



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

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No.2 Refinery Dept. Blind Plate Management Rules

炼油二部盲板管理细则

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	Hengyi Industries Sdn Bhd 恒逸实业（文莱）有限公司			
	No.2 Refinery Dept. Blind Plate Management Rules 炼油二盲板部管理细则			
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1 Purpose 目的

This system clarifies the control and management of the blind plate of No. 2 Refinery Department in order to prevent unexpected energy release or medium channeling to occur by doing well job in starting and stopping the device, temporary maintenance, material transfer and energy isolation during local maintenance and normal production.

本制度明确了炼油二部各装置盲板的控制与管理，防止能量意外释放或者介质互窜情况的发生，做好装置开停工、临时性检修、局部检修和正常生产期间物料转输和能量的隔离。

2 Scope of application 适用范围

This system applies to each unit in No. 2 Refinery Department.

本制度适用于炼油二部各装置。

3 Terms and Definitions 术语及定义

3.1 Blind plate design: There are blind plates designed in the pipeline and instrument flow diagram, where the design meets the standard requirements and it is used in a fixed position.

设计盲板：在管道及仪表流程图中有设计的盲板，盲板设计符合标准要求，并且其使用位置是固定。

3.2 Temporary blind plate: It means that there is no design in the pipeline and instrument flow diagram. However, in order to prevent materials from channeling each other or accidentally releasing energy, temporary blind plates need to be isolated or blocked. Due to on-site flange gap, material and other conditions, it is restricted to use standard blind plates and it needs to be made temporarily according to the actual situation.

临时盲板：是指管道及仪表流程图中没有设计，但是为了防止物料互窜或者能量意外释放需要隔离或封堵的临时盲板，临时盲板因现场法兰间隙、物料等条件限制不能使用标准盲板，需要根据实际情况临时制作。

3.3 Quality blind plate: All the process of the product output line, the relevant blinds in the unit

process line from the product line sample point to the battery limit, belong to the quality blind plate of the unit area.

质量盲板：所有出厂产品流程上，从装置产品线取样点到装置界区流程上的相关盲板，属装置区的质量盲板。

4 Management Responsibilities 管理职责

4.1 Process engineers are responsible for the management of the blind plate record and the daily supervision and inspection of the blind plate conditions.

工艺工程师负责装置盲板台账的管理，盲板状态发生改变的日常监督检查。

4.2 Process engineers are responsible for the installation of blind plates for each unit, issuance of blind plate work permit, responsible for the confirmation of the conditions before removing the blind plate and the approval after installation;

工艺工程师负责各装置盲板安装的提出，盲板作业票开具，负责拆加盲板前条件的确认及安装后的验收；

4.3 Safety engineers are responsible for on-site review and confirmation, supervision and inspection, and safety management of the operation process.

安全工程师负责现场复查确认，作业过程的监督检查和安全管理。

4.4 The equipment engineers are responsible for the contact and coordination of the blind plate production and blind plate installation and construction personnel, and arrange the anti-corrosion and maintenance work of the team on the blind plate.

设备工程师负责盲板制作及盲板安装施工作业人员的联系与协调，安排班组对盲板的防腐保养工作。

4.5 In the daily production process, once the blind plate conditions have changed, the on-duty shift team should record the contents of the blind plate changes in the "Registration Form for Changes of Unit Active Blind Plate". When the condition of the blind plate changes during the startup and shutdown, the on-duty shift team shall record the changes in the "Registration Form for Blind Plate for Startup and Shutdown".

在日常生产过程中，盲板状态发生改变之后，班组应在当班期间，将盲板变更内容在《装置动态盲板变更登记表》中进行记录。开停工期间盲板状态改变后，班组应在当班期间，将变更内容在《停开工盲板登记表》中进行记录。

4.6 The teams are required to check the status and identification of the on-site blind plate regularly in accordance to "Blind Plate Form for Normal Production Unit" and "Blind Plate Form for Normal Production Boundary Area", and perform good maintenance and management of the blind plate.

班组按照《正常生产装置内部盲板表》及《正常生产界区盲板表》，定期检查现场盲板状态，标识，并做好盲板的保养管理工作。

5 Management Content 管理内容

5.1 Department Management Requirement 部门管理要求

5.1.1 Establish separately the registration and management for the blind plate management record of each unit, the blind plate refer to the product quality blind plate shall be marked "quality blind plate" in the registration. the blind plate for unit startup and shutdown, and the blind board disassembly and assembly in normal production. Special personnel will be appointed for shutdown for maintenance and startup blind plate while other management personnel will cooperate well. The process technician is responsible for the active management of the blind plate and blind plate disassembly and assembly during the normal production.

