



Report of Communication on Progress
进展报告





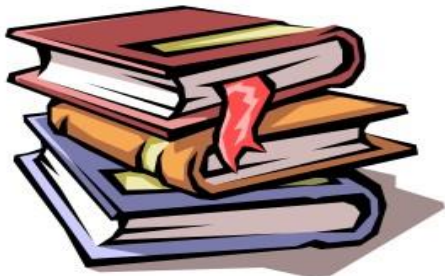
- 一、支持申明Statement of continued support
- 二、管理层承诺Top management commitment
- 三、员工Employee
- 四、社会责任Social ability
- 五、高新企业-High Tech
- 六、安全/职业健康Safety /Professional health
- 七、环保Environment
- 八、节能减排Energy saving and emission reduction
- 九、循环经济Circular Economy
- 十、反腐败Anti-Corruption



管理层承诺和持续支持声明

Top management demonstrate commitments and continued support:

- Management review 管理评审
- Safety meeting 安全会议
- Various Plant OHS inspection 多方面OHS 检查
- JHA review 作业危害分析
- Leads procedures update 引导程序更新
- Leads emergency drills 引导应急演练
- Push safety hazards to be corrected 推进隐患整改





持续支持申明- Statement of continued support

Health and Safety Declaration
健康安全宣言

SNF CHINA puts Health and Safety at the top of its list of objectives in the workplace.
爱森中国将健康安全放在工作场所目标的首位

WE ARE ALL COMMITTED 我们的承诺

Our company, SNF CHINA operates in accordance with the following points, ensuring that our business activities take place under the best possible health and safety conditions.

本公司承诺将遵循以下方针以确保所有活动均在最佳职业健康安全条件下进行:

Compliance with all applicable laws, regulations and other requirements relating to OHS 满足所有适用的与职业健康安全有关法律法规及其他要求。

Take laws and other requirements as system inputs. This process would be done through the opportunity and risk identification (unique document) procedure for analysis and evaluation, in order to realize the effective management. 法律法规和其他要求作为体系输入,通过风险和机遇识别分析评价,以实现有效管理。

Involvement and responsible behaviour of every employee to realize worker participation and consultation. 关于每个人责任的承诺和行动,以实现全员参与和协商。

Safety is not just one priority among many, it is much more. Safety is everyone's duty at all times. This is why we will attempt to control behaviour with specifically fixed objectives. 安全不是众多其他因素当中的某一个,它有着更深远的位置。它关于任何人在任何情况下的责任。这也是我们制定或调整目标的行为依据和原则。

Permanent evaluation of professional risks 持续地进行职业风险评估

We make a permanent evaluation of professional risks with formalization, updating and availability to the whole staff through the Unique Document. It's an evolving working document created by all the actors (working groups, Unique Document...). 我们对职业风险进行持续的评估,并使其制度化、具体化。由参与文件的所有成员共同完成。它是通过更新、可用性和向全体员工展示来实现的。

Proximity Management and follow up 跟踪和管理

Follow-ups and safety controls should be performed daily on-site by management levels from the production engineer to team supervisor. Furthermore, the numerous audits and meetings are the best time for everyone to participate and give input on safety.

ISSUE: 由所有参与者从生产工程师到团队主管以及更多管理者和合作者安全的持续考虑能实现工厂日常的风险和预防。

Risk detection and preventive measures 对潜在风险的发现和预防措施

Safety audits will allow us to put in place the elements of progressions to identify dangerous situations and to take the necessary measures to eliminate them. 安全审计将使我们能够识别不完全因素的危险,发现危险源,并采取必要措施进行处理。

Dysfunctions / incidents / Accidents analysis and corrective actions 运行不良/事件/事故以及更正措施的分析

I consider each dysfunction, incident, accident as a failure of our accident prevention guidelines. Therefore, their systematic analysis should allow us to avoid their recurrence. 我们将每次运行不良、事件、事故均视为预防指南的失败,因此我们应对其运行不良、事件、事故系统的分析使我们避免类似事件的再次发生。

Follow-up of Performance Indicators 对结果的追踪

I am committed to the evaluation of the efficiency of our accident prevention guidelines and measurement of its accomplishments in order to better the new improvement guidelines and objectives. 我们承诺将评估我们的预防指南的有效性并改进其在完善方面的进步。

Follow-up of the improvement of accident prevention guidelines 对预防措施的完善计划

I will follow-up on the advancement of the annual prevention improvement plan and the annual updating of professional risks evaluation (Unique Document) which are established under the control of the CHSCT (Workplace Health and Safety Board) and controlled by the Health and Safety Department. If they are applied by EVERYONE, they are the guarantee of the long-lasting improvements in our safety results. 我们将跟踪年度预防改进计划和年度专业风险评估(独特文件)的更新,它们是在CHSCT(工作场所健康安全委员会)的控制下并由健康安全部控制的。如果它们被每个人应用,它们是长期安全改进的保证。

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Bruno Michel
General Manager of SNF China
Date: 2019-01-01

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2020-09-10-03C REV: 02 PAGE: 05

Statement of continued support
持续支持声明

Dec 2018

To our stakeholders:
致本公司利益相关者:

I am pleased to confirm that SNF (China) Flocculant Co., Ltd reaffirms its support of the Ten Principles of the United Nations Global Compact in the areas of Human Rights, Labour, Environment and Anti-Corruption.

我很高兴地确认爱森(中国)絮凝剂有限公司重申支持《联合国全球契约》在人权、劳工、环境和反腐败领域的十项原则。

In this annual communication on Progress, we describe our actions to continually improve the integration of the Global Compact and its principles into our business strategy, culture and daily operations. We also commit to share this information with our stakeholders using our primary channels of communication.

在年度进展报告中,我们描述了我们为不断更好地在我们的商业战略、文化和日常运营中融入《全球契约》及其原则而采取的行动。我们也承诺通过我们的主要沟通渠道与我们的利益相关者分享这个信息。

Bruno Michel
General Manager of SNF China

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SNF FLOERGER®

Environmental Policy
ISO 14001 环境方针

SNF's mission is to develop, manufacture and sale the products and service for water treatment, enhanced oil recovery, paper and mining industries. The nature of business has generated numerous actions to improve environment. Therefore, as a key player in this industry, SNF ensure the environment continuous improvement for its product, operation and service towards this environment policy.

爱森致力于水处理、油田、造纸和采矿领域的产品的研发、生产和销售活动,肩负着环境改善的使命。作为行业的领先者,爱森将遵循以下环境方针,实现环境的持续改善。

- Comply with existing local legislation and environmental regulations. 遵守现有的法律法规规定及要求。
- Advocate actions to prevent any environmental degradation during the whole process, and have end treatment before discharging. 预防污染,达标排放。
- Minimize the environmental impact of our activities, to reduce our energy and source consumption. 减少组织活动对环境的影响,降低能源和资源的消耗。
- Reduce the waste emission by driving the recycled waste application, and by controlling the influence of the hazards. 推动废物回收利用和有害物质控制,减少废物排放。
- Keep improving environmental system and environment performance, and contribute for the global environment protection. 持续改进环境体系和绩效,为全球的环境保护作出贡献。
- Motivate employees as well as working partners to act in an environment responsible way. 推动员工及相关方参与环境活动。
- Benefit all the group's entities from worldwide feedback and communication. 集团公司全球范围内环境信息交流与共享。

In order to reach these goals, SNF has implemented an Environmental Management System under ISO 14001 standard. And our commitment is to fulfill the current and future obligation and expectations as a modern industrial company.

为实现这些目标,爱森在ISO14001标准指导下,实施了环境管理体系,并承诺作为一个现代化工业企业,爱森将义不容辞地持续承担当前或将来

CONTROLLED BY...
受控文件...

SNF FLOERGER®





持续改进 Continuous Improvement

- 年度安全/质量/环境管理评审
- Yearly safety/Quality/Environment audit
- 年度内部审核
- Yearly internal audit
- 月度安全检查
- Monthly safety checking
- 关于化学品注册、评估、许可和限制法案 (REACH), 责任关怀, 环境等ISO
- Chemicals registration, evaluation, permitting (REACH), responsible care



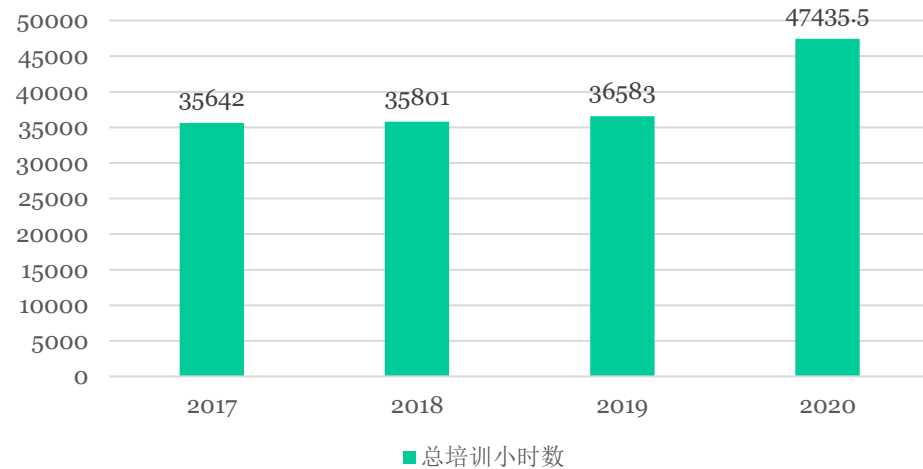


员工 Employee

❖ 培训：重视和发展每个人的技能 Training: Value and develop everyone's skill

- 平均每年培训38865h, 其中
- 29342h为安全培训
- Average training hour 38865H/Y, 29342H for safety training

