. Road signal & Zebra crossing. 8. Improper turn on roundabout. 9. Seat belt not use.		6. Seat belts, statutorily required, must be worn when the vehicle is in motion. 7. All materials must be securely loaded on the vehicle. 8. Hand brake/chocks to be applied to vehicles when stationary. 9. An audible reverse warning device should be fitted to the vehicle. 10. A second person should monitor behind the vehicle when reversing. 11. Vehicles on site must be driven at all times with due care and attention to pedestrians and other vehicles. 12. All vehicles driven on public roads must comply with all legal requirements, must be road worthy. 13. Weight/loading limits must not be exceeded. 14. Passengers must only travel on fixed seating installed by the vehicle manufacturer. 15. It will be a dismissible offence for anyone to drive a company vehicle under the influence of alcohol or drugs 16. All relevant transport regulations must be complied with. 17. Do not talk on mobile phone while driving. 18. Park vehicle at designated parking place only.	
		ENVIRONMENT:			
		QUALITY:			
13.	Working beside excessive heat area	SAFETY: 1. Radiant heat 2. Contact burns 3. Heat exhaustion 4. Heat stroke 5. Falls resulting from the above. Toxic Gases, dust, fumes, Slip/Trip and falls.	Scaffolding Supervisor	1. Ideally work should not be carried out on hot, live plant. 2. Where work is unavoidable the client should operate a permit to work system for work on hot, live plant. 3. The permit should indicate the maximum surface temperature of components, and a heat stress index for the working environment. The permit should indicate the precautions necessary for the work to be carriedout. 4. Where the main risk is from radiant heat or contact burns the appropriate personal protective equipment should be worn i.e. heat resistant and reflective clothing. 5. Close and constant monitoring and supervision of the operatives. 6. Provision of cool sheds near the working area. 7. Provision of cool drinking water near the working area. 8. Selection of suitably experienced and fit personnel. 9. The temperature in the environment should be reduced by the means of	

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				natural or mechanical ventilation.	
14.	Working beside Road & Rail Track.	SAFETY: 1. Workers getting hit by upcoming traffic or loco. 2. Materials hitting pedestrians or falling over them.	Youngman Scaffolding Supervisor	1. Ask for Road closing clearance from customer. 2. Barricade the area with a Safety tape if any support structure /scaffolding Pipe, clamps are kept 3. Ask Rail Track Clearance before starting the job. 4. Put red banner at both sides of the track to stop loco movement during scaffolding erection or dismantling. 5. Display of Board.	
		ENVIRONMENT:			
		QUALITY:			
15.	Housekeeping Clear the site, all tools & tackles, scaffolding materials etc.	SAFETY: Finger, hand, leg & body may cause injury during shifting.	Youngman Scaffolding Supervisor	1. The supervision will ensure that, best housekeeping practices are employed at all times. 2. All unused materials are to be removed from the work area at the earliest opportunity. Before collection, they are to be stacked in an orderly manner to cause no obstruction or tripping hazard. 3. Housekeeping audits will be carried out on a regular basis and recorded. 4. Unused materials will be returned to stores and placed into stock. 5. Damaged materials will be placed in a quarantine area. 6. Any bad housekeeping will be reported and action taken to rectify the problem immediately. 7. Housekeeping audits will not just be limited to our work activities but will also include other works that may be going on in the area. 8. All access areas are always to be kept clear. 9. Clear the entire area before leaving the site.	
		ENVIRONMENT:			
		QUALITY:			
16.	Emergency Preparedness	SAFETY: For any Emergency Situation.	Youngman Scaffolding Supervisor	First aid box, stretcher available at car and at Office. Phone no.—WP First aid station –43142 Gas safety station--43606 Safety --43613 Fire brigade --101 Single Helpline --0647-66-47777 TMH --41233	
		ENVIRONMENT:			

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		QUALITY:			
17.	Rescue of someone who has had a fall when harness is attached to anchor point	SAFETY: Suspension trauma Injury to those carrying out rescue	Youngman Scaffolding Supervisor	1. Independent Scaffold-Assisted rescue. 2. If conscious colleagues will assist by helping back onto the working platform. 3. If unconscious colleagues will fit 2 No.3 board hop up brackets below feet level. These will be boarded out and provided with a guardrail. The unconscious person will be released from his harness and lowered onto the platform. 4. Emergency services to be called to provide any assistance that maybe required. 5. Youngman site scaffolders to be given information on the rescue procedure.	
		ENVIRONMENT:			
		QUALITY:			