建立各个装置的盲板管理台账，涉及到的质量盲板应在台账中注明“质量盲板”，装置开停工盲板以及正常生产中盲板拆装进行分别登记管理。停工检修及开工盲板将指定专人负责，其它管理人员做好配合。工艺工程师负责正常生产期间介质互窜点盲板和盲板拆装动态管理。

5.1.2 Before the unit is shutdown, the unit process engineers will prepare blind plate details for the unit maintenance during shutdown, the maintenance isolation requirements and the equipment conditions (such as the pressure level and corrosion of the isolated medium), and the unit preparation for maintenance during shutdown blind plate plan. During shutdown purging and process maintenance that require blind plate isolation are also required to be managed in the same way as the startup and shutdown blind plate.

在装置停工前，装置工艺工程师根据装置停工检修具体内容、检修隔离要求及设备状况（如被隔离介质的压力等级、腐蚀性等），编制装置停工检修盲板计划。对实施停工吹扫及检修过程中需临时增设的隔离盲板，也要求同开停工盲板一样进行管理。

5.1.3 Combined with the unit purge situation, the unit process engineers organized the disassembly and assembly of the blind plate according to the blind plate list, confirm and fill out the confirmation sheet for the startup and shutdown the blind plate.

结合装置吹扫情况，装置工艺工程师按照盲板清单组织好盲板的拆装、确认并填写好开停工盲板确认单。

5.1.4 Before installation starts, the process engineers shall compare the list of blind plates for shutdown and maintenance, as well as the situation of blind plates to be disassembled during the startup, prepare the blind plate details for startup operation, organize the disassembly of blind plates and fills in the confirmation sheet for blind plates for startup and shutdown.

在装置开工前，装置工艺工程师对照停工检修盲板清单，以及开工过程中需拆装盲板情况，编制装置开工盲板计划，组织实施盲板拆装并填写好开停工盲板确认单。

5.1.5 The on-duty shift team shall register the blind plates dismantled and installed during the normal production period in the "Registration Form for Changes of Unit Active Blind Plate" promptly, and the process engineers shall update the contents of the unit blind plate management record within 7 working days.

班组应将正常生产期间当班所拆装的盲板及时在《动态盲板变更登记表》中登记，工艺工程师应在 7 个工作日内，对装置的盲板管理台账内容进行更新。

5.1.6 For the temporary blind plate installed in the temporary operation, the shift team should register in the "Registration Form for Changes of Unit Active Blind Plate" during the operation period, and it is not required to update the unit blind plate management record. If the temporary operation is completed and the temporary blind plate is still needed to be kept, then it must be updated in the unit blind plate management record.

对于临时作业所加装的临时盲板，在作业周期内，班组应在《动态盲板变更登记表》中登记，装置盲板管理台账中无需更新。若临时作业完毕，临时盲板需要继续保留，则必须在装置盲板管理台账中进行更新。

5.1.7 On-site blind plate (regardless of the 8-figure blind plate in the blind position or the general position) requires the establishment of an obvious and reliable blind plate signage and is marked with the blind plate number, The quality blind plate involved should add the mark "quality blind plate" on the sign plate; the blind plate must have a handle for easy identification and plugging and the 8-figure blind plate is not necessary to set the handle. For the single plug plate and the pass-through plate, the handle should be distinguished by the steel stamp and the color on the handle.

现场盲板（无论处于盲位还是通位的 8 字盲板）均要求设立明显可靠的盲板标志牌，并标注盲板编号，其中涉及到的质量盲板应在标识牌上添加“质量盲板”；盲板要有手柄，便于识别和抽堵，8 字盲板可以不用设置手柄。对于单体插板和通板，应在手柄上通过钢印和颜色进行区分。

5.1.8 For the prohibited valves, pipelines, unit boundary valves and other equipment, it is required to set a clear and reliable prohibition signage card around the blind plate area, and strengthen inspection and monitoring to avoid running leakage during construction or on-site operation.

对盲板外侧的禁动阀门、管线及装置边界阀等设备，要求设置明显可靠的禁动牌，并加强巡检与监控，避免施工或现场操作过程中出现跑冒泄漏事件。

5.1.9 Before carrying out the disassembly and assembly of the blind plate, the unit process engineers in charge shall first be responsible for the treatment of the media involved in the equipment or pipeline. For the disassembly and assembly of blind plates between upstream and downstream devices or blind plates related to the system, the department shall first apply for it, and then the Dispatch and Scheduling Department will lead the organization of relevant units

for implementation. For the status change of the quality blind plate in the Unit, the department needs to submit an application to the Plan and Dispatch Department, the blind plate changes can be implemented only after the application is approved. See Attachment 3 for the application form.

在实施盲板拆装作业前，装置主管工艺工程师应先负责对涉及设备或管线内介质进行处理。对上下游装置间盲板或与系统有关盲板拆装，先由部门提出申请，再由计调部牵头组织有关单位予以实施。对于装置内的质量盲板状态改变，部门需向计调部提交申请，申请通过后方能实施，申请表见附件 3。

5.1.10 During the process of blind plate for startup and shutdown, the unit process engineers are required to clarify the contents of assembling and disassembling the blind plate to the construction unit, reasonably arrange the operation time for the blind plate disassembly and assembly, do the confirmation of the blind plate conditions onsite before disassemble and assemble, and apply for the blind plate disassembly and assembly work permit before the construction work.

开停工过程中拆装盲板，要求装置工艺工程师对盲板拆装作业内容向施工单位交底，合理安排盲板拆装作业时间，做好盲板拆装前的现场条件确认工作，并在施工作业前办理盲板拆装作业票。

5.1.11 The changes of active blind plate summary table and startup and shutdown, archive two production cycles of the registration form for blind plate during maintenance in order to ensure the traceability of the blind plate disassembly and assembly management and improve the quality of the blind plate management.

动态盲板变更汇总表及开停工，检修过程盲板登记表的保存时间均为两个生产周期，保证盲板拆装管理可追溯性，提高装置盲板管理质量。

5.2 The requirements for blind plate disassembly and assembly are to ensure the safety of direct operations. 确保直接作业环节安全的盲板拆装要求

5.2.1 Before the unit is shutdown and send for maintenance and hot work, in addition to fresh water, circulating water, purified air and non-purified air, in principle, all pipelines in the unit boundary area must be equipped with blind plates for isolation.

在装置停工交付检修动火前，除新鲜水、循环水、净化风、非净化风外，原则上装置界区管线必须全部加装盲板隔离。

5.2.2 Before the device is qualified for purging and replacement, and before being shut down for delivery, the nitrogen and steam lines connected to the reactor, towers, tanks, and furnace system must be completely isolated with blind plates.

装置吹扫置换合格、停工交付检修前，与反应器、各塔、罐、加热炉系统相连的氮气、蒸汽管线必须用盲板完全隔离。

5.2.3 Boundary blind plates are installed before shutdown or maintenance or the startup of a new installation must be removed in accordance with the list of blind plate after the start of construction confirmation and submitted to the head of department for review and confirmation, and the list of blind plate must be archived for future verification.

在停工检修或新装置开工前安装的边界盲板，必须在开工确认后方可按照盲板清单全部予以拆除，并提交清单给部门主管领导审查确认，盲板清单必须存档便于今后核查。

5.2.4 When the unit is purged with nitrogen or steam, and when the operation such as airtightness is completed, the steam or nitrogen pipeline at the purge point must be connected and install with blind plates for isolation. Register the change state of the blind plate state in the "Registration Form for Changes of Active Blind Plate".

装置进行氮气或蒸汽吹扫，气密等操作完成时，必须将吹扫点的蒸汽或者氮气管线，加装盲板进行隔离，并将盲板状态的变更状态在《动态盲板变更登记表》中登记。

5.2.5 For a new unit startup process with severe cross-operation, the isolation blind plates must be installed at various stages such as introduction of steam, nitrogen, gas, and filling agents in strict accordance with safety requirements. Prevent suffocation, burns, fire, poisoning and other accidents from occurring.

对于存在严重交叉作业的新装置开工过程，必须严格按照安全要求，在引蒸汽、氮气、瓦斯、装剂等各个阶段加装好隔离盲板。防止发生窒息、烫伤、着火、中毒等恶性事故。

5.2.6 For the temporary maintenance of the unit or the operation of entering the tower or entering the tank, the blind plate must be installed in strict accordance with the safety fire management regulations and completely isolated from flammable, explosive and toxic media.

装置临时检修动火或进塔入罐作业，必须严格按安全用火管理规定加装盲板与易燃易爆有毒介质完全隔离。

5.3 Regulations for the management of blind state 盲板状态管理规定

5.3.1 In principle, blind plates are used to isolate the anti-channeling parts of the medium, if the blind plate cannot be installed, double valves must be closed while the draining in between the double valves must be opened to isolate.

防介质互窜部位，原则上均使用盲板隔离，若无法安装盲板，必须采用双阀关，双阀间倒淋打开的方式进行隔离。

5.3.2 Stop the pump and equipment and sent to the underground sewage pipeline, and carry out the isolation by installing a blind plate or close the double valve and open the draining in between the double valve.

停用机泵、设备至地下污油线，采用安装盲板或者双阀关倒淋开的方式进行隔离。

5.3.3 During the unit normal production, all kinds of purge pipelines should be closed with blind plates or double valves and draining for isolation, and the blind plates should be installed at the flange near the process medium side.

各类吹扫线，在装置正常生产期间，均采用盲板或者双阀关，倒淋开的方式进行隔离，且盲板应安装在靠近工艺介质一侧的法兰处。

5.3.3 Blind plates or blind covers should be installed for high temperature and high pressure, vent hydrogen sulfide content onsite and draining.

高温高压，含硫化氢部位的现场放空，倒淋，均应安装盲板或者盲盖。

5.4 Safety regulations for disassembly and assembly of blind plates 盲板拆装安全规定

5.4.1 The valves at both ends of the pipeline must be completely closed and vent between the double valve to release the medium in the pipeline.

管线两端的阀门必须完全关闭，通过双阀间放空，放尽管线内的介质。

5.4.2 Pipelines containing flammable media must use explosion-proof tools.

含可燃介质的管线必须使用防爆工具。

5.4.3 It is strictly forbidden from hammering.

严禁铁器敲打。

5.4.4 The guardian can only work onsite.

监护人在现场方可作业。

5.4.5 Wear safety belts when working at heights.

高空作业佩带好安全带。

5.4.6 Toxic gas operations must wear appropriate gas protection equipment.

有毒气体作业必须佩带好合适的气防器具。

5.4.7 If there is an accident during disassembly and assembly, stop the operation immediately and follow the instructions of the guardian.

拆装过程如有意外，立即停止作业、听从监护人指挥。

5.4.8 The completion of the construction must be confirmed by the guardian and onsite supervisor.

施工完毕必须经过监护人、现场复核人的确认。

5.5 Requirements for the use of blind plate accessories 盲板附件的使用要求

5.5.1 The blind plate and the blind plate identification plate are managed as a whole. Each blind plate is accompanied by a blind plate identification plate to mark the blind plate conspicuously. The blind plate number is the same as the blind plate identification plate number, and there is a one-to-one correspondence. The letters and numbers are printed on the blind board as the number. For the numbering method of the blind board of each device, see Attachment 1. Please refer to Attachment 2 for the details of the style and layout format of the

blind plate.

盲板及盲板标识牌作为一个整体管理，每块盲板附带一个盲板标识牌对盲板进行醒目标识，盲板编号与盲板标识牌编号一致，一一对应。盲板上打印字母加数字作为编号，各装置盲板编号方式见附件 1。盲板标识牌样式及排版格式详见附件 2。

5.5.2 For the single plug plate, mark on the handle of the plate with a steel stamp, 0 means the plate, and 1 means the blind plate.

对于单体插板，在插板的手柄上通过钢印符号进行标记，0 标识通板，1 标识盲板。

5.5.3 The blind plate identification plate is uniformly hung on the handle of the blind plate.
盲板标识牌，统一悬挂在盲板手柄上。

5.5.4 The specifications of the blind plate identification plate are: height 6cm, width 5cm.
盲板标识牌规格为：高 6cm，宽 5cm。

6 Assessment and Inspection 考核与检查

6.1 The process engineers shall inspect the blind plate installation accuracy, effectiveness and change of the blind plate conditions in the unit, correct signage, and the inspection and registration of the blind plate by the teams.

工艺工程师对装置中盲板加装的准确性，有效性和盲板状态改变，标识的正确性，以及班组对盲板的检查登记进行检查考核。

6.2 Equipment engineers shall inspect and evaluate the maintenance of the blind plate.
设备工程师对盲板的维护保养进行检查考核。

6.3 Safety engineers shall inspect and evaluate the operation safety management in the process of blind plate isolation.

安全工程师对于盲板隔离过程中的作业安全管理进行检查考核。

7 Associate Record 关联记录

7.1 No. 2 Refinery Dept. Kerosene Hydrotreating Unit Summary Table for Blind Plate Management

炼油二部煤油加氢装置盲板管理汇总表 HYBN-T6-11-0013-2018-1_1020

7.2 No. 2 Refinery Dept. Diesel Hydrotreating Unit Summary Table for Blind Plate Management

炼油二部柴油加氢装置盲板管理汇总表 HYBN-T6-11-0014-2018-1_1030

7.3 No. 2 Refinery Dept. Unicracking Unit Summary Table for Blind Plate Management

炼油二部加氢裂化装置盲板管理汇总表 HYBN-T6-11-0015-2018-1_1040

7.4 No. 2 Refinery Dept. LPG Unit Summary Table for Blind Plate Management

8 Attachment 附件**Attachment 1: Blind Plate Identification Table for Each Unit**


附件 1: 各装置盲板标识牌编号表

No. 序号	Unit 装置	Blind Plate Category 盲板类别	Blind Plate No. 盲板编号
1	KHT & DHT 煤、柴油加氢装置	Boundary Plate 界区盲板	220-BJ-001~100
3		Blind Plate within Unit 装置内盲板	220- 001~1000
4		Active Blind Plate 动态盲板	220-D-001~100
5	UCK 加氢裂化装置	Boundary Plate 界区盲板	240-BJ-001~60
6		Blind Plate within Unit 装置内盲板	240-KT-001~500
7		Active Blind Plate 动态盲板	240-D-001
8	LPG Fractionation 气体分馏装置	Boundary Plate 界区盲板	241-BJ-001~60
9		Blind Plate within Unit 装置内盲板	241-KT-001~250
10		Active Blind Plate 动态盲板	241-D-001~100

Attachment 2: Blind Plate Signage Template:

附件 2: 盲板标识牌样式:



		(Example: Port & Storage Department) Unit Quality Blind Plate Change Request Form (*****装置/部) 质量盲板变更申请表												
		Record No.								Date(Y/M/D)				
No · 序 号	Position of Blind Plate 盲板位置	Medium in Blind Plate 盲板处介质								Status of Blind Plate 盲板状态				Date Of Change 计划变更时 间
		Medium 1 (Pressure:MPa; Temperature:°C) 介质 1 (压力:MPa; 温度:°C)				Medium 2 (Pressure: MPa; Temperature:°C) 介质 2 (压力:MPa; 温度:°C)								
		Name 名称	Pipe Diamete r 管径	Press ure 压力	Temperat ure 温度	Name 名称	Pipe Diameter 管径	Pressure 压力	Tempera ture 温度	Add Blind Plate 加盲板	Dismantle Blind Plate 拆盲板	Blind Plate Serial No.	Status of double valve and vent valve	
1	柴油加氢装置界区	产品柴油	DN250	0.5	50	蒸汽	DN 50	1	220	加	-	XXX	双阀关, 导 淋开	2023/12/2 1
2	4202T-004 界区	产品柴油	DN 250	0.1	常温	航煤	DN 250	0.5	常温	-	拆	XXX	双阀关, 导 淋开	
3														
Change Of Purpose 变更目的														
Confirmed By 运行部工程师													Date:	
Confirmed By 运行部门工艺负责人													Date:	
Approved By 计调部/质检部负责人													Date:	
Remark 备注														

9 Supplementary Rules 附则

9.1 These detailed rules are under the centralized management of the Second Oil Refining Department, and matters not covered in these detailed rules will be implemented with reference to the company's relevant systems.

本细则由炼油二部归口管理，本细则未尽事宜参照公司相关制度执行。

9.2 The drafting department of the detailed rules: the second oil refining department.

本细则起草部门：炼油二部。

9.3 The preparation and approval of this system version are shown in Table 1:

本制度版本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	2024/1/5	Cui Hai Qing 崔海青	Yang Fan, Yang Shi Hai, Zhao Ting Yun 杨帆、杨仕海、赵挺云	Sun Jian Huai 孙建怀
Version 版本	Issued Date 颁布日期	Compiler 编制人	Reviewer 审核人	Approval 批准人