总培训小时数 Total Training Hours

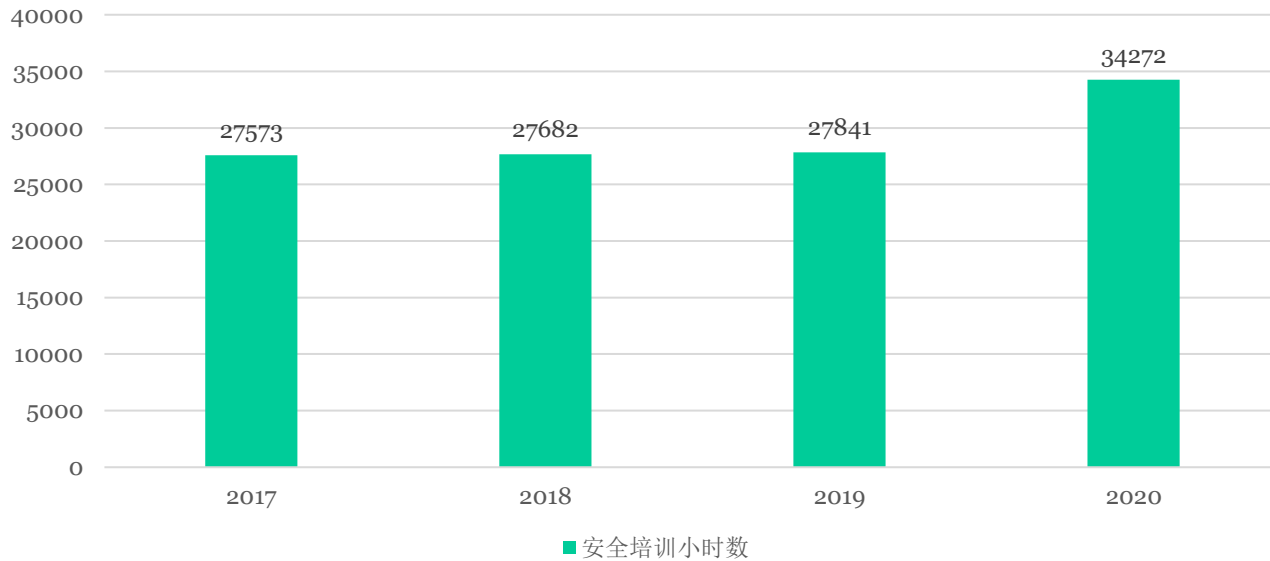




员工 Employee

❖ 培训：重视和发展每个人的技能 Training: Value and develop everyone's skill

安全培训小时数 Safety Training Hours

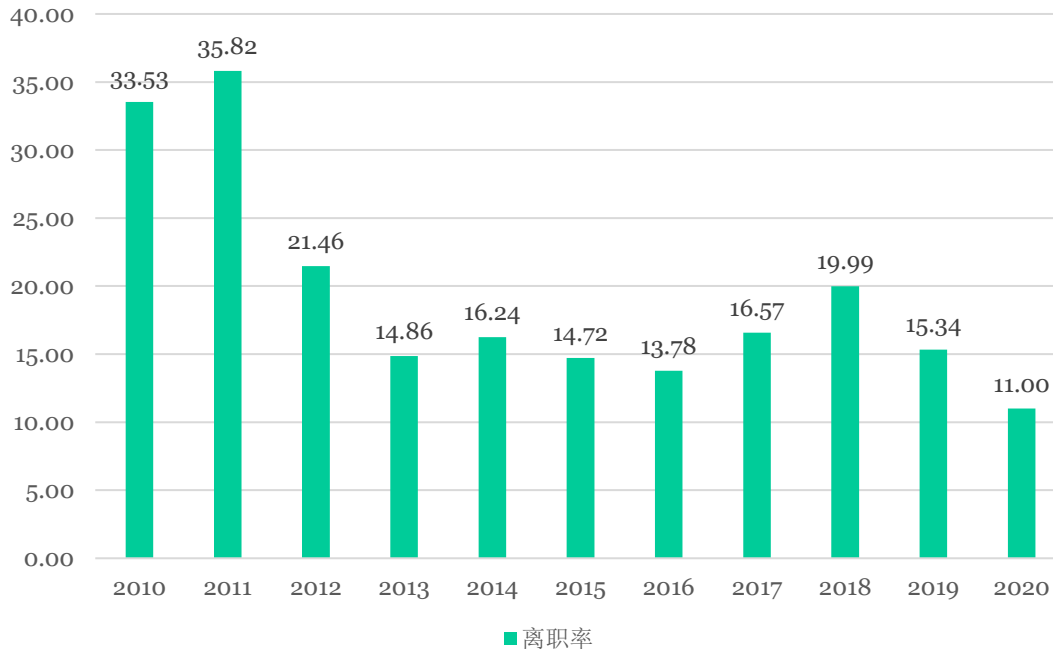




员工 Employee

❖ 社会政策：留住员工，发展素质公司 Social policy: retain employees and develop quality company

离职率 Turnover



- 专业知识/经验
- Specialized knowledge/experience
- 丰富知识
- enrich knowledge
- 培训累积
- Accumulation of training
- 员工福利welfare
- 公司归属感
- sense of belonging
- 12个内部晋升
- 12 internal promotion
- 持续的工资增长
- Continual salary increasing
- 工龄奖金
- Seniority bonus
- 男女员工性别比例 64: 36
- Gender balance man to woman, 64:36



员工 Employee

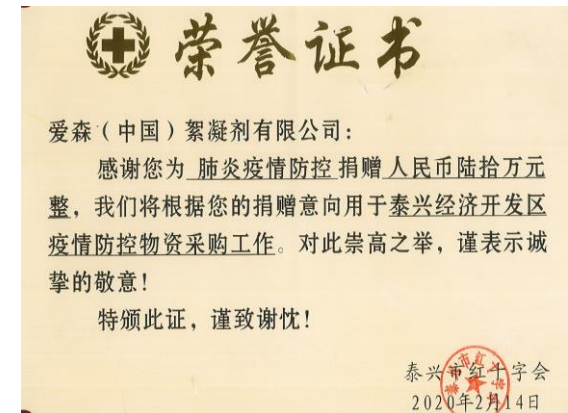
- 建立工会，建立膳食委员会，提高员工满意度
- Labor union, food committee, improve the satisfaction of employee
- 资助困难员工和额外的医疗保险
- Help employee with financial difficulties and extra medical insurance
- 每年举办篮球比赛Yearly Basketball game
- 每年年会 End-Year Party





社会责任 Social ability

- 2014年 40万元黄桥老区建设
- 400,000RMB help huangqiao construction
- 2016年56万元贫困村扶贫
- 560,000RMB help poor village 2016
- 2017年慈善总会20万元
- 200,000RMB to charity federation 2017
- 2019 年扶贫义购公益行动-陕西旬邑县
- Public Welfare and Poverty Alleviation Action 2019- Shanxi Xunyi
- 2020年捐赠60万元抗疫，口罩给学校，持续的扶贫义购
- 600,000RMB for epidemic prevention, masks to school, continues poverty alleviation





高新企业High-Tech

- Investment 10MRMB to build R&D Center in 2017 and start to use in 2018/05.
- 2017年投资1000多万元建立地区总部研发中心，2018年投入使用。
- There are 3 floors in R&D Center. Each floor area is 600m².
- 研发中心共三层，每层600平方米
- We have scientific R&D director, R&D center head and 21 full time R&D staff.
- 我们有研发总监，研发中心负责人和21名专职研发人员





高新企业High-Tech

现有研发人员148人，23个专利证书
148research staff, 23patents

R&D Expense 研发费用

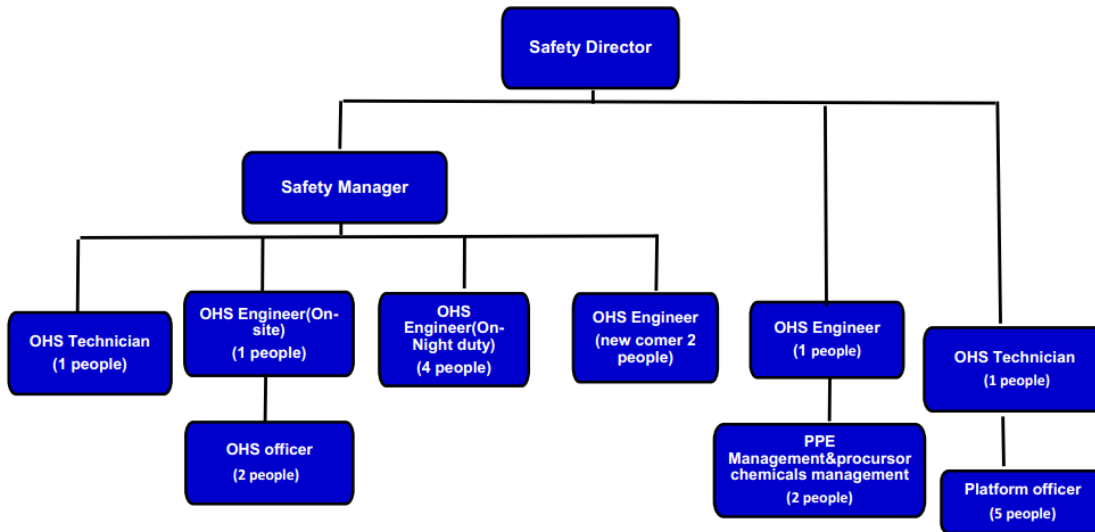




□ OHS personnel at work site 现场的HS 人员

- Around 917 employees in SNF Taixing site
- 全厂有917名员工
- 24 people working in Health Safety department
- 健康安全团队24人

