

## TAISHAN GROUP

TAIAN BOAO INTERNATIONAL TRADE CO., LTD.



POWERING THE WORLD WITH INNOVATIVE ENERGY SOLUTIONS

Tel: 0086-538-6619632

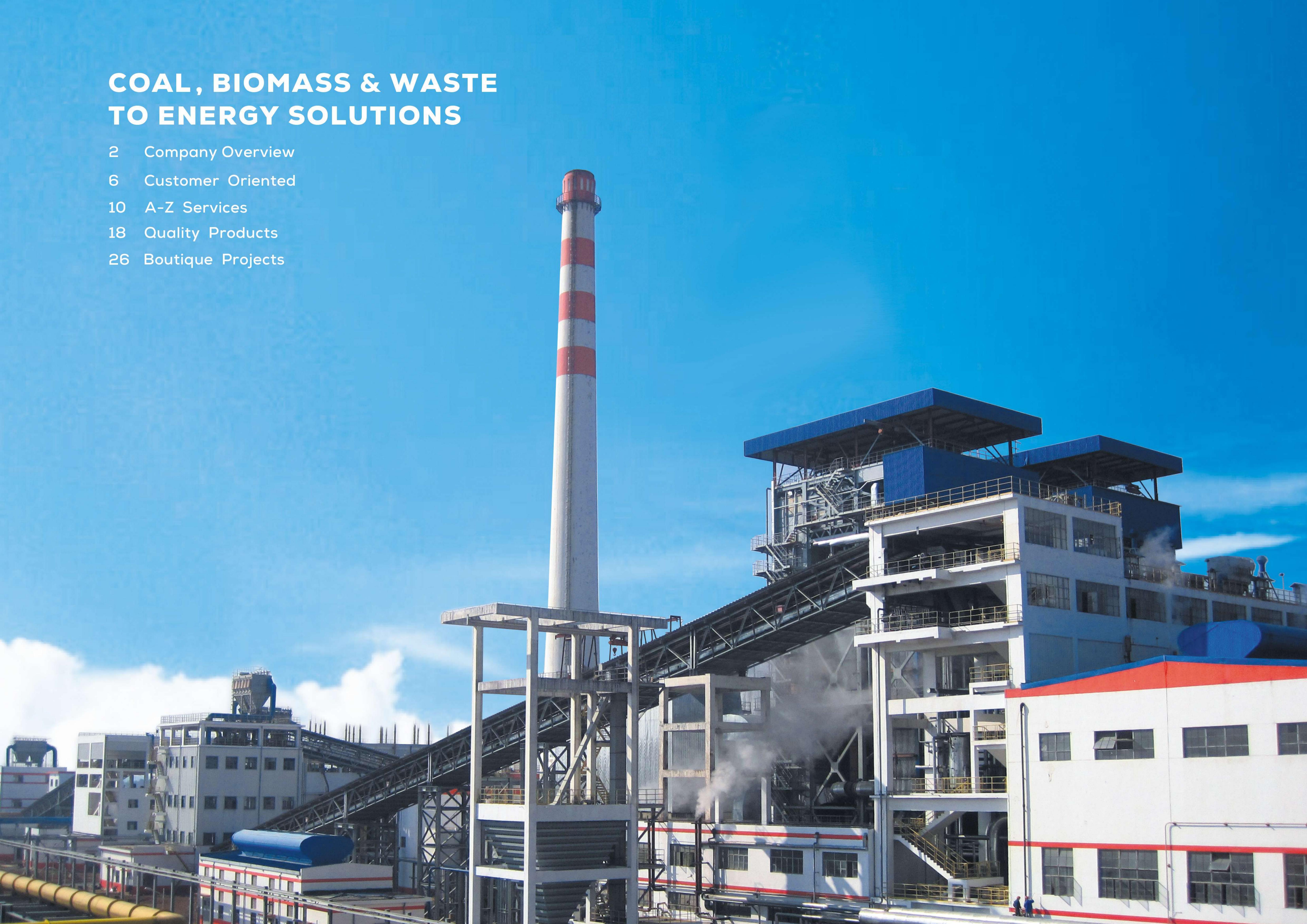
Web: www.coalbiomassboiler.com

Email: boao@taishanboao.com

Add: No.1169 Beitianmen Street,

High-tech Industrial Development Zone,

Tai 'an City, Shandong Province



## Company Introduction

1978

#### Independent Factory

1978 Named as "Taian City Boiler Factory."

#### Joint-Stock System Reform

1994 Joint-stock company renamed as "Taishan Group Co., Ltd.,

#### Merging And Reorganization, Privatization Transformation

2002 Core enterprise transformed to privatization.

2010

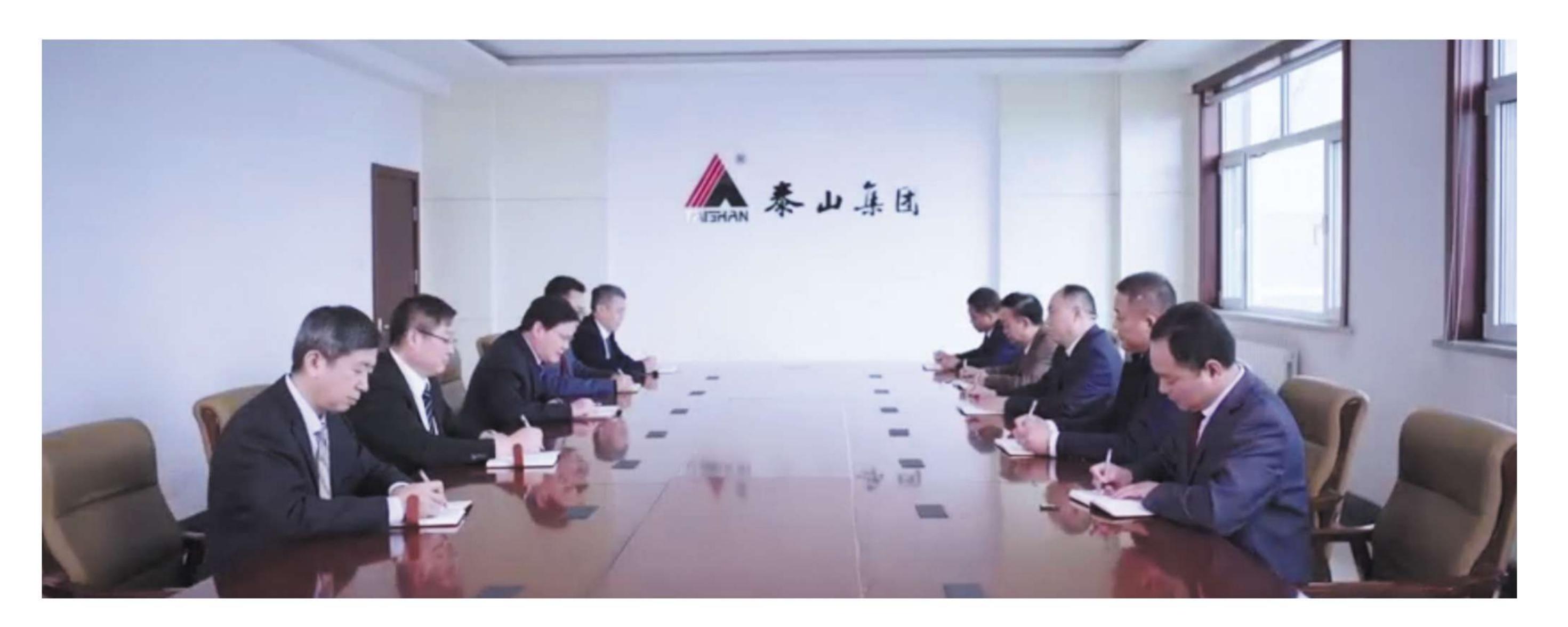
#### **Expanded Operation**

2006 Held Shandong Luneng Mount. Tai Electric Equipment Co., Ltd. 2010 Registered Weihai Shidao Heavy Industry Co., Ltd.

2017 Industrial Chain Extension 2017 Acquired Shandong Yinen 2017 Acquired Shandong Yineng Engineering Design Co., Ltd. 2020 Registered Taishan Combustion Control (Taian) Co., Ltd. 2023 Registered New Grid (Shandong) Energy Equipment Technology Co., Ltd.

## TAISHAN GROUP

## Since 1978



Founded in 1978, TaiShan Group has nearly 50 years of experience and know-how in combustion technology. With excellent performance and fabulous quality, TaiShan Group has become a well-known leading coal, biomass and waste to energy solution provider.

TaiShan Group's manufacturing facilities span over 378,000 square meters, with an annual turnover of over 500 million USD. Our design team comprises over 50 senior engineers and 80 chief designers. In the past decade, we have completed over 25 EPC projects and 500 boilers overseas. We are dedicated to delivering high-quality boilers and A-Z services, and have a professional engineering, fabrication, QC, erection, and aftersales team to ensure best customer experience.

## Taishan Background

TAISHAN History

Year

Taishan Group has three sectors: boiler, pressure vessel and transformer

Workshop

378,000

Square Meter

Boiler workshop covers an area of 56,000 square meters.

Sales

USD Million

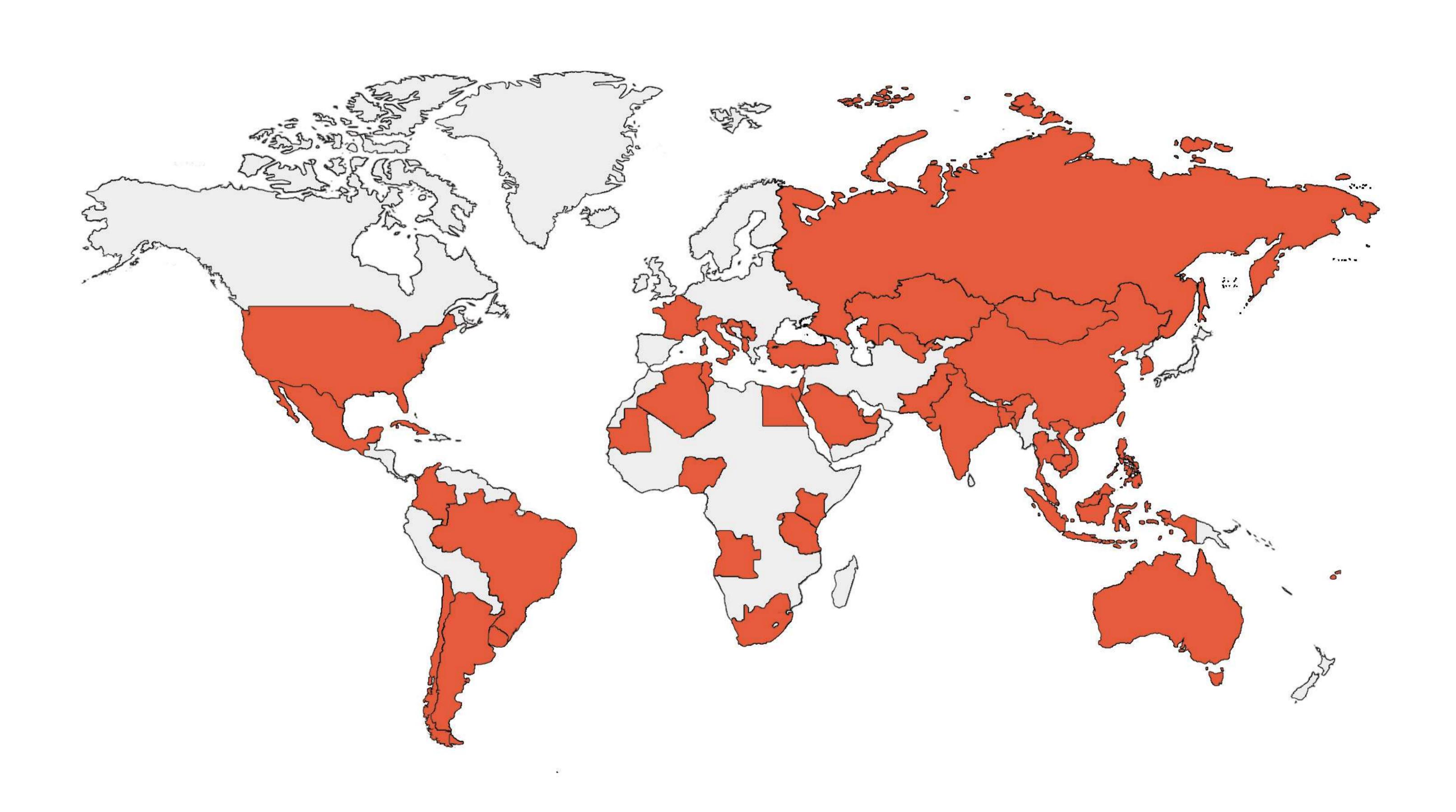
Boiler annual sales revenue is nearly 200 million USD.

Scale

50000

Employee

Boiler sector has more than 1000 staffs.



## INTERNATIONAL MARKET

Market – Russia, Brazil, Mexico, Mongolia, Turkey, Tanzania, Cambodia, Vietnam, Indonesia, Malaysia, Singapore, Thailand, Algeria, Philippines, South Africa, Kenya, Egypt, South Korea, Saudi Arabia, Pakistan, Bangladesh, etc.

TaiShan Group has a strong track record of successful completion over 25 EPC projects and 500 boilers overseas in the past decade.

Founded in 1978, TaiShan Group has nearly 50 years of experience and know-how in combustion technology. TaiShan Group has become a well-known leading

coal, biomass and waste to energy

# Socius Sito MER Taishan Group's manufacturing CORIENTED

square meters, with an annual turnover of over 500 million USD Our design team comprises over 50 senior engineers and 80 chief designers.



