

Tedrail 

Introduction to Rail Products

钢轨产品介绍



目录

CONTENTS

01

Advantages
公司优势

02

Productive process
生产过程

03

Transportation capacity
运输能力

04

Project
项目业绩



STANDARD
标准

China Railway
中国铁路

(TB/T 2344, TB/T 3276)

International Railway
国际铁路

(UIC 860)

European Railway
欧洲铁路

(EN 13674,
DIN 536, DIN 5901)

American Railway
美国铁路

(AREMA, ASCE)

Australian Railway
澳大利亚铁路

(AS 1085.1)

Russian Railway
俄罗斯铁路

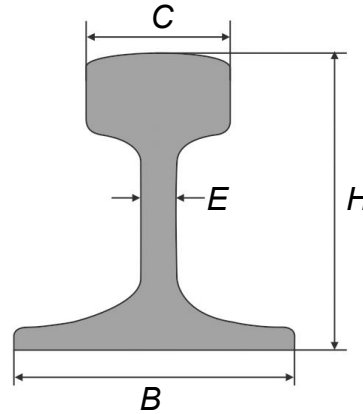
(GOST P51685)



We can also develop products of other specifications and brands according to user needs

我们也可以根据用户需求可开发其他规格和牌号的产品

Advantages 公司优势



China Railway 中国铁路

Type of rail 钢轨型号	Specification 型号	Dimension(mm)			
		H	B	C	E
43kg/m	TB/T2344.1	140.00	114.00	70.00	14.50
50kg/m	TB/T2344.1	152.00	132.00	70.00	15.50
60kg/m	TB/T3276	176.00	150.00	70.80	16.50
75kg/m	TB/T2344.1	192.00	150.00	72.00	20.00
60AT1	TB/T2344.2	152.00	152.00	70.85	44.00

International Railway 国际铁路

Type of rail 钢轨型号	Specification 型号	Dimension(mm)			
		H	B	C	E
UIC54	UIC860	159.00	140.00	70.00	16.00
UIC54E	UIC860	161.00	125.00	67.00	16.00
UIC60	UIC860	172.00	150.00	72.00	16.50

Advantages 公司优势

European Railway 欧洲铁路

Type of rail 钢轨型号	Specification 型号	Dimension(mm)			
		H	B	C	E
39E1	EN 13674-4	133.40	117.50	63.50	13.10
45E1	EN 13674-4	142.88	127.00	66.70	13.89
45E3	EN 13674-4	142.00	130.00	66.00	15.00
46E2	EN 13674-1	145.00	134.00	62.00	15.00
49E1	EN 13674-1	149.00	125.00	67.00	14.00
49E5	EN 13674-1	149.00	125.00	67.00	14.00
50E2	EN 13674-4	133.40	117.50	63.50	13.10
50E6	EN 13674-1	153.00	140.00	65.00	15.50
54E3	EN 13674-1	154.00	125.00	67.00	16.00
54E4	EN 13674-1	154.00	125.00	67.00	16.00
54E5	EN 13674-1	159.00	140.00	70.20	16.00
56E1	EN 13674-1	158.75	140.00	69.85	20.00
60E2	EN 13674-1	172.00	150.00	72.00	16.50

Type of rail 钢轨型号	Specification 型号	Dimension(mm)			
		H	B	C	E
A45	DIN 536	55.00	125.00	45.00	24.00
A55	DIN 536	65.00	150.00	55.00	31.00
A65	DIN 536	75.00	175.00	65.00	38.00
A75	DIN 536	85.00	200.00	75.00	45.00
A75S	DIN 536	85.00	200.00	75.00	75.00
A100	DIN 536	95.00	200.00	100.00	65.00
A120	DIN 536	105.00	220.00	120.00	72.00
A150	DIN 536	150.00	220.00	150.00	80.00
S18	DIN 5901	93.00	82.00	43.00	10.00
S20	DIN 5901	100.00	82.00	44.00	10.00
S24	DIN 5901	115.00	90.00	53.00	10.00
S30	DIN 5901	108.00	108.00	60.30	12.30
S31	DIN 5901	125.00	106.00	56.00	12.00
S41A	DIN 5901	138.00	125.00	67.00	12.00