	2019	2020
Total	850	917
OHS	13	24



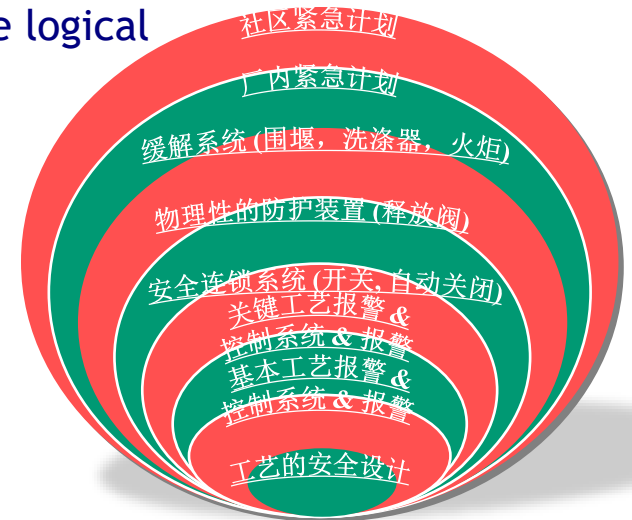
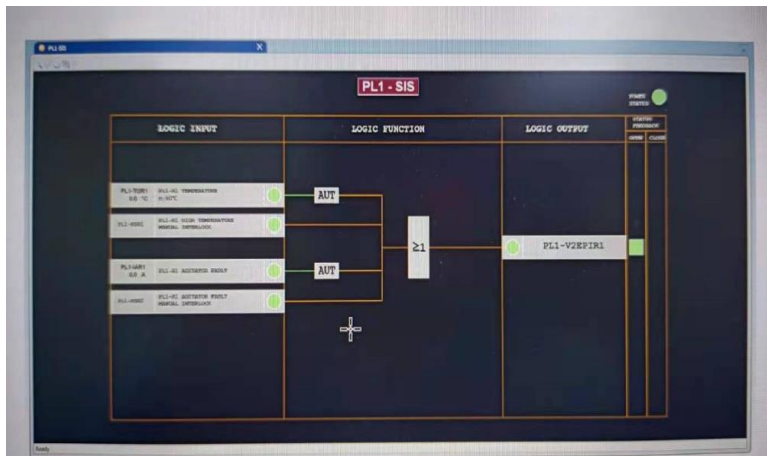


职业卫生安全OHS - SNF 安全的可靠性Safety reliability

所有新建，改扩建生产线均会进行工艺安全可靠性论证，并在详细设计阶段进行HAZOP分析（危险与可操作性分析）和LOPA（保护层分析），根据LOPA报告选择适合的SIS系统，有效进行工艺安全管理。

2020年对多胺SIS系统进行升级改造，现场显示逻辑联锁图

- All new and expanded production lines will be demonstrated for process safety reliability, and HAZOP analysis (hazard and operability analysis) and LOPA (protection layer analysis) will be carried out in the detailed design stage, then choose suitable SIS system to effectively manage process safety.
- In 2020, the polyamine SIS system was upgraded, and the logical interlocking diagram was displayed on site





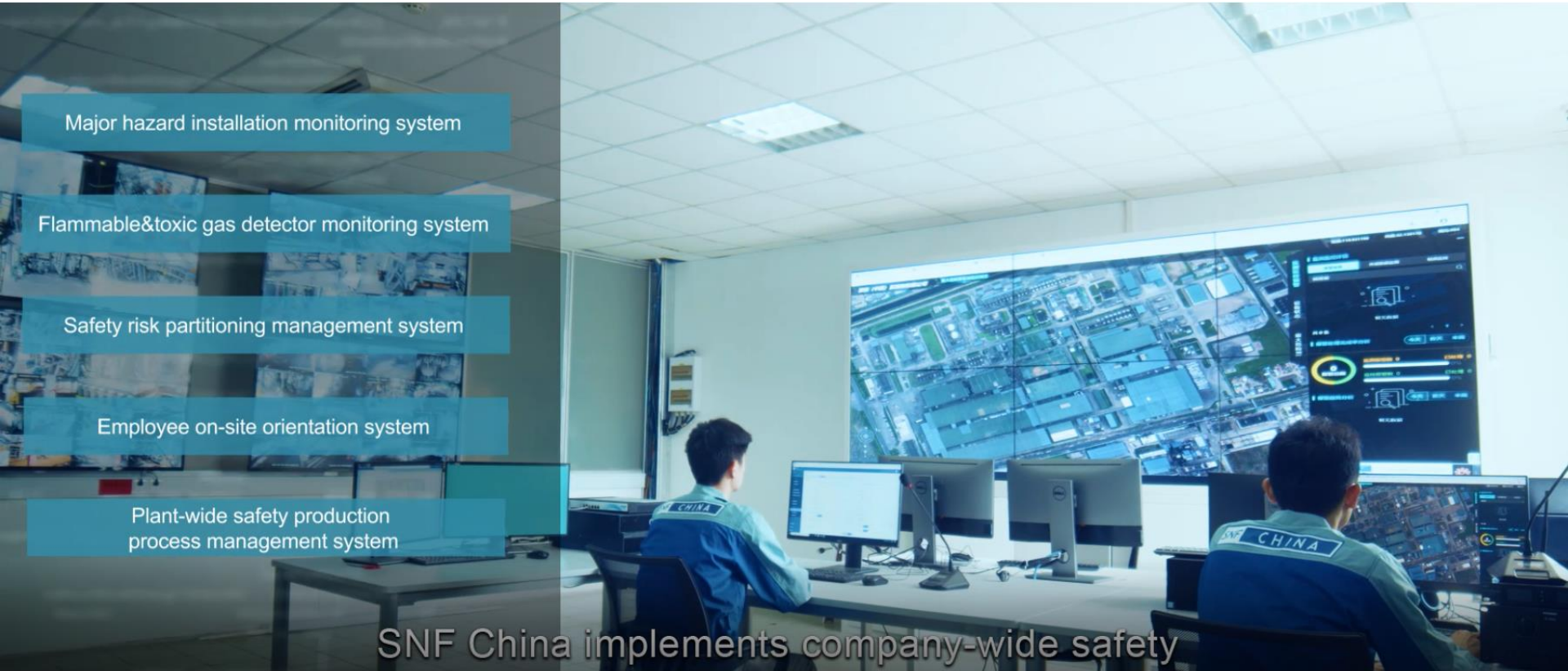
In 2020, invest more than 2MRMB to build and run “5 in 1” a smart safety management system, this system involves: 2020年，投资超过200万元，实施并运行五位一体智能化安全管理系统，包括

- Detailed GPS of all posts 全员定位
- Video signal of major hazard source 重大危险源监控
- Inflammable and toxic gas detector 气体探测
- Safety production process management 安全生产全流程工艺管理
- Safety risk partition 安全风险分区
- Face recognition entrance 进入厂区的人脸识别

	Number
Positioning card	877
Beacon	1418
Inflammable and toxic gas detector	96
Video signal	31