Three sets 75t/h Coal CFB Boiler for 30MW CHP Unit

## Customer Oriented

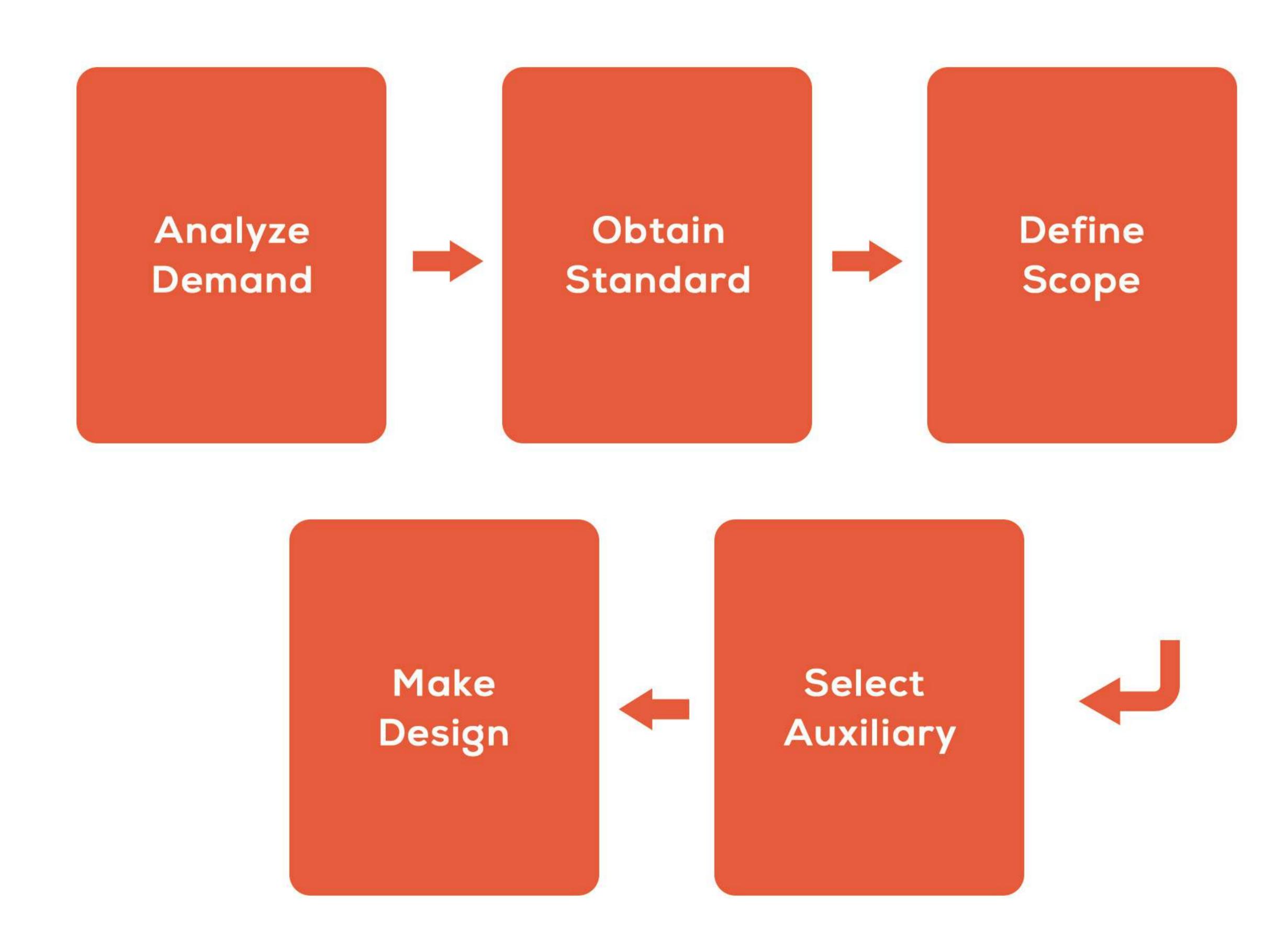


## Tailoring Plant Design Proposals

At TaiShan Group, we take pride in tailoring preliminary boiler plant design proposals based on client's specific demands, and we have the expertise and resources to deliver customized solutions for both new and existing boiler plants.

## Deliver Customized Solutions

- Analyze client's steam/electricity demand.
- Obtain boiler capacity, steam pressure, fuel & design standard.
- Define the exact scope of supply.
- Select auxiliary equipment following altitude, water quality, emission & safety rules.
- Make preliminary boiler plant design following existing site layout.

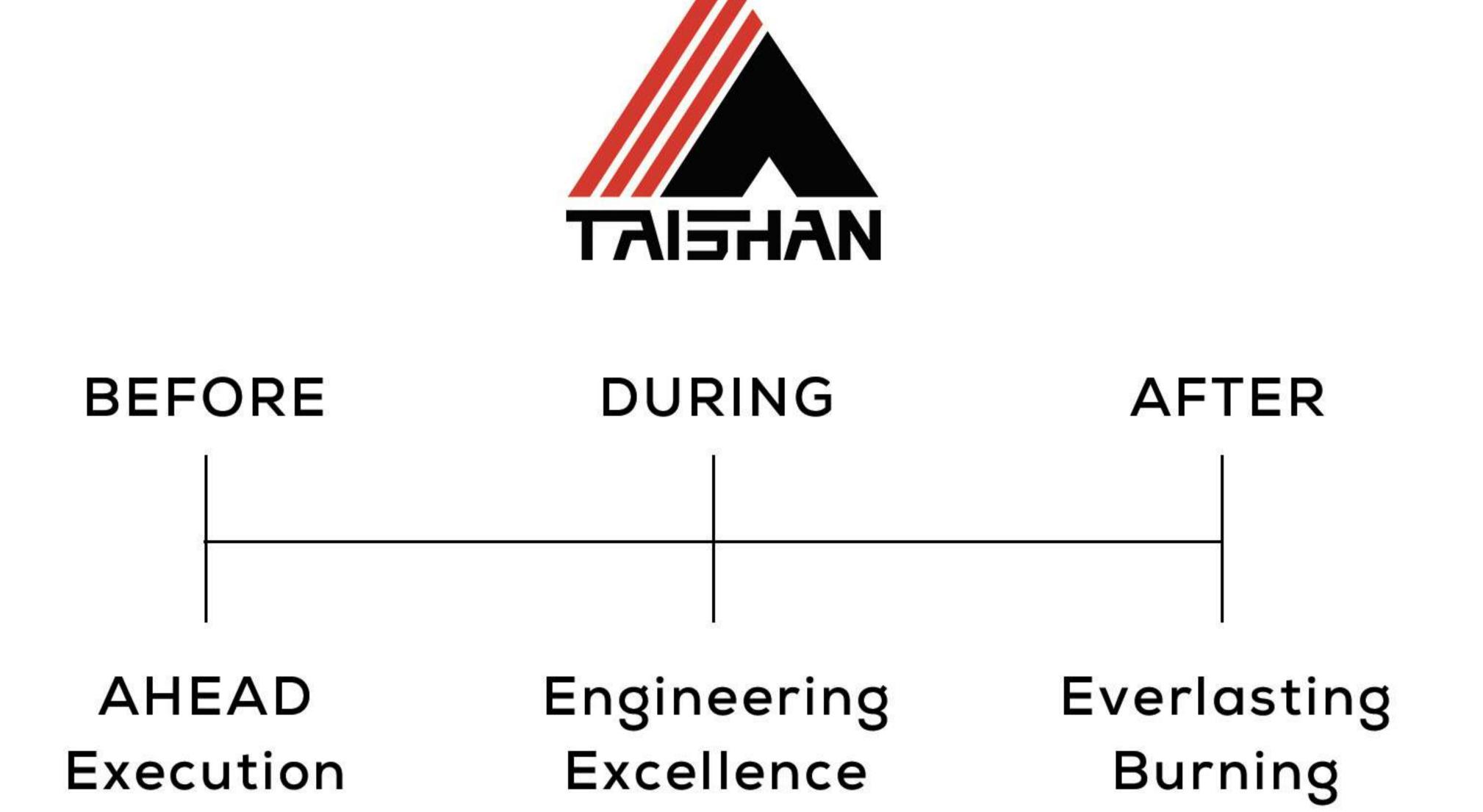


SERVICES

square meters, with an annual turnover of over 500 million USD. Our design team comprises over 50 senior engineers and 80 chief designers.



Two sets 150t/h Corn Stalk CFB Boiler for 50MW CHP Unit



## Covering Entire Project Lifecycle

- We improve profitability and minimize risk for clients with AHEAD execution model.
- We create value for clients with our engineering excellence.
- We provide extensive support and service with our strong presence.



One set 38t/h Palm Fiber Reciprocating Grate Boiler

## BEFORE



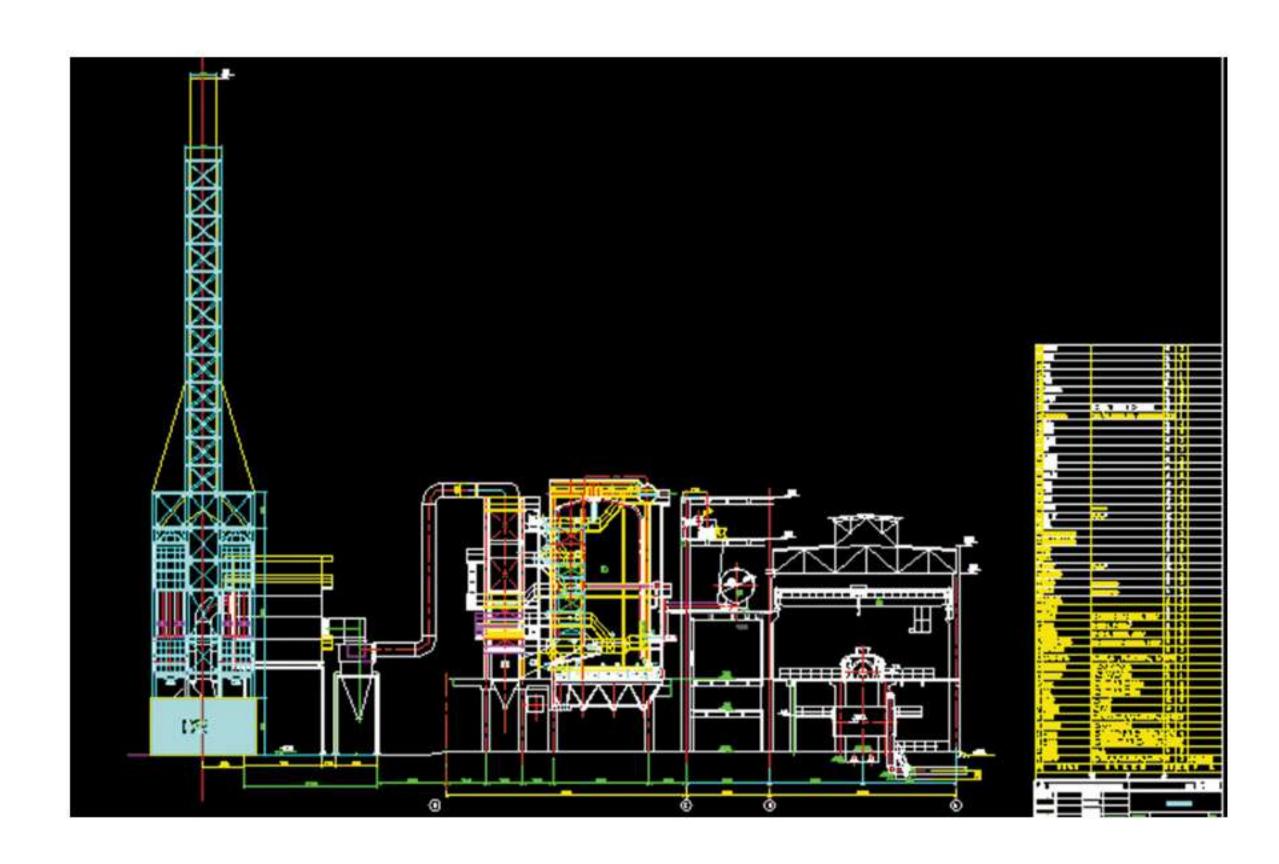
#### NEED

We figure out your energy needs.



## EXPERIENCE

We share our successful experience.



## DESIGN

We make preliminary boiler plant design.

## DURING

01

Detailed optimal engineering by our design institute.

02

Impeccable
manufacturing &
global procurement
ensure stable quality.

03

Dynamic milestone tracking throughout the whole process.