Advantages 公司优势

American Railway 美国铁路

Type of rail 钢轨型号	Specification 型号	Dimension(mm)			
		H	B	C	E
90ARA-A	AREMA	142.90	130.20	65.10	14.30
115RE	AREMA	168.30	139.70	69.10	15.90
136RE	AREMA	185.70	152.40	74.60	17.50
ASCE60	ASCE	107.95	107.95	60.32	12.30
ASCE80	ASCE	127.00	127.00	63.50	13.98
ASCE85	ASCE	131.80	131.80	65.10	14.30
CR104	AREMA	127.00	127.00	63.50	25.40
CR105	AREMA	131.80	131.80	65.10	23.80
CR135	AREMA	146.05	131.76	87.30	31.80
CR171	AREMA	152.40	152.40	109.20	31.80
CR175	AREMA	152.40	152.40	108.00	38.10

Australian Railway 澳大利亚铁路

Type of rail 钢轨型号	Specification 型号	Dimension(mm)			
		H	B	C	E
AS60	AS 1085.1	170.00	146.00	70.00	16.50
AS68	AS 1085.1	185.70	152.40	74.40	17.50

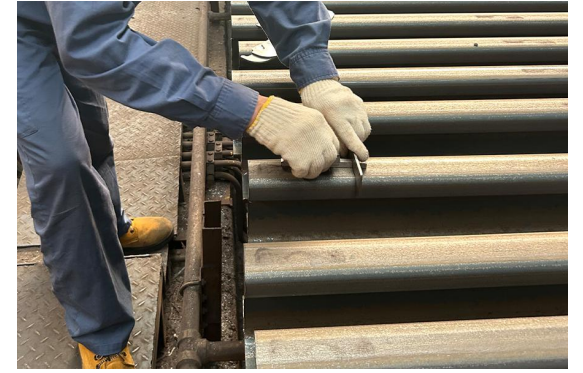
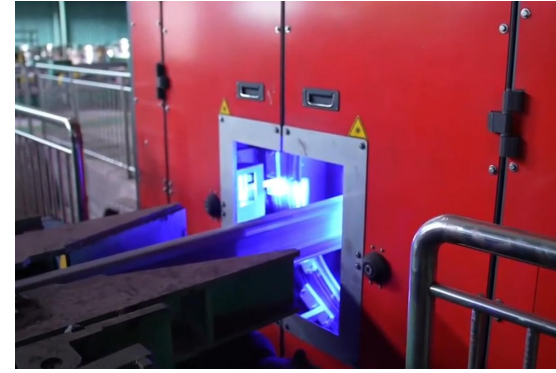
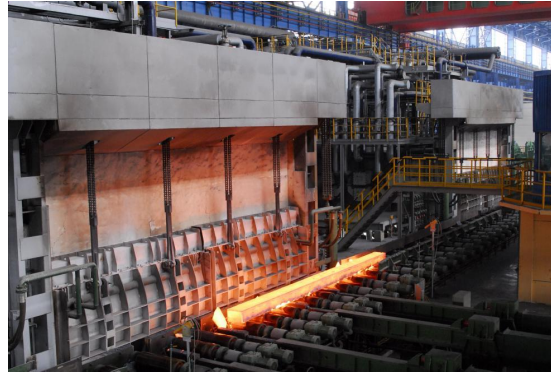
Russian Railway 俄罗斯铁路

Type of rail 钢轨型号	Specification 型号	Dimension(mm)			
		H	B	C	E
R50	GOST P51685	152.00	132.00	72.00	16.00
R65	GOST P51685	180.00	150.00	73.00	18.00

Advantages 公司优势

In view of the long process of rail, complex process and high technical requirements, the lean management of the whole process of production is carried out by integrating the resources of production, technology and quality inspection within the company. Stable rail quality ensures that railway transportation is safe.