职业健康安全OHS- Smart safety management system 智能化安全



Major hazard installation monitoring system

Flammable&toxic gas detector monitoring system

Safety risk partitioning management system

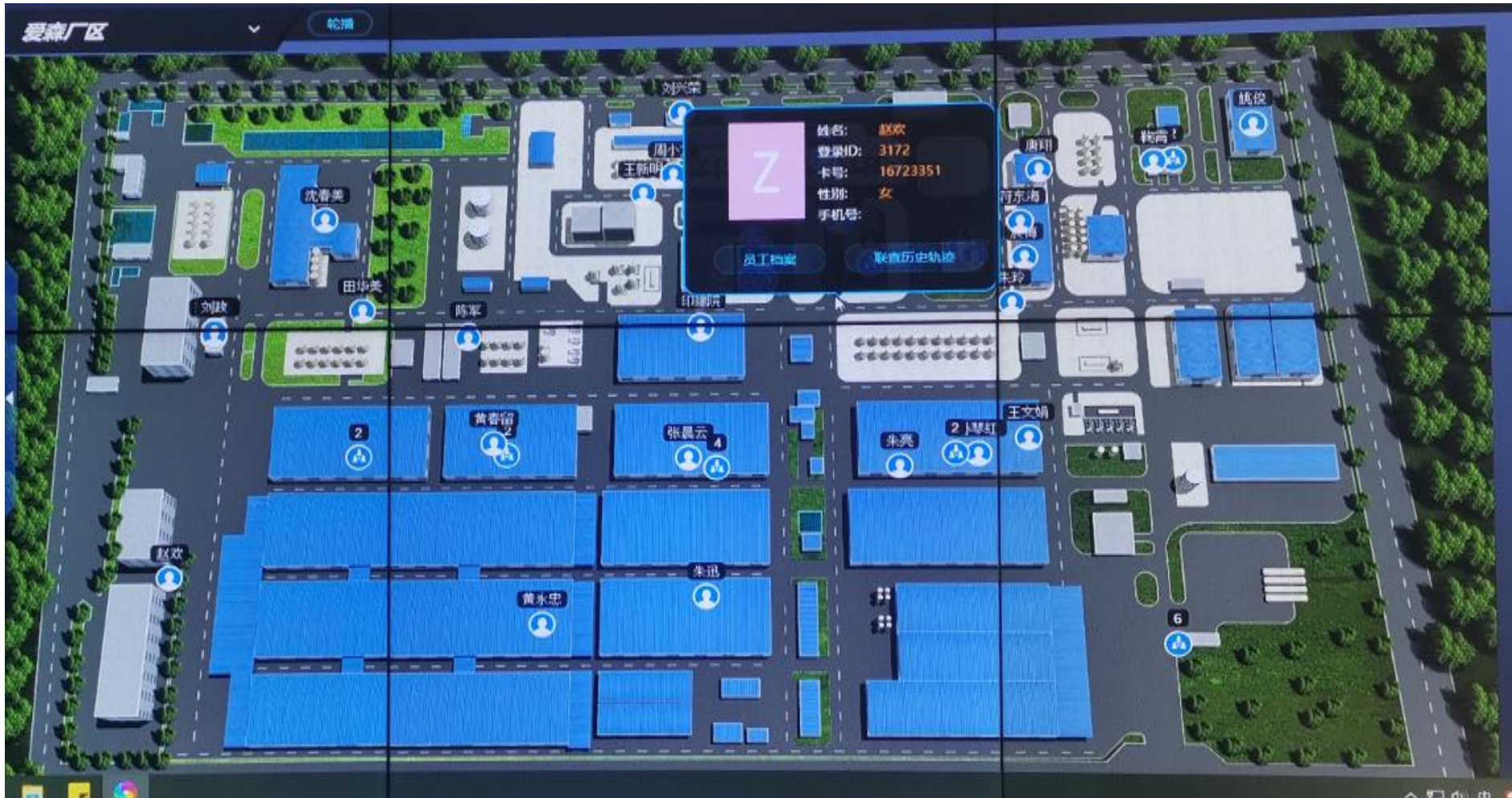
Employee on-site orientation system

Plant-wide safety production process management system

SNF China implements company-wide safety



➤ Real-time display of personnel location is realized
实现人员位置实时显示



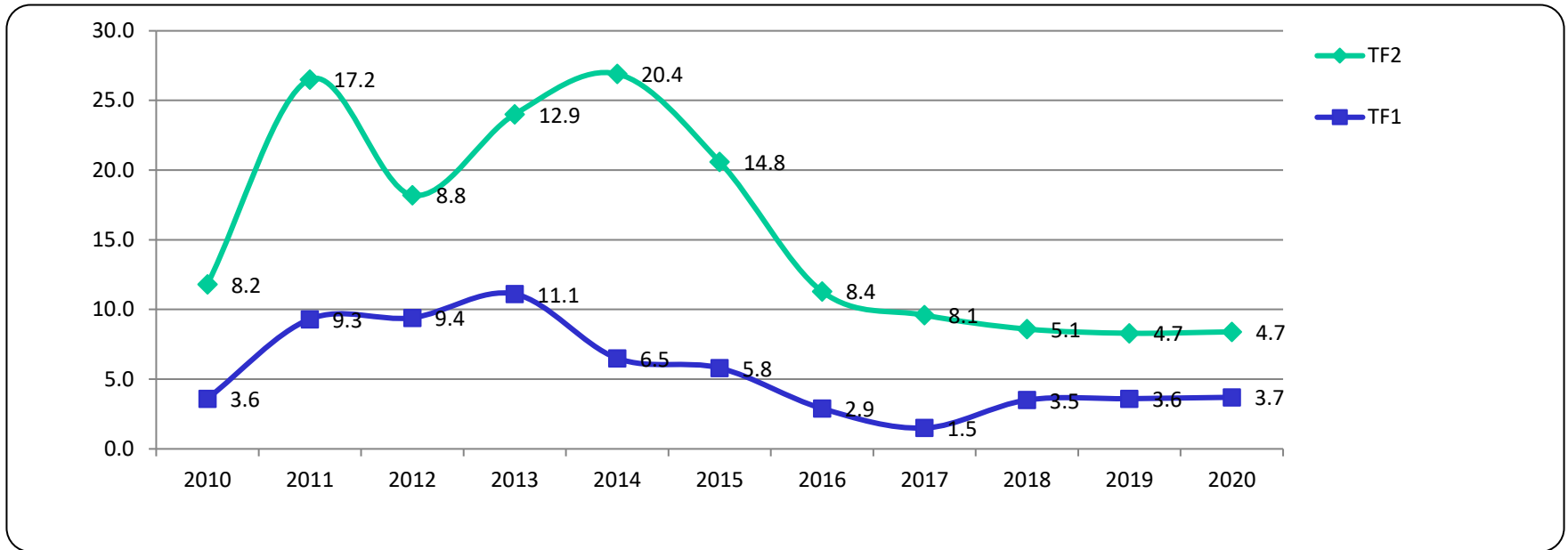


职业卫生安全OHS-Smart safety management system 智能化安全管理系统-- Face recognition+ personnel ID card entrance 进入厂区的人脸识别和人员识别卡





职业健康安全OHS-Historical data of safety performance安全成绩的历史数据



NOTE:

$$TF1 = \frac{\text{Accident with Lost times}}{\text{Total Work hours}} \times 10^6$$

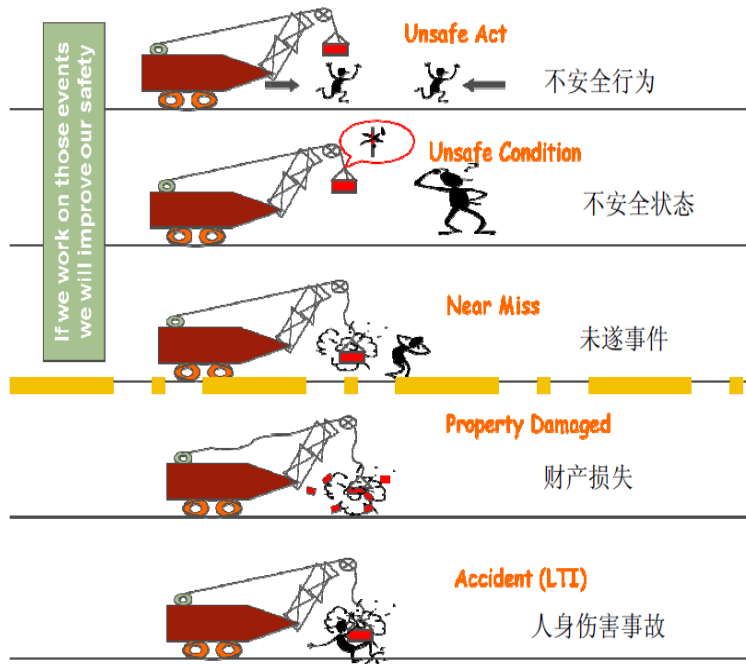
$$TF2 = \frac{\text{Accident with Lost times} + \text{Accident without lost times}}{\text{Total Work hours}} \times 10^6$$



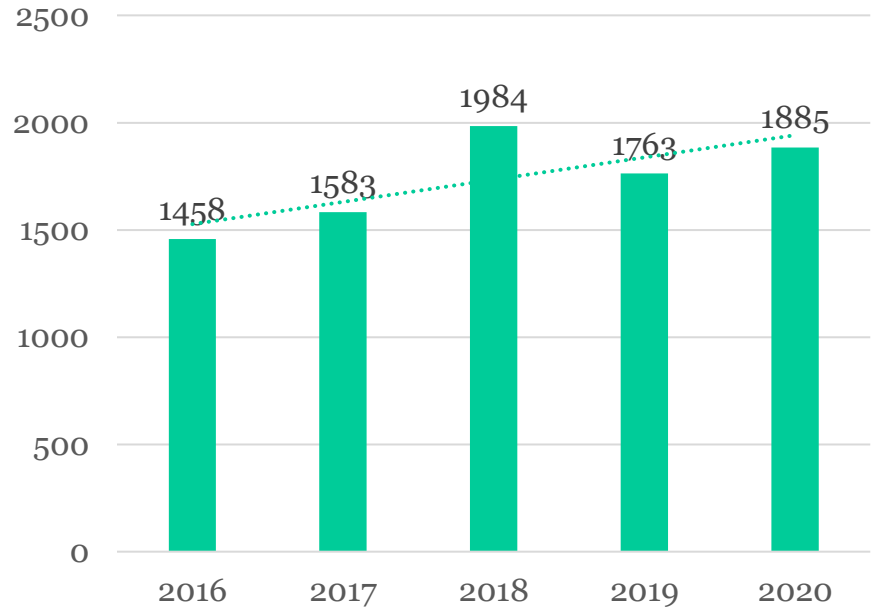
□ Near miss report未遂事故报

In April 2013, “near miss report” is commenced in SNF Taixing site to reduce accident happened.

Almost 160 near miss reports have been received every month in 2020.