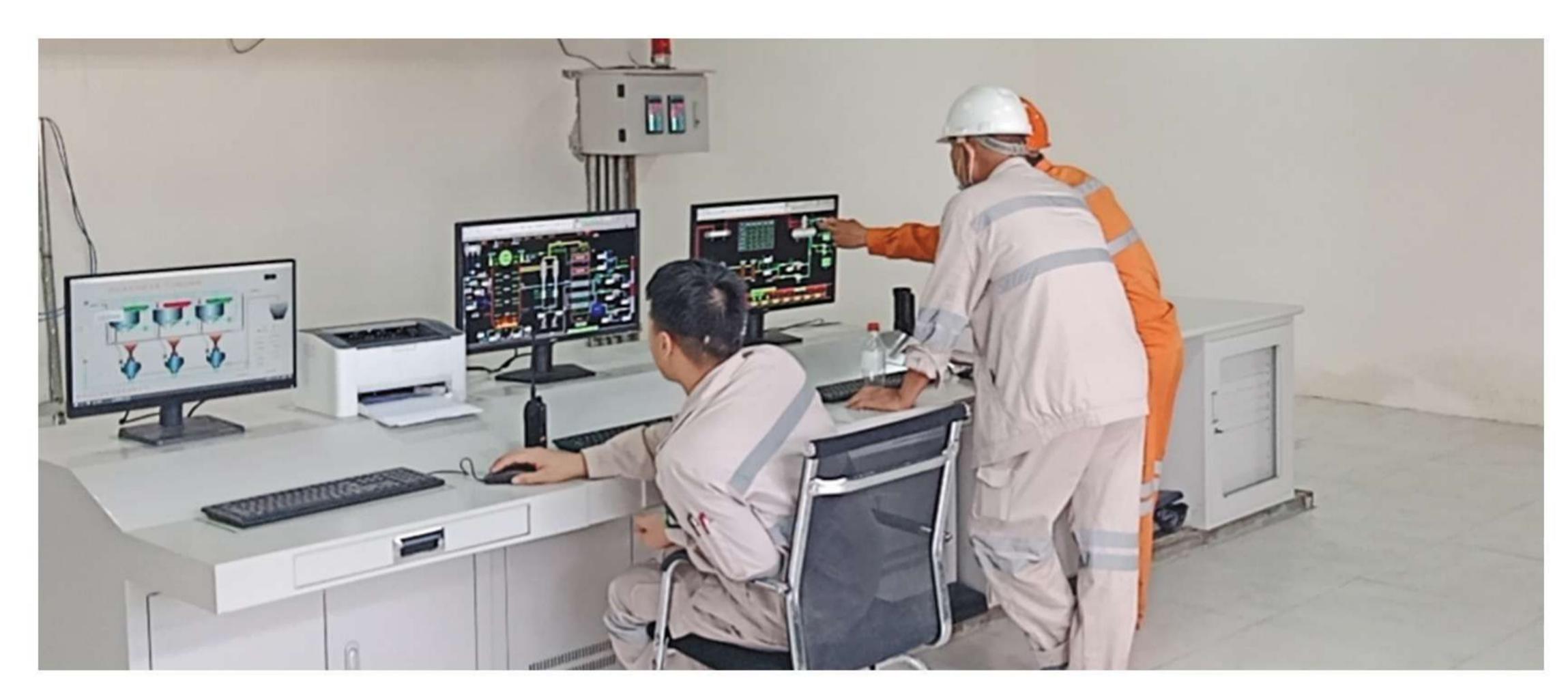
Shandong Yineng Engineering Design

Boiler technology Development Center



## AFTER





- Installation supervision and commission by experienced engineer.
- Managed operation and maintenance service.
- Rapid spare parts supply by virtue of client profile database.
- Remote operation guidance by virtue of cloud platform.
- Timely after-sales service by local professional partner.

## Experienced Services Team



Hao Qun

Senior Service Engineer

- Chief Technician of Shandong Province (Chief Technician of Masonry)
- National Senior Technician
- Power Engineering Engineer
- Evaluator for National
   Vocational Skills Appraisal
- Taian Municipal Model Worker

Founded in 1978, TaiShan Group has nearly 50 years of experience and know-how in combustion technology. TaiShan Group has become a well-known leading

coal, biomass and waste to energy

# solut Q.U.A.LITY Taishan Group's manufacturing PRODUCTS

square meters, with an annual turnover of over 500 million USD Our design team comprises over 50 senior engineers and 80 chief designers.



One set 600TPD Municipal Solid Waste (MSW) Incinerator

## Highly Skilled Design Team



## Su Menghuai

National CFB Boiler Design Expert.

- National CFB boiler design expert.
- Led the design of China's first 35TPH CFB boiler, marking a milestone in China CFB boiler development.
- Committed to designing
   15TPH-300TPH CFB boilers
   throughout his 40 years
   experience.

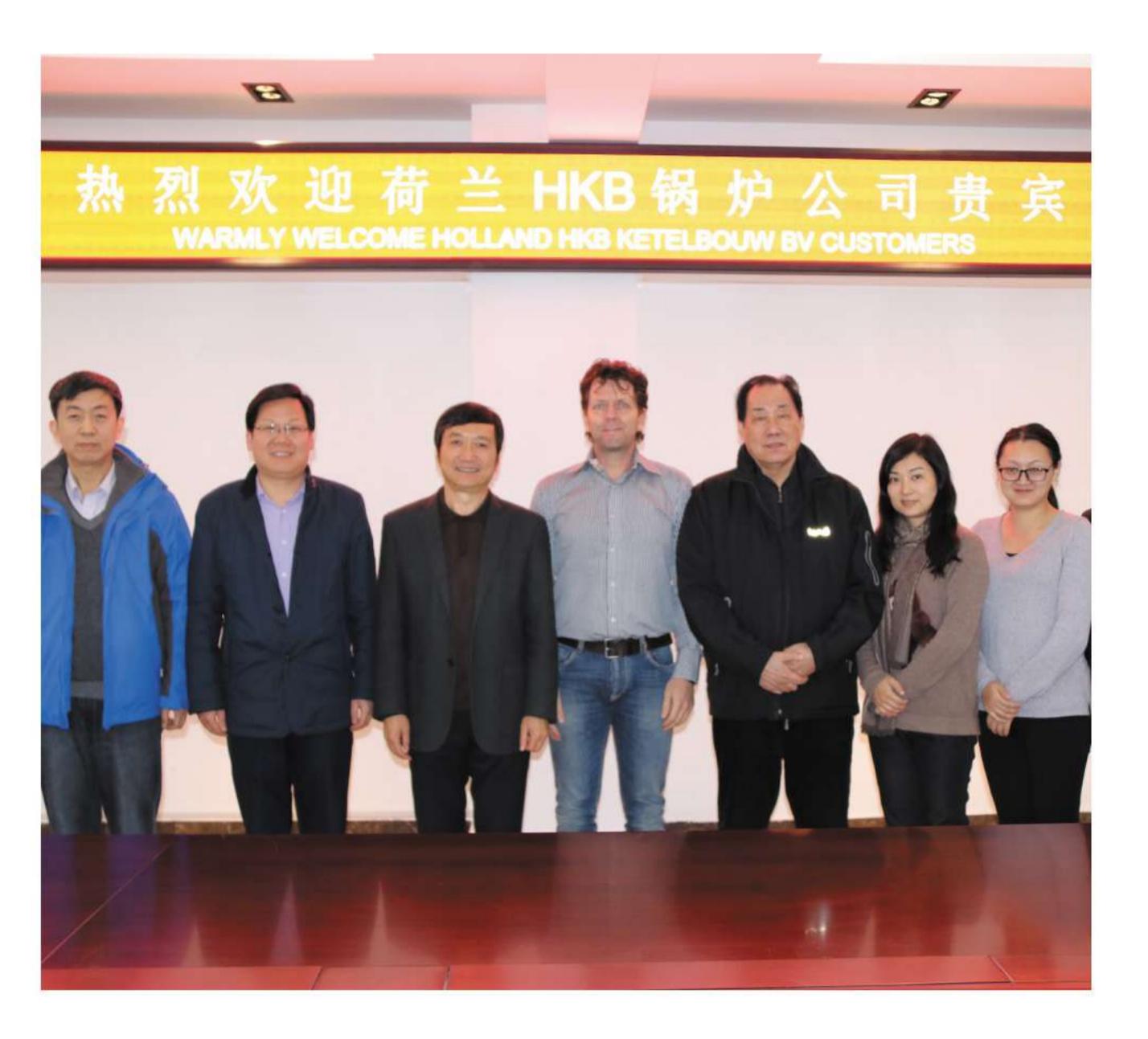
## International Technical Exchange and Cooperation



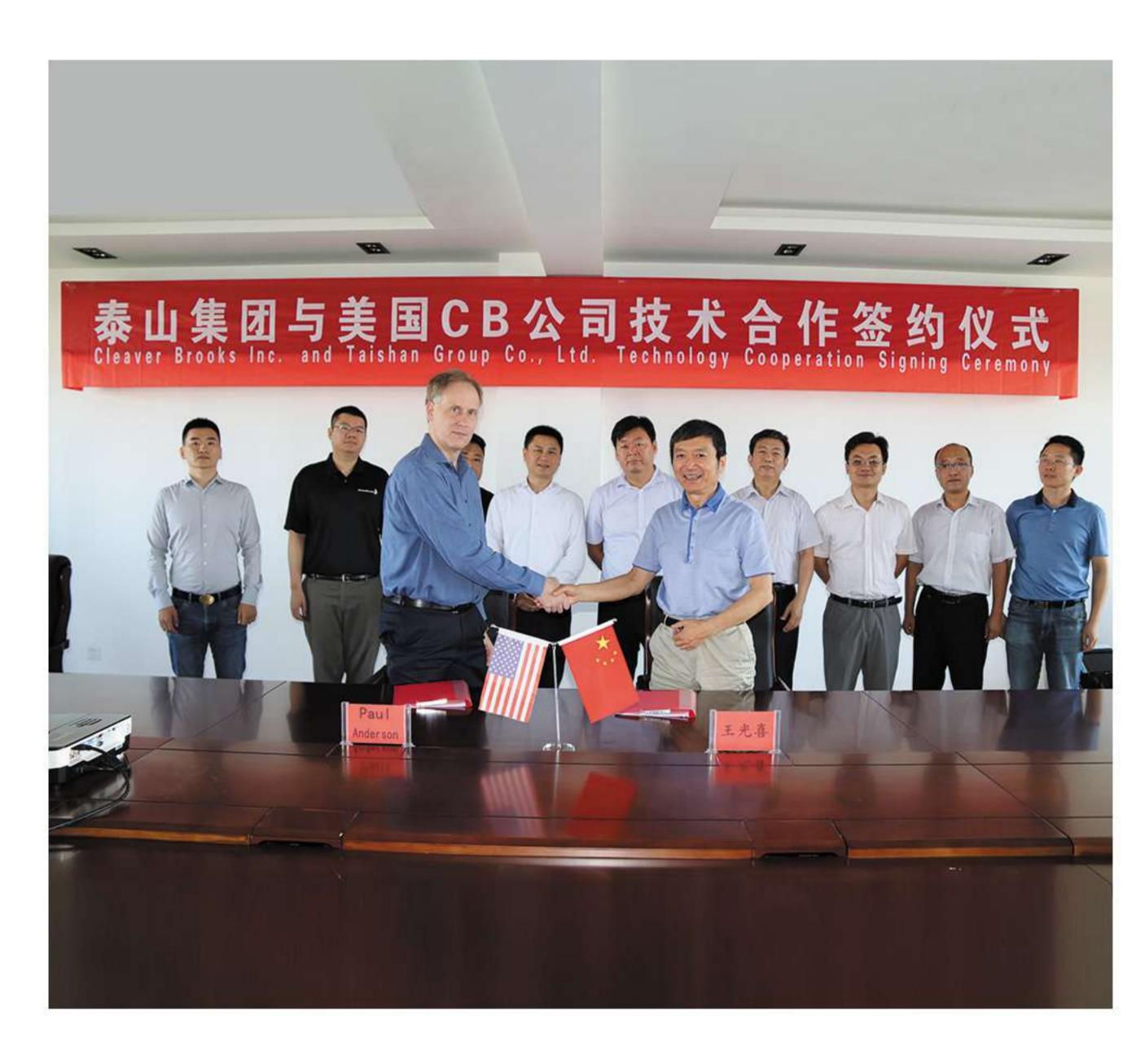
Technical Cooperation with Novitec Company in Finland