针对钢轨、生产流程长、工艺复杂、技术要求高的特点，通过整合公司内生产、技术、质检等资源，对生产的全流程实施了精益化管理。稳定的钢轨质量，确保铁路运输安全。

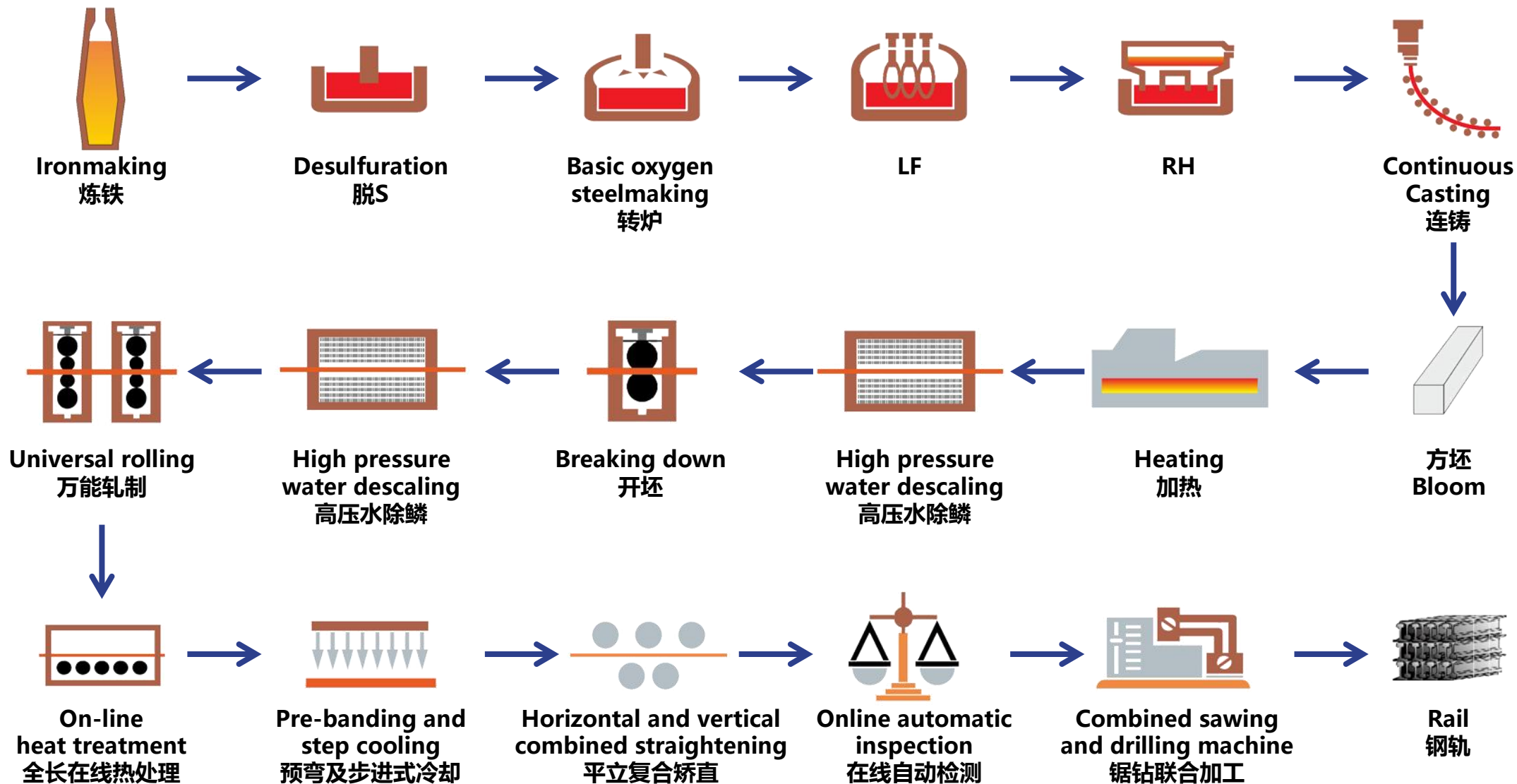


During the trial production, the researchers conduct full field tracking and technical guidance to optimize the production process.
科研人员于试制期间进行全程现场跟踪和技术指导，优化生产工艺。

Automatic online detection can timely detect and deal with rail internal defects.
全自动在线检测，及时发现钢轨内在缺陷并处理。

The quality of rail surface is checked one by one with a four-side inspection strictly according to the standard.
钢轨表面质量采取逐支四面检查方式，严格按照标准判定。

Productive process 生产过程



Productive process 生产过程

Improving the purity of rail steel by using various advanced smelting technologies

运用多种先进冶炼技术提高钢轨钢纯度

Converter
转炉炼制

LF furnace refining
LF精炼炉

RH vacuum degassing
RH真空脱气

Continuous casting
连铸

The billet caster adopts many advanced international technologies, such as electromagnetic stirring of mould, dynamic soft reduction at solidification end, etc.