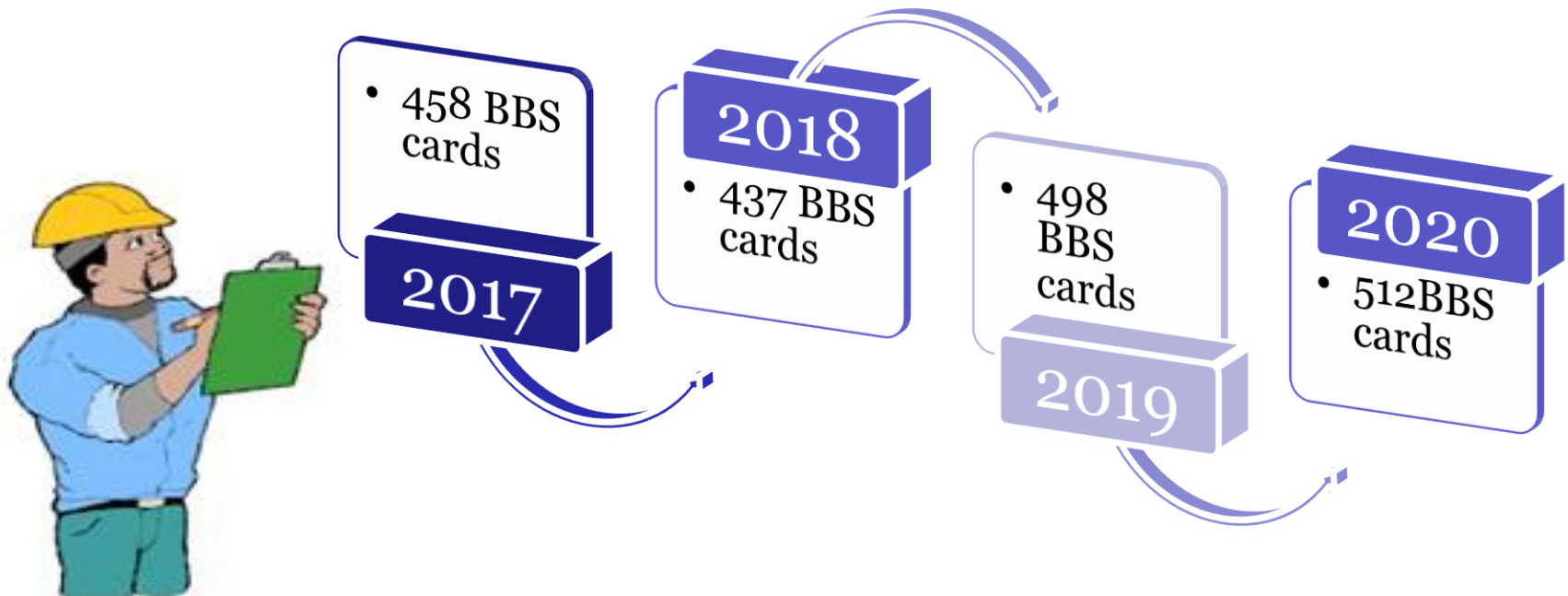
Quantity of received near miss reports





In October 2013, BBS observation project is initialed.

- Nowadays we have 28 qualified BBS observers.
- OHS can receive almost 48 BBS cards every month, then analyze the unsafe behaviors and make them corrected.



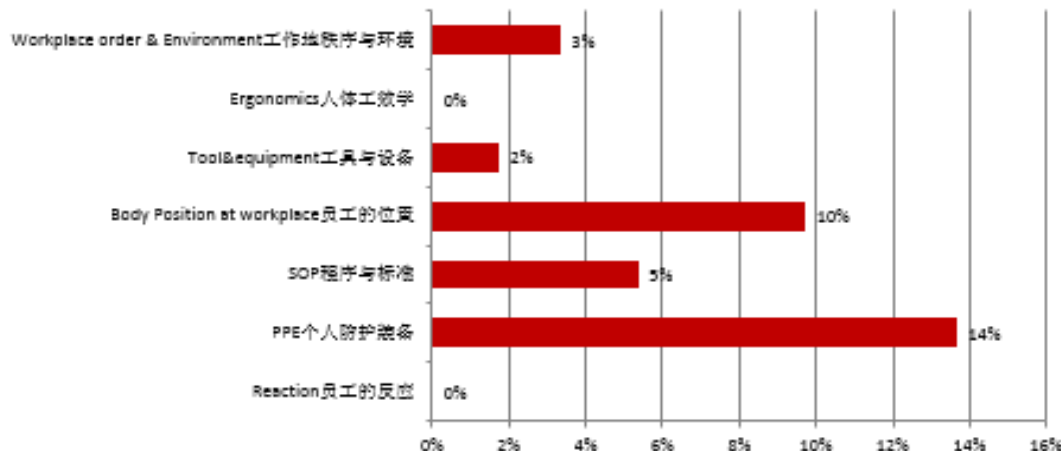


Monthly BBS observation & communication data analysis

BBS observation & communication data analysis

BBS observation section 观察的类别	Observation amount of each observed BBS section	Number 数量	Ratio of Safe behavior in BBS observation 被观察到的安全行为所占观察类别的比例	Number 数量	Ratio of Unsafe behavior in BBS observation 被观察到的不安全行为所占观察类别的比例	Number 数量	% Category of observation/Safety suggestion 占建议总量比例
Reaction员工的反应	288	288	100%	0	0%	0	0%
PPE个人防护装备	432	373	86%	59	14%	0	0%
SOP程序与标准	336	318	95%	18	5%	0	0%
Body Position at workplace员工的位置	432	390	90%	42	10%	0	0%
Tool&equipment工具与设备	288	283	98%	5	2%	0	0%
Ergonomics人体工效学	240	240	100%	0	0%	0	0%
Workplace order & Environment工作秩序与环境	240	232	97%	8	3%	0	0%
Total合计:	2256	2124	1	132	1	0	0%
Amount of safe behaviors and unsafe behaviors行为总数	2256	/	Rate of safe behaviors	94%	Rate of unsafe behaviors	6%	/

Unsafe behavior不安全行为



1. Safety Situation:

I've got **46** BBS observation cards in **Sep 2020**. Rate of unsafe behaviors was **6.2%** which is as same as the last month. We shall keep improving our safety all over the company!

2. Main Unsafe Sections Analysis:

1. PPE was **14%**. According to the observation cards the results highlighting as follow:

- PO8-VIIM2 maintenance
- * Didn't wear dust mask well
- * Didn't set chin strap well
- * Didn't wear earplugs
- * Didn't wear safety goggles

2. Body Position at workplace was **10%**. According to the observation cards the results highlighting as follow:

Most of this issue are working without safety glasses. Working at high place without safety belt is also high-frequency

3. SOP was **5%**. According to the observation cards the results highlighting as follow:

Most of this issue is working without work permit.

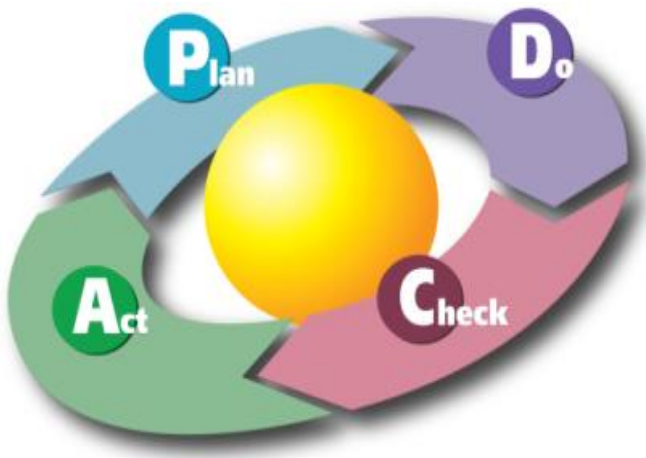


Implement:

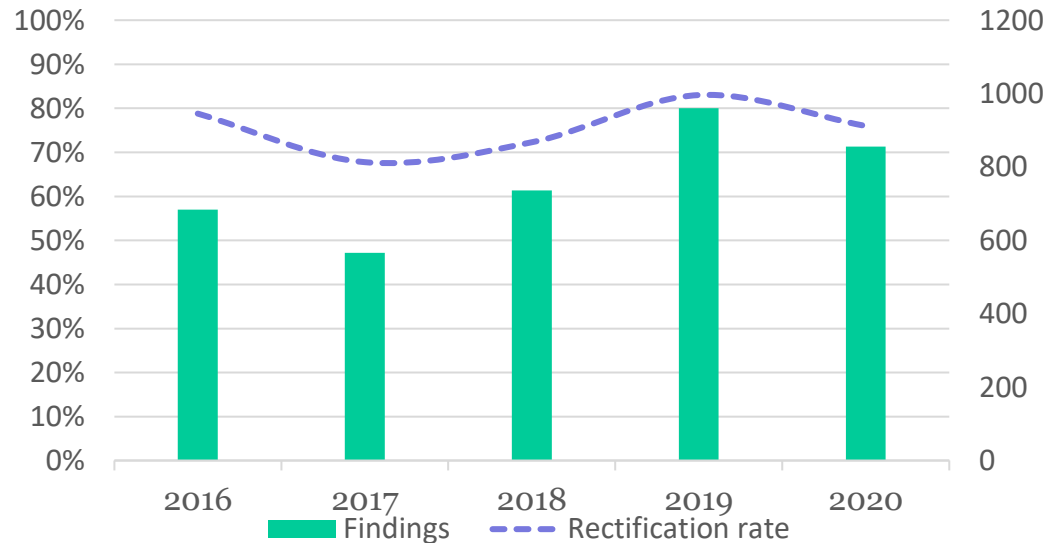
EHS findings from various EHS inspections are put on the follow up list to track.