Technical Cooperation with TTS GROUP in the Czech Republic

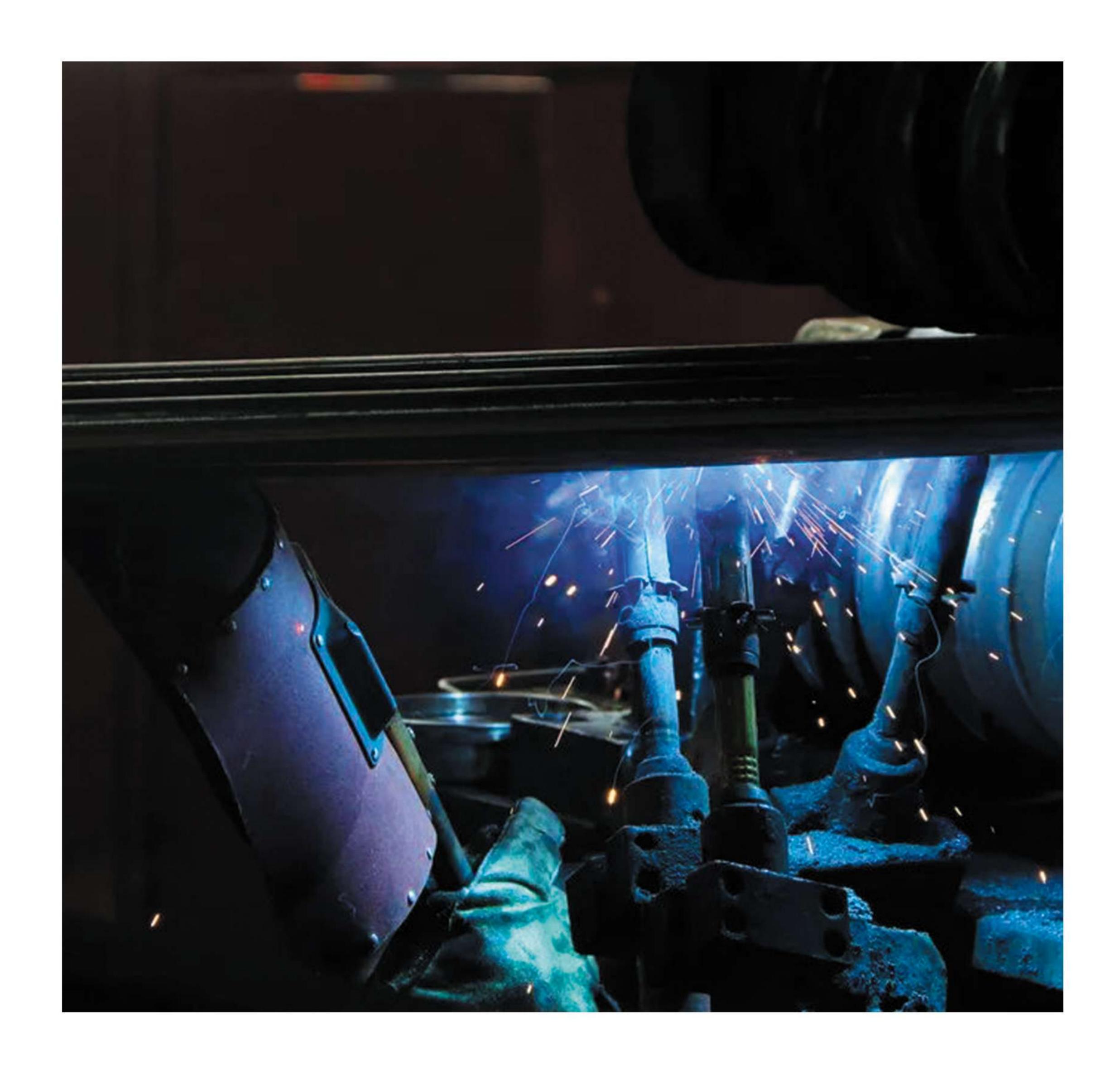


Technical Cooperation with HKB Boiler Company in the Netherlands



Technical Cooperation with Cleaver Brooks Inc. in the United States

## Quality Products



## Commitment To Quality And Safety

As an energy solution provider, we are not only engineering service provider, but also professional manufacturer of industrial boilers, power plant boilers & pressure vessels. Our commitment to quality and safety is evident in our Quality Improvement & Innovation Program, which has helped us achieve nearly zero quality defect, and our Safety Motivation Program, which ensures safety as top priority in our daily operation.

## Excellent Production Conditions



Workshop



Submerged arc welder



Laser cutting machine

## Glories & Certificates

We use ISO9001, ISO14001 & ISO45001 standard as a backbone in our quality, environment, occupation health & safety management system.

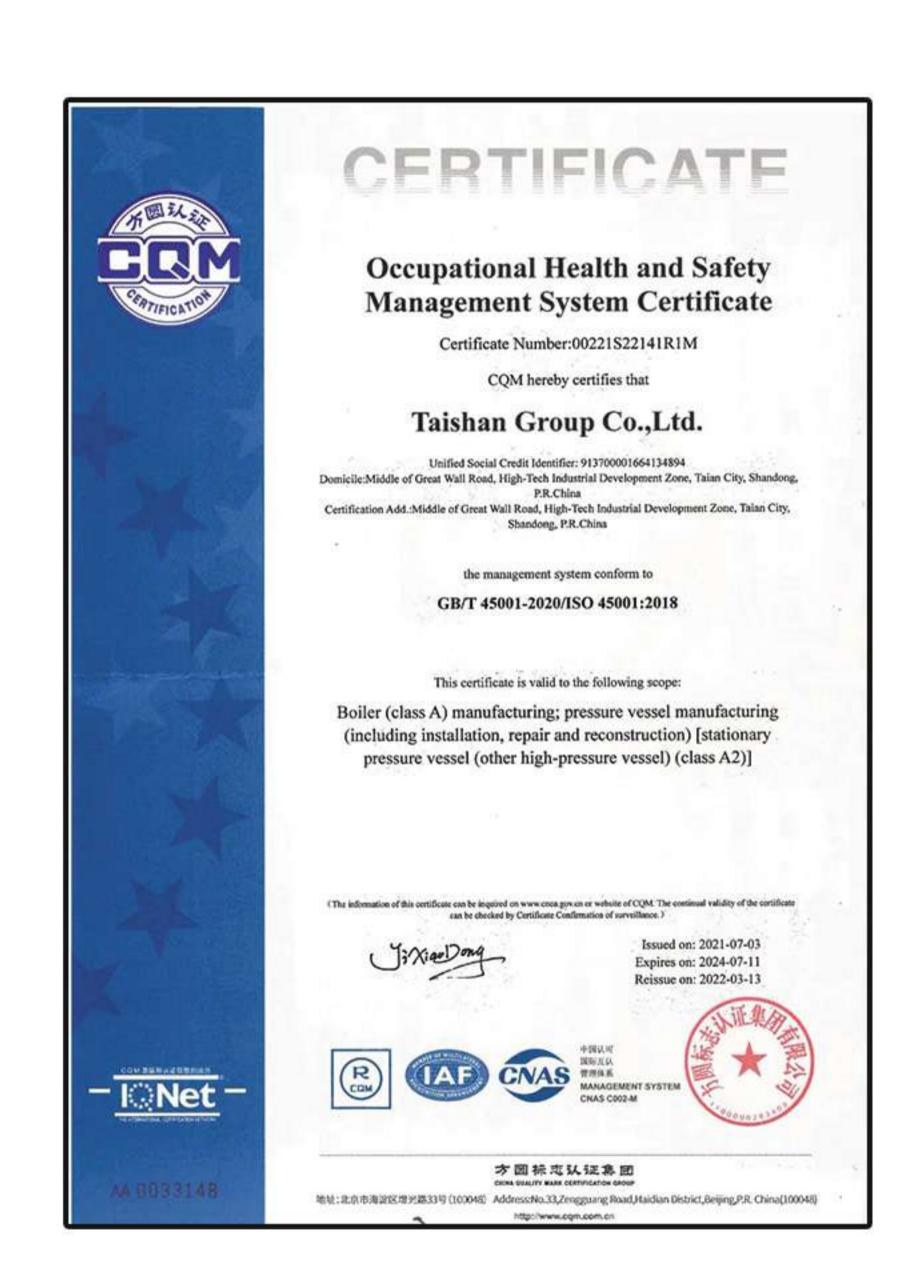
Quality management system certification



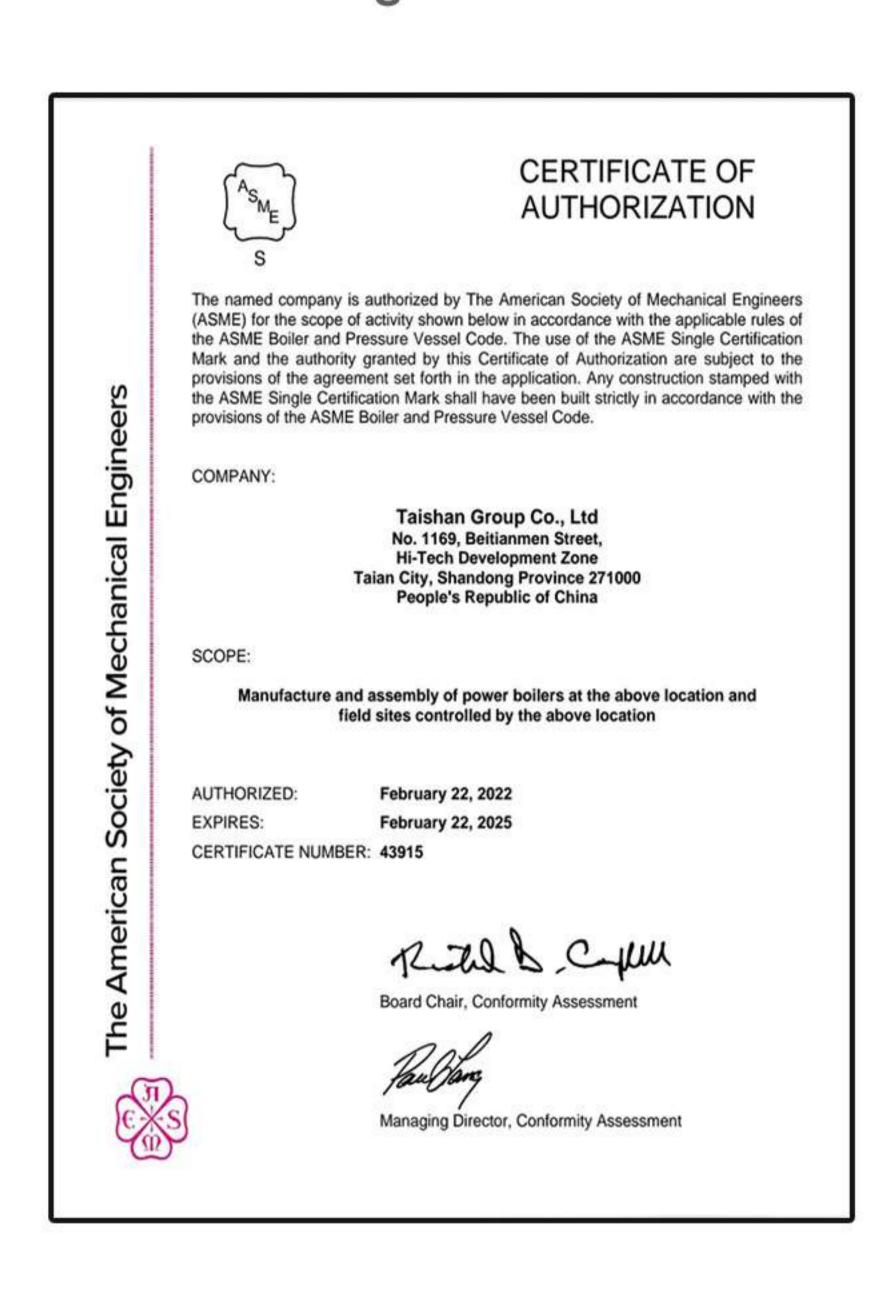
Environmental management system certification



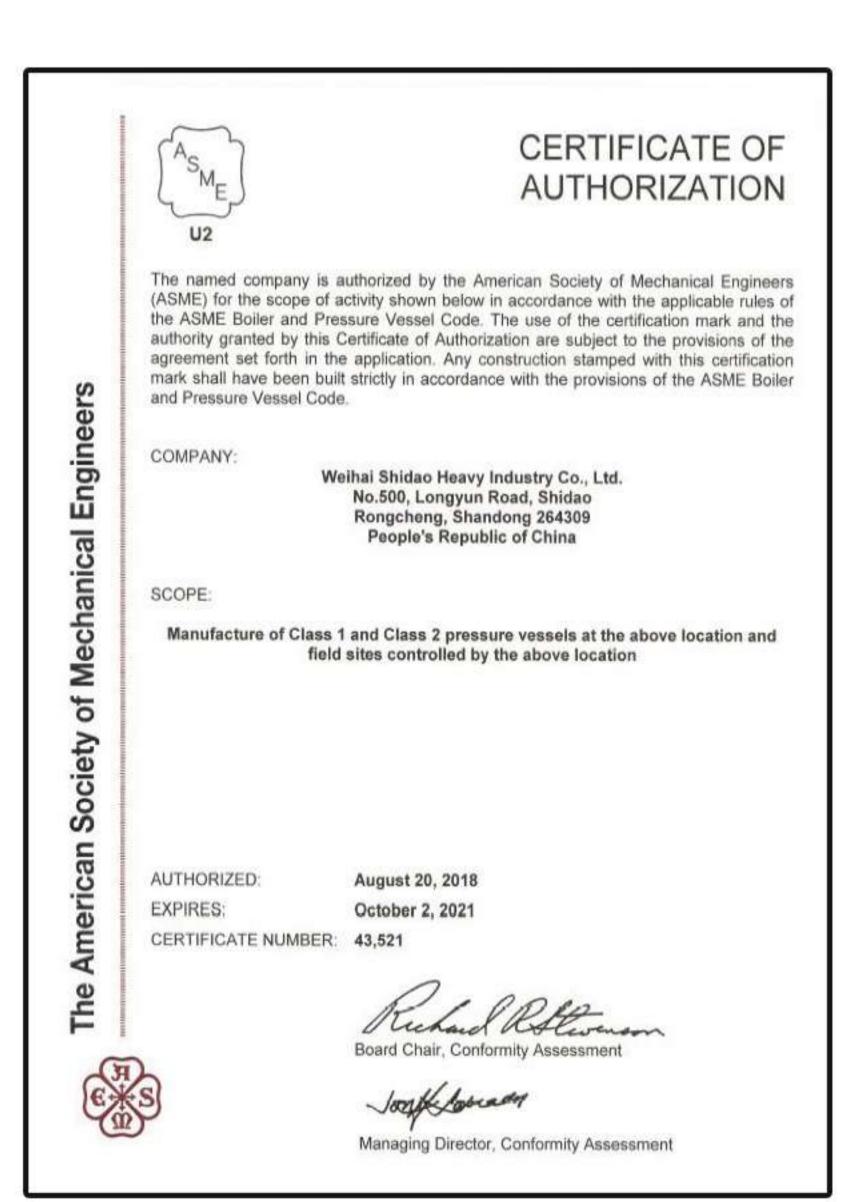
Occupational health and safety management system certification



