

ENF Solar Assessed Supplier

Assessment Report Presented to:

DAH Solar Co., Ltd.
安徽大恒能源科技有限公司

Service Commissioned by:



Service Provided by:



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Expiry Date: 08/Aug./2024

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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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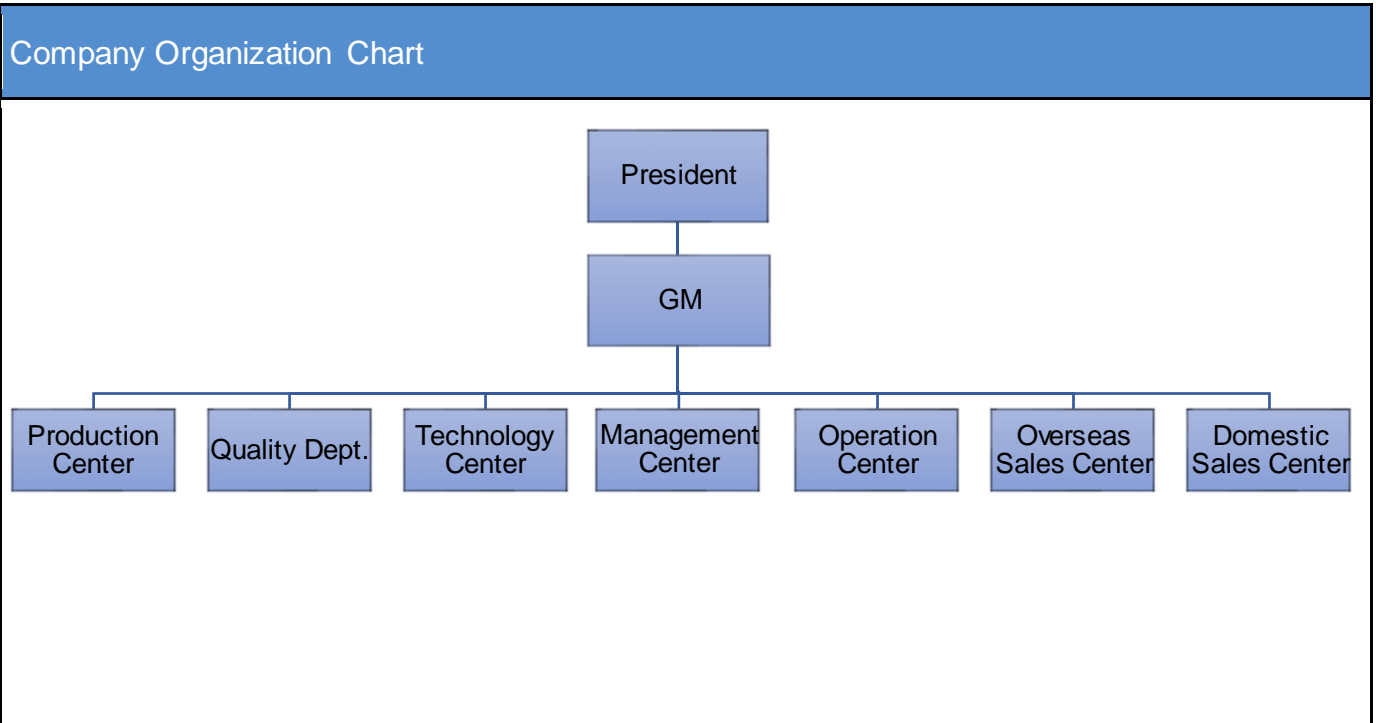
Company Overview

Identification	Details		
Company Name	DAH Solar Co., Ltd.		
Facility address	No. 1, Yaoyuan Road, Luyang Industrial Park, Luyang District, Hefei City, Anhui Province, China		
	Contact Person:	Ms. Echo Liu	
	Tel:	0086-15955106013	
	Fax:	N/A	
	E-mail:	liufangfang@dhsolar.cn	
URL/Web Address	www.dahsolarpv.com		
Report Date	09/Aug./2022		
Expiry Date (24 months validity)	08/Aug./2024		
Name of Assessor	Acaile Xu		
Overall Turnover of Last Year	USD 269,240,000		
Total Building Size	26,739 m ²		
Number of Buildings	3		
Office Size	4,000 m ²		
Working Day	Monday to Friday	Working Hours	09:00am to 06:00pm

Legal Entity

Legal Entity			
Business License Number	91340100686890473Q		
Year Established	07/Apr./2009	Validity Period:	07/Apr./2009 -- 01/Apr./2039
Registered Address	No. 1, Yaoyuan Road, Luyang Industrial Park, Luyang District, Hefei City, Anhui Province, China		
Company Address	No. 1, Yaoyuan Road, Luyang Industrial Park, Luyang District, Hefei City, Anhui Province, China		
Registered Capital	RMB 85,000,000		
Corporate Representative	Mr. Shenheng Xie		
Industry	Solar Energy Products		
Products /Service	Solar Panel		
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
President	1	0	1
GM	1	0	1
Production Center	246	0	246
Quality Dept.	61	0	61
Technology Center	22	0	22
Management Center	37	0	37
Operation Center	30	0	30
Overseas Sales Center	38	0	38
Domestic Sales Center	15	0	15
Totals	451	0	451

Export Business Capacity

Current Export Situation

There are 38 foreign trading employees in the company.

Working Experience	Headcount
Over 30 Years	0
21-30 Years	0
11-20 Years	12
6-10 Years	19
2-5 Years	5
Less than 2 years	2

Accepted Language	Listening & Speaking	Reading & Writing
English	Yes	Yes
Japanese	Yes	Yes
German	Yes	Yes
Russian	Yes	Yes
French	Yes	Yes
N/A	N/A	N/A

Does the company have a valid export license?	<input checked="" type="checkbox"/> Yes Export License Registration No.: 02361999			<input type="checkbox"/> No
Trade Agents Employed Overseas	<input checked="" type="checkbox"/> Yes Brazil			<input type="checkbox"/> No
Nearest Port	Shanghai Port, Ningbo 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 type="checkbox"/> Cash
	<input 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)	30 Days			

Market Distribution (Previous 12 Months)		
Market	Main Product(s)	Total Revenue (%)
North America	Solar Panel	0.30
South America	Solar Panel	59.42
Eastern Europe	Solar Panel	1.22
Southeast Asia	Solar Panel	0.41
Africa	Solar Panel	4.68
Oceania	Solar Panel	0.04
Middle East	N/A	0
Eastern Asia	N/A	0
Western Europe	Solar Panel	0.59
Central America	N/A	0
Northern Europe	Solar