Each item on the list will be taken care of within one month.

Follow up list reviewed weekly.



EHS findings and rectification rate





职业健康安全OHS-Positive OHS Culture积极的OHS 文化

Toolbox meeting have been running continuously since 2015
从2015年至今班组活动持续正常运行

- The topic of toolbox meeting is decided by staffs.
- Organized by themselves.
- Every shift should organize the toolbox meeting at least twice each month.





□ Competence and general OHS training 能力和OHS培训

- Employee training is managed in SNF training platform including new comer.
- 员工培训在SNF培训平台进行管理，包括新人培训。
- We provide series contents on HR,OHS, operation etc..
- 我们提供人力资源安全环保，操作等各种内容
- It is not less than 72 hours training for new comer.
- 新员工培训不少于72小时。

The screenshot shows the SNF (China) Training Platform interface. At the top, there is a logo for SNF CHINA and the text "SNF (China) Training Platform". To the right, there are buttons for "Easy HRO", "Password", and a language selector showing Chinese and English flags. Below the header, there are navigation icons (back, forward, home, refresh) and a date display "Today's date: 2014-05-09". The main content area is divided into several sections: a large image of an industrial facility, four main menu buttons with icons: "Training Plans", "Training Documents", "Analysis", and "Training Center". At the bottom, there are two summary panels: "Information" and "Validation".

Information	Validation
0 New Comer(s)	0 Position Training Plan Validation
3 The Transferred Employee	
0 Training Validation Overdue	
1 Examination Schedule	
0 Examination Results	



职业健康安全OHS -Positive OHS Culture积极的OHS 文化

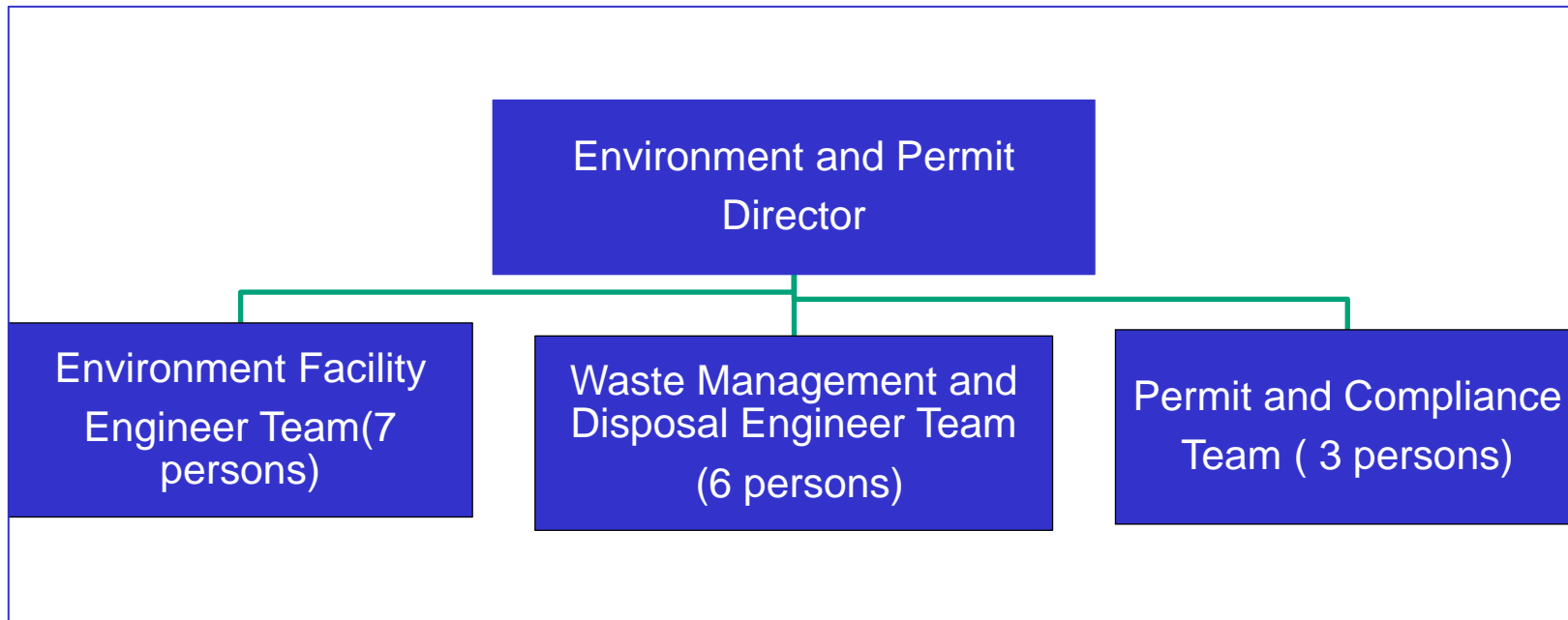
- After training, attendees must pass examination in the training platform then can get a passport as qualified operator in workshop operation.
- 培训后，员工要通过培训平台的考试，合格后才能操作。
- Score for both OHS and operation skill are recorded.
- 安全环保培训和操作技能培训分数都要记录

培训成绩			
安全考试比分	71.8	车间培训导师评论	
技术考试比分	88.5		
其他			
工作获能			
<p>根据以上各项培训成绩，我同意 <u>胡荣</u> 顺利完成他/她的工作岗位培训计划。</p> <p>该员工能够作为 <u>丙烯酸胺生产操作工</u> 独立上岗。</p> <p>部门经理 <u>刘政</u></p> <p>日期 <u>2014.4.25</u></p>			
<p>至期间，我 <u>胡荣</u> 参加了岗位培训计划的全部内容。</p> <p>经过培训，我能够作为 <u>丙烯酸胺生产操作工</u> 独立上岗。</p> <p>员工 <u>胡荣</u></p> <p>日期 <u>2014.4.25</u></p>			



安全Safety- SCBA培训





- ❑ SNF set up the separate Environment and Permit Team to enforce and specify environment management, improve environment performance, achieve full compliance to regulation. 爱森成立单独的环保许可团队，从而加强和专注于环保管理，提升环保绩效，实现合规运行。
- ❑ EHS full compliance operation and investment is SNF core principle 安全健康 环保合规的运行和投资是爱森核心准则。



环保Environment-Policy 方针

- ❑ Strictly follow Regulation requirement to run environment facility, control emission and discharge, manage and dispose all waste. 严格执行法规要求，运行环保设施，控制大气和水的排放，管理和处置所有废物。
- ❑ Continuously improvement environment performance, drive to improve process to reduce the waste, emission and energy and water consumption, encourage the resource utilization. 持续提升环保业绩，致力于改进工艺以减少废物产生，减少排放，减少能源和水的消耗，鼓励资源综合利用。
- ❑ Set up all environment performance data inventory and measurement system, identified all deviations in time, control and drive to reduce environment emission. 建立环保绩效数据清单和检测系统，及时识别偏差，控制并减少环保排放。
- ❑ Encourage all environment incidents to be reported, all environment deviations are analysed and investigated to find the root cause. 鼓励汇报所有环境事件，所有环境偏差得到分析和调查并找出根本原因。
- ❑ Set up Environment Performance Audit Program, improve Top to Down Environment Awareness. 建立环保绩效现场稽查制度，从上到下提升环保意识。



- ❑ Build new 400m² HW storage, can accommodate 400 t HW, all HW are disposed within one month(legal request not more than three months). 新建400平方米危废仓库，可以同时容纳400吨危废，所有的危废当月内及时处置(法规要求不超过三个月)。
- ❑ Install Smart Hazards Waste Management system, video measurement and record all Waste receiving and delivery 安装智能化危废称管理系统，视频称重计量系统，对危废进出进行控制。
- ❑ The HW measurement system is connected to TEDA EPB, the receiving and delivery is supervised by EPB 危废称重系统和环保局联网，废物收发称重过程均由环保局监控。



- ❑ To response National resource utilization and Waste reduction, SNF build two Incinerators with total capacity 800kg/h, can reduce 3000t/a waste. 为了响应国家资源综合利用，减少废物产生，爱森建立两套焚烧炉，产能共计800公斤/小时，每年减少约3000吨危废处置。
- ❑ Incinerator produce SnO₂ ashes and then extract metal to reproduce catalyst back to process, not only bring huge economic income, but also drive to reduce Hazards waste, achieve win-wins to environment and operations. 焚烧炉生产锡灰到提炼金属锡，再生产催化剂回到生产使用，不仅带来巨大经济效益，同时降低危废产生，实现环保和运行双赢机制。
- ❑ The field incinerator also improve HW waste logistic safety for HW residuals are dangerous during transportation to treatment. 现场焚烧同时提升危废物流安全，消除了危废处置运输过程的不安全因素。





环保Environment - 气Air

- ❑ To drive to reduce emission, SNF invest to improve process, environment facility to contribute to the air quality, make blue sky light. 为了减少对大气的排放，爱森投资改进工艺，环保设施，致力于改进空气质量，让蓝天更蓝。
- ❑ SNF all off-gas from process and tank go for TO burning, SNF will continue to expand TO capacity to drive to reduce emission further. 爱森所有尾气均进入TO炉焚烧,爱森将继续扩大TO炉的能力，致力于降低排放。
- ❑ Install Polaris Treatment to condense MeCL, not only reduce VOC, but also recycle MeCL and realize circular economy. 一氯甲烷冷凝吸收装置，不仅降低VOC排放，而且对一氯甲烷回收再利用，实现循环经济。





- ❑ To drive to reduce NH₃, SNF improve process, recycle NH₃ emission by producing (NH₄)₂SO₄, also contribute the circular economy. 为了减少氨气对的大气排放，爱森投资改进工艺，将氨气变成副产硫酸铵，从而实现循环经济并减少排放。
- ❑ In the coming few years, SNF will continue to drive to optimize and revamp our process, to reduce emission and impact to environment. 未来几年，爱森将会继续对工艺进行持续改进和优化，降低排放，减少对环境的影响。





环保Environment-气 Air

In 2020, LDAR inspection is planned 4 times:

- 2 times full inspection of 26342 sealed points (June and December).
- 2 times inspection for 7026 dynamic seals (March and September).