The American Society of Mechanical Engineers



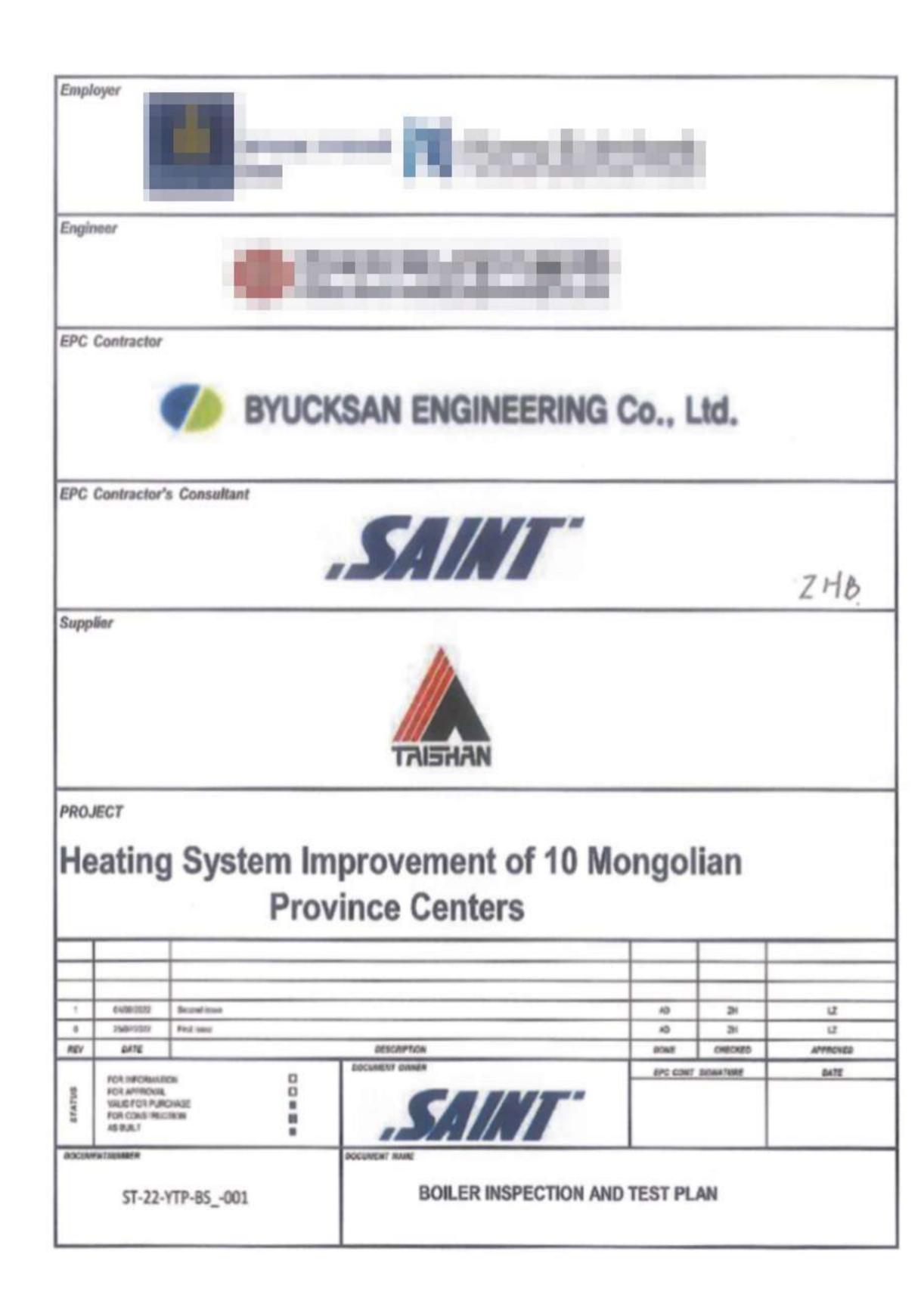
The American Society of Mechanical Engineers



Conformité Européene



#### ITP for CFBC Boiler



			INSPECTION	I AND TEST PLAN 检验和测试计	M						
		Component 2:	FAN (FD FAN, ID F	FAN, ROOTS FAN) 风机 (鼓风)	机、引风机、罗茨风机)						
imployer:	Ministry of Energy of Mo		Project name:	Heating System Improvement		ters					
EPC Contractor: Byucksan Engineering Co., Ltd. Ord		Order No.	PO-ME-001 (Boiler Package)								
Consultant	Saint Engineering		Supplier:	Taishan Group Co., Ltd.				leanettee			
	Components & Operations 部件名称	Check/ Inspection设作内	容		Format Of Record試象記录文件名称	Place/Time of inspection投資地点	Inspection Agency 松松 机构				
52007			Scope較受范陽、 数量、抽粒比例	Ref.			Third-party /				
S. N.		Characteristics 类别、粒验项目、参数等		Documents参考文件标准,以 及本项目的参数标准			Supplier 供給資	Consultant 第三方公司 息包方順同	Engineer / Employer 设计方/全主		
		材料质量证明书									
	WZ	Certificate of raw material	17,000	GB/T1591 图版要求 Drawing	构验记录及报告 Inspection record and report	风机 家 Fan supplier	VR	R	(3000		
2-1.	終子 Rotor	尺寸微矩 Dimension Inspection	100%						R		
	13.0	选平 测试 Dynamic balance test	_								
		无视检测 NDT 材料质量证明书									
2020-1	概念 Housing	作种知识如明 p Certificate of raw material	100%	GB/T3274 图纸要求 Drawing	检验记录及报告 Inspection record and report	风机 家 Fan supplier	VR	R	R		
2-2.		尺寸微绘 Dimension Inspection									
		无规检测 NDT	5%	1							
		蓋底电阻 DC resistance	100%		1	风机 家 Fan supplier					
	电机 Motor	地球电阻 Insulation resistance							R		
2-3.		电压试验 Voltage test		G8755-87	检验报告		VR	R			
8.00		空载试验 No-load test		5010/01	Inspection Report						
		連絡试验 Looked rotor test									
24.	Nink Bearing	農功測量 Measurement of vibration 尺寸校验 Dimension Inspection	100%		檢验合學证明文件		VR	R	R		
0264		尺寸检验 Dimension Inspection			Inspection Certificate 检验合格证明文件	1	0.0000				
2-5.	技术服 Bearing Box	水压测试 Hydro test	100%		Inspection Certificate		VIR	R	R		
2-6.	清音器 Silencer	村辰华	100%		检验合格证明文件		VR	R	R		
**		尺寸检验 Dimension Inspection	100.00	Inspection Certificate	6155	.0.					
		至配 Assembly			Maria	风机厂家 Fan supplier					
2-7.	發配 Assembly	焊缝外程质量检查 Weld appearance quality inspection	100%	图纸要求 Drawing	稅報记录 Inspection record	гатырры	R	R	R		
2-8.	性能測试	风压风量测试	Spot check	设计参数	检验记录		R	R	R		
(1.0)	Performance test 油漆收量 Painting	Air pressure and air flow test		Design data	Inspection record			-	1000		
2-9.	inspection	達服斯度 Paint thickness	100%	00-SPE-0002-2	检验记录 Inspection record		R	R	R		
2-10.	最供制造文件审核 Final Documentation	包裝投號和最終制造文件申核Packing Inspection & Final Documentation	100%	發着率、过程报告 Packing List,Manufacturing Reports	最终检验和测试报告Final Inspection & Test Report	风机厂家 Fan supplier	R	R	R		
				Legends:							
V = Witness Poi	nt	A notified inspection point in the process of	cle beyond which w	ork may proceed if Client or Qua	sity Management personnel d	o not attend is require	d				
		见证点,如果客户或者规量管理人员没能多	transfer alternation	HLVOUR							
i = Hold Point		A notified inspection point in the process cycle beyond which work shall NOT proceed unless attended by the Client or waived in writing									
		批製点。如果客户或者质量管理人员没懂多	加的话,生产不可以	(単线进行							
S = Surveillance	g o	The continuing evaluation by Client or Quality Management personnel									
		监督。客户或者质量管理人员持续的监管评估质量									
/ = Verify		A visual or dimensional check by production, Quality Management personnel or Client									
000000000000000000000000000000000000000		証实。生产人员、客户或者叛量管理人员目測或者是測量产品尺寸									
= Certificate R	equired	Document / MDR to be supplied to Client									
	- 1	<b>资质证明,需要是供给客户相关的资质文件</b>									
R = Review		A check of documents and or product against standard requirements, drawing specs etc.									
		审核、根据标准或者预纸的要求检查文件或	会产品								

,		N	SPECTION AND TE	EST PLAN 检查影響此計划							
			Component	1: BOLER RIP							
mployer: Ministry of Energy of Mongolia			Project name:	Heating System Improvement of 10 8	Nongolian Province C	Centers					
EPC Contractor: Byuckson Engineering Co., Ltd.		Order No.	PO-ME-001 (Boiler Package)								
Consultant: Saint Engineering		Supplier:	Taishan Group Co., Ltd.								
		Check/ Inspection社会行名					Inspection Agency				
	Components &			Ref. Documents	Format Of Special	Place/Time of	根保税用		_		
S.N.	Operations	Characteristics	Scope #9/EN	参考文件/裕准。以及本项目的参数标	Format Of Record 试验记录文件名称	inspection	Supplier	Third-party / Consultant	Engir		
	8886	类别、检验项目、参数等	表章- 抽粉比何	设计领统选用材料的材料和推		RRMI	REA	第三方会部	Emp 设计7		
			15.00		WHIII CO.			华包古城村	10,017		
		矩形對抗量逆明书 Certificate of ray material	1次模 once per batch	Standard specified in drawing	單裡稱入库車 Warehouse-in	類风遊供表面	R	R	1		
				學提工艺機物、類提工艺術記、算工 發統、王統检測的序及人员要請	0.0000000						
		粉证例序文件 Verification of Procedure	100%	WPS & POR, WPQ&WOPQ, NOE	WPS & PQR, WPG&WOPQ, NOE		R	R			
	AVE			procedure and personnel qualification							
1-7.	MIKE Air & Gas Duct	尺寸投發 Dimension Inspection		设计简型Drawing, NB/T47043-2014			W	W			
		包建件程 Visual inspection of seam 建設省支援投资 Surface treatment before painting	100%	NB/T47943-2014 NB/T47055-2017	RRICE Inspection record		W	W			
		接貨電源 Painting inspection		NB/T47055-2017			W	W			
		包围投资和最终制造文件审视Packing Inspection &		我都多、过程服务 Packing List.	能件检验申提式报告 Final inspection &		R	R			
		Final Documentation		Menufacturing Reports	Test Report		~	- "			
	ff iff Piping Speel	Water Street Continues of the material	1次/後	设计器低连用材料的材料标准	原材料入库率	領の丁重	R	R			
		郑利科授登证明书 Certificate of new material	once per batch	Standard specified in drawing	Warehouse-in record						
		验证程序文件 Verification of Procedure	100%	等接工艺模性。每接工艺计记、算工 管理。 王蟒检测程序是人员管理	OTTO STATE OF THE				Г		
				WPS & PQR, WPQ&WOPQ, NOE	WPS & PQR, WPQ&WOPQ, NDE		R	R			
14.				procedure and personnel	mrusmoru, nue						
14.		尺寸松轮 Dimension Inspection 位数升級 Visual Inspection of seam 油漆蛋素與处理 Surface treatment before painting		gualification Bt 设计假把Drawing NB/T47043-2014	Boiler supplier	W	W				
			100%	NB/T47043-2014 NB/T47055-2017	根据记录 Inspection record	n record I Mutal is section & Report	W	W			
		接貨收益 Painting Inspection		NB/147055-2017			W	W			
		包里松松和最终制造文件审核Packing Inspection &		質能學、过程接货 Packing List.	提供信息年期式报告 Final inspection &		R	8	8		
		Final Documentation		Manufacturing Reports	Test Report		. "				
		放射形成學記憶各 Certificate of raw material	130/8E once per batch	设计图优生现时料的时料标准 Standard specified in drawing	照解特人库里 Warehouse-in	事業与供養資	R	R			
			once per seion	母接工艺规程,母接工艺讲证。母工					Н		
		股证积于文件 Verification of Procedure	100%	贷兵。无统检测程序及人员变统 WPS & POR, WPQ&WOPQ, NOE	WPS & POR		R	R			
	BT Expansion Joint	RELEATED VEHICLEON OF PROCESURE		procedure and personnel	WPQBWOPQ, NOE						
14.		尺寸检验 Dimension Inspection		gualification 设计推进Drawing NB/T47043-2014		Expansion Joint	W	R			
		の後升級 Visual inspection of seam	100%	NB/T47043-2014	粉除记录	源 B n &	W	W			
		推译报表面处理 Surface treatment before painting 推译电波 Painting Inspection		NB/T47055-2017 NB/T47055-2017	Inspection record		W	W	H		
		包含检验和最终制造文件中积Packing Inspection &		国籍年、过程报告 Packing List.	最终投资申请式报告		100				
		Final Documentation		Manufacturing Reports	Final Inspection & Test Report		R	R			
*Ad/*89/6	(Ex-vork inspection	1)									
		批广被接近相 Quality certificate of boiler	100%	排售要求 Drawing	first (Cit) Inspection record		Х	R			
			Le	gends:	mayoure: rouns						
W = Witness Poi	int	A notified inspection point in the process cycle bey			nent personnel do not	attend is require	đ				
0.200 (1.000 (0.0		见还在,如果客户或者乘量管理人员改量参加的进。	100								
H = Hold Point		A notified inspection point in the process cycle beyond which work shall NOT proceed unless aftended by the Client or waived in writing									
		控制点。如果客户或者或量管理人员改能参加的话,生产不可以推搡进行									
S = Surveillance		The continuing evaluation by Client or Quality Many									
		最赘。客户或者乘量管理人员持续的监督评位乘量									
/ = Verify		Quality Management personnel or Client									
		证实。生产人员、客户或者纸架管理人员目開或者是	開発产品だけ								
X = Certificate R	lequired	Document / MDR to be supplied to Client									
		<b>也有证明。需要提供出生户相关的使用文件</b>									
R = Review		A check of documents and or product against stand	sard requirements, o	traving specs etc.							
		审核、模量标准或者图纸的要求检查文件或者产品									

