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Hengyi Industries Sdn Bhd
恒逸实业（文莱）有限公司

HYBN-T3-07-0026-2024-2

Hoisting Work Management System

吊装作业管理制度

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 HENGYI	Hengyi Industries Sdn Bhd 恒逸实业（文莱）有限公司			
	Hoisting Work Management System 吊装作业管理制度			
	Doc No.	HYBN-T3-07-0026-2024-2	Ver No.	2

1 Purpose 目的

In order to strengthen safety management and supervision of hoisting operation, standardize hoisting operation procedures, reduce hoisting operation risks and prevent and eliminate production safety accidents, this system is specially formulated according to the nature and risk degree of hoisting operation and in combination with the actual situation of the company.

为了加强吊装作业安全管理与监督，规范吊装作业程序，减少吊装作业风险，预防和杜绝生产安全事故的发生，根据吊装作业的性质及风险程度，结合本公司实际，特制定本制度。

2 Scope of Application 适用范围

This system is applicable to all departments of the company and relevant contractor.

本制度适用于本公司各部门及相关承包商单位。

3 Terms and Definition 术语和定义

3.1 Hoisting operation: refers to the operation process in which equipment, workpieces, appliance materials, etc. are hoisted by hoisting machinery to change their positions.

吊装作业：是指利用起重机械将设备、工件、器具材料等吊起，使其发生位置变化的作业过程。

3.2 Hoisting machinery: refers to bridge crane, gantry crane, loading bridge, cable crane, truck crane, tire crane, crawler crane, railway crane, tower crane, portal crane, mast crane, hydraulic hoisting device, elevator, electric hoist, simple hoisting equipment and auxiliary equipment (such as hanging basket), etc.

起重机械：系指桥式起重机、门式起重机、装卸桥、缆索起重机、汽车起重机、轮胎起重机、履带起重机、铁路起重机、塔式起重机、门座起重机、桅杆起重机、液压提升装置、升降机、电葫芦及简易起重设备和辅助用具(如吊篮)等。

3.3 Classification of hoisting operations: hoisting operations are divided into three grades according to the quality of hoisting workpieces, with grade 1: $m \geq 100t$; Level 2: $40t \leq m < 100t$; Level 3: $m < 40t$.

吊装作业分级：吊装作业按起吊工件质量划分为三个等级，一级： $m \geq 100t$ ；二级： $40t \leq m < 100t$ ；三级： $m < 40t$ 。

4 Management Responsibilities

管理职责

4.1 Specified administrative authority

归口管理部门

4.1.1 The Equipment Management Department is the specified administrative authority of hoisting operations, which is responsible for formulating the hoisting operation management system and inspecting and supervising the implementation of hoisting operations by various departments.

机械动力部是吊装作业的归口管理部门，负责制定吊装作业管理制度，对各部门吊装作业执行情况进行检查与监督。

4.1.2 Be responsible for the examination and approval of the first-level hoisting operation and the second-level hoisting operation.

负责一级吊装作业的审定及二级吊装作业的审批。

4.1.3 To be responsible for the management and coordination of hoisting operations for on-site construction projects.

负责对现场施工项目的吊装作业进行管理和协调。

4.2 Coordinated management departments

协同管理部门

4.2.1 HSE Management Department is responsible for the qualification confirmation of operators engaged in command, rigging and hoisting machinery, and is responsible for the supervision and inspection of the hoisting operation process.

HSE 管理部负责对从事指挥、司索和起重机械操作人员进行资格确认，负责吊装作业过程的监督检查。

4.2.2 The Human Resources Department is responsible for organizing and coordinating the training, filing and certificate management of the commanding, rigging and hoisting machinery operators during hoisting operations.

人力资源部负责组织、协调吊装作业中指挥、司索和起重机械操作人员的培训，备案和证件管理工作。

4.3 Executive departments

执行部门

Each operation department is the executive department

各运行部为执行部门

4.3.1 Each production and operation department, electrical department, instrument and control department.

各生产运行部、电气部、仪控部

4.3.1.1 Responsible for applying for hoisting operation, taking the lead in handling the Permit

for Hoisting Operation, organizing personnel of various departments to carry out risk identification and implementing risk reduction measures.

负责提出吊装作业申请，牵头办理《吊装作业许可证》，组织各部门人员进行风险识别，落实风险削减措施。

4.3.1.2 Responsible for monitoring the hoisting operation and assisting in the implementation of safety measures on the hoisting operation site.

负责吊装作业监护，协助落实吊装作业现场安全措施。

4.3.1.3 Responsible for examining and approving Level III Hoisting Operation Permit; review the first and second level hoisting operation permits.

负责审批三级《吊装作业许可证》；审核一、二级吊装作业许可证。

4.3.1.4 Responsible for on-site supervision and inspection of hoisting operations.

负责吊装作业的现场监督检查工作。

4.3.2 Equipment maintenance department

设备检修部

4.3.2.1 Responsible for the establishment of all kinds of hoisting machinery technical files; Responsible for the daily use, maintenance and repair of hoisting machinery, and carry out regular safety inspection on hoisting machinery.

负责建立各类起重机械技术档案；负责起重机械的日常使用、维护保养，对起重机械进行经常性的安全检查。

4.3.2.2 To implement Risk Reduction Measures and Monitoring in Hoisting Process.

落实吊装作业过程中的风险削减措施及监护。

4.3.2.3 Responsible for preparing the hoisting operation plan and the operating rules of hoisting machinery and strictly implementing them.

负责编制吊装作业方案及起重机械的操作规程并严格执行。

4.3.2.4 Proposed the training needs of hoisting workers and arranged to participate in the training.

提出吊装作业人员培训需求，并安排参加培训。

5 Management Content

管理内容

5.1 Basic requirement

基本要求

5.1.1 Hoisting machinery must have product certification and instructions for safe use, maintenance and maintenance; Its manufacturers must have relevant qualifications issued by the competent government departments, and its safety and protection devices must be complete.

起重机械必须具有产品合格证和安全使用、维护、保养说明书；其生产厂家必须具有政府主管部

门颁发的相关资质，其安全、防护装置必须齐全、完备。

5.1.2 Simple hoisting equipment such as slings, riggings, etc. that are self-made, modified and repaired must have design data (including drawings, calculation sheets, etc.) and be archived. Self-made, modified and repaired simple hoisting equipment must be strictly carried out in accordance with the drawings, and can only be used after passing the inspection by a qualified organization.

自制、改造和修复的吊具、索具等简易起重设备，必须有设计资料(包括图纸、计算书等)，并予以存档。自制、改造和修复简易起重设备必须严格按照图纸执行，并经具有检验资质的机构检验合格后方可使用。

5.1.3 For level I and level II hoisting operations, a hoisting scheme shall be prepared. For level III hoisting operations, the hoisting scheme shall also be prepared under special circumstances such as complicated shape, small rigidity, large aspect ratio and operating conditions, although the hoisting weight is less than 40 tons. The operating unit shall be responsible for preparing the scheme.

对于一级、二级吊装作业须编制吊装方案，对于三级吊装作业，吊物虽不足 40 吨，但形状复杂、刚度小、长径比大、作业条件特殊情况下，也应编制吊装作业方案，方案由作业单位负责编制。

5.1.4 Except for the fixed hoisting operation originally designed for production and operation, other hoisting operations shall be subject to the hoisting operation permit in accordance with clause 5.3 of this system.

除了原固有设计用于生产运行操作的固定吊装作业外，其他吊装作业均应按照本制度 5.3 条款规定办理吊装作业许可证。

5.1.5 When using the shaped hoisting machinery such as tires, automobiles, crawler belts and bridge cranes for hoisting operations, the operating procedures of the shaped hoisting machinery shall also be observed.

利用轮胎、汽车、履带和桥式起重机等定型起重机械进行吊装作业时，还应遵守定型起重机械的操作规程。

5.2 Management content and it's requirement

管理内容及其要求

5.2.1 General safety management requirements

一般安全管理要求

5.2.1.1 Before hoisting operation, risk identification shall be carried out according to the operation contents and corresponding risk reduction measures shall be determined.

进行吊装作业前，应针对作业内容进行风险识别，确定相应的风险削减措施。

5.2.1.2 The operating unit must carry out daily inspection, monthly inspection and annual inspection of hoisting machinery in accordance with the standards. Any problems found in hoisting equipment shall be repaired in time and the repair files shall be kept.

作业单位必须按照标准规定对起重机械进行日检、月检和年检，发现的起重设备问题要及时进行

检修处理，并保存检修档案。

5.2.1.3 The hoisting commander, the cable operator (rigger) and the crane operator shall hold the "Operation Certificate for Special Operators" issued by the relevant departments before they can conduct the command and operation.

吊装指挥人员、司索人员(起重工)和起重机械操作人员，应持有相关部门颁发的《特种作业人员操作证》，方可从事指挥和操作。

5.2.1.4 Before the primary and secondary hoisting operations, the technical department shall, together with the safety department, carry out risk assessment and review on the operation scheme, operation safety measures and emergency plans.

一级、二级吊装作业前，技术部门应会同安全部门对作业方案、作业安全措施和应急预案进行风险评估和审查。

5.2.1.5 The hoisting operation site shall designate a special person to monitor, and the hoisting application unit and the operation unit shall each assign one person to monitor, and if there is any relevant unit, another guardian shall be assigned.

吊装作业现场应指定专人进行监护，由吊装申请单位与作业单位各派一人进行监护，如有相关单位，则还需再派一名监护人。

5.2.1.6 The following items shall be inspected for safety before hoisting:

吊装作业前应以下项目进行安全检查：

(1) The on-site person in charge of the unit applying for hoisting shall confirm the qualifications of the commanding, commanding and operating personnel;

申请吊装作业单位现场负责人应对从事指挥、司索和操作人员进行资格确认；

(2) Carry out safety inspection and confirmation on hoisting machinery and spreader protection devices to ensure they are in good condition;

对起重机械和吊具保护装置进行安全检查确认，确保处于完好状态；

(3) Confirm the implementation of safety measures;

对安全措施落实情况进行确认；

(4) To inspect the safety conditions in the hoisting area (including the delineation, identification and obstruction of the hoisting area);

对吊装区域内的安全状况进行检查(包括吊装区域的划定、标识、障碍)；

(5) Verify weather conditions.

核实天气情况。

5.2.2 Safety Requirements for Hoisting Related Personnel:

吊装相关人员安全要求：

5.2.2.1 The hoisting commander shall comply with the following provisions:

吊装指挥人员应遵守以下规定：

(1) During hoisting operations, the commander must be clearly identified, and the commander should wear obvious signs.

吊装作业时明确指挥人员，指挥人员应佩戴明显的标志。

(2) The hoisting commander must command according to the specified command signal, and

other operators should know the hoisting scheme and command signal clearly.

吊装指挥人员必须按规定的指挥信号进行指挥，其他操作人员应清楚吊装方案和指挥信号。

(3) The hoisting commander shall strictly implement the hoisting scheme, and timely negotiate with the scheme designer to solve any problems found.

吊装指挥人员应严格执行吊装方案，发现问题要及时与方案编制人员协商解决。

(4) Trial hoisting shall be carried out before formal hoisting to check the stress of all machines and tools and ground anchors. If problems are found, the hoisting objects should be put back to the ground first.

正式起吊前应进行试吊，检查全部机具、地锚受力情况。发现问题，应先将吊物放回地面，

(5) If there is a fault in the hoisting process, the hoisting operator should immediately report to the commander, and no one is allowed to leave the post without authorization.

吊装过程中出现故障，吊装操作人员应立即向指挥人员报告，任何人不得擅自离开岗位。

(6) When commanding hoisting and lowering hooks or hoisting objects, the safety of operators and equipment shall be ensured.

指挥吊运、下放吊钩或吊物时，应确保作业人员、设备的安全。

(7) Hoisting rigging shall not be untied before hoisting heavy objects in place.

起吊重物就位前，不得解开吊装索具。

5.2.2.2 Hoisting operators shall comply with the following provisions:

起重操作人员应遵守以下规定：

(1) Operate according to the command signals issued by the command personnel; For emergency stop signals, any person shall immediately execute them.

按指挥人员发出的指挥信号进行操作；对于紧急停车信号，任何人发出均应立即执行；吊

(2) When the weight is close to or reaches the rated hoisting capacity, the brake shall be checked, and the weight shall be hoisted after trial hoisting with low height and short stroke.

重物接近或达到额定起重吊装能力时，应检查制动器，用低高度、短行程试吊后，再吊起。

(3) No hoisting operation shall be carried out when there are people under the hoisting arm, hook or hanging object, or when there are people on the hanging object or floating objects.

当起重臂、吊钩或吊物下面有人，或吊物上有人、浮置物时不得进行起重操作。

(4) It is strictly prohibited to lift overloaded and unclear quality articles and buried objects.

严禁起吊超载、质量不清的物品和埋置物体。

(5) Hoisting equipment such as brake and safety device failure, hook anti-loosening device damage, wire rope damage reaching scrapping standard, etc. shall be installed.

在制动器、安全装置失灵、吊钩防松装置损坏、钢丝绳损伤达到报废标准等起重设备、设

(6) Hoisting binding, unstable or unbalanced hoisting may cause sliding, and hoisting operation shall not be carried out when no liner is added between edges and corners of hoisting objects and wire rope, sling or sling.

吊装捆绑、吊装不牢或不平衡可能造成滑动，吊物棱角处与钢丝绳、吊索或吊带之间未加衬垫时，不得进行吊装操作。

(7) When the site, hoisting situation and command signal cannot be clearly seen, hoisting

operation is not allowed.

无法看清场地、吊装情况和指挥信号时，不得进行吊装操作。

(8) Hoisting machinery and its boom, hoisting appliance, spreading tool, steel wire rope, cable wind rope and hanging objects shall not be close to high and low voltage power transmission lines. When it is really necessary to operate near the power transmission lines, sufficient safe distance must be kept according to regulations. Otherwise, power shall be cut off for hoisting operations. Minimum safe distance between hoisting machinery, slings, slings and equipment and overhead transmission lines:

起重机械及其臂架、吊具、辅具、钢丝绳、缆风绳和吊物不得靠近高低压输电线路，确需在输电线路近旁作业时，必须按规定保持足够的安全距离，否则，应停电进行起重作业。起重机械、吊索、吊具及设备与架空输电线间的最小安全距离：

Item 项目	Transmission line voltage 输电导线电压 (kv)						
	<1	10	35	110	220	330	500
Safe Distance (m) 安全距离 (米)	2.0	3.0	4.0	5.0	6.0	7.0	8.5

(9) Suspending objects, cages, slings and slings shall not be suspended in the air during shutdown or rest.

停工或休息时，不得将吊物、吊笼、吊具和吊索悬吊在空中。

(10) When hoisting machinery is working, it shall not be inspected and maintained; The hoisting and luffing mechanism shall not be adjusted under the condition of load.

起重机械工作时，不得对其进行检查和维修；不得在有载荷的情况下调整起升、变幅机构

(11) When two or more hoisting machines are used to lift the same heavy object, the hoisting and operation shall be kept synchronous. When two cranes are used as the main hoisting and hoisting equipment, the hoisting capacity of the cranes shall be the same. The load borne by each hoisting machine shall not exceed 80% of its rated hoisting capacity.

利用两台或多台起重机械吊运同一重物时，升降、运行应保持同步，当采用两台起重机作为主吊抬吊高、细设备，起重机起重能力宜相同。各台起重机械所承受载荷不得超过各自额定起重能力的 80%。

5.2.2.3 The company's personnel shall comply with the following provisions:

司索人员应遵守以下规定：

(1) Obey the command of the commander and report any dangerous situation in time.

听从指挥人员的指挥，发现险情及时报告。

(2) According to the specific situation of the hanging objects, choose the appropriate hoisting tools and slings. It is not allowed to directly wrap the hanging objects with hooks, and it is not allowed to mix slings and slings of different types or specifications. The sling load shall not

exceed the rated hoisting mass and the sling shall not exceed the safety load. Check whether the connection point is firm and reliable when hoisting the hanging objects.

根据吊物具体情况选择合适的吊具与吊索；不准用吊钩直接缠绕吊物，不得将不同种类或不同规格的吊索、吊具混合使用；吊具承载不得超过额定起质量，吊索不得超过安全负荷；起升吊物时应检查连接点是否牢固、可靠。

(3) The hanging objects shall be bound firmly, and the hanging point and the center of the hanging objects shall be on the same vertical line.

吊物捆绑应牢靠，吊点和吊物的中心应在同一垂直线上。

(4) It is forbidden to use hoisting machinery to transfer personnel and directly hoist gas cylinders;

禁止使用起重机械移送人员和直接吊装气瓶；

(5) Personnel are prohibited from staying under hooks and hanging objects; If it is necessary to enter the lower part of the suspension due to special circumstances, contact the commanding personnel and hoisting operation personnel in advance and set up supporting devices. No one is allowed to stay on the crane track.

禁止人员在吊钩、吊物下停留；因特殊情况需进入悬吊物下方时，应事先与指挥人员和吊装作业人员联系，并设置支撑装置。任何人不得停留在起重机运行轨道上。

(6) When hanging heavy objects, the edges and corners through which the hoisting ropes and chains pass shall be padded; The number of single pieces to be hoisted at one time shall not exceed 3 and the hoisting pieces shall be fixed properly. When hoisting more than 3 pieces of scattered objects, hanging baskets, buckets and other appliances shall be used.

吊挂重物时，起吊绳、链所经过的棱角处应加衬垫；一次吊装的单件数量不能超过 3 件且吊装件应固定好；吊运 3 件以上零散物件时，应使用吊篮、吊斗等器具。

(7) Heavy objects of unknown quality, buried underground or connected with other objects shall not be tied and hung.

不得绑挂起吊不明质量、埋在地下或与其他物体连接在一起的重物。

(8) It is strictly prohibited to bind and lift at a single point except for the hoisting objects with special structures.

除具有特殊结构的吊物外，严禁单点捆绑起吊。

(9) Personnel and hanging objects should keep a certain safe distance. When placing the hanging objects in place, the hauling rope or stay rod and hook shall be used to assist in positioning.

人员与吊物应保持一定的安全距离。放置吊物就位时，应用牵引绳或撑杆、钩子辅助就位。

(10) When the production equipment is abnormal and may endanger the safety of the operators, the operators shall stop the operation and evacuate quickly.

当生产装置出现异常，可能危及作业人员安全时，作业人员应停止作业，迅速撤离。

5.2.2.4 Guardians shall comply with the following provisions:

监护人员应遵守以下规定：

(1) The guardian does not directly participate in the operation, he is responsible for the

inspection of the implementation of the operation safety measures, and implements communication, supervision and management in the whole operation process.

监护人不直接参与作业，负责作业安全措施落实情况的检查，对整个作业过程中实施沟通、监督、管理。

(2) Be responsible for confirming whether the relevant permit procedures for hoisting operation are complete, and check and confirm whether all risk reduction measures for hoisting operation site are implemented item by item.

负责确认吊装作业相关许可手续是否齐全，逐项检查、确认吊装作业现场风险削减措施是否全部落实。

(3) When it is found that the hoisting conditions do not meet the basic safety requirements, the safety measures are not implemented, and abnormal conditions occur around, the guardian has the right to stop the operation in time; After the operation is terminated immediately in case of any abnormal situation on the site, the initial disposal such as alarm, personnel evacuation and rescue shall be carried out in a timely manner.

当发现吊装条件不符合安全基本要求、安全措施不落实、周边出现异常情况时，监护人有权及时制止作业；在现场出现异常情况立即终止作业后，应及时进行报警、人员疏散、救援等初期处置。

(4) During the hoisting period, they shall not leave the site without permission or engage in anything unrelated to guardianship. At the end of hoisting, the guardian shall close the hoisting permit after checking the site to confirm that there are no remaining problems.

吊装期间不得擅自离开现场，不得从事与监护无关的事；在吊装结束，监护人在对现场进行检查确认无遗留问题后，关闭吊装作业许可证。

5.2.2.5 After the hoisting operation is completed, the operators must also do the following work:

吊装作业完毕，作业人员还必须做好以下工作：

(1) Put the hoisting hook and hoisting arm in the specified safe position, all control handles shall be placed in zero position, and the main power switch shall be disconnected for hoisting machinery using electrical control.

将吊钩和起重臂放到规定的稳妥位置，所有控制手柄均应放到零位，对使用电气控制的起重机械，应将总电源开关断开。

(2) The crane working on the track shall be effectively anchored.

对在轨道上工作的起重机应有效锚定。

(3) Take back the slings and place them in specified places, and carry out routine inspection on them.

将吊索、吊具收回放置于规定的地方，并对其进行例行检查。

(4) When carrying out maintenance on hoisting machinery, the main power supply shall be cut off and signs shall be hung or locks shall be added.

对起重机械进行维护保养时，应切断主电源并挂上标志牌或加锁。

5.2.3 Other safety management requirement

其他安全管理要求

5.2.3.1 Response to Severe Weather

恶劣天气的应对

(1) Stop hoisting operation when the wind speed is greater than 10.8m/s (strong wind above level 6).

风速大于 10.8m/s（六级以上大风）时停止吊装作业。

(2) In principle, hoisting is not arranged at night. It is strictly prohibited in thunderstorm days, at night and when visibility is low. The hoisting of large pieces should be arranged in the morning.

吊装原则上不安排在夜间进行，雷雨天、夜间、能见度低时严禁吊装作业；大件吊装宜安排在早上进行。

5.2.3.2 Hoisting Operation and Pavement and Civil Foundation of Plant Area

吊装作业与厂区路面及土建基础

(1) The crawler crane cannot directly contact the road surface during walking. Protective measures such as paving the road base plate and steel plate must be taken to protect the road.履带吊车行走作业不能直接接触路面，必须采取铺垫路基板、钢板等保护措施，以保护道路。

(2) During crane operation, the support legs must be padded with driftwood.

吊车作业时，支腿必须下垫道木。

(3) The foundation or equipment cannot be collided during hoisting.

吊装时不能碰撞基础或设备。

(4) The crane is strictly prohibited from rolling on the basis.

吊车严禁在基础上碾压。

(5) In principle, the equipment foundation cannot be used as anchor point.

原则上设备基础不能当锚点。

5.2.3.3 Protection of underground concealed works

地下隐蔽工程保护

(1) Where underground pipes are buried under the route through which vehicles pass, protective measures shall be taken.

车辆通过的路线下埋地管的地方，要采取保护措施。

(2) Before the crane passes through the inspection well, the well shall be filled with yellow sand and padded with thick steel plates.

吊车通过窨井前，井要填满黄沙，上垫厚钢板。

(3) When the crane passes through the fire hydrant, special personnel shall be assigned to observe and take fire hydrant protection measures to prevent damage.

吊车通过消防栓时，要设专人观察，并采取消防栓保护措施，防止碰坏。

(4) When the crane passes through the cable trench, protective measures shall be taken to prevent the cover plate from crushing.

吊车通过电缆沟时，要采取保护措施，防止盖板压坏。

5.3 Hoisting permit management

吊装作业许可证管理

5.3.1 Application and Handling of "Hoisting Operation Permit"

《吊装作业许可证》申请与办理

5.3.1.1 The "Hoisting Operation Permit" is the basis for hoisting operations, which must be applied for and handled in advance and can only be carried out after passing the examination and approval.

《吊装作业许可证》是进行吊装作业的依据，必须提前申请、办理，并经审批合格后方可作业。

5.3.1.2 The hoisting operation follows the principle that whoever manages the hoisting equipment applies for the "Hoisting Operation Permit". As the unit applying for hoisting operation, the equipment disciplines (including electrical and instrument technicians) of the unit, i.e. the applicant, shall take the lead in handling the "Hoisting Operation Permit". When the electrical department and the instrument control department need hoisting operation due to overhaul of the production equipment, the electrical department and the instrument control department shall be the applicant and the production operation department shall be the relevant unit.

吊装作业遵循吊装设备谁管理谁申请《吊装作业许可证》的原则，作为申请吊装作业单位，需由本单位的设备专业人员（包括电气、仪表技术人员），即申请人，牵头办理《吊装作业许可证》，当电气部、仪控部在生产装置内因检修需要吊装作业时，电气部、仪控部为申请单位，生产运行部为相关单位。

5.3.1.3 The equipment disciplines of the applicant shall organize the operators, guardians and relevant on-site persons in charge of each unit (including this unit, relevant units and operation units) to jointly identify the risks in the hoisting operation process, formulate risk reduction measures, conduct on-site verification on the implementation of relevant measures, and sign in the corresponding columns after confirming that they are qualified.

申请单位设备专业人员组织各单位（包括本单位、相关单位、作业单位）作业人、监护人及相关现场负责人，共同对吊装作业过程进行风险识别，制定风险削减措施，对相关措施的落实情况现场核查，确认合格后在相应栏目内签名。

5.3.1.4 When filling in the "Hoisting Operation Permit", it must be filled in item by item, not blank. For the optional item of "□", tick the corresponding "□" according to the actual situation. For blank items, if they are not applicable or need not be filled in, they are indicated by "-" and the applicable items are filled in according to the actual situation.

在填写《吊装作业许可证》时，须逐项填写，不得空项，对于“□”的可选项，按实际情况在对应的□内划“√”；对于空格项，不适用或不需要填写时，用“-”表示，适用项则按实际情况填写。

5.3.1.5 The period of validity of the "Hoisting Operation Permit" is one cycle of the operation project, and one cycle shall not exceed 3 days.

《吊装作业许可证》有效期为作业项目一个周期，一个周期不超过3天。

5.3.1.6 The "Hoisting Operation Permit" is in four copies, with the first copy retained by the applicant, the second copy held by the on-site guardian, the third copy held by the person in

charge of on-site hoisting, and the fourth copy stored in the operation control room or post where the operation is located.

《吊装作业许可证》一式四联，第一联申请单位留存，第二联由现场监护人持有，第三联由现场吊装负责人持有，第四联存放在作业所在操作控制室或岗位。

5.3.2 Review and approval of "Hoisting Operation Permit"

《吊装作业许可证》的审核、审批

The "Hoisting Operation Permit" shall first be organized by the equipment disciplines of the operation application unit to organize the operators, guardians and relevant on-site responsible persons of each unit to confirm the implementation of various safety measures and sign in the corresponding columns.

《吊装作业许可证》先由作业申请单位设备专业人员组织各单位作业人、监护人及相关现场负责人确认各项安全措施落实情况，并在相应栏目内签名。

5.3.2.1 When $m < 40t$, it is a level 3 hoisting operation, which is approved by the leaders of the applying unit and relevant units (if any).

当 $m < 40t$ 时，属三级吊装作业，经申请单位及相关单位（如有）领导批准。

5.3.2.2 When $40t \leq m < 100t$, it is a Level 2 hoisting operation, which shall be reviewed by the leaders of the applying unit and relevant units (if any) and approved by the leaders of the Equipment Management Department.

当 $40t \leq m < 100t$ 时，属二级吊装作业，经申请单位及相关单位（如有）领导审核，机动部领导批准。

5.3.2.3 When $m \geq 100t$, it is a Level 1 hoisting operation, which is reviewed by the leaders of the application unit and relevant units (if any), reviewed by the leaders of the Equipment Management Department, and approved by the company's Director in charge.

当 $m \geq 100t$ 时，属一级吊装作业，经申请单位及相关单位（如有）领导审核，机动部领导审定，公司主管领导批准。

5.3.3 Closing and keeping of "Hoisting Operation Permit"

《吊装作业许可证》关闭、保存

5.3.3.1 After the hoisting operation is completed, the operation unit shall clean up the operation site and leave after confirming that there are no remaining problems. All guardians shall confirm and sign the closure and submit it to the equipment discipline of the application department for storage.

吊装作业完成后，作业单位应清理作业现场，在确认无遗留问题后方可离开；所有监护人进行关闭确认、签名，并交给申请部门的设备专业人员保存。

5.3.3.2 The "Hoisting Operation Permit" shall be kept by the applicant unit in a unified manner and filed on a monthly basis for one year.

《吊装许可证》应由申请单位统一保存，按月归档，保存期为一年。

6 Supervision and inspection

监督检查

The Equipment Management Department and HSE Management Department are responsible for supervising the hoisting operation management carried out by various departments and integrating them into performance management, and conducting regular inspection and assessment.

机械动力部和 HSE 管理部负责对各部门执行吊装作业管理进行监督并纳入绩效管理，定期进行检查和考核。

7 Associated programs and records

关联程序和记录

7.1 Associated programs

关联程序

Hoisting Operation Approval Procedure(HYBN-T2-07-0074-2024-2)

吊装作业许可证审批程序 HYBN-T2-07-0074-2024-2

7.2 Associated records

关联记录

Hoisting Operation Permit(HYBN-T6-07-0174-0001-2019)

吊装作业许可证 HYBN-T6-07-0174-0001-2019

8 Supplementary Rule 附则

8.1 This System is under the jurisdiction of Equipment Management Dept.

本制度由机械动力部归口管理。

8.2 This System is drafted by Equipment Management Dept.

本制度起草部门：机械动力部。

8.3 Equipment Management Dept. is responsible for the interpretation of this System.

本制度解释权归机械动力部拥有。

8.4 Preparation and approval of this system are shown in Table 1

本制度编制和审批情况见表 1:

Table 1 Revision preparation and approval of document

表 1 文件版本编制和审批情况

2	2024-04-01	Pan Xiaoming 潘小明	Zhao Tingyun 赵挺云	Xu Ye 徐野	Chen Liancai 陈连财
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Revision 版本	Issued date 颁布日期	Prepared by 编制人	Reviewed by 审核人	Authorized by 审定	Approved by 批准人
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