



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

HYBN-T3-07-0025-2024-2

HENGYI INDUSTRIES SDN BHD  
恒逸实业（文莱）有限公司

**Safety Relief Devices Management System**

**安全泄放装置管理制度**



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## Version Information 版本信息

1 Rev 1 released on Aug. 11, 2019.

第一版发布时间为 2019 年 8 月 11 日。

2 Rev 2 released on April 1, 2024.

第二版发布时间为 2024 年 4 月 1 日。



 <b>HENGYI</b>	<b>Hengyi Industries Sdn Bhd 恒逸实业（文莱）有限公司</b>				
	<b>Safety Relief Device Management System</b> <b>安全泄放装置管理制度</b>				
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## 1 Purpose

### 目的

This system is formulated to standardize the management of the company's safety relief devices and ensure the safe operation of boilers, pressure vessels, pressure pipelines and other equipment.

为规范公司安全泄放装置的管理，保证锅炉、压力容器、压力管道等设备安全运行，特制定本制度。

## 2 Scope of Application

### 适用范围

This system is applicable to all departments.

本制度适用于各部门。

## 3 Terms and Definitions

### 术语和定义

Safety relief device: it is an automatic device, including safety valve, bursting disc and breathing valve. It does not rely on any external force, but uses the force of the medium itself to discharge or inhale a rated amount of fluid to prevent the pressure from exceeding or falling below the rated safety value. Safety valve and breathing valve When the pressure returns to normal, the valve closes automatically and prevents the medium from flowing out or in. Once the bursting disc bursts, it cannot recover itself.安全泄放装置：是一种自动装置，包括安全阀、爆破片和呼吸阀。它不借助任何外力而是利用介质本身的力来排出或吸入一额定数量的流体，以防止压力超过或低于额定的安全值。安全阀和呼吸阀当压力恢复正常后，阀门自行关闭并阻止介质继续流出或流入；爆破片一旦爆破无法自行恢复。

## 4 Management Responsibilities

### 管理职责

#### 4.1 Specified administrative authority

##### 归口管理部门

4.1.1 The Equipment Management Dept. is the specified administrative authority of the safety relieve device.

机械动力部是安全泄放装置的归口管理部门。

4.1.2 To organize the compilation of ledger for safety relief devices; Supervise and inspect the use, inspection and daily maintenance of safety relief devices in each operation department.

组织编制安全泄放装置台帐；对各运行部安全泄放装置的使用、检验以及日常维保情况进行督促、检查。

4.1.3 To be responsible for the delayed inspection, shutdown, scrapping and cancellation of safety relief devices.

负责安全泄放装置的延期检验、停用、报废、注销等工作。

#### 4.2 Coordinated Management Departments

协同管理部门

4.2.1 The HSE Management Dept. is responsible for the safety supervision of the safety relief device; countersigned application for extension of inspection of safety relief device.

HSE 管理部负责安全泄放装置的安全监督；会签安全泄放装置延期检验申请。

4.2.2 The Scheduling and Dispatch Dept. will countersign the application for extension inspection and inspection of the safety relief device and organize the formulation of monitoring measures.

计划调度部会签安全泄放装置延期检验申请并组织制定监控措施。

4.2.3 The Material & Supplies Department is responsible for the qualification examination of manufacturers of safety relief devices and accessories (RMB); Responsible for the procurement, unpacking acceptance, safekeeping and provision of quality assurance materials for safety relief devices and accessories (RMB)

物资装备部负责安全泄放装置及配（元）件制造商资质审查；负责安全泄放装置及配（元）件的采购、开箱验收、保管并提供质保资料。

#### 4.3 Executive departments

执行部门

4.3.1 Each operation department is the executive department and is responsible for preparing the ledger of the safety relief device and organizing the quarterly inspection of the safety relief device and check the checklist to solve the existing problems;

各运行部为执行部门，负责编制安全泄放装置台帐，组织安全泄放装置季度检查；并审核检查表，

对存在问题进行解决；

4.3.2 Responsible for the correct use of the safety relief device, the inspection and the maintenance during use;

负责安全泄放装置正确使用及使用过程中的检查、维护工作；

4.3.3 Be responsible for preparing and implementing the inspection plan for safety relief devices;

负责编制安全泄放装置检验计划并实施；

4.3.4 Prepare the application for delayed inspection of safety relief devices, formulate and implement monitoring measures for delayed inspection equipment, and make monitoring records.