		N		1: BOILER GLEP						
mployer:	Ministry of Energy of	Monoria	Project name:		Annother Persince C	enters				
PC Contractor:	Byuckson Engineerin		Order No.	Heating System Improvement of 10 Mongolian Province Centers PO-ME-001 (Soiler Package)						
onsultant.	Saint Engineering		Supplier:	Teinhan Group Co., Ltd.						
o management		Check/ Inspectionity #16/69				Inspection Agency				
5. N.	Components &	Create Improvedentity	Scope 能能查提 查是,抽除定例	Ref. Documents	Format Of Record	Place/Time of inspection 83.50.4t.		抱我机构	_	
	Operations 30(F-3).80	Characteristics 素別、粒態項目、多数等		参与文件制度。以及本项目的参数制 度	战役纪录文件名称		Supplier (RICN)	Third-party / Consultant 第三方公司/ 章在方開州	Enginee Employe 设计力/8	
	MM Drum	源和新教验证明书 Certificate of raw material	1/t/dt once per batch	设计图形成构材料的4ff标准 Standard specified in drawing 学型工艺研究、导致工艺研究、每工	Warehouse-in except		R	R	R	
		NoE程序文件 Verification of Procedure	100%	受损。无损抢押和产及人员变换 WRS A DOR WROAWARD NOT	WPS & PQR, WPG&WOPQ, NOE		R	R	R	
		新头冠轴底形 Head forming 病壳卷剪 Shell section rolling	100%	ibitilité Drawing GB/T16507-2013			w	WV	R	
1-1.		報報法、非可識物金 Visual inspection of longitudinal and cincumferential seem		母推工艺文券 Welding document	Inspection record	MPCR	w	WR	R	
11.77		成环母母针性的第 RT for longitudinal and circumferential seam		设计指统 Drawing, NB/T47013-2015		Boiler supplier	w	WR	R	
		担性を見る inspect the layout before drilling hole 参照/要素を経済器 Visual Inspection of nozzle to		abiritest Drawing			W	WV	R	
		shell weld		统计照纸 Drawing			W	W	R	
		尺寸包包 Dimension Inspection 化压试验 Hydrostatic test		进计照统 Drawing 进计照统 Drawing			w	W	R W	
		施運電線 Painting Inspection		NB/T47055-2017			W	W	R	
		包括投版印刷符制造文件中包Packing Inspection & Final Documentation		製菓車、対象技術 Packing List. Manufacturing Reports	British in Wilflatti in Final Inspection & Test Report		R	R	R	
12.	& III Header	遊針料面登記電包 Certificate of raw material	1次度 once per batch	記分別的成果材料的材料を集 Standard specified in drawing 単毎工工規程、取扱工工研究、和工	便和料入水卓 Wiarehouse-in record	MAPIT RE Builter supplier	R	R	R	
		验证程序文件 Verification of Procedure	100%	<b>市场。王桥松湖和</b> 伊及人西南州	WPS & PGR, WPG&WOPQ, NDE		R	R	R	
		集產業身所遵保信Visual imspection of circumferential seam		每接工艺文册 Welding document			w	WR	R	
		其标值和性检测 RT for circumferential seam	100%	设计报纸 Drawing NB/T47013-2015 设计报纸 Drawing 设计报纸 Drawing			W	WR	R	
		だす的位 Dimension Inspection 水圧試験 Hydrostatic fest					W	H	R	
		無事電波 Painting inspection		NB/T47055-2017			W	W	R	
		化磁轮放射器/BBIG 文件单包Packing Inspection & Final Documentation		SER 6. 1587/8 R Packing List. Manufacturing Reports	Final Inspection & Test Report 服計算人成果		R	R	R	
1-2.	63988 Water wall	遊析形態整証明刊 Certificate of rev material	1/0/80 once per batch	设计规范选用材料的材料标准 Standard specified in drawing 即版工艺研究、即版工艺研究、和工	Warehouse-in record	概件广定 Dater supplier	R	R	R	
		私近程が文章 Verification of Procedure	100%	供食。无烦检解和疗法人价强性 MOS # 0000 WROSEWOOD NOT	WPS & PQR, WPG&WOPQ, NDE		R	R	Я	
		學元素冷學符號 Unit water wall welding 哲子环磷铝铝 Tube circumferential seam	100%	存在工艺文件 Welding document 经独工艺文件 Welding document			W	WIR	R	
		音序尺寸 Tube panel size		IR:11 III IED rawing, GB/T16507-2013	MrMrIZ-Mr Inspection record		W	WV	R	
		#LIS IESE Hydrostatic test		战計照然 Drawing			W	H	W	
		施多恒度 Painting Inspection		NB/T47055-Q017	BRESTRAS		W	W	R	
		包装检验形要性制造文件证明Packing Inspection & Final Documentation		南部市、対形形向 Packing List。 Manufacturing Reports	Final Inspection & Test Report 超起转入推集		R	R	R	
		應材料底量延衛书 Certificate of new material	130/46 once per ballch	设计银匠选取器等的材料构造 Standard specified in drawing 即版工艺规程、即版工艺研究,即工	Warehouse-in record		R	R	R	
	包括器 Economizer	验证程序文件 Verification of Procedure	100%	<b>资质,无器检测和产及人员贷款</b>	WPS & PQR. WPG&WOPQ, NOE	SLP)"-® Boiler supplier	R	R	R	
1-4.		哲子序程序图 Tube circumferential seam	100%	保接工艺文件 Welding document			w	WIR	R	
		管子通用 Tube ball through test 尺寸松站 Dimension Inspection		Q8/T16507-2013 IBH Bill Drawing	新能位度 Inspection record		W	W	R	
		休!Eiit\$k Hydrostatic test		(Eirmit Drawing			W	н	R	
		施護電波 Painting inspection		NB/T47055-2017	BREWERZES		W	W		
		包装控制和最终制造文件学数Packing Inspection & Final Documentation	18/4	教師や、対形形で Packing List。 Manufacturing Reports 注評価状点用経験的経験設施	Final Inspection & Test Report		R	R	R	
14.	SER/YORKS Obed Frame / platform & ladder	運紅民政營证帐书 Certificate of raw material	once per baltch	Standard specified in distring 即提工之現程、即接工之研究。除工 包括、主統检察和中央人员包括	Warehouse-in	MRRRR Deal frame supplier	R	R	R	
		Ni近程序文件 Verification of Procedure	100%	WIDE & DOD WIDOSWIDDS NOT	粉粉记录		R	R	R	
		だす転転 Dimension Inspection 保護計載 Visual Inspection of seam		NB/T47043-2014			W	W	R	
		無道報言數处理 liurface treatment before painting 無道報道 Painting Inspection		NBT47843-2014, NB/T47055-2017 NB/T47055-2017	inspection record		W	W	R	
		性致检验和最终就是文件使用Packing Inspection & Final Documentation	0.000	当都中、过程指令 Packing List. Manufacturing Reports	級市場 In ROPILE S Final Impection & Test Report		R	R	R	
		運動與數學延續书 Certificate of raw material	1次模	设计划现在和材料的材料标准	提材料入库单		R	R	R	
	24388	粉紙形序文件 Verification of Procedure	once per belch	Standard specified in drawing 中班上之境界。特殊上之份支、除上 市底,工商检查股市及人而销售 WPS & PQR、WPQ&WOPQ、NDE procedure and personnel	WPS & PQR, WPG&WOPQ, NOE		R	R	R	
1-6.		Et al Mills Dissancing Secondary		mailfeation.		WHITE	w	100		
146.	Air preheater	尺寸包轮 Dimension Inspection 包装件数 Visual Inspection of seam	1	设计提供Drawing, NB/T47043-2014 NB/T47043-2014	格斯拉萊	Boiler supplier	W	W	R	
		推通管影響处理 Surface treatment before painting	100%	NB/T47055-2017	Inspection record		W	W	R	
		數道機論 Painting Inspection		NB/T47055-2017	<b>ERNEWMEN</b>		W	W	-	
		性關稅股份數件制造文件申租Packing Inspection & Final Documentation		型影号、妊形形合 Packing List. Manufacturing Reports	Final Inspection & Test Report	R	R	R		

Founded in 1978, TaiShan Group has nearly 50 years of experience and know-how in combustion technology. TaiShan Group has become a well-known leading

coal, biomass and waste to energy

## BOUTIQUE Taishan Group's manufacturing PROJECTS

square meters, with an annual turnover of over 500 million USD Our design team comprises over 50 senior engineers and 80 chief designers.



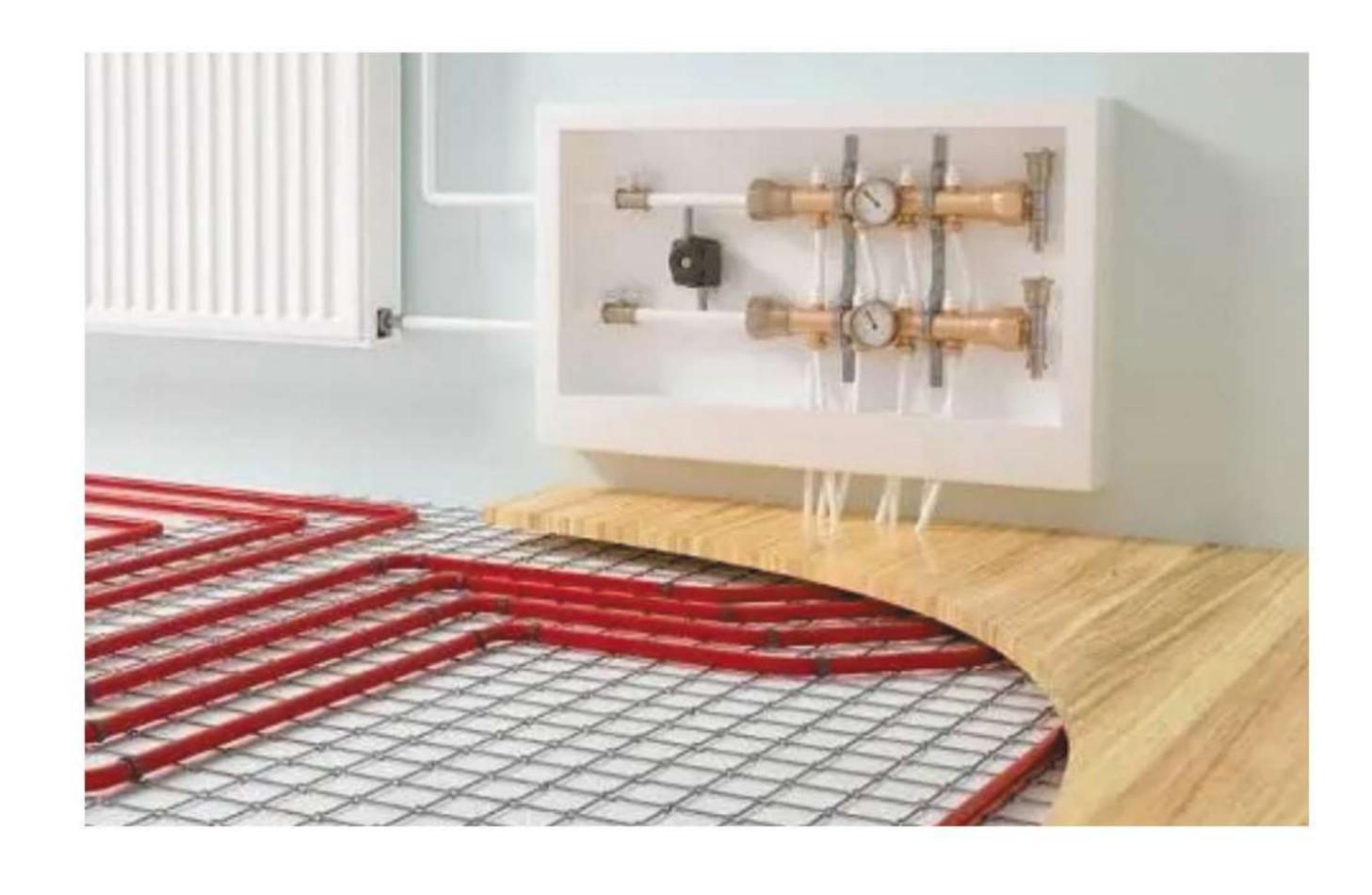
One set 75t/h Refinery Dry Gas Boiler for 15MW CHP Unit