Following the full inspection of June 2020 and after maintenance, the releasing quantity of VOCs is 1845kg/a, and have reduced 2667kg/a VOCs emission.



序号	装置	区域	设备	密封点	介质	检测值	检测时间
1	ADAM	ADI二区以上	ADI-CP1EMHQ	L-02968-00F	二甲苯-甲苯 ADAMC-丙烷 中停止区	57584.6	2020-07-02 10:30:41



序号	装置	区域	设备	密封点	介质	检测值	检测时间
1	ADAM	锅炉区	锅炉	ADAMGL-01-01-00020-00F	天然气	875.1	2020-07-03 14:05:06
1	ADAM	锅炉区	锅炉	ADAMGL-01-01-00020-00F	天然气	875.1	2020-07-03 14:05:06



排放量与减排(kg)			
运行部	维修前VOC	维修后VOC	减排量
ADAM	3024.82	661.79	2363.03
粉末车间	506.8	506.8	
丙烯酸装置	157.48	157.48	
罐区	485.06	181.21	303.85
Dadmac装置	53.53	53.53	
B25	18.59	18.59	
B15	200.15	200.15	
精馏残渣装置	62.18	62.18	
B05罐区	3.16	3.16	
合计	4511.75	1844.87	2666.88



环保Environment - 水 Water

- ❑ SNF 600t/a WWTP plant, use air flotation + hydrolysis acidification + MSABP sewage treatment system 启用气浮+水解酸化+MSABP的污水处理系统。
- ❑ Use evaporators as pre-treatment for high concentration WW, to ensure WWTP in stable operation, achieve far below 500 mg/l discharge. 采取蒸发工艺处理高浓度污水，确保污水处理厂稳定运行并达到COD远低于500排放。
- ❑ Use low temperature plasma UV light technology to treat exhausted gas, reduce VOC emission. 废气采用低温等离子+UV光解除臭技术来处理，减少VOC排放。





环保Environment - 水 Water

- ❑ SNF TX TEDA Chemical Park is close to Yangtze River, all Rainwater discharge must achieve COD below 30mg/L, NH₃N below 1.5mg/L, TP below 0.3mg/L. 爱森泰兴化工区紧靠长江，所有雨水排放必须执行COD低于30mg/L,氨氮低于1.5mg/L,总磷低于0.3mg/L。
- ❑ Online monitor of COD is connected to rainwater discharge gate and EPB to control no above limit rainwater are discharged. 在线COD监控和雨水排口闸门以及环保局联动，确保没有超标的水排出。
- ❑ All tank farms, 15 minutes rainwater are collected to be treated, strict rainwater management to ensure no any pollution to rainwater. 所有罐区15分钟初期雨水收集处置，严格的雨水管理确保雨水没有任何污染。





环保Environment- 水

- ❑ SNF online monitors: total 17 sets (CEMS, NHMC, ACN, HCL, COD, NH3N, PH, Flow meter) are connected to EPB & TEDA, SNF all emission and discharge are watched by EPB and SNF strictly. 爱森共17套在线监控 (CEMS, NHMC, ACN, HCL, COD, 氨氮, PH和流量计), 均接入环保局和TEDA, 爱森所有排放都受到环保局和爱森严格监控。
- ❑ SNF TO, incinerator, WWTP run status are connected to TZ EPB. 爱森TO炉, 焚烧炉, 污水处理厂的运行工况接入泰州环保局。
- ❑ All environment emission are partial of process control and line manager take the responsibility to control. 所有环保排放都是工艺参数控制的一部分, 现场经理有责任去控制。
- ❑ Environment trace all deviations, analyze and find root cause. 环保部对所有排放偏差进行跟踪分析并找出具体原因。





环保Environment -Waste Reuse, Recycle, Recover

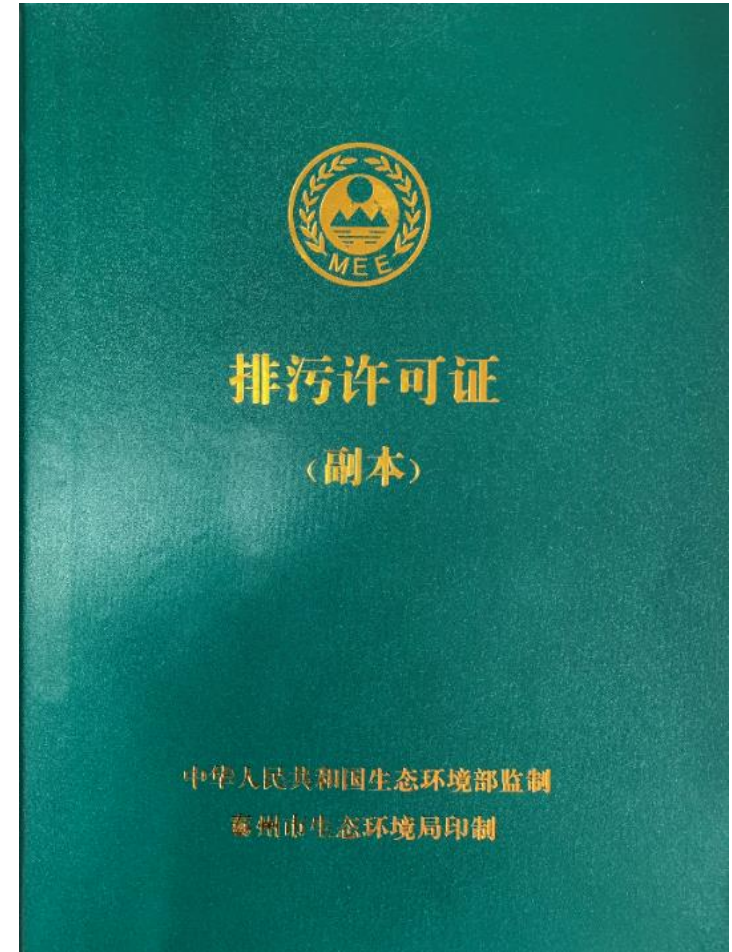
- ❑ Continue to increase MeOH boiler's capacity, to utilize 22.6kt/a MeOH and produce 66kt/a steam. 继续增加甲醇锅炉的产量，将会扩大到消耗22.6万吨甲醇副产物,自产18.8万吨蒸汽。
- ❑ Follow Hazards chemical category, implement precisely Waste separation, try to avoid package polluted from workshop and recycle, reduce Waste. 严格按照危险化学品目录，实现废物精细化分类，从车间避免污染包材从而实现回收，减少废物产生。
- ❑ Encourage to reuse IBC and drums, e.g. H2O2 and Acetic Acid reuse, LQ IBC reuse. 鼓励重复使用IBC桶，如双氧水桶,乙酸桶回用，水剂桶回用。





环保Environment- Discharge Permit Update

- ❑ Change SNF discharge permit from Petrochemical to special chemical industry. 将爱森排污许可证从石油化学行业变更到专项化学品行业。
- ❑ Follow Discharge permit requirement to do regular self-monitoring for 51 exhausted ducts. 执行排污许可证要求, 对51个排气筒, 展开定期环保监测。
- ❑ Inventory SNF actual discharge quota and emission concentration, compared with EIA approval quota and its limit. 盘点爱森实际排放量和浓度值, 和环评批复进行比对。
- ❑ Assess whole plant discharge GB code limit and total Quota risk and find solution. 评估整个工厂排放限值和排放总量风险, 找出解决方案。



环保Environment-应急演练ERP drill





环保Environment- Audit Program

□ Total 150 audit reports have received since July, encourage all environment team to do field site audit, identify and solve the findings. 自2020年7月份开始，环保部共实施了稽查，收到了150份报告，鼓励环保部所有成员实施现场稽查，及时发现现场问题并立即解决问题。

□ Environment audit program will help SNF to identify deviation in time, improve field site environment awareness, and then improve SNF field site environment performance. 环保部稽查制度会帮助公司及时找出偏差，提升现场环保意识，同时提升现场环保绩效。

爱森(中国)絮凝剂有限公司 Environment Audit Report				
稽核区域 Audited District: Site		稽核日期 Audit Date: 2020.10.24		
稽核组 Audit Team: 周辉		稽核组长 Auditor:		
观察 Observations	建议措施 Suggestions	责任归属 Responsibility	同意的改进行动 Agreed Action	目标日期 Target Date
B02罐区旁存在垃圾袋 There are garbage bags beside the B02 tank farm	及时打包送一般固废仓库 Send to general solid waste warehouse in time	B01	已清理 The cleared	
				