编制安全泄放装置延期检验申请，制定、落实延期检验设备的监控措施，并做好监控记录。

4.3.5 The equipment maintenance department is responsible for the calibration, maintenance and overhaul of the safety relief device to ensure the safe operation of the safety relief device.

设备检修部负责安全泄放装置的校验、维护保养与检修工作，保证安全泄放装置的安全运行。

## 5 Management Content

### 管理内容

5.1 The management of safety relief devices shall conform to the requirements of specifications and standards such as "Safety Valve Technical Supervision Regulation TSGZF001-2006".

安全泄放装置的管理应符合《安全阀技术监察规程 TSGZF001-2006》等规范要求。

5.2 Safety relief devices must be purchased from units with manufacturing licenses, and the quality shall conform to the provisions of relevant standards

安全泄放装置必须向具有制造许可证单位采购，质量应符合相关标准的规定。

5.3 User department shall establish safety valve, rupture disc and breathing valve ledger, which shall be updated once every year.

安全泄放装置使用部门应建立安全阀、爆破片、呼吸阀台账，每年更新一次。

5.4 The operators shall check the safety relief device once every quarter. The equipment management personnel of the operation department shall prepare a quarterly check list and issue it to the operators. The operators shall complete it in the first month of each quarter and record the inspection results in the quarterly inspection report of the safety relief device. The inspection report shall be submitted to the equipment management personnel of the operation department within 5 days from the beginning of the second month of each quarter to deal with the safety relief devices with problems in a timely manner.

操作人员每季度需对安全泄放装置进行一次检查，运行部设备管理人员编制季度检查表下发操作人员，操作人员在每个季度第一个月内完成并将检查结果记录在安全泄放装置季度检查报告中。

检查报告需在每个季度第二个月的开始 5 天内交给运行部设备管理人员，对存在问题的安全泄放装置及时进行处理。

## 5.5 Safety Valve

### 安全阀

5.5.1 The setting pressure of safety valves shall be managed using level pressure notebook. Each safety valve shall have one notebook. The relevant basic parameters in the level pressure notebook shall be filled in by the user department. The approval column for setting pressure shall be confirmed and signed by the person in charge of the user department and the technical person in charge.

安全阀定压采用定压本方式管理，每台一本，定压本中有关基本参数由使用部门填写，整定压力的审定栏由使用部门主管人员及技术负责人确认签字。

5.5.2 The setting pressure of safety valve shall be fixed and set in strict accordance with the values given in the design. Changes shall be reported to the Equipment Management Department, Scheduling and Dispatch Department and HSE Management Department in written form and approved by the company's director in charge.

安全阀的整定压力严格按照设计给出的数值进行定压和设定；变更应以书面形式向机械动力部、计划调度部、HSE 管理部申报，经公司分管领导批准。

5.5.3 Safety valves for pre-inlet, post-outlet and bypass line cut-off valves are installed on normal operation boilers, pressure vessels, pressure pipelines and other equipment. The cut-off valves for the safety valves in service must be fully opened and lead-sealed. The cut-off valve before the inlet of the standby safety valve must be fully closed, and the cut-off valve after the outlet must be fully opened and lead-sealed. The bypass line valve of the safety relief device must be fully closed and lead-sealed.