## Industrys



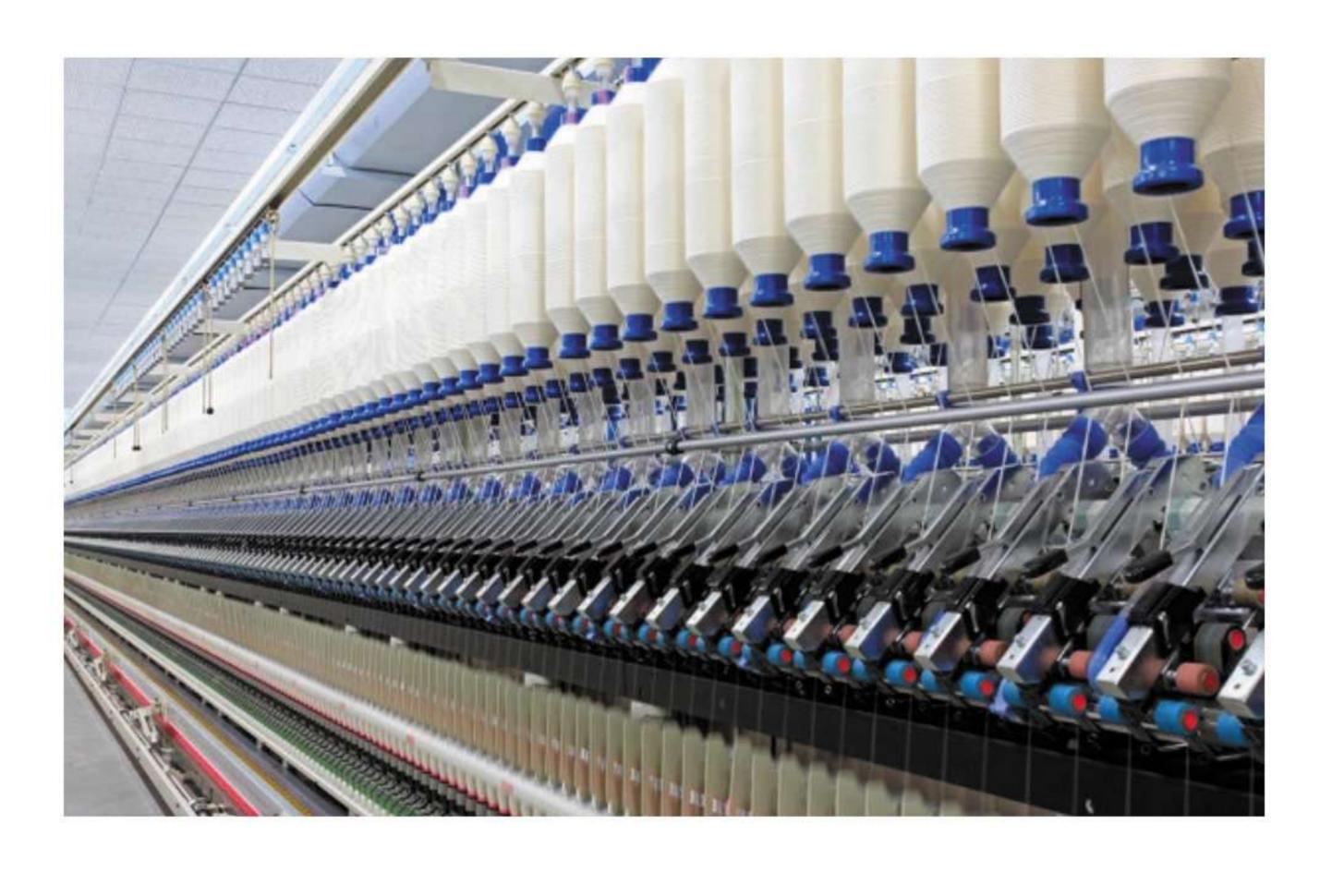
## POWER

High-temperature high-pressure steam drives steam turbine to produce electricity.



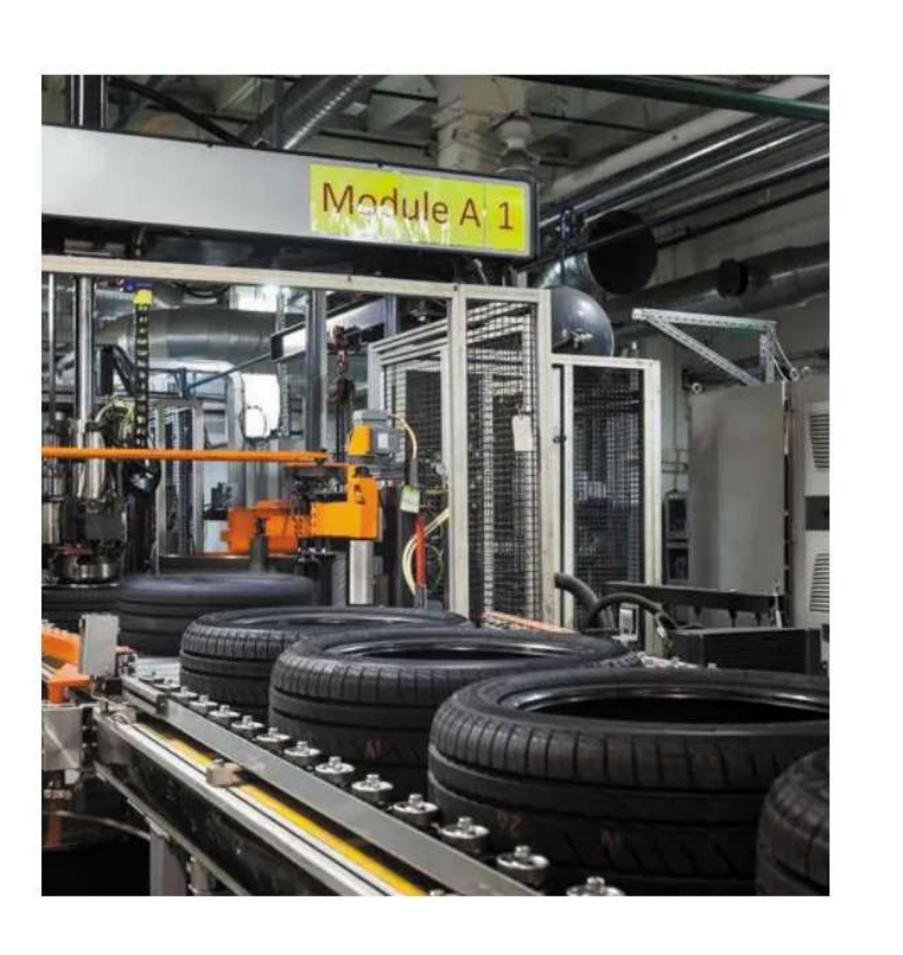
## CENTRAL HEATING

Hot water is distributed through pipelines to hotels, hospitals, apartments, and communities.



## **TEXTILE MILL**

Steam for processes like weaving, dyeing, printing and other textile production operations.



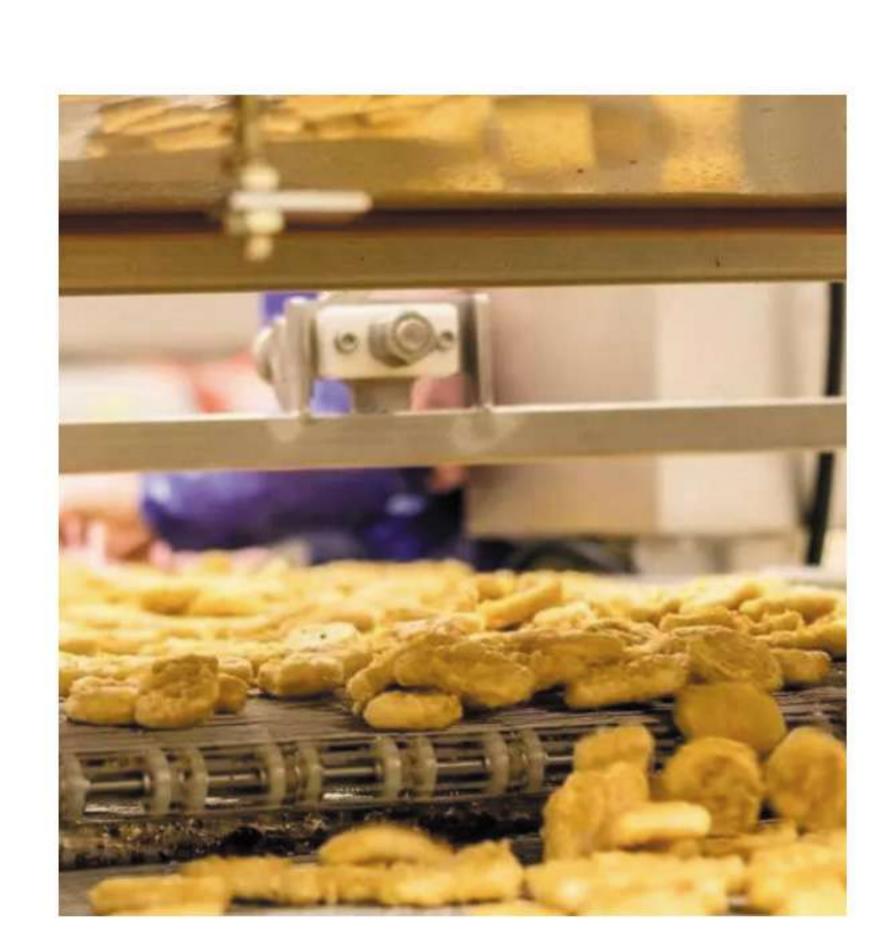
## TIRE MILL

Steam for raw material preparation, plastic grinding, combining, calendering, shaping and vulcanizing.



## PAPER MILL

Steam for heating pulp, drying paper, pressing, shifting and drying paper roll.



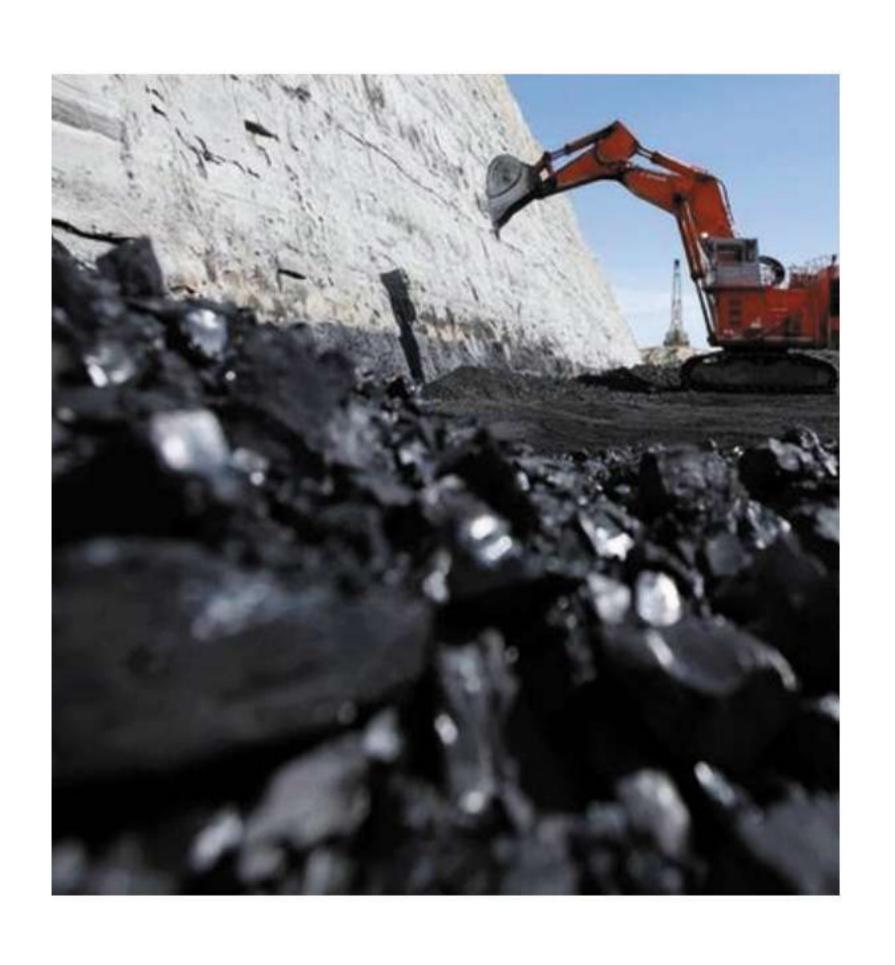
## FOOD & DRINKS

Steam for boiling, baking, steaming, and sterilization in food processing.



## PALM OIL MILL

Steam for heating hydrocarbon mixtures, preheating crude oil, and in distillation process.



## CEMENT MINERAL

Steam for calcining raw materials and producing cement or other mineral products.



STEEL MILL

The waste gas from steel mill will be used to generate steam.

## POWER

## VIETNAM NATIONAL COAL AND MINERAL INDUSTRIES GROUP (VINACOMIN)

Vietnam National Coal and Mineral Industries Group (VINACOMIN) is the largest coal and mineral company in Vietnam and serves as a leading enterprise in the country's coal and mineral industry. It holds a dominant position in the coal and mineral sectors, with a wide range of operations and significant contributions to the Vietnamese economy, making it a crucial pillar of Vietnam's coal and mineral industries. We supplied two sets 170TPH coal fired CFB boilers.



Two 170t/h coal-fired circulating fluidized bed boilers



## PARNAÍBA II GERAÇÃO DE ENERGIA S.A.

Parnaíba Complex is one of the largest natural gas thermal parks in Brazil which is made up of six thermo power plants. We supplied HP Drum and LP Drum for HRSG connected to a TG model 7FA04 General Electric.



## SHANDONG JINCHENG PETROCHEMICAL GROUP

Shandong Jincheng Petrochemical Group is a major player in China's petrochemical industry, excelling in polyolefins, polyurethanes, specialty chemicals and new materials. We supplied three sets 240TPH pulverized coal boilers.



## CHINA NUCLEAR POWER ENGINEERING CORPORATION LIMITED

China Nuclear Power Engineering (CNPE) has the R&D and design capabilities of nuclear power, nuclear chemical industry and nuclear fuel. We supplied four sets 60TPH and two sets 55TPH natural gas fired steam boilers.