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SOP of scaffolding material Mobilization & De-mobilization

Mobilization start from here

We have Send our requirements to the vendor As per contract,(work order)

Vendor comes with material at TSL GATE ,And create 3 copy challan

Security checks all necessary document and than give approval for weight the vehicle

vendor has to submit the one weighing memo copy to security and than start the unloading in front of TSL supervisor

After unloading & counting done in front of TATA STEEL supervisor vendor again send the vehicle for tare weight

And at last vendor has submit the one copy of material challan & weighing memo in our office,

De-mobilization start from here

First of all vendor has take written approval from department for material Demobilization in hard copy format

And submit the format in HOD office …and than take approval from our HOD through system

Then the vendor takes the vehicle‘s tare weight and start loading the material according to DC copy in front of TATA STEEL supervisor

And submit the weighing memo copy to the HOD office for vehicle gate pass approval

And after approval of HOD vendor goes to security office for final approval, security has been collect the 3 copy challan and cancelled ,

After the cancellation of 3 copy challan the vendor submit a one copy to us for billing ,

SOP No.	FMM-INFRA/SCAFFOLDING//SOP NO. 002	Effective Date	06/09/2022	REVISION No	04
SOP DESC	Erection, Dismantling &Manual Handling of aluminum lightweight Scaffolding including Xo and Xo plus towers	Section	Mechanical		
DEPARTMENT	CMM	Page	**21** of 2**1**		

DO	DON'T
1. Top rail, mid rail & toe board must be provided on the concern scaffold platform position. 2. Use full body harness while working on 1.8 mtr or above. 3. Ladder must be provided (with 1 mtr extended from the platform rest position) for smoothly access or egress on the working platform. 4. Scaffold must be provided from the safe distance to the ongoing power line or DE-energize the power line. 5. Scaffold must be erected on solid base (screw jack). 6. After completion of scaffold green tag must be used (for safe use) or red tag (for unsafe) 7. Use the scaffold as per its rated capacity which is mentioned in its tag. 8. Inspect ladder before use, Use both hands when climbing and descending, carry tools in your pocket on your belt. 9. Check for splinters and sharp edges. 10. Wear clean shoes.Use the mobile scaffold only when its wheels are locked properly. 12 Use full body harness with double lanyard above 2 metre Height. 13 Always intervene and follow "Stop work obligation" system if you see any unsafe act or condition nearby you during "work or non-work-related activities. 14 Always follow road safety norms and timing during cycling inside the works. 15 Always remember safety is everyone's responsibility "Be safe, work safe, go home safe" **Return to Workplace guidelines 1.** All returning employees will be required to complete a Return to Workplace YOUNG MAN Questionnaire. **2.** All returning employees will be required to complete a travel history self-declaration TSL form. **Covid-19 Precautions-** 1. Screening of people at plant entrance based on thermal monitoring. 2. Everyone must wear a face mask and gloves Before entering plant premises, and All while working at their respective stations Use of hand sanitizers and hand wash at shift start and at regular intervals	1. Don't use scaffold without hand rail & toe board. 2. Without full body harness it may cause minor, major or fatal incident. 3. Don't use cross member (Bracing) or tie member (Ledger) as approach on the working platform instead of ladder. 4. Don't use scaffold on the nearest energized line. 5. Don't erect the scaffold on unsuitable surface. 6. Without tagging (green/red tag) system do not use scaffold. 7. Never allow to get the dust / glass wool / cotton waste / hygroscopic material which may soak water and may collapse the scaffold in due course. 8. Don't modify scaffold in any condition by yourself. Call competent Person for modification. Don't Move a scaffold when someone is on it. 9. Don't Use boxes, chairs or tables as ladders, don't use a metal ladder near electricity 10. Don't place a ladder in front of an unlocked or un-blocked door. 11. Don't allow more than one person on a ladder at a time. 12 Don't OVERLOAD on scaffold platforms. 13 Don't climb on tree; climbing on tree is danger for your life, think before you act 14 Don't leave the work area without prior approval of crew leader. 15. Don't use of Biometric system it is prohibited for all employees till further notice

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