正常运行的锅炉、压力容器、压力管道等设备上设置了进口前、出口后和副线截断阀的安全阀，投用的安全阀进口前、出口后截止阀必须全开并加铅封；备用安全阀进口前截断阀必须全关、出口后截断阀必须全开并加铅封。安全泄放装置副线阀必须全关并加铅封。

5.5.4 On-site inspection of safety valves includes the following contents:

安全阀在线检查包括以下内容：

5.5.4.1 Whether the safety valve is installed correctly;

安全阀安装是否正确；

5.5.4.2 Whether the documents of safety valves are complete (nameplate, quality certificate, installation number, calibration record and report);

安全阀的资料是否齐全（铭牌、质量证明文件、安装号、校验记录及报告）；

5.5.4.3 Whether the lead seal of the external regulating structure of the safety valve is in good condition;

安全阀外部调节结构的铅封是否完好；

5.5.4.4 Any factors affecting the normal function of the safety valve;

有无影响安全阀正常功能的因素；

5.5.4.5 When a cut-off valve must be set, is the lead seal of the cut-off valve before the inlet and after the outlet of the safety valve intact and in the open position;

必须设置截断阀的情况时，其安全阀进口前和出口后的截断阀铅封是否完好并且处于开启位置；

5.5.4.6 Whether the safety valve leaks;

安全阀有无泄漏；

5.5.4.7 Whether there is corrosion on the surface of the safety valve;

安全阀外表有无腐蚀情况；

5.5.4.8 Discharge holes provided for bellows shall be open and clean;

为波纹管设置的卸出孔应当敞开和清洁；

5.5.4.9 The lifting device (wrench) acts effectively and is in proper position;

提升装置（扳手）动作有效，并且处于适当位置；

5.5.4.10 Relevant accessories outside the safety valve are intact and normal. The problems found in the inspection should be promptly investigated for the cause and solved.

安全阀外部相关附件完整无损并且正常。对在检查中发现的问题要及时查找原因，并予以解决。

5.5.5 The safety valve technical file established by the safety valve user department shall include the following contents:

安全阀使用部门建立的安全阀技术档案应当包括以下内容：

5.5.5.1 The product quality certification documents, installation, operation, maintenance and calibration instructions of the safety valve manufacturer;

安全阀制造单位的产品质量证明文件、安装及使用维护、校验说明书；

5.5.5.2 Regular inspection records and reports of safety valves;

安全阀定期检查记录及报告；

5.5.5.3 Approval documents for delayed verification;

延期校验的批准文件；

5.5.5.4 Daily usage and maintenance records of safety valves;

安全阀的日常使用情况和维护保养记录；

5.5.5.5 Safety valve operation failure and accident record.

安全阀运行故障和事故记录。

5.5.6 Safety valves shall be calibrated once a year in principle. Safety valves that meet the requirements of extended calibration period shall be calibrated according to the approved extended calibration period after being approved by company leaders. If it is necessary to extend calibration, the approval procedures shall be implemented with reference to 5.12 of Special Equipment Management System. And check and record at least once a month.

安全阀原则上每年校验一次，经确认符合延长校验周期要求的安全阀经公司领导批准后按批复的

延长校验周期进行校验。如需延期校验，审批程序参照《特种设备管理制度》5.12 执行。并每月至少进行一次检查和记录。

5.5.7 The safety valve calibration shall be carried out by a unit specialized in safety valve calibration, and the maintenance and calibration personnel shall obtain the "Safety Relief Device Operator Certificate".

安全阀校验应由专门从事安全阀校验的单位进行，检修、校验人员应取得《安全泄放装置作业人员证》。

5.5.8 The calibration unit shall issue a calibration report in duplicate within 15 days after passing the calibration, one copy for calibration unit and one copy for user department.

校验单位在校验合格后 15 日内出具一式二份的校验报告，校验单位、使用部门各一份。

5.5.9 The safety valve calibration record shall be filled in and signed by the calibration unit, and the user department shall participate in setting pressure and sign it. The safety valve must be lead-sealed and hung with the name of the calibration organization, calibration number, installation equipment number, safety valve number, set pressure, next calibration date, etc. After the safety valve is put into operation, the technical personnel of the user department shall confirm and sign on the level pressure notebook and enter the calibration result into the EM system.

安全阀校验记录由校验单位填写签字，使用部门参加定压并签字。安全阀校验合格须加铅封并悬挂有校验机构名称、校验编号、安装设备位号、安全阀编号、整定压力和下次校验日期等内容的标牌。安全阀投用正常后由使用部门技术人员在定压本上确认签字并将校验结果录入 EM 系统。

5.5.10 Safety valves calibrated off-site shall be kept vertical during transportation and installation and collision shall be avoided.

离线校验的安全阀运输安装过程中应保持垂直并避免碰撞。

5.5.11 The new safety valve can only be installed and used after debugging. In case of any abnormality during use, calibration shall be entrusted in time.

新安全阀经调试后方可安装使用；使用期间出现异常应及时委托校验。

## 5.6 Rupture Disc

### 爆破片

5.6.1 Rupture discs are generally replaced every 2~3 years, and those used under harsh conditions should be replaced every year. Those that exceed the maximum design pressure and are not blasted shall be replaced immediately. The rupture disc with specified service life shall be replaced within the service life.

爆破片一般 2~3 年更换一次，苛刻条件下使用的应每年更换；对超最大设计压力而未爆破的应立即更换；爆破片规定使用年限的应在使用年限内更换。

5.6.2 When the rupture disc and safety valve are used in series, a pressure gauge and an

exhaust valve shall be installed between the two, and whether the rupture disc is normal or not shall be confirmed through regular display of the pressure gauge and exhaust and drainage of the exhaust valve.

爆破片和安全阀串联使用时两者之间应装压力表和排气阀，通过定期对压力表显示和排气阀排气、排液情况确认爆破片是否正常。

## 5.7 Breathing Valve

### 呼吸阀

5.7.1 On-site inspection shall be carried out on the tank breathing valve every quarter to check whether the breathing valve bird net is in good condition, and whether there is any air leakage, stuck, sticking, clogged, corrosion, etc.

每季度对储罐呼吸阀进行一次在线检查，检查呼吸阀防鸟网是否完好，是否有漏气、卡死、粘结、堵塞、锈蚀等情况。

5.7.2 The breathing valve of the storage tank shall be disassembled and inspected online once every six months (including the flame arrester), and the valve disc, valve seat and corrugated flame retardant layer shall be cleaned in time.

储罐的呼吸阀应每半年在线拆检一次（包括阻火器），及时清洗阀盘、阀座和波纹阻火层。

## 6 Inspection and Supervision

### 检查与监督

The Equipment Management Dept. is responsible for supervision, inspection and assessment of the management and implementation of the safety relief devices by operation department.

机械动力部负责对运行部安全泄放装置管理执行情况进行监督、检查、考核。

## 7 Associated Procedures and Records

### 关联程序和记录

#### 7.1 Associated procedures

关联程序

N/A

无

#### 7.2 Associated records

关联记录

## 7.2.1 Safety Valve Quarterly Checklist(HYBN-T6-07-0170-001-2019)

安全阀季度检查表 HYBN-T6-07-0170-001-2019

## 7.2.2 Rupture Disc Quarterly Checklist (HYBN-T6-07-0171-001-2019)

爆破片季度检查表 HYBN-T6-07-0171-001-2019

## 7.2.3 Breathing Valve Quarterly Checklist( HYBN-T6-07-0172-001-2019)

呼吸阀季度检查表 HYBN-T6-07-0172-001-2019

## 8 Supplementary Rules

### 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 Revision, preparation and approval of this System 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	2024-04-01	Zhao Xia 赵霞	Zhao Tingyun 赵挺云	Xu Ye 徐野	Chen Liancai 陈连财
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