## CENTRAL HEATING

## BYUCKSAN ENGINEERING CO., LTD.

Ministry of Energy of Mongolia plans to implement a heating renovation project in the central cities of 10 provinces in Mongolia. This project has received financial support from Export-Import Bank of Korea and is executed by Korean Byucksan Engineering as general contractor. TaiShan Group is responsible for subcontracting of boiler island, including boiler unit and a complete set of auxiliary equipment. It is expected that the commissioning and trial operation will take place in October 2023. We supplied 22 sets 10Gcal/h CFB hot water boilers, 2 sets 5Gcal/h CFB hot water boilers and 9 sets 2.4Gcal/h step grate hot water boilers.



Heating administrative centers of Mongolia's nine provinces.



## AKSU SUNSHINE THERMAL COMPANY

Aksu Sunshine Thermal Company plays a vital role in Xinjiang's energy industry. The project started operating in winter 2019, significantly improving local heating conditions. We supplied two sets 116MW coal CFB hot water boilers.



## BEIJING DISTRICT HEATING GROUP

Shandong Jincheng Petrochemical Group is a major player in China's petrochemical industry, excelling in polyolefins, polyurethanes, specialty chemicals and new materials. We supplied three sets 240TPH pulverized coal boilers.



#### WORLD BANK GROUP

The centralized heating project is funded by World Bank. The project covers the installation of boilers, hot water systems, radiators, and pipelines. It started in 2011 and was operated in 2012. We supplied three sets 29MW gas fired hot water

# TEXTILE

## UTOPIA INDUSTRIES (PRIVATE)LTD

UTOPIA is a well-known textile enterprise group in Pakistan with several printing, dyeing, and fabric companies. It is a leading manufacturer and supplier of distinctive fabrics for hotels, residences and rentals, catering to a global clientele. UTOPIA has operations in the United States, Canada, Australia, Europe, and Asia. We supplied them one set 20TPH coal fired steam boiler for their production.



SZL20-1.25-AII



#### **CROWN TEXTILE**

CROWN TEXTILE is a major local knitting apparel production enterprise that primarily exports to Europe and America. We supplied them one set 15TPH coal fired steam boiler.



## M.Y BARI MILLS (PVT) LTD

Bari Mills is a top family textile mill, exporting bath products to major retailers, hotels, and healthcare industries. Key markets are US, Canada, Australia, and Europe. We supplied a 15TPH coal fired steam boiler.



## NIDA TEXTILE MILLS (T) LTD

NIDA Textile Mills is a renowned textile conglomerate in Tanzania, includes printing, dyeing, and fabric companies. We supplied one set 10TPH coal fired boiler for production needs.

## **Business Domains**

## TIREMILL

## SAILUN VIETNAM CO., LTD

Sailun Tyre is a globally renowned tire manufacturing company. Sailun Vietnam is the production facility located in Binh Phuoc Province, Vietnam.

Due to the factory's expansion in 2017, we supplied one set 35TPH coal CFB boiler. It is the first EPC project in Vietnam. In 2020, Sailun Vietnam expanded its production again and we supplied another 75TPH coal CFB boiler. So far these two sets CFB boilers are operating stably.



2017 GB coal steam



#### LINGLONG TIRE

Linglong Tire is a large-scale tire manufacturer with diverse brand offerings. Their products serve passenger cars, commercial vehicles, and construction machinery. We supplied two sets 35TPH gas boilers for their tire production.



## JINYU TIRE (VIETNAM)

Jinyu Tire is a prominent tire manufacturer based in Shandong, China. Jinyu Tire (Vietnam) is in Binh Phuoc Province, Vietnam. We supplied two sets 20TPH coal CFB boilers.



## ADVANCE TYRE (VIETNAM)

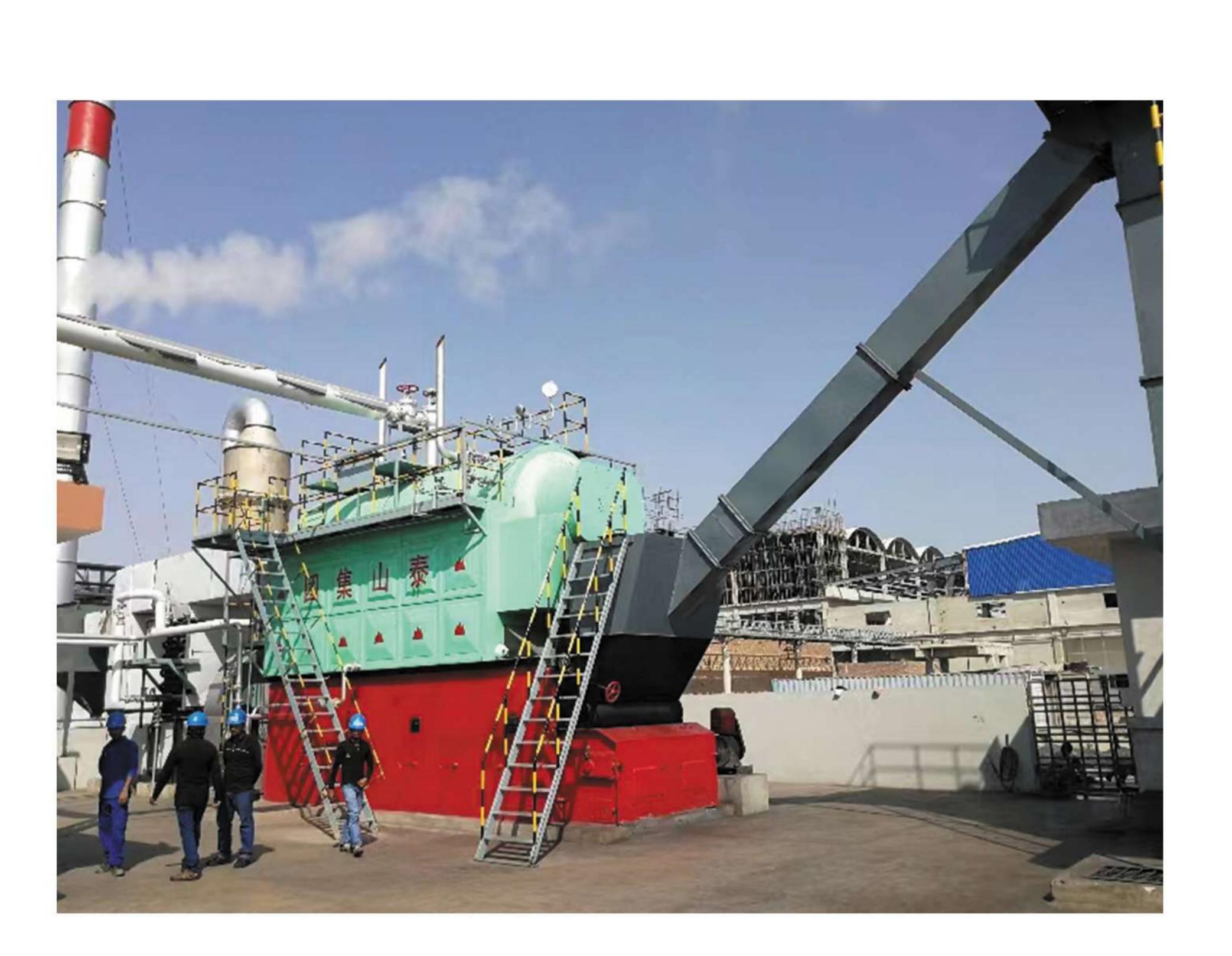
Guizhou Tyre is a well-known tire manufacturing company based in Guizhou Province, China. Advance Tyre (Vietnam) is the production facility located in Preah Sihanouk Province, Vietnam. We supplied two sets 25TPH coal CFB boilers.

# PAPER MILL

## PT. PINDO DELI PULP AND PAPER MILLS

PT. PINDO DELI PULP AND PAPER MILLS is a paper mill under the prominent Indonesian conglomerate APP Sinar Mas. It is one of the largest pulp and paper enterprises in Asia.

We supplied them two sets 20TPH coal fired steam boilers for their production.



2\*20tph steam boiler



## FU LONG CO.,LTD.

Fulong Paper Industry is a
Taiwanese-owned enterprise located in
Vietnam. We supplied one unit of 12TPH
anthracite fired steam boiler.



## FAZAL PAPER MILLS (PVT.) LTD.

Fazal Paper Mills is part of Salva Group of Industries, began as a commodity trader in the 1980s and later diversified into manufacturing. We supplied one set 20TPH coal boiler for their paper production.



#### TIANHE PAPER

Tianhe Paper is a private enterprise specializing in pulp and paper production. It integrates product processing, chemicals, and wastewater treatment. We supplied 25TPH gas fired steam boilers.

# FOOD & DRINK

### THAI BEVERAGE

Thai Beverage, better known as ThaiBev, is Thailand's largest and one of Southeast Asia's largest beverage companies, with distilleries in Thailand, UK, and China. With their expansion, they need a self-built beer factory. We supplied 2 sets 30TPH spent grain boiler and one set 9MW backpressure steam turbine and generator. This is our first EPC project overseas.



#### ALMONAIRY CORN PRODUCTS

Almonairy is a joint-stock company involved in diverse food industry sectors.

They prioritize "quality first" and deliver high-quality products globally, using best practices and academic expertise. We supplied five sets 8TPH oil fired boilers.



2\*30tph steam boiler



## ACECOOK VIETNAM JSC

Acecook Vietnam Joint Stock Company is Vietnam's top instant noodle manufacturer. We supplied one set 15TPH, 7 sets 20TPH, and 2 sets 30TPH anthracite fired boilers.



#### SCHNECK

SCHNECK is prestigious for processing and production of sausage and meat products in Uruguay. We supplied one set 4t/h HFO boiler and one set 4t/h wood chip boiler, of which one set is working and another set is standby.

## **Business Domains**

## PALMOIL

## BEST INDUSTRY GROUP

BEST Industry Group involved in the vegetable oil business, especially in the manufacture of palm cooking oil. It is one of the top 5 largest palm oil refiners in Indonesia, with total refining capacity of 6,000 MT per day. It has five physical refining, four fractionation plants, and two double-fractionation plants. We supplied over 20 sets coal steam boilers.



20tph, 25tph, 30tph, steam boiler



#### SUFI

Sufi Banaspati & Cooking Oil championed quality assurance and customer satisfaction to emerge as one of the top two market leaders in the Edible Oil and Ghee industry in Pakistan. We supplied 2 stes 15TPH coal fired boilers.



## THACHANA PALM OIL CO., LTD

Tha Chana Palm Oil is a crude palm oil extraction company producing crude palm oil, dried palm kernels, and electricity, we supplied a 38TPH palm fiber boiler.



## LATIF GHEE INDUSTRIES PVT LTD

Latif Ghee Industries is a prominent edible oil producer in Khyber Pakhtunkhwa,
Pakistan. We supplied a 20TPH coal fired steam boiler for their production needs.

# CEMENT & MINERAL

## PT. QMB NEW ENERGY MATERIALS

PT QMB NEW ENERGY MATERIALS, located in Morowali Regency, Central Sulawesi, is one of the companies located in Morowali Industrial Park (IMIP), Indonesia Region, engaged in the production of raw materials for batteries. Qingmeibang Company uses laterite nickel ore as raw material to produce new energy nickel, cobalt and manganese raw materials.

We supplied one set 75t/h coal CFB boiler, which is used to provide steam for the hydrometallurgy of laterite nickel ore.



1\*75t/h coal-fired circulating fluidized bed boiler



## NUH ÇIMENTO SANAYI A.Ş.

NUH Cement Plant is Turkey's largest port-type cement plant. We supplied one set 25TPH Bilge Boiler with oil-water separator, and dual-tower desulfurization for fuel purity and emission control.



## DATONG COAL MINE GROUP

Datong Coal Mine Group is a super-large energy conglomerate with coal mining as its core business. It includes power, chemical, metallurgy, and machinery sectors. We supplied nearly thirty sets coal fired boilers.



## BANGLADESH CHEMICAL INDUSTRIES

Bangladesh Chemical Industries Corporation (BCIC) is engaged in producing a wide range of products like Urea, TSP, DAP, Paper, Cement, Glass sheet, Hardboard, Sanitary ware & Insulator. We supplied one set 55TPH natural gas power plant boiler.

## **Business Domains**

## STEEL

#### **EVRAZ**

EVRAZ plc is a UK-incorporated multinational steel manufacturing and mining company part-owned by Russian oligarchs. It has operations mainly in Russia as well as the USA, Canada, and Kazakhstan.

We supplied two sets 12t/h waste heat receovery boilers for them.



## KOREA HYUNDAI STEEL INCHEON WORKS

Hyundai Steel has paved the way for sustainable growth by boosting blast furnace business as a new growth engine in addition to its existing electric arc furnace based operaton. We supplied steam drum for their 26t/h waste heat boiler.



Two 12-ton waste heat boilers



#### KOREA POSCO STEELEON

POSCO produces color coated steel sheets, aluminum coated steel sheets, aluminum-zinc alloy coated steel sheets, zinc coated steel sheets, polyester painted steel sheets. We supplied steam drum for their 18t/h waste heat boiler.



#### SHOUGANG GROUP

Shougang Group is a super-large modern mining enterprise with mining and mineral processing as main business and development of mining equipment manufacturing. We supplied two sets 35TPH gas boilers.

## TAISHAN GROUP

0086-538-6619632 www.coalbiomassboiler.com boao@taishanboao.com