方坯连铸机采用了许多国际先进技术，如结晶器电磁搅拌、凝固端动态软压下等。



Productive process 生产过程



Using multiple processes to ensure dimensional accuracy, surface quality, and flatness of steel rails

采用多种工艺确保钢轨的尺寸精度、表面质量和平面度

Universal
rolling
万能轧制

Long length
production
长生产线

Compound
straightening
复合矫直

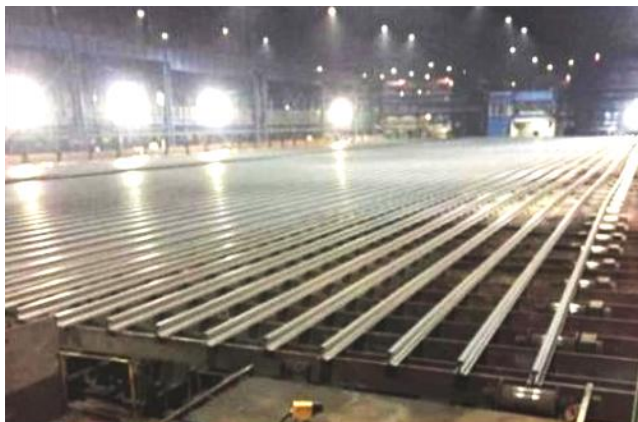
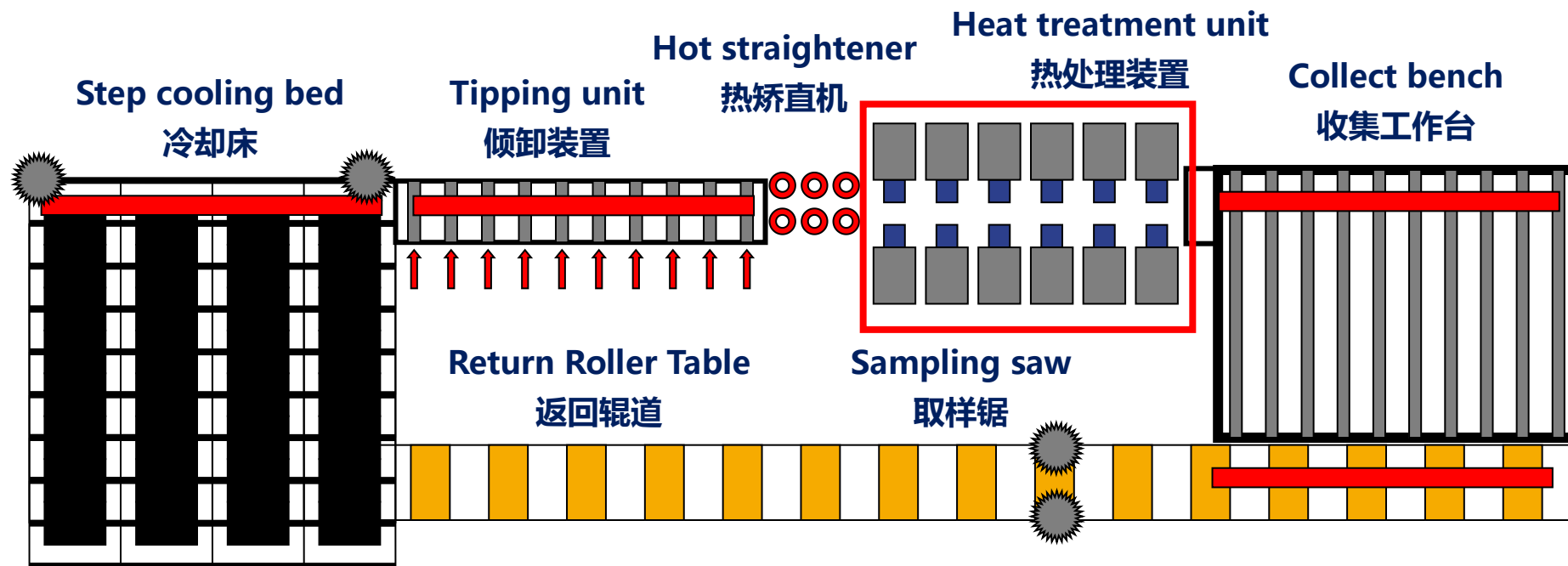
Rectification of Four-sided
Hydraulic Press
四边液压机整改

Automatic Detection
Technology
自动检测技术

The universal line has the functions of long-length rolling, long-length pre-bending and long-length straightening, the rail length can reach to 100 m.