爱森(中国)絮凝剂有限公司 SOP Audit Report				
稽核区域 Audited District: Site		稽核日期 Audit Date: 2020.10.04		
稽核组 Audit Team: 谭明超		稽核组长 Auditor:		
观察 Observations	建议措施 Suggestions	责任归属 Responsibility	同意的改进行动 Agreed Action	目标日期 Target Date
B03南侧冰水罐滴漏，取样分析COD数值超过1650，通过水桶进行收集，水桶已经接满。 B03 south ice drip POTS, sample analysis COD value of more than 1650, the wastewater is full.	对收集的废水进行集中处理 Centralized treatment of collected wastewater	公用工程 The utility		已完成 done
				
B31 TO炉碱洗塔有滴漏现象，已通知生产工程师。 The scrubber is leaking and the production engineer has been informed.	生产工程师联系维修部门进行修复。 The production engineer contacts the maintenance department for repair.	维修部门 MA		
				
雨水沟上游有柴油堆积，未对总排口造成影响。 There is a small amount of diesel accumulation in the upstream of the channel, which does not affect the RW outlet.	用吸油棉持续吸附。 Oil absorbent cotton is used for continuous adsorption.	ENV		



- 改造项目:
- **Renovation projects:**
- C2: 淘汰现有5000吨/年硫酸铵装置，增加母液蒸发装置，现有2万吨/年硫酸铵生产线扩建为3万吨/年硫酸铵生产线。经废气处理后的含氨废水，加入硫酸，形成硫酸铵溶解，结晶后成为硫酸铵，是化肥的一种。
- C2: Eliminate the existing 5000 tons/year ammonium sulfate facilities, add mother fluid evaporation skid, then extend the existing 20,000 tons/year ammonium sulfate productivity to 30,000 tons/year. Ammonium-containing wastewater after exhaust gas treatment is added to sulfuric acid to form ammonium sulfate dissolved and crystallized into ammonium sulfate, which is a kind of fertilizer.
- 环保: 水
- **Environmental protection: water**
- 处理: 废气处理后的含氨废水，加入硫酸，形成硫酸铵溶解，结晶后成为硫酸铵，是优良氮肥之一。
- Treatment: ammonia-containing wastewater after exhaust gas treatment, added sulfuric acid, formed ammonium sulfate dissolved, crystallized into ammonium sulfate, is one of the excellent nitrogen fertilizer.
- 排水: 比现有标准提高了雨水排放要求，将COD减少到30，减少对环境的污染和影响。
- 采用紫外线灯对冷却塔循环水进行杀菌处理，排水前采用电导率仪与排放阀门连锁，智能达标排放，减少对环境的污染。
- Drainage: Increases stormwater discharge requirements compared to existing standards, reduces COD to 30, and reduces pollution and impact on the environment.
- The use of ultraviolet lamps to cool tower circulating water sterilization treatment, drainage before the use of conductivity meter and discharge valve interlock, intelligent emission standards, reduce environmental pollution.
- 减少用水量: 继续对其他生产线上的容器进行高压清洁喷嘴改造，大大的减少了用水量和污水量。
- 污水经过蒸发处理后产生的清洁水，原本送污水装置处理的，现在重新收集并用于生产线作为冲洗水循环使用。
- Reducing water consumption: Continue to make high-pressure cleaning nozzle modifications to containers on other production lines, significantly reducing water consumption and sewage volume.
- Clean water produced by evaporation treatment of sewage, originally sent to the sewage unit for treatment, is now re-collected and used in the production line for recycling as flushing water.



节能减排Energy saving and emission reduction

- 环保：节能
- **Environmental protection: energy saving**
- 节能工作
- **Energy-saving work**
- 氧化锡回收装置烟气余热回收系统。氧化锡回收装置在运行中产生大量高温烟气，采用余热锅炉收集烟气中的余热生产蒸汽并网，烟气生成量约3800Nm³，温度约900度，可连续生产质量为0.75t/h压力为2.0MPa温度为214.9度的过热蒸汽。按年运行时间330计，每年可回收5940吨蒸汽，年节能量达568tce。
- Flue gas recovery system of Incinerators can make heat recovery. Incinerator in operation to produce a large number of high-temperature flue gas, the use of waste heat boiler to collect the residual heat in the flue gas production steam and reuse it, flue gas generation of about 3800Nm³, temperature of about 900°C, can continuously produce a mass of 0.75t/h pressure of 2.0MPa temperature of 214.9°C of superheated steam. With an annual operating time of 330hr, 5940 tons of steam can be recovered each year, saving 568tce per year.
- 新型节能空压机替换老旧空压机。空压机系统目前几乎处于满负荷运行状态，空压机改用目前最节能的二级压缩螺杆空压机，容积效率和绝热效率更高，能效进一步提升。
- Use the new energy-saving air compressor replaces the old air compressor. Air compressor system is now at full capacity operation, air compressor to the current most energy-saving secondary compression screw air compressor, volume efficiency and insulation efficiency is higher, energy efficiency further improved.
- 副产品甲醇全部燃烧用于生产蒸汽，提高蒸汽回收比例，降低外购蒸汽输入。2020年1-9月内部产蒸汽68629吨，折标煤6519tce(热值取0.095kgce/kg)，降低外购能源输入6519tce。
- The by-product methanol is all burned for the production of steam, increasing the proportion of steam recovery and reducing the input of purchased steam. From January to September 2020, the internal production of steam 68,629 tons, 6519tce (thermal value of 0.095 kgce/kg), reduce the import of foreign energy 6519tce.



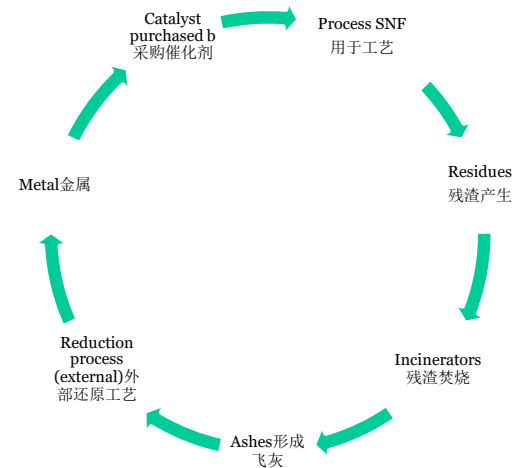
循环经济Circular economy

1. 废气处理后的含氨废水，加入硫酸，形成硫酸铵溶解，结晶后成为硫酸铵，是优良氮肥之一。

Treatment: ammonia-containing wastewater after exhaust gas treatment, added sulfuric acid, formed ammonium sulfate dissolved, crystallized into ammonium sulfate, is one of the excellent nitrogen fertilizer.

2. 氧化锡回收装置出来的废灰含氧化锡，可以交给下游的企业提炼出金属锡和催化剂，催化剂仍可以用于工艺使用

The waste ash from the tin oxide recovery device contains tin oxide, which can be handed over to downstream enterprises to extract the metal tin and catalyst, which can still be used in the process





ANTI-CORRUPTION 反贪腐

爱森公司商业道德规范 利益冲突



序言

- 爱森公司所有股东约定，爱森公司的所有员工必须保证我们每个员工行为举止在某种程度上都必须与这种承诺相符合。
 - 尽管支配商业行为的法律比较明确，但潜在的个人利益冲突总是存在的。
 - 所以关于可能引起争议的利益冲突建立相关的法规是规范章程中爱森公司的标准。
 - 爱森公司依靠个人的责任心来保证个人和集体的道德。
 - 此章程和适用于每个人员工及整个爱森集团公司的普遍原则。
 - 若某个员工有本章程未包括的问题，可直接向他的上级部门咨询。
 - 关于此主题的相关讨论都必须保密。
- 利益冲突和个人事务**
- 爱森公司希望每个员工忠于职守，一切从公司的利益出发。
 - 公司员工不得利用工作或服务之便为其亲属或亲戚谋取利益。
 - 公司资源不得用于任何与公司无关之处。
 - 为保护客户，原料供应商或其任何第三方的利益，或接受他人钱财或礼物。



爱森商业道德规范——利益冲突

-For our employees, everyone who joined the company need to sign the **SNF Company Business Ethics Rules** and do the work according to this rule.

对于我们的员工，每个人在入职时都会接受反贪腐的培训，并签名。

-SNF does its utmost to choose reliable and ethical commercial partners. Every supplier shall sign the **Charter on Suppliers' Ethics**.

对于我们的商业合作伙伴，我们会将反贪腐的要求传递给他们，以施加影响。



Zero anti-corruption issue recorded in Y2020

2020年“零”贪腐事件。

we pass URSA

URSA: Understanding Responsible Sourcing Audit

The terms of this audit include:

1. Business is conducted lawfully and with integrity
2. Work is conducted on the basis of freely agreed and documented terms of employment
3. All workers are treated equally and with respect and dignity
4. Work is conducted on a voluntary basis
5. All workers are of an appropriate age
6. All workers are paid fair wages
7. Working hours for all workers are reasonable
8. All workers are free to exercise their right to form and/or join trade unions or to refrain from doing so and to bargain collectively
9. All workers' health and safety are protected at work
10. All workers have access to fair procedures and remedies
11. Land rights of communities, including indigenous peoples, will be protected and promoted
12. Business is conducted in a manner which embraces sustainability and reduces environmental impact

The first point is: Business is conducted lawfully and with integrity



In the future 未来.....



- “Zero tolerance” to accident
- 事故零容忍
- We will keep expanding our plant
- 继续扩建工厂
- We will boost more OHS activities
- 推动更多的OHS 活动
- We will recruit more people
- 录用更多的员工