

ENF Solar Assessed Supplier

Assessment Report Presented to:

Suzhou Luxen Solar Energy Co.,Ltd.
苏州市乐能光伏有限公司

Service Commissioned by:



Service Provided by:



July 4, 2019

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Report Date: 20/Jun./2019

Expiry Date: 19/Jun./2021

Online Verification: <https://verified.chn.tuv.com>

Introduction

This report has been commissioned by ENF Solar – the world's most visited solar website. Inspections have been undertaken by TÜV Rheinland – a testing service provider who have been testing solar components since 1985. TÜV Rheinland is part of TÜV Rheinland Group, a technical services company established in 1872 and employing 17,000 staff around the world.

To make these reports, TÜV Rheinland sends inspectors directly to the factories to collect data, take pictures and check documents.

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This report reflects our findings for the particular company in concern on the date of our service only. This report does not discharge or release the factory/sellers/suppliers from their commercial, legal or contractual obligations with buyers in respect of products provided by the factory/sellers/suppliers. Any reader other than the party for which this report has been specifically issued is hereby informed that the General Conditions of Service of TÜV Rheinland contain liability limitation provisions.

The objective of validating supplier information is to provide additional confidence to buyers so that they know the information has been verified by an independent third party.

The TÜV Rheinland "Supplier Capability Assessment" program is not designed to be a performance standard but rather an information validation program against an established criterion providing potential buyers with information on the establishments stated claims and capabilities.

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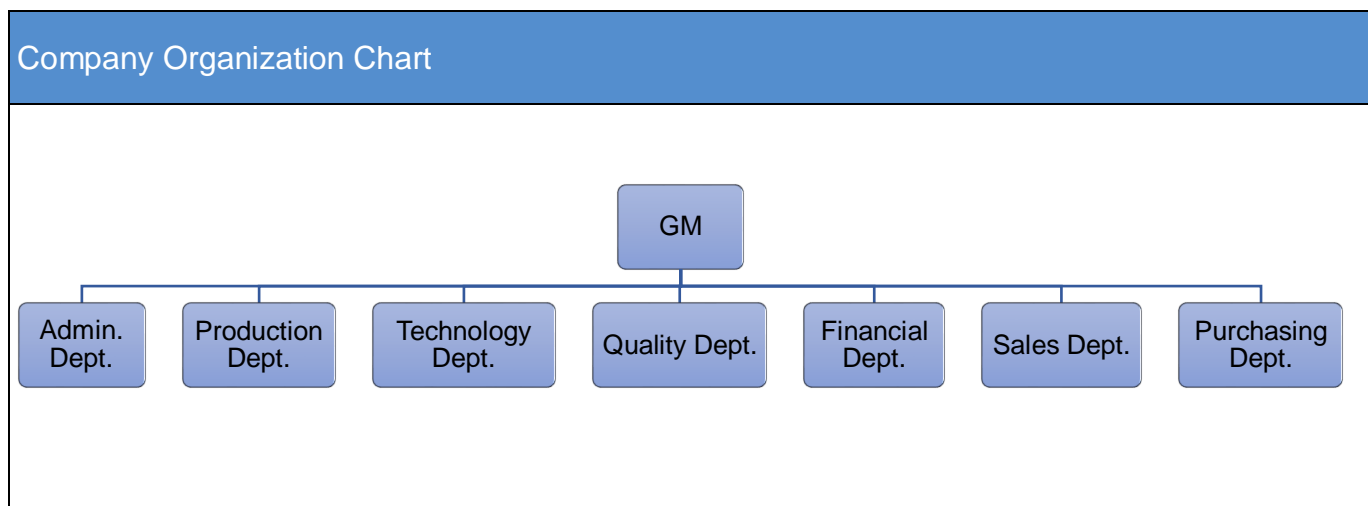
Company Overview

Identification	Details		
Company Name	Suzhou Luxen Solar Energy Co., Ltd.		
Facility address	No. 22, North Guandu Road, Wuzhong District, Suzhou City, Jiangsu Province, China		
	Tel:	0086-0512-67081572	
	Fax:	0086-0512-67081570	
	E-mail:	sales@luxensolar.com	
URL/Web Address	http://www.luxensolar.com		
Report Date	20/Jun./2019		
Expiry Date (24 months validity)	19/Jun./2021		
Name of Assessor	Jack Liu		
Overall Turnover of Last Year	Confidential		
Total Building Size	8,365.23 Square Meters		
Number of Buildings	2		
Office Size	1,000 Square Meters		
Working Day	Mon. to Sat.	Working Hours	08:00 -- 11:30 12:30 -- 17:00

Legal Entity

Legal Entity			
Business License Number	91320506581079887J		
Year Established	24/Aug./2011	Validity Period:	24/Aug./2011 -- 23/Aug./2031
Registered Address	No. 22, North Guandu Road, Wuzhong District, Suzhou City, Jiangsu Province, China		
Company Address	No. 22, North Guandu Road, Wuzhong District, Suzhou City, Jiangsu Province, China		
Registered Capital	RMB 10,000,000		
Corporate Representative	Mr. Dongbo Zhang		
Industry	Solar Energy Products		
Products /Service	Solar Modules		
Business Type	<input type="checkbox"/> Manufacturer	<input type="checkbox"/> Trading Company	<input checked="" type="checkbox"/> Combined
Type of Ownership	<input checked="" type="checkbox"/> Private Owner	<input type="checkbox"/> Public Company	<input type="checkbox"/> Joint Venture
	<input type="checkbox"/> Stated Owned	<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Other

Human Resources



Department Name	Full Time Employee(s)	Part-Time Employee(s)	Total
GM	1	0	1
Admin. Dept.	4	0	4
Production Dept.	107	0	107
Technology Dept.	12	0	12
Quality Dept.	17	0	17
Financial Dept.	3	0	3
Sales Dept.	19	0	19
Purchasing Dept.	2	0	2
Totals	165	0	165

Export Business Capacity

Current Export Situation

There are 14 foreign trading employees in the company.

Working Experience	Headcount
Over 30 Years	0
21-30 Years	0
11-20 Years	0
6-10 Years	7
2-5 Years	5
Less than 2 years	2

Accepted Language	Listening & Speaking	Reading & Writing
English	Yes	Yes
Japanese	Yes	Yes
Spanish	Yes	Yes
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Does the company have a valid export license?	<input checked="" type="checkbox"/> Yes Export License Registration No.: 02254736	<input type="checkbox"/> No
Trade Agents Employed Overseas	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Nearest Port	Shanghai Port	

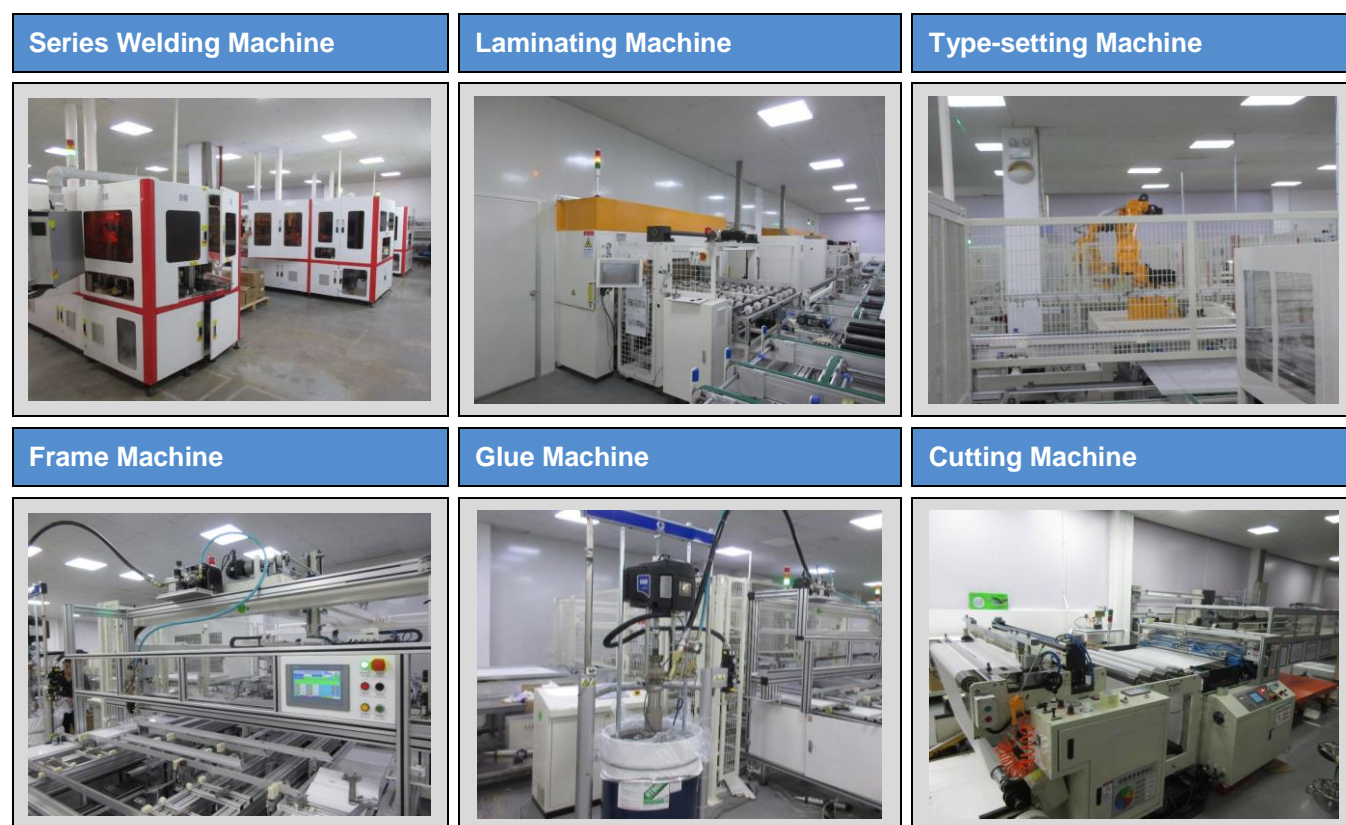
Accepted Payment Terms	<input checked="" type="checkbox"/> FOB	<input checked="" type="checkbox"/> CIF	<input checked="" type="checkbox"/> EXW	<input checked="" type="checkbox"/> CFR
Accepted Payment Types	<input checked="" type="checkbox"/> L/C	<input checked="" type="checkbox"/> T/T	<input type="checkbox"/> Credit Card	<input checked="" type="checkbox"/> Cash
	<input checked="" type="checkbox"/> West Union	<input type="checkbox"/> Money Gram	<input type="checkbox"/> Paypal	<input type="checkbox"/> Money booker
Average lead time from product order confirmation to production delivery (products exiting the company)	7-20 Days			

Market Distribution (Previous 12 Months)		
Market	Main Product(s)	Total Revenue (%)
North America	Solar Modules	19
South America	Solar Modules	4
Eastern Europe	N/A	0
Southeast Asia	Solar Modules	18
Africa	N/A	0
Oceania	N/A	0
Middle East	Solar Modules	12
Eastern Asia	N/A	0
Western Europe	Solar Modules	11
Central America	N/A	0
Northern Europe	Solar Modules	6
Southern Europe	N/A	0
South Asia	N/A	0
Domestic Market	Solar Modules	30

Product Capabilities

Production Capacity		
Product Name	Production Line Capacity (Monthly)	Actual Units Produced (Previous Year)
Solar Modules	30MW	300MW

Production Machinery			
Key Machine Name	Brand & Model No.	Quantity	Condition
Series Welding Machine	Wuxi Xiandao LDTS3000, Wuxi Xiandao LDTS4000B	3	Acceptable
Laminating Machine	Qinhuangdao Jinchen JC858, Qinhuangdao Jinchen JC859, Qinhuangdao Jinchen JC860	3	Acceptable
Type-setting Machine	Nanjing Aisidun ER20110	3	Acceptable
Frame Machine	Suzhou Shencheng LN-ZKJ 005A	1	Acceptable
Glue Machine	Shanghai Shengpu SPD-200, Shanghai Shengpu SPZ AB10V	2	Acceptable
Cutting Machine	Wuxi Jingdian LN-CQJ-020A	2	Acceptable



Key Testing Machinery			
Machine Name	Brand & Model No.	Quantity	Condition
Pull Tester	LIGAO LNEC-F-06	1	Acceptable
Resistance Tester	Yangzi Electronic YD2654D	1	Acceptable
Drying Cabinet	LICHEN	1	Acceptable
Electrical Safety Comprehensive Tester	Yangzi Electronic YD9860D	1	Acceptable
Power Tester	Shangxi Zhongsun LN-IVGL	1	Acceptable
Electronic Scale	Shanghai Zhuojing BSM120	1	Acceptable

Pull Tester



Resistance Tester



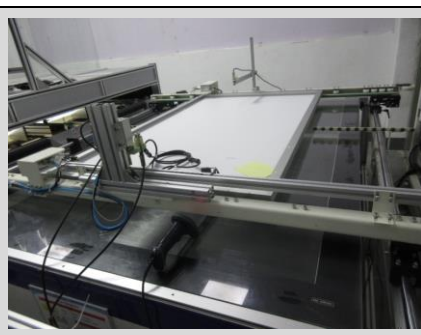
Drying Cabinet



Electrical Safety Comprehensive Tester



Power Tester



Electronic Scale



Production Flow (Solar Modules)

1: Raw Material Preparing 1



2: Sorting



3: Series Welding



4: Type Setting

5: In-line Inspecting 1

6: Laminating



7: In-line Inspecting 2



8: Gluing



9: Framing



10: Assembling



11: Finished Inspecting



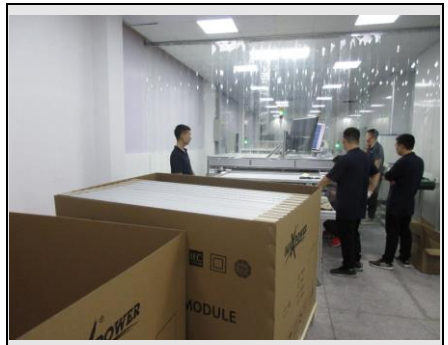
12: Packaging



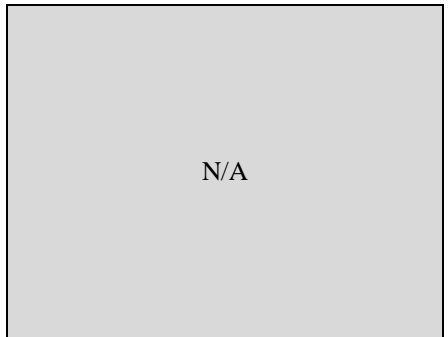
13: Packing



14: Finished Product



N/A



N/A

R & D Capacity

Current Situation			
There are 12 R&D engineers in the company.			
Education Level	Headcount	Work Experience	Headcount
Doctorate	0	Over 30 Years	0
Post-Graduate	0	21-30 Years	0
Graduate	6	11-20 Years	0
Junior College	6	6-10 Years	4
Technical School	0	2-5 Years	8
High School	0	Less than 2 years	0

Brand Situation				
Registration/application No.	Brand Name	For Approval to Use Goods	Validity Date	Ref.
25473403	LENENG	Energy Production, Optical Glass Grinding, Material Processing Information, Wind Power, Water Treatment, Welding Service, Electric Power Production Equipment Rental, Waste Treatment (Deformation), Air Purification, Stripping Processing, Class 40	07/Aug./2018 – 06/Aug./2028	Refer to Photo
25473400	LUXEN	Wind Power, Electric Power Production Equipment Rental, Energy Production, Class 40	14/Nov./2018 – 13/Nov./2028	Refer to Photo
25477246	LUXEN ENERGY	Research and Develop New Products for Others, Quality Control, Modeling	07/Aug./2018 – 06/Aug./2028	Refer to Photo

		(Industrial Design), Development of Construction Projects, Technical Research, Computer Software Installation, Chemical Research, Measurement, Computer Software Design, Material Testing, Class 42		
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Patent Situation				
Patent No.	The Name of the Patent	The Patent Type	Available Date	Ref.
ZL 2016 2 1011319.5	Solar Cell Detection Device	The patent for utility model	15/Mar./2017	Refer to Photo
ZL 2016 2 1011318.0	Inspection Tooling for Solar Panels	The patent for utility model	15/Mar./2017	Refer to Photo
ZL 2016 2 0994456.9	A Kind of Silicone Coating Machine for Solar Junction Box	The patent for utility model	15/Mar./2017	Refer to Photo
ZL 2016 2 0994103.9	Solar Battery Equipment	The patent for utility model	15/Mar./2017	Refer to Photo
Does the company provide OEM/ODM service for others?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Are there relevant design input/output, review, and verification documents available for the assessed company?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Based on inspection, are R&D employees equipped with adequate specialized equipment?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Do R&D employees use any specific software for designing new products?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Development Devices

Device 1 -- Pull Tester

Device 2 -- Resistance Tester

Device 3 -- Electrical Safety Comprehensive Tester



Management Systems & Quality Control Management

Quality Management System Certification				
Certification	Certified By	Certificate No.	Business Scope	Expiry Date
ISO 9001:2015	CQC,CNAS	00116Q39048R0M/3200	Scope: Production of Solar Modules	28/Sep./ 2016 -- 27/Sep./2019
OHSAS 18001:2007	Beijing Head International Certification Co., Ltd., CNAS	04619S12079R0M	Scope: Production and Related Management Activities of Solar Photovoltaic Modules	01/Mar./ 2019 -- 11/Mar./2021

Product Certification				
Certification	Certified By	Certificate No.	Product Name & Model No.	Expiry Date
TUV SUD Mark Certificate	TUV SUD	Z2 095833 0012 Rev.00	Crystalline Silicon Terrestrial Photovoltaic (PV) Modules Poly- Crystalline Silicon Photovoltaic Modules	17/Apr./ 2019 -- 16/Apr./2024
TUV SUD Mark Certificate	TUV SUD	Z2 095833 0013 Rev.00	Crystalline Silicon Terrestrial Photovoltaic (PV) Modules Mono- Crystalline Silicon Photovoltaic Modules	17/Apr./ 2019 -- 16/Apr./2024
CQC Product Certificate	CQC	CQC16024151626	Mono- Crystalline Silicon Photovoltaic Modules	25/Jun./ 2018 -- 31/Dec./2049
CQC Product Certificate	CQC	CQC16024151624	Poly- Crystalline Silicon Photovoltaic Modules	29/Aug./ 2016 -- 31/Dec./2049
CE	TUV SUD	N8A 17 0195833008	Crystalline Silicon Terrestrial Photovoltaic (PV) Modules Poly- Crystalline Silicon Photovoltaic Modules	13/Jan./ 2017 -- 31/Dec./2049
CE	TUV SUD	N8A 17 0195833007	Crystalline Silicon Terrestrial Photovoltaic (PV) Modules Mono- Crystalline Silicon Photovoltaic Modules	13/Jan./ 2017 -- 31/Dec./2049

Test Report			
Test Report	Certified By	Product Name & Model No.	Expiry Date
N/A	N/A	N/A	N/A

Quality Control Management			
Content	Observations / Comments		
Does the company set up any inspection standards for raw materials?	<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No
Has the company set up necessary quality inspection standards in the process of production?	<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No
Does the company have any measures to control the management of unqualified materials after sampling, to avoid mixing up or wasting?	<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No
Are work instructions available at the location where the processes take place?	<input checked="" type="checkbox"/> Total line	<input type="checkbox"/> Parts of the line	<input type="checkbox"/> No
Is personal protective equipment (PPE) needed in the production line?	<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No
Is the management and usage of production materials as well as the production process executed by staff who are appropriately trained and qualified or by senior staff?	<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No

Supplier Management			
Content	Observations / Comments		
Does the company have a supplier assessment procedure?	<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No
Does the company establish and implement a standard procedure for purchasing contract review and approval?	<input checked="" type="checkbox"/> Yes, with written standard procedures	<input type="checkbox"/> Yes, with written procedure but lack of consistent standard	<input type="checkbox"/> No

Does the company keep its supplier assessment reports?	<input checked="" type="checkbox"/> Yes, Keep for _2_ years available			<input type="checkbox"/> No
Are the company's purchasing documents sufficient to ensure product safety control and their customers' requirements?	<input checked="" type="checkbox"/> Yes, the purchasing document includes all the information required	<input type="checkbox"/> Yes, however the purchasing document includes incomplete information		<input type="checkbox"/> No
Is there a procedure to conduct random product inspections after final packaging?	<input checked="" type="checkbox"/> Yes, with clear standard and written inspection records	<input type="checkbox"/> Yes, with inspection records but no procedures	<input type="checkbox"/> Yes, with procedures but no inspection records	<input type="checkbox"/> No, inspections are not necessary

After Sales Service				
Content	Observations / Comments			
Has the company set up any procedure for customer feedback, including complaints, clearly recorded and maintained?	<input checked="" type="checkbox"/> Yes, with a standard feedback form and records	<input type="checkbox"/> Yes, with a standard feedback form but no records	<input type="checkbox"/> Yes, with records but no standard feedback form	<input type="checkbox"/> No
Are there any clear procedures for handling customer complaints?	<input checked="" type="checkbox"/> Yes, with clear procedures and written records	<input type="checkbox"/> Yes, with clear procedures but no written records	<input type="checkbox"/> Yes, with written records but no clear procedures	<input type="checkbox"/> No
Does the company have the SOP (Standard Operation Procedure) for after-sales service? Does the company provide after-sales consulting services?	<input checked="" type="checkbox"/> Yes			<input type="checkbox"/> No
Does the company implement the provisions of the National Three Warranties (warranty for repair/replacement /return) for their products?	<input checked="" type="checkbox"/> Yes			<input type="checkbox"/> No

Corporate Social Responsibility

Child Labour & Forced Labor		
Content	Observations / Comments	
Is it clarified that there's no child labor in the company?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the company have an explicit job management program, and take corresponding measures to check the age of the employees?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Are the staff clearly aware of the terms of labour contract, regulations of the company and the right of free employment?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Have the staff been forced to work overtime? Will they be fined or fired if they refuse to?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Health and Safety		
Content	Observations / Comments	
Has the company set up a safety responsibility system, and distributed to all levels of supervisor and provided them with corresponding training?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the company conduct regular inspection of the plant and equipment, to ensure the health and safety of the workshop at least in accordance with the law?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the company regularly provide necessary safety and health training, to make the staff understand that there might be occupational hazards in their work, and take appropriate protective measures when necessary? (For example, how to use personal protective equipment safely, etc.)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the company hold regular fire drills, including fire drills and evacuation drills? Do the staff clearly know how to raise an alarm, how to evacuate and how to use the fire extinguisher?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the company have the approval report issued by the local Fire Bureau?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the company provide sufficient first aid equipment? Are first-aid kits and trained first-aiders available in each workplace?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No (No qualified first aider available in workshop)

Does the company provide clean lavatories, separating men's and ladies'?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the company provide clean drinking water to the staff? Is there unrestricted access to the drinking water?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Development / Expansion Plans

Company Development / Expansion Plans	
Company Development Action	Timeframe
N/A	N/A

Certification & Photos

Certification

Business License



Tax Registration Certificate



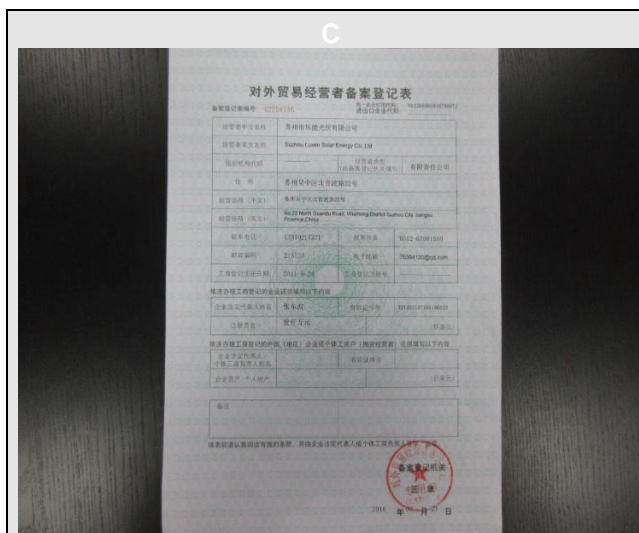
Organization Code Certificate



Permit for Opening Bank Account



**Certification & Photos -- Import and Export
Enterprise Registration**



Certificate Photo -- Custom Clearance Registration Form



Certificate Photo -- Patent 1



Certificate Photo -- Patent 2



Certificate Photo -- Patent 3



Certificate Photo -- Patent 4



Certificate Photo -- TUV SUD Mark Certificate 1



Certificate Photo -- TUV SUD Mark Certificate 2



Certificate Photo -- CQC Product Certificate 1



Certificate Photo -- CQC Product Certificate 2



Certificate Photo -- CE1



Certificate Photo -- CE2



Certificate Photo -- ISO9001:2015



Certificate Photo --OHSAS18001:2007



Certificate Photo -- High New Technology Enterprise Certificate



Certificate Photo -- High New Technology Product Certificate



Certificate Photo -- Trademark 1



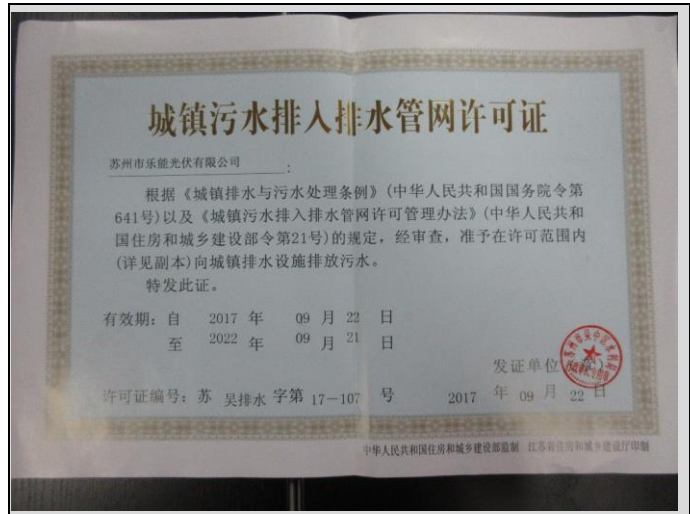
Certificate Photo -- Trademark 2



Certificate Photo -- Trademark 3



Certificate Photo -- Urban Sewage Drainage Network Permit



Certificate Photo -- Jiangsu Private Technology Enterprise

Certificate Photo -- Honor



Company Gate



Office



Workshop



Workshop



Warehouse

Warehouse



Product Photo



Product Photo



Product Photo



Product Photo



Product Photo



Product Photo



-- The END --