生产线具有长轧制、长预弯、长矫直功能，钢轨长度可达100m。

Productive process 生产过程



On-line heat treatment with residual heat after rolling can improve the strength and hardness of rails. After heat treatment, the hardening depth is deep, the flatness is high, and the residual stress is low.

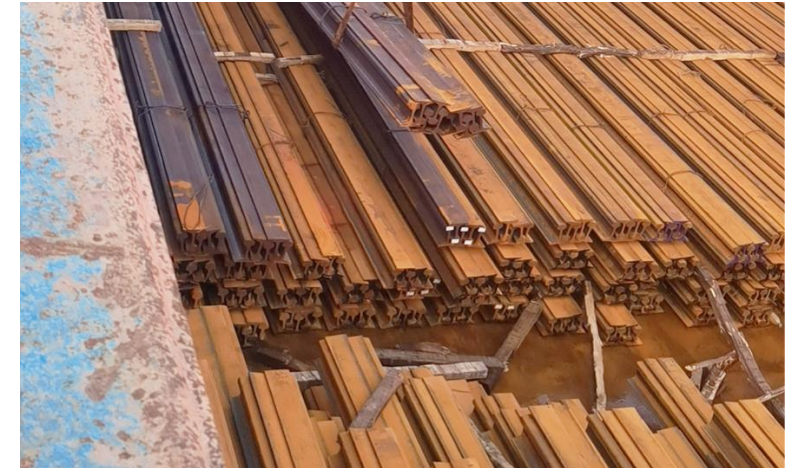
轧后余热在线热处理可以提高钢轨的强度和硬度。热处理后，硬化深度深，平整度高，残余应力低。

Transportation capacity 运输能力

Standard hoisting and transporting 规范的吊装和搬运



- Steel section is mainly hoisted with electromagnetic sucker.
型钢主要采用电磁吸盘吊装
- When electromagnetic sucker is not available, other hoisting means will be used.
不具备电磁吸盘时，使用其他安全吊装方式

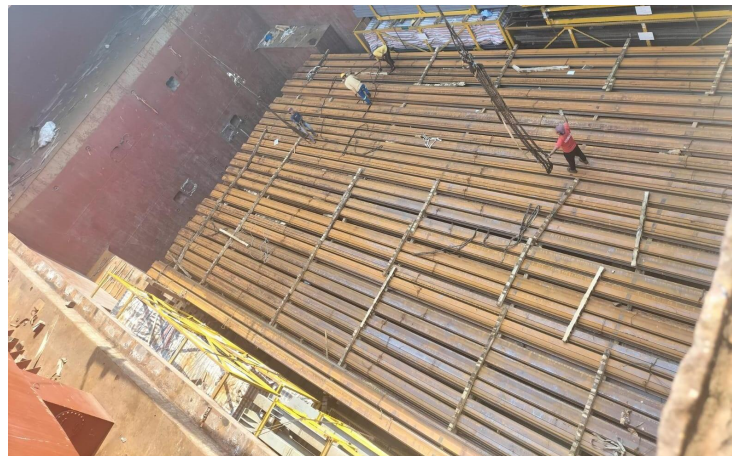


Transportation capacity 运输能力

Standard waterway shipping ships and loading reinforcement scheme 规范的水路运输船舶和装载加固方案

