



HENGYI INDUSTRIES SDN BHD

*Excellence in developing Petrochemicals
through pursuing Innovation and Business sustainability*

INVITATION FOR EXPRESSIONS OF INTEREST

Hengyi Industries Sendirian Berhad (HYBN) invites interested companies to submit Expressions of Interest (EOI) for the following work:

Provision of Spherical Coal Storage Shed Roof Mining Plate Replacement and Reinforcement Of The Ball Panel Works On Pulau Muara Besar (Ref: MSD652945)

Tender brief of work

- Contractors required to have :
 1. Code for Construction of Industrial Equipment and Pipeline Insulation Engineering (GB50126-2008)
 2. Code for Acceptance of Industrial Equipment and Pipeline Insulation Engineering (GB50185-2010)
 3. Technical Specification for Petrochemical Equipment and Pipeline Heating Isolation (SH3010-2000)
 4. Code for Construction Quality of Petrochemical Coatings (SH / T3548-2011)
- The company should have the qualification above anticorrosion insulation construction, equipped with a project leader, a full-time safety officer, a on-site construction management, a full-time monitoring personnel, and have the corresponding qualifications and work at height personnel must hold the high-altitude work certificate.
- Preliminary work for construction- Support point setting and inspection, Safety lifting measures erection, Remove and install the old light panels, Overall roof inspection and reinforcement.
- To comply with Hengyi's policies and relevant Brunei Darussalam's laws and legislations.

Local Business Development (LBD):

- The above work category falls under **HIGHLY SPECIALISE** Quadrant of the Local Business Development Directive for Oil and Gas Industry (LBD Directives), issued by the Department of Energy at the Prime Minister's Office (DOE).
- Hengyi Industries Sdn Bhd LBD requirements are in line with the LBD Directives as issued by the DOE.
- Target for recruitment and development of qualified Bruneian staff, including graduates will be part of Tender / Contract.

Note : This Expressions of Interest shall not be deemed as an invitation to tender from HYBN. Any expenses incurred in connection with this EOI to be borne solely by the interested parties.



HENGYI INDUSTRIES SDN BHD

*Excellence in developing Petrochemicals
through pursuing Innovation and Business sustainability*

Interested companies are required to fulfill the following prerequisite and complete the Pre-Qualification Questionnaire together with copies of the key documents as stated therein. The requirements and Pre-Qualification Questionnaire can be downloaded under this link [https://www.hengyi-industries.com/opportunities/expression-of-interest-\(eoi\)/](https://www.hengyi-industries.com/opportunities/expression-of-interest-(eoi)/)

Prerequisite: 1) Company profile 2) Acquired 5 to 10 years experiences of same work nature 3) Established HSE Management Policy 4) Established Quality Assurance Policy.

Interested companies shall submit a **HARD COPY** of the letter of interest with company letter head together with copies of the abovementioned key documents to **Hengyi Industries Sdn Bhd, Plot 30, 31, & 32, Serasa Muara Industrial Estate, Brunei-Muara District BT 1728, Negara Brunei Darussalam, with title "Provision of Spherical Coal Storage Shed Roof Mining Plate Replacement and Reinforcement Of The Ball Panel Works On Pulau Muara Besar (Ref: MSD652945)" Attention to: "Tender Coordinator"** no later than 5pm, on 18th May 2024. Late submissions will not be entertained.

Any enquiries on the EOI can be made to **"Tender Coordinator"** at 60000216@pmb.hengyi.com.

An Electronic copy in PDF shall be sent via email to 60000216@pmb.hengyi.com with the subject heading **Provision of Spherical Coal Storage Shed Roof Mining Plate Replacement and Reinforcement Of The Ball Panel Works On Pulau Muara Besar (Ref: MSD652945)"**

Note : This Expressions of Interest shall not be deemed as an invitation to tender from HYBN. Any expenses incurred in connection with this EOI to be borne solely by the interested parties.

HENGYI INDUSTRIES SDN BHD

**Technical Accessories for Replacement of Lighting Board on
Roof of Spherical Coal Storage Bunker and Reinforcement of
Spherical Panel**

恒逸石化球形储煤仓棚顶采光板更换及球面板加固工程技术附件

Document number 文件编号 MSD652945

Party A 甲方:

Representative signature 代表签字:

Party B 乙方:

Representative signature 代表签字:

Date 日期:

Catalogue 目录

1.	General situation 概况	3
2.	Implementation standards for general construction and acceptance 施工及验收执行标准.....	3
3.	Construction process 施工工序 Error! Bookmark not defined.	
4.	Safety precautions 安全措施.....	3
5.	Technical requirement 技术要求	5
6.	Quality requirement 质量要求	6
7.	Raw material requirements 原材料要求.....	6
8.	Guarantee period 质保期	6
9.	Safety measures requirements 安全措施要求	6
10.	Construction management requirements 施工管理要求.....	7
11.	Contact Information 联系方式	7

1. General situation 概况

Hengyi Industries Sdn Bhd (hereinafter referred to as Party A) and (hereinafter referred to as Party B) reach the following agreement on the replacement of the roof of the spherical coal bunker and the inspection and reinforcement of the ball panel.

恒逸实业（文莱）有限公司(以下简称甲方)、 _____

(以下简称乙方)， 就甲方球形储煤仓棚顶采光板更换及球面板检查加固工程达成如下协议。

2. Implementation standards for general construction and acceptance 施工及验收执行标准

Code for Construction of Industrial Equipment and Pipeline Insulation Engineering (GB50126-2008)
《工业设备与管道绝热工程施工规范》(GB50126-2008)

Code for Acceptance of Industrial Equipment and Pipeline Insulation Engineering (GB50185-2010)
《工业设备与管道绝热工程施工质量验收规范》(GB50185-2010)

Technical Specification for Petrochemical Equipment and Pipeline Heating Isolation (SH3010-2000)
《石油化工设备和管道隔热技术规范》(SH3010-2000)

Code for Construction Quality of Petrochemical Coatings (SH / T3548-2011)
《石油化工涂料防腐工程施工质量验收规范》(SH/T3548-2011)

3. Construction process 施工工序

Preliminary work for construction→Support point setting and inspection→Safety lifting measures erection→Remove and install the old light panels→Overall roof inspection and reinforcement

施工准备→支承点设置及检查→安全吊设措施搭设→旧采光板拆除及安装→整体屋面检查加固。

4. Safety precautions 安全措施

4.1 Selection of force points for suspension operation

悬吊作业受力点的选择：

a. When the horse road under the roof is used as the force point of the construction personnel, that is, two $\Phi 11$ wire ropes are set in the cross section of the horse road under the roof, and the joints at both ends of the wire rope are fixed with a matching wire rope splint.

a.利用棚顶下方马道作为施工人员操作绳受力点，即在棚顶下方马道的横截面箍设两道 $\Phi 11$ 的钢丝绳，钢丝绳两端接头用配套钢丝绳夹板固定牢。

b. With $\Phi 11$ wire rope in the exposed umbrella surface below the roof of the steel structure support around two hoops as the operator's safety rope.

b.用 $\Phi 11$ 的钢丝绳在棚顶外露的伞形面下方钢结构支撑四周箍设两道作为操作人员的保险绳。

4.2 Inspection of the lifting point 吊点的检查：

Reliability inspection before installation of the stress point: the steel

structure of the stress point must be free of loosening and dewelding;

受力点安装前可靠性检查：受力点的钢结构必须无松动及脱焊；

The force point should be checked before work: before going to work every day, check the force point and rope first, confirm that there is no fatigue damage, then use, and carefully fill in the inspection confirmation form.

受力点在使用中要进行班前检查：每日上班前，先进行受力点及绳索的检查，确认无疲劳损坏后，再进行使用，并认真填写检查确认单。

Force point and rope pre-shift inspection confirmation sheet

受力点及绳索班前检查确认单

Project Sign Content	Inspector 检查人	User 使用人	Project Leader 项目负责人	Time 时间
Is the fixed point loose? 固定点是否松动				
Whether the fixed point is fatigued or damaged. 固定点是否疲劳损坏				
Rope fixing condition 绳索固定情况				
Whether the rope is worn or not 绳索是否磨损				

4.3 Attention should be paid to the matters in the installation of the seat-type climbing board:

座式登高板安装应注意的事项:

4.3.1 The seat type climbing board usually consists of working rope, safety rope, sliding buckle, sling, seat plate, crotch belt, seat belt, belt, rope, self-locking device and ring, half ring and other amount accessories.

座式登高板通常由工作绳、安全绳、下滑扣、吊带、座板、胯带、安全带、腰带、系绳、自锁器及圆环、半圆环等金额配件组成。

4.3.2 The working rope is ϕ 18 nylon rope, and the force point is on the Φ 14 wire rope fixed on the chimney.

For the weight of the bearing plate and the operator, the sliding buckle is freely moved on the working rope by the construction personnel.

工作绳采用 ϕ 18 锦纶绳, 受力点在烟囱上以固定的 Φ 14 钢丝绳上。用于承载座板及其上作业人员的重量, 下滑扣通过施工人员控制在工作绳上自由移动。

4.3.3 The sliding buckle is a metal member connecting the working rope and the seat plate. It can be sliding or fixed along the vertical side of the building through the loose or fastening of the working rope winding joint.

下滑扣是连接工作绳与座板的金属构件, 可通过工作绳活络接头的松动或紧固, 使座板沿建筑物立面向下滑行或固定。

4.3.4 The sling is the belt of the back pocket plate and fixed with the seat plate, and connected with the sliding buckle at the same time. The material is mostly chemical fiber, and the width is usually greater than 75mm.

吊带是反兜座板面并与座板固定，同时和下滑扣相连的带子，材料多为化纤，宽度通常大于 75mm。

4.3.5 The seat plate is the component of the high workers sitting on it, which is often made of hard and tough whole wood material. The general length is greater than 600mm, the width is greater than 150mm, the thickness is more than 40mm, the surface has anti-skid pattern, the edge is smooth without diamond, the appearance is no cracks, scar points.

座板是高处作业人员坐在上面工作的构件，常用坚硬而有韧性的整块木质材料制作。一般长度大于 600mm，宽度大于 150mm，厚度大于 40mm，表面有防滑花纹，边缘圆滑无菱角，外观无裂纹、疤点。

4.3.6 The crotch band is a belt fixed with the seat plate and restricts the movement back and forth of the operator on the board. The material is generally the same as the sling, and the width is usually 40-50mm.

胯带是与座板固定、限制作业人员在座板上前后移动的带子，材料一般与吊带相同，宽度通常为 40-50mm。

4.3.7 The safety belt consists of a whole belt and metal fittings connected to the sling and hip belt with a width of 40-50mm and a length of 1300-1600mm.

安全带腰带由整根带子和金属配件组成，与吊带和胯带相连，宽度为40-50mm，长度为1300-1600mm。

4.3.8 The safety rope is a rope connected to the self-locking device with the same material as the main rope.

The force point of the safety rope is also fixed on the wire rope on the chimney and fixed on the two wire ropes respectively with the main rope.

安全绳是与自锁器相连的绳，材料与主绳相同。安全绳受力点也在烟囱上已固定的钢丝绳上，与主绳分别固定在两根钢丝绳上。

4.3.9 The self-locking device is a metal component with a self-locking device. When the working rope breaks and the seat plate falls, the safety rope can be stuck immediately to prevent the operator from falling.

After the falling impact occurs, the maximum sliding distance of the self-locking device on the safety rope shall not exceed 1.2m.

自锁器是带有自锁装置的金属构件，当工作绳断裂、座板坠落时能立即卡住安全绳，防止作业人员坠落。坠落冲击发生后，自锁器在安全绳上的下滑距离最大不超过1.2m。

4.3.10 The material of the base type climbing plate metal accessories is ordinary carbon steel, the appearance of no hemp point, crack, edge into a circular arc, the surface can be used by anti-rust

treatment.

座式登高板金属配件的材料为普通碳素钢，外观无麻点、裂纹、边缘成圆弧形，表面需经过防锈处理才可使用。

4.3.11 The sliding buckle of the seat climbing board is connected with the working rope in a loose knot way, and the connection is firm. The more the knot is stressed, the tighter it will shrink and will not come off. At the same time, the seat board can slide or be fixed conveniently underground by manual or fastening the knot under the working state, depending on the self-weight of the human body, so as to reach the working height required by the operators.

座式登高板的下滑扣与工作绳采用活络结的方式连接，连接牢固，绳结受力越大就越收缩得越紧，不会散脱，同时也能在工作状态下通过手动或紧固绳结，依靠人体自重使座板方便地下滑动或固定，达到作业人员所需的工作高度。

4.4 Notes for high operation of seat climbing board:

座式登高板高处作业注意事项：

4.4.1 The upper end of the working rope and the safety rope should be firm and reliable. The fixed point of the safety rope is not allowed to be tied at the same force as the working rope, and only one fixed point is not allowed. Before each operation, check whether the fixing point of the rope is loose and the corner is worn and take measures.

座式登高板工作绳和安全绳上端的固定应牢固可靠，安全绳的固定点不允许与工作绳结扎在同一受力处，各自的固定点不允许只有一个，

每次作业前要检查绳子固定点有无松动和角边有无磨损并采取措施。

4.4.2 The connection of the sliding buckle to the working rope and the sling should be reliable to ensure that it does not fall off.

下滑扣于工作绳及吊带的连接应可靠，确保作用时不脱落。

4.4.3 The friction parts of the working rope, the safety rope and the hard object should be reliably protected by a soft cushion.

Under any circumstances, the safety factor of the working rope and the safety rope should not be less than 10.

工作绳、安全绳与硬性物体的摩擦部位应有软垫可靠地保护。任何情况下均不能使工作绳、安全绳的安全系数小于 10。

4.4.4 Before the start of the operation every day, the seat climbing board should be checked according to the regulations, recorded, archived, and made safety evaluation to determine whether it can be put into use.

每天作业开始前应按规定对座式登高板进行检查，做好记录、归档保存，并对其做出安全评价，确定能否投入使用。

4.4.5 When working in corrosive environment, protective measures should be taken and corrosion-resistant ropes should be selected.

在腐蚀性环境中作业时，应做好作业人员的防护措施，选用耐腐蚀的绳索。

4.4.6 Two people are not allowed to work together on the same board, and they are forbidden to use a safety rope at the same time without special safety measures.

不允许两人在同一座板上协作作业，无特殊安全措施禁止两人同时使用一条安全绳。

4.4.7 The rope is not allowed for use after the connection.

Frequent used rope, should often do appearance inspection, scrapped rope is not allowed to be reused after repair.

绳索不允许连接后使用。使用频繁的绳，应经常做外观检查，已报废的绳索不允许修补后重新使用。

4.4.8 The operator should connect the self-locking device first, and then sit on the seat plate for operation. The safety rope should be basically kept perpendicular to the ground during the operation.

作业人员应按先连接自锁器，再坐进座板操作，作业时安全绳应基本保持垂直于地。

5、Technical requirement 技术要求

5.1 Lighting plate installation 采光板安装：

5.1.1 The lighting board shall be installed from the bottom up, and the cross section shall be removed and installed;

采光板应由下而上进行安装，横截面顺时移动拆除安装；

5.1.2 The installed light board must be on the same horizontal line, the self-tapping screw must be fixed firmly together with the steel support on the corrugated plate groove, the bolt spacing is not more than 150mm, and the exposed part is equipped with rubber gaskets;

所安装采光板必须都在同一个水平线上，自攻螺丝必须在波纹板凹槽上与钢支撑固定牢固，螺栓间距不大于 150mm，外露部分加装橡胶垫片；

5.1.3 The joint of the light board is lap, one end should be pressed out of the convex bars, the lap size is not less than 50mm;

采光板的接缝采用搭接的方式，搭接时一端要压出凸筋，搭接尺寸不小于 50mm；

5.1.4 All the lap joints must be selected colorless glass glue for smooth, waterproof treatment;

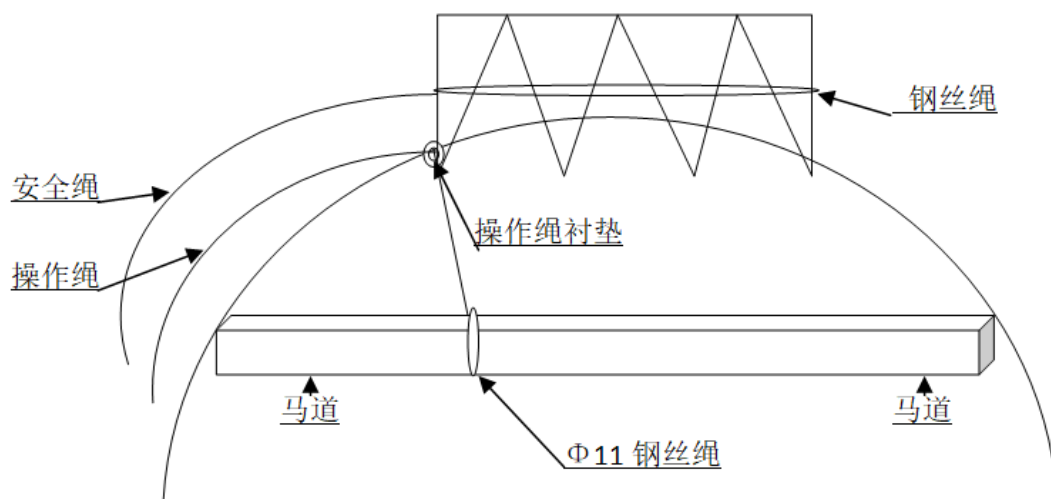
所有的搭接缝必须选用无色玻璃胶进行抹平，做好防水处理；

5.1.5 Anti-proof measures for new lighting installed:With the wire into two holes, the joint must be firm, the wire and the rope connection, and the small crane slowly moved to the installation position, such as both sides installed firmly, to ensure safety before removing the wire.

安装的新采光板防脱落措施：沿新采光板搭接边内侧用手枪钻钻两个孔，用铁丝穿入两个孔连接，接头打结必须牢固，铁丝与提料绳连接，并小吊慢移到安装位置，等两边安装牢固，确保安全再拆除铁丝。

Schematic diagram of the roof

棚顶示意图



5.2 Spherical reinforcement 球面加固

If the original fixed pin is loose, install a new fixed pin. tighten the old knob again and do not pull it out.

原固定钮钉松动处，加装新固定钮钉，旧钮钉重新收紧，不拔除。

6、Quality requirement 质量要求

The surface shall be smooth, all joints and layers shall be tight, without leakage holes, warping, delamination, cracking and mechanical damage.

表面平整，所有接头、层次应严密，无漏孔、翘口、脱层、开裂和机械损伤等缺陷。

7、Raw material requirements 原材料要求

This project the main materials from Party A, The installation pin is a composite stainless steel pin, The mining steel plate is 0.6-0.8 thick aluminum plate.

本工程为甲方供主材，安装钮钉为复合不锈钢钮钉，采钢板为 0.6-0.8 厚铝质板。

8、Guarantee period 质保期

The warranty period of the project is three years, and the quality problems shall be repaired by the contractor free of charge.

协议内工程质保期为三年，质保期内质量问题由承包方免费维修。

9、Safety measures requirements 安全措施要求

All personnel shall have occupational physical examination before construction, and personnel suffering from hypertension, heart disease and epilepsy shall be prohibited to engage in construction and high-altitude work.

所有人员进行施工前职业体检，禁止患有高血压、心脏病、癫痫病的
人员从事施工及高空作业。

Strictly abide by the enterprise's safety rules and regulations and related industry construction requirements. No equipment, pipes, switches and valves of the enterprise without permission, and no water, electricity, wind, steam and other pipelines without authorization.

严格遵守企业的各项安全规章制度及相关行业施工要求，按规定办理各种作业票证。未经许可不准乱动企业的任何设备、管道、开关、阀

门，不准擅自乱接水、电、风、汽等管线。

Party B shall abide by Party A's regulations on site civilized and safe construction, which shall be responsible for implementing the high-altitude safety measures of the project, and shall bear any safety problems or accidents caused by the construction. If it affects Party A, Party A shall have the right to investigate Party B for relevant responsibilities.

乙方应遵守甲方现场文明及安全施工规定，此项目高空安全措施由乙方负责落实，出现由施工引起的任何安全问题、事故等由乙方独自承担，若对甲方造成影响，甲方有权追究乙方相关责任。

10、Construction management requirements 施工管理要求

10.1 The company should have the qualification above anticorrosion insulation construction, equipped with a project leader, a full-time safety officer, a on-site construction management, a full-time monitoring personnel, and have the corresponding qualifications. Climbing personnel must hold the high-altitude work certificate.

公司应该具有防腐保温施工二级以上资质，配备项目负责人一名，配备专职安全员一名，现场施工管理一名，专职监护人员一名，并具备相应资质。凡登高人员必须持有高空作业证。

10.2 The aerial lifting rope and accessories shall be inspected on schedule and the certificate shall be provided.

高空吊绳及配件应按期检验，并提供合格证。

10.3 Before construction, the relevant operation tickets should be handled and safety measures should be implemented before

construction.

施工前需办理好相关作业票，并落实好安全措施后方可施工。

10.4 Fraud is prohibited, or alter the visa form confirmed by Party A.

工程签证禁止弄虚作假，或涂改经甲方确认的签证单。

10.5 New entry workers shall not be allowed to arrange construction operations without the third-level safety education and training.

新入场工人未经三级安全教育培训不得安排施工作业。

10.6 The concealed works must be notified to Party A for on-site inspection and enter the next process after qualification.

隐蔽工程必须通知甲方现场检查，合格后进入下一步工序。

11、Contact information 联系方式

Party A 甲方：

Address 地址：

Name 联系人：

Telephone 电话：

E-mail 邮箱：

Party B 乙方：

Address 地址：

Name 联系人：

Telephone 电话：

E-mail 邮箱：