Cladding Technology Shanxi Co., Ltd

HSE On-Site Inspection Checklist

Document No.: CLADDING-HSE-PD-42

I. Basic Information (Including Management Identification)

Inspection Object	Inspected Unit/Team: _____ Inspection Location: (Material Storage Area □/ Loading and Unloading Operation Area □/ Equipment Maintenance Area □/ Transportation Parking Area □/ Equipment Installation Area □/ Others _____)
Inspection Time	____ Year __ Month __ Day __ Hour __ Minute to __ Hour __ Minute Inspection Period: Morning □ Afternoon □ Night □ Inspection Type: Routine Inspection □ Special Inspection □ Seasonal Inspection □ Holiday Inspection □ Resumption of Work Inspection □
Personnel Information	Inspectors: _____ Accompanying Personnel: _____ Person in Charge of Inspected Unit: _____
Inspection Basis	HSE Operation Guidance, Regulations on Safety Supervision of Special Equipment, Company HSE Management System Documents

II. General Safety Management Inspection (30 Items in Total, Full Score: 150 Points)

(I) Personnel Qualifications and Behaviors (8 Items)

Serial No.	Inspection Content	Inspection Standards	Inspection Method	Inspection Result (√ Qualified / × Unqualified / — Not Applicable)	Remarks (Problem Description / Rectification Suggestions)
1	Qualifications of Special Operation Personnel	100% of special operation personnel (such as forklift operators, crane operators, hot work operators, electricians) hold valid certificates, with certificates within validity period and consistent with the personnel.	Check original certificates / system records		
2	Training and Technical Disclosure Records	100% of new employees receive three-level safety education; 100% of on-the-job employees receive quarterly re-training; safety technical disclosure records before work are fully signed.	Check ledgers / on-site interviews (2-3 persons)		
3	Wearing of Labor Protection Equipment	1. Basic Protection: All personnel correctly wear safety helmets (with straps fastened), anti-static work clothes (without damage),	On-site observation (covering all on-site personnel)		

		and anti-smashing and anti-piercing safety shoes; 2. Special Protection: Personnel working at heights wear full-body safety belts; personnel in noise-prone posts wear earplugs; personnel engaged in electrical work wear insulating clothes.			
4	Mastery of Safety Procedures	Operators are familiar with HSE operating procedures of their posts and can accurately answer key risk points and control measures.	On-site interviews (randomly select 2-3 persons)		
5	Control of Violation Behaviors	No command in violation of regulations, operation in violation of regulations (such as loitering in hoisting area, wiring with electricity on), or violation of work discipline.	On-site inspection / check monitoring records		
6	Mental State	No operators work in a state of fatigue, after drinking, or with	On-site observation / inquiry		

		illness; all operators are focused.			
7	Management of External Personnel	External visitors/operators wear visitor badges and can enter the operation area only after receiving safety briefing.	Check visitor registration / on-site confirmation		
8	Health Monitoring Records	Employees in high-risk posts (welding, noise, dust) receive physical examination once every six months, with complete health records.	Check physical examination reports / health ledgers		

(II) Safety Facilities and Signs (8 Items)

Serial No.	Inspection Content	Inspection Standards	Inspection Method	Inspection Result	Remarks
9	Configuration and Integrity of Fire-Fighting Equipment	1. At least one 4kg dry powder fire extinguisher per 50 ㎡, with normal pressure (in green zone) and within validity period; 2. Fire-fighting sand ≥ 2m³, fire blankets	On-site counting / check pressure value / check validity period		

		without damage, placed in a prominent and unobstructed position; 3. Fire hoses connected firmly, without aging or damage.			
10	Safety Warning Signs	Prohibition / Warning / Instruction / Prompt signs (such as "High Voltage Danger", "Hoisting Warning Area", "Dangerous Goods Storage Area") are complete, clear, and undamaged, placed in prominent positions.	On-site inspection (full coverage of key areas)		
11	Equipment/Material Identification	1. Equipment status identification (in operation / out of service / under maintenance) is consistent with the actual situation; 2. Material identification cards (name, specification,	Random sampling inspection (5-10 locations)		

		height limit, MSDS number) face the passage and are updated weekly.			
12	Emergency Lighting and Evacuation Facilities	1. Emergency lights have sufficient power, automatically turn on after power failure, and cover evacuation passages; 2. Emergency exit signs are clear, doors open smoothly, and no blockage.	Test emergency lighting / on-site observation		
13	Safety Passage and Fixed-Position Management	1. Width of fire-fighting passages ≥ 1.5m, width of operation passages ≥ 1.2m, no material stacking or obstacles; 2. Materials are stored in classified and fixed positions, with clear area division (marked by yellow lines).	On-site measurement / observation		
14	Protective Railings and Edge Protection	Protective railings with a height of 1.2m	On-site inspection (key		

		are installed at work platforms at heights, edges of warehouses, and ditches, with 18cm-high toe boards at the bottom, without damage.	parts)		
15	Eye Wash Stations and First-Aid Facilities	1. Eye wash stations are equipped in dangerous goods operation areas and welding areas, with normal water pressure and no blockage; 2. First-aid kits are fully equipped with medicines (no expired ones), including tourniquets, disinfectants, and burn ointments.	Test eye wash stations / open-box inspection		
16	Explosion-Proof Facilities (Hazardous Areas)	Explosion-proof equipment such as explosion-proof lamps, explosion-proof switches, and explosion-proof walkie-talkies	On-site inspection / check explosion-proof marks		

		are in good condition, without damage or modification.			

(III) Electrical Safety (7 Items)

Serial No.	Inspection Content	Inspection Standards	Inspection Method	Inspection Result	Remarks
17	Management of Distribution Boxes/Cabinets	1. Clear identification (such as "Power Distribution Box", "Lighting Distribution Box"), intact door locks, no water inflow or dust accumulation; 2. Internal terminal blocks are fastened, no exposure, and lines are color-coded in compliance with specifications (red / blue / yellow-green).	Open box door for inspection / measure temperature with infrared thermometer		
18	Temporary Electricity Management	1. Temporary Electricity Permit is handled with complete approval procedures; 2. Cables are overhead or protected by 穿	On-site inspection / check permits		

		管，without rolling or damage, and overhead height ≥ 2.5m; 3. Explosion-proof plugs are used (in humid /hazardous areas).			
19	Leakage Protection Devices	1. Handheld electric tools, temporary electrical equipment, and distribution boxes are all equipped with leakage protectors; 2. Operating current ≤ 30mA, operating time ≤ 0.1s, and test buttons are effective.	Test leakage protectors / check marks		
20	Grounding of Electrical Equipment	1. Protection grounding resistance of cranes, forklifts, pressure vessels, etc. ≤ 4Ω; 2. Grounding cables are not broken, and grounding electrodes are firm.	Detect with grounding resistance tester		
21	Handheld Electric Tools	1. Insulation resistance ≥ 0.5MΩ	On-site inspection / detect		

		(detected with insulation meter), and protective covers are intact; 2. Power cords are not damaged or aged, and plugs and sockets are intact.	insulation resistance		
22	Cable and Line Laying	1. Cables do not cross passages or soak in water; 2. Indoor lines are laid along walls, fixed firmly, and no random wiring.	On-site observation		
23	Operation Status of Electrical Equipment	Electrical equipment such as motors and pumps operate without abnormal noise, and surface temperature ≤ 60℃ (measured with infrared thermometer).	On-site sound listening / temperature measurement		

(IV) Emergency Management (7 Items)

Serial No.	Inspection Content	Inspection Standards	Inspection Method	Inspection Result	Remarks
24	Emergency Plans and Drills	1. Targeted emergency plans (such as fire,	Check emergency plans / drill records		

		leakage, electric shock) are available, revised once a year; 2. At least one special drill is conducted every quarter, with complete records (including videos and summary reports).			
25	Emergency Rescue Materials	1. Emergency rescue materials such as emergency rescue tripods, jacks (50 tons), stretchers, and positive pressure gas masks are complete and within validity period; 2. Emergency contact cards are posted at the entrance of the operation area, including internal HSE Department and external fire-fighting / hospital phone numbers.	On-site counting / check contact cards		
26	Emergency Stop Buttons	Key equipment such as cranes, pressure test equipment, and large-scale equipment are equipped with emergency stop buttons, with clear identification, and the equipment stops immediately	On-site test		

		when the button is pressed.			
27	Evacuation Routes and Drill Records	1. Evacuation route maps are posted in prominent positions, consistent with the actual situation; 2. Employees are familiar with evacuation routes, and evacuation time during drills ≤ 5 minutes.	On-site interviews / check drill records		
28	Accident/Incident Reporting and Handling	1. In the past year, accidents/incidents have investigation records, rectification measures, and verification results; 2. No concealment or underreporting of accidents/incidents.	Check accident/incident ledgers		
29	Emergency Communication Equipment	Emergency communication equipment such as explosion-proof walkie-talkies and emergency phones have sufficient power, clear calls, and no faults.	Test communication equipment		
30	Maintenance Records of Emergency Materials	Emergency materials are inspected once a month, with complete records, and damaged/expired materials are	Check maintenance ledgers		

		replaced in a timely manner.			

III. Special Operation Safety Inspection (Select by Operation Type, Full Score: 100 Points / Type)

(I) Special Inspection for Material Storage Operations (10 Items)

Serial No.	Inspection Content	Inspection Standards	Inspection Method	Inspection Result	Remarks
1	Stacking of Ordinary Materials	1. Stacking in accordance with the principle of "heavy materials at the bottom, light materials at the top; large materials at the bottom, small materials at the top": steel ≤ 1.2m (single layer), cartons ≤ 2m (≤ 5 layers), pipe fittings are stacked in classification; 2. Verticality deviation ≤ 5°, and anti-toppling baffles are set for stacks with height ≥ 1.5m.	On-site measurement / measure verticality with level gauge		
2	Storage of Dangerous Goods	1. Stored separately in explosion-proof	On-site measurement / check sealing		

	(Hydraulic Oil, Gases)	warehouses; distance between hydraulic oil and fire source ≥ 10m; distance between oxygen and acetylene ≥ 10m; 2. Oil drums have no leakage, valves of gas cylinders are closed, and shock-proof rings are intact; 3. MSDS is posted at the entrance of the warehouse, matching the materials.	surface / check MSDS		
3	Temperature, Humidity and Ventilation Control	1. Ordinary storage area: temperature 10-30℃, humidity ≤ 65%; 2. Dangerous goods warehouse: temperature 10-30℃, humidity ≤ 65%, ventilation equipment operates ≥ 6 times per hour, with complete records.	Check temperature and humidity records (past 7 days) / on-site reading		
4	Storage Equipment	1. Operators hold Special Equipment Operation	Check certificates / on-site test		

	(Stackers, Forklifts)	Certificate, and equipment inspection reports are within validity period; 2. Limit switches are effective (automatic shutdown when lifting exceeds limit), and braking systems are sensitive.			
5	Outbound Operation Management	1. Check material name, specification, and quantity before outbound, consistent with documents; 2. Handle with care during loading and unloading to prevent collision, no rough operation.	Check outbound documents / on-site observation		
6	Fire Isolation and Fire Prevention Distance	1. Fire prevention distance between dangerous goods warehouse and ordinary storage area ≥ 15m; 2. Distance between	On-site measurement		

		materials and lamps in the warehouse ≥ 0.5m; distance between materials and fire-fighting equipment ≥ 1m.			
7	Preparation for Leakage Handling	1. Dangerous goods warehouses are equipped with leakage treatment kits (absorbent cotton ≥ 5kg, one set of explosion-proof tools), placed in a prominent position; 2. Absorbent cotton is not damp or expired, and employees know how to use it.	Open-box inspection / on-site demonstration		
8	Key and Access Control	1. Double-person and double-lock management is implemented for dangerous goods warehouses, and keys are kept by 2 persons separately; 2. There are records of key	Check key ledgers		

		collection and return, no unauthorized key duplication.			
9	Hidden Danger Inspection and Rectification	1. At least one hidden danger inspection is conducted in the storage area every week, with complete records; 2. Discovered hidden dangers are rectified within 48 hours, with verification of rectification.	Check hidden danger inspection ledgers / rectification records		
10	Waste Disposal	1. Hazardous wastes such as waste oil rags and damaged packaging are placed in special containers with clear identification; 2. Recyclable / non-recyclable wastes are stored in classification and transported regularly.	On-site inspection / check disposal records		

(II) Special Inspection for Loading and Unloading Operations (10 Items, Forklift / Crane)

Serial No.	Inspection Content	Inspection Standards	Inspection Method	Inspection Result	Remarks
1	Operation Permit and Approval	1. Hoisting Operation Permit is handled for hoisting operations with weight ≥ 10t or high-altitude hoisting (≥ 2m), with complete signatures; 2. Valid period of the permit ≤ 8 hours, no over-period operation.	Check original permits		
2	Personnel Allocation and Qualifications	1. Hoisting operations require the cooperation of 3 persons: "operator + commander + supervisor", all holding valid certificates; 2. Commanders are familiar with flag signals / walkie-talkie signals, no concurrent posts.	On-site confirmation of personnel qualifications		
3	Forklift Equipment Inspection	1. Braking system: test braking with empty vehicle, braking distance ≤ 3m (speed 5km/h); 2. Forks: no deformation	On-site test of braking / check forks / check leakage points		

		or cracks, wear amount ≤ 10%, positioning pins are intact; 3. Hydraulic system: no leakage, stable lifting.			
4	Crane and Lifting Gear Inspection	1. Crane load moment limiters and height limiters are within calibration period, and tests are effective; 2. Lifting gears (steel wire ropes, hooks): wear amount of steel wire ropes ≤ 10%, anti-drop devices of hooks are intact, no cracks; 3. Anemometer shows wind speed ≤ level 6 (real-time monitoring during operation).	Check lifting gear inspection reports / test limiters / check wind speed records		
5	On-Site Preparation for Operations	1. Warning zone radius for hoisting operations ≥ 10m, warning zone radius for forklift operations ≥ 5m, enclosed with warning tapes and attended by special	On-site observation / measure warning zone with tape measure		

		personnel; 2. Clear obstacles and flammables in the warning zone, no unrelated personnel entering.			
6	Specifications for Hoisting/Forking Materials	1. Hoisted materials: clear center of gravity, four-point hoisting with double hooks (such as DN800 valves), protective pads added at edges and corners; 2. Forked materials: insertion depth of forks into pallets ≥ 2/3, load centered, no overloading (rated load of forklift ≤ 3t).	On-site observation / confirm hoisting plan		
7	Operation Process Control	1. Crane: lifting speed ≤ 0.5m/s, pause to check balance when the hoisted material is 30cm above the ground; 2. Forklift: driving speed: ≤ 5km/h in warehouses, ≤ 10km/h outdoors, no sudden braking or sharp turns; 3.	On-site timing / observation		

		Hoisted materials are strictly prohibited from passing over personnel's heads.			
8	Signal Communication and Collaboration	1. Commanders use standard signals (flag signals: red for stop, green for start / walkie-talkie: "lift / lower / stop"), no ambiguity; 2. Smooth communication between operators and commanders, no illegal operations.	On-site observation / test walkie-talkies		
9	Emergency Preparation and Materials	1. Equipped with ≥ 2 jacks of 50 tons, ≥ 1 set of rescue tripods, ≥ 2 4kg dry powder fire extinguishers; 2. Emergency materials are within 50m of the operation area, and employees are familiar with the usage methods.	On-site counting / confirm location / on-site interviews		
10	Post-Operation Cleaning and Records	1. Equipment reset: forklift forks land on the ground, handbrake	On-site observation / check records		

		pulled; crane hooks lifted to the upper limit, power turned off; 2. On-site cleaning: recover warning tapes, check wear of lifting gears, no scattered materials; 3. Fill in Loading and Unloading Operation Record Form with complete records.			

(III) Special Inspection for Equipment Maintenance Operations (10 Items, Hot Work / High-Altitude Work / Confined Space Work)

Serial No.	Inspection Content	Inspection Standards	Inspection Method	Inspection Result	Remarks
1	Handling of Operation Permits	1. Corresponding permits are handled for hot work / high-altitude work / confined space work, with complete approval processes (signed by HSE Department); 2. Confined space permits are attached with gas detection	Check original permits / detection reports		

		reports, and high-altitude work permits are attached with platform acceptance records.			
2	Preparation for Hot Work	1. Clear flammables (cotton yarn, cartons) within a radius of 10m around the hot work point, or cover with fire blankets; 2. Equipped with ≥ 2 4kg dry powder fire extinguishers, ≥ 20kg fire-fighting sand, and supervisors hold combustible gas detectors.	On-site inspection / count materials		
3	Gas Detection (Hot Work / Confined Space Work)	1. Hot work: combustible gas concentration ≤ 10% LEL, re-detection every 2 hours; 2. Confined space: oxygen content 19.5%-23.5%, toxic gases (hydrogen sulfide ≤ 10mg/m³, carbon monoxide ≤ 30mg/m³), re-detection every 1 hour.	On-site detection with gas detectors		

4	Protection for High-Altitude Work	1. Work at heights above 2m requires wearing full-body safety belts (worn high and used low), with safety belts intact and within validity period; 2. Load-bearing capacity of work platforms ≥ 2.5kN/m², qualified after acceptance, with protective railings set at edges; 3. Tools are placed in tool bags, no throwing.	Check platform acceptance records / on-site inspection		
5	Isolation and Ventilation for Confined Spaces	1. Cut off power and gas sources, install blind plates (numbered and registered), lock and tag (keys kept by supervisors); 2. Forced ventilation (air change rate ≥ 3 times / hour), and air vents are away from operators.	On-site inspection of valve status / check tags / check ventilation equipment		
6	Lighting and Communication (Confined Spaces)	1. Explosion-proof lighting is used in confined spaces (brightness ≥	Check lighting / test communication		

		300lux), with cables undamaged; 2. Operators and supervisors communicate with explosion-proof walkie-talkies, with clear signals.			
7	Personal Protective Equipment	1. Hot work: wear impact-resistant masks and anti-static gloves; 2. Confined space work: wear positive pressure air breathing apparatus (pressure ≥ 25MPa) and chemical protective clothing; 3. Electrical maintenance: wear insulating gloves and insulating shoes.	Check equipment labels / on-site practical operation		
8	Supervision Management Requirements	1. Supervisors are on duty throughout the process, no concurrent work, and record operation time and detection data; 2. "No Entry" signs are set outside	On-site confirmation / check supervision records		

		confined spaces, and supervisors can observe the operators.			
9	Operation Duration and Rotation	1. Single hot work duration ≤ 8 hours, and confined space operators are rotated every 30 minutes; 2. Check the physical condition of personnel during rotation intervals (no dizziness, nausea).	Check permit time / rotation records		
10	Post-Operation Acceptance and Cleaning	1. After hot work: pour water to confirm no remaining fire, clean fire blankets and fire-fighting sand; 2. After confined space work: clean up internal debris, restore blind plates / valves, and fill in acceptance forms; 3. After high-altitude work: recover safety belts and tools.	On-site inspection / check acceptance records		

(IV) Special Inspection for Transportation and Distribution Operations (10 Items, Ordinary / Dangerous Goods Transportation)

Serial No.	Inspection Content	Inspection Standards	Inspection Method	Inspection Result	Remarks
1	Personnel Qualifications and Training	1. Drivers hold Driving License (Class A/B) and Road Transportation Qualification Certificate; 2. Dangerous goods escorts hold Dangerous Goods Escort Certificate and receive pre-job training on dangerous goods characteristics.	Check original certificates / training records		
2	Inspection of Ordinary Transportation Vehicles	1. Sensitive brakes, tire tread depth ≥ 1.6mm, normal lights (headlights, turn signals, brake lights); 2. Clear reflective signs without damage, fully equipped with wheel chocks and 2 4kg fire extinguishers.	On-site inspection / test brakes		
3	Inspection of Dangerous Goods	1. Equipped with explosion-proof tires, anti-static grounding belts	Check devices / test positioning systems		

	Transportation Vehicles	(good grounding), and satellite positioning systems (online); 2. Clear dangerous goods signs (diamond-shaped plates) matching the type of materials (such as red for flammable liquids).			
4	Material Loading Specifications	1. Ordinary materials: no overloading (≤ rated load of the vehicle), no unbalanced loading, fixed firmly (bound with ropes); 2. Dangerous goods: hydraulic oil drums are fixed upright, distance from the cab ≥ 3m, and shock-proof rings of gas cylinders are intact.	Check weighing tickets / on-site observation		
5	Transportation Documents and Files	1. Carry Transportation Contract, MSDS, and Dangerous Goods Transportation Permit (for dangerous goods transportation);	On-site inspection / check documents		

		2. Complete documents, consistent with the materials, no alterations.			
6	Emergency Material Preparation	1. Dangerous goods transportation vehicles are equipped with leakage treatment kits (absorbent cotton ≥ 5kg, one set of explosion-proof tools) and 2 gas masks; 2. First-aid kits are fully equipped with medicines, including tourniquets and disinfectants.	Open-box counting		
7	Driving Specifications and Monitoring	1. Driving speed: ≤ 60km/h on national highways, ≤ 80km/h on expressways (check driving recorder data of the past 24 hours); 2. Continuous driving ≤ 4 hours, rest ≥ 20 minutes, no fatigued driving.	Check driving recorder data / on-site interviews		
8	Parking Management Requirements	1. Prohibited to park for a long time (> 30 minutes) within	On-site observation /		

		500m of schools and residential areas; 2. Set wheel chocks and warning lights after parking, and drivers/escorts shall not leave their posts without permission.	confirm location		
9	Performance of Escort Duties	1. For dangerous goods transportation, inspect once every 2 hours (check material sealing and vehicle status) and fill in Escort Log; 2. Voluntarily present documents and cooperate with inspection when inspected.	Check logs / on-site interviews		
10	Safety of Unloading Operations	1. The unloading point has a flat ground and sufficient load-bearing capacity (≥ twice the weight of the materials), with a warning zone set; 2. Prohibited to smoke or use mobile phones during dangerous goods unloading,	On-site observation		

		and handle with care.			

(V) Special Inspection for Equipment Installation and Commissioning Operations (10 Items)

Serial No.	Inspection Content	Inspection Standards	Inspection Method	Inspection Result	Remarks
1	Installation Plan and Review	1. Prepare Equipment Installation Plan, specifying risk control measures (such as hoisting, pipeline connection); 2. The plan is reviewed by the Technical Department and HSE Department, with complete signatures.	Check plan review records / on-site confirmation		
2	Equipment Positioning and Datum	1. Deviation between equipment center line and design datum line ≤ 2mm; 2. Levelness deviation ≤ 0.1mm/m (detected with level gauge), and shim plates are stable.	On-site measurement		
3	Pipeline Connection and Sealing	1. Flange sealing surfaces are free of oil and	Check torque wrench records		

		scratches, and gaskets are selected correctly (such as high-temperature-resistant gaskets for high-temperature pipelines); 2. Bolts are fastened diagonally, torque complies with specifications (M20 bolts ≥ 80N·m), and 2-3 threads are exposed.	/ on-site inspection		
4	Electrical Wiring and Grounding	1. Terminal blocks are fastened, phase lines / neutral lines / ground lines are of correct colors (red / blue / yellow-green), no exposure; 2. Equipment protection grounding resistance ≤ 4Ω, cross-sectional area of grounding cables ≥ 4mm².	Test with torque wrench / detect with grounding resistance tester		
5	Pressure Test (Valves / Vessels)	1. Test pressure is 1.2 times the design pressure, with slow pressure rise (≤ 0.1MPa/min); 2. Pressure holding time ≥ 30	Check pressure records / on-site monitoring		

		minutes, pressure drop ≤ 0.05MPa, no leakage.			
6	Preparation for Power-On Commissioning	1. Insulation resistance ≥ 0.5MΩ (detected with insulation meter), and leakage protectors are tested effectively; 2. Set warning tapes in the commissioning area, prohibiting non-operators from entering.	On-site detection / observation		
7	Load Test Control	1. Gradually load from 50% → 80% → 100% of the rated load, holding pressure for 10 minutes at each stage; 2. Overload protection devices act when the load reaches 1.1 times the rated load, with reliable shutdown.	On-site observation / test protection devices		
8	Safety Protection and Warning	1. Protective covers are set for high-speed rotating parts (motor shafts, pulleys) with clear identification; 2. Post	On-site inspection		

		"Commissioning in Progress, No Operation" signs at the commissioning site.			
9	Emergency Handling Measures	1. Equipped with pipeline leakage plugging tools and emergency stop buttons (the equipment is powered off immediately when pressed); 2. Employees are familiar with emergency handling procedures for leakage and overload.	On-site test / on-site interviews		
10	Commissioning Records and Acceptance	1. Record commissioning data (current, temperature, pressure) completely and accurately; 2. Acceptance reports are fully signed, no remaining issues, with attached commissioning qualification certificates.	Check records / reports		

(VI) Special Inspection for Equipment and Facility Safety (10 Items, Pressure Vessels / Handheld Tools)

Serial No.	Inspection Content	Inspection Standards	Inspection Method	Inspection Result	Remarks
1	Registration for Use of Pressure Vessels	1. Pressure vessels (such as pressure test tanks, air storage tanks) have Special Equipment Use Registration Certificates within validity period; 2. Complete annual inspection reports, no over-period use.	Check registration certificates / inspection reports		
2	Safety Accessories of Pressure Vessels	1. Safety valves and pressure gauges are within calibration period (safety valves calibrated once a year, pressure gauges calibrated once every six months); 2. Set pressure of safety valves is 1.05-1.1 times the design pressure, and range of pressure gauges is 1.5-3 times the working pressure.	Check calibration marks / test safety valves		

3	Operation Status of Pressure Vessels	1. No cracks, deformation, or leakage on the body, surface temperature ≤ design temperature; 2. Operation parameters (pressure, temperature) are within the allowable range, with complete records.	On-site inspection / check operation logs		
4	Management of Handheld Electric Tools	1. Tools are managed by number, with insulation detection once every 3 months and complete records; 2. Protective covers of electric drills, angle grinders, etc. are intact, and switches are sensitive.	Check detection ledgers / on-site inspection		
5	Safety of Welding Equipment	1. Welding machines are well grounded, welding cables are not damaged or aged, length ≤ 30m; 2. Welding protective equipment (masks, gloves)	On-site inspection / check protective equipment		

		is intact, no damage.			
6	Compressors and Pump Equipment	1. Operate without abnormal noise, bearing temperature ≤ 70℃ (measured with infrared thermometer); 2. Seals have no leakage, normal lubricating oil level, and good oil quality.	On-site sound listening / temperature measurement / check seals		
7	Steel Wire Ropes and Slings	1. Wear amount of steel wire ropes ≤ 10%, number of broken wires ≤ standard value (such as ≤ 12 broken wires for 6×19 steel wire ropes); 2. Slings have no cracks or deformation, no torsion or knotting during use.	On-site inspection / check standards		
8	Ladders and High-Altitude Access Facilities	1. Ladders have no cracks or deformation, intact anti-slip pads, and angle with the ground is 60-75° when in use; 2. Mobile platforms have brake devices	On-site inspection / test brakes		

		for wheels, no damage.			
9	Toolboxes and Tool Management	1. Tools are stored in toolboxes in classification, with clear identification, no rust or damage; 2. Measuring tools (calipers, torque wrenches) are within calibration period, with qualified accuracy.	On-site inspection / check calibration marks		
10	Equipment Maintenance Records	1. Key equipment (cranes, forklifts, pressure vessels) are maintained once a month, with complete records; 2. Maintenance contents include lubrication, fastening, and cleaning, and problems are rectified in a timely manner.	Check maintenance ledgers		

(VII) Special Inspection for Occupational Health and Environmental Protection (10 Items)

Serial No.	Inspection Content	Inspection Standards	Inspection Method	Inspection Result	Remarks
1	Noise Control in Operation Environment	1. Noise in noise-prone posts (forklift operation, welding, compressor operation) ≤ 85dB (measured with noise detector); 2. Employees wear noise-canceling earplugs, with noise reduction value of earplugs ≥ 25dB.	Detect noise / on-site observation		
2	Control of Dust and Harmful Gases	1. Welding operations are equipped with smoke extractors, dust concentration ≤ 4mg/m³; 2. Good ventilation in dangerous goods warehouses, harmful gases (such as gasoline vapor) ≤ 300mg/m³.	Detect dust / gas concentration		
3	Temperature, Humidity and Lighting in Operation Environment	1. Temperature in indoor operation areas: ≤ 32℃ in summer, ≥ 10℃ in winter,	On-site reading / detect lighting brightness		

		humidity ≤ 65%; 2. Lighting brightness: ≥ 300lux in operation areas, ≥ 150lux in passages.			
4	Dust Removal and Ventilation Facilities	1. Dust removal equipment in welding and grinding operation areas operates normally, and filter elements are replaced regularly; 2. Ventilation equipment in warehouses and workshops operates ≥ 4 times per hour, no faults.	Check equipment operation / check replacement records		
5	Occupational Health Training and Notification	1. Conduct occupational health training every year, and employees are aware of post hazard factors and protection measures; 2. Post occupational health notification cards in operation areas, with clear content.	Check training records / on-site inspection		

6	Classification and Disposal of Wastes	1. Recyclable wastes (waste steel, cartons), general wastes (domestic garbage), and hazardous wastes (waste oil, waste rags) are stored in classification with clear identification; 2. Hazardous wastes are disposed of by qualified units, with transfer manifests.	On-site inspection / check disposal ledgers		
7	Control of Wastewater Discharge	1. Pressure test wastewater and equipment cleaning wastewater are collected into special storage tanks, no direct discharge; 2. Wastewater is treated by qualified units, with complete records.	On-site inspection / check treatment records		
8	Dust Control Measures	1. Outdoor stockyards are covered with dust-proof nets and watered regularly (≥ 2 times a day); 2. Vehicles transporting muck and sand	On-site observation		

		are covered with tarpaulins, no spillage.			
9	Energy and Resource Conservation	1. No-load operation time of equipment ≤ 10 minutes, power off in a timely manner; 2. Save water, with water reuse rate ≥ 80%.	Check equipment operation records / water use ledgers		
10	Environmental Compliance and Monitoring	1. No environmental complaints or environmental penalties; 2. Conduct environmental monitoring (noise, wastewater, waste gas) every quarter, with qualified reports.	Check monitoring reports / complaint records		

IV. Inspection Summary and Rectification Requirements

(I) Statistics of Inspection Results

Inspection Category	Number of Items to Be Inspected	Number of Qualified Items	Number of Unqualified Items	Qualification Rate	Evaluation Grade (√)
General Safety Management Inspection	30				□ Excellent (≥ 95%) □ Good (85%-94%) □ Qualified (75%-84%) □

					Unqualified (< 75%)
Special Operation Safety Inspection (_____ Type)	10				□ Excellent (≥ 95%) □ Good (85%-94%) □ Qualified (75%-84%) □ Unqualified (< 75%)
Overall Evaluation	—	—	—		□ Qualified (both types ≥ 75%) □ Unqualified (either type < 75%)

(II) Summary of Major Problems

1. _____ ___ (Problem Description + Involved Clauses + Risk Level)

(III) Rectification Requirements

Serial No.	Description of Unqualified Items	Rectification Measures	Responsible Unit/Person	Rectification Time Limit	Re-inspection Method	Consequences of Failure to Rectify
1				_____ Year __ Month __ Day	□ On-site Re-inspection □ Submit Rectification Photos / Report	Deduct _____ points from performance in accordance with HSE Assessment Management Measures, suspend relevant operation qualifications, and pursue

						management responsibilities
2				_____ Year __ Month __ Day	□ On-site Re-inspection □ Submit Rectification Photos / Report	
3				_____ Year __ Month __ Day	□ On-site Re-inspection □ Submit Rectification Photos / Report	

(IV) Signature Confirmation

Signature of Inspectors	_____	Date: _____ Year __ Month __ Day
Signature of Person in Charge of Inspected Unit	_____	Date: _____ Year __ Month __ Day
Re-inspection Records (Filled in Only During Re-inspection)	1. Rectification Completion Status: □ All Completed □ Partially Completed (Uncompleted Items:) 2. Re-inspection Conclusion: □ Qualified □ Unqualified 3. Signature of Re-inspector: _____ Date: _____ Year __ Month __ Day	

V. Appendices (Supporting Forms)

1. Appendix A: Template of HSE On-Site Inspection Problem Rectification Notice
2. Appendix B: Special Equipment Inspection Ledger (Forklifts / Cranes / Pressure Vessels)
3. Appendix C: Gas Detection Record Form (Special for Hot Work / Confined Space Work)

4. Appendix D: Emergency Material List and Maintenance Record Form
5. Appendix E: Occupational Health Physical Examination Ledger
6. Appendix F: Hazardous Waste Disposal Transfer Manifest