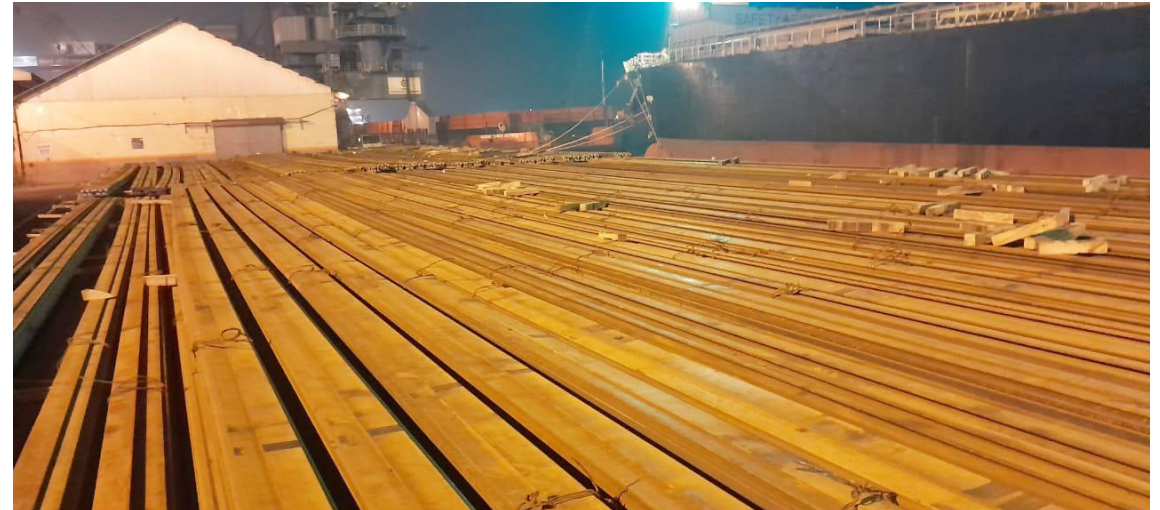


- The ships chosen conform to the relevant regulations of the state water transport management.
选用的船舶符合国家水运相关管理规定
- Products are loaded reasonably according to the length of the cargo and the inner structure of the cabin.
根据货物长度和船舱内部结构合理布载。
- Timber is placed at the bottom of the bilge to avoid direct contact between cargo and bilge
舱底摆放垫木，避免货物与舱底直接接触



Transportation capacity 运输能力

Customer Taking Delivery 客户提货



Project 项目业绩

Project 项目	Country 国家	Year 年	Type of rail 钢轨型号	Standard 标准	Quantity(T) 数量(吨)
Pengadaan Rel UIC54 Sepanjang 41KM' Sp Sampai Lokasi Udang Bangil 1 (Paket Rel-1)	Indonesia 印度尼西亚	2014	54E1, R320Cr	EN13647-1	8984
Kenya Railway 肯尼亚铁路	Kenya 肯尼亚	2015	60E1, U71Mn	TB/T2344-2003	13000
Montero-Bulo Bulo 玻利维亚项目	Bolivia 玻利维亚	2015	UIC54, 900A	UIC860-2008	11000
Pengadaan Rel UIC54 Sepanjang 41KM' Sp Sampai Lokasi Udang Bangil 1 (Paket Rel-2)	Indonesia 印度尼西亚	2015	UIC54 E1	EN13647-1	4052
Belgrano Cargos Project 阿根廷项目	Belgrano 阿根廷	2016	54E1, R260	EN13674-1:2011	10000
China Project 中国铁路项目	China 中国	2016	60kg/m	TB/T2344	129136
Benguela Railway 安哥拉项目	Benguela 安哥拉	2017	50kg/m, U75V	TB/T2344-2012	4000
China Project 中国铁路项目	China 中国	2018	60kg/m, 60N	60kg/m, 60N	406064
China Project 中国铁路项目	China 中国	2019	60kg/m, 60N	60kg/m, 60N	392028
Chile Project 智利项目	Chile 智利项目	2022	136RE	AREMA	2000

Obtained the 2023-2025 Indonesian Rail Project 获得2023-2025 印度尼西亚钢轨项目

The 2023 order is as follows:
2023年订单如下:

Type of Rail 钢轨型号	Length/m 长度/m
UIC 54 HHR 370BHN	81375
UIC 54 HHR 400BHN	50125
UIC 60 HHR 370BHN	10000
UIC 54 HHR 370BHN	103000
UIC 54 HHR 400BHN	10000

Customer Acceptance:
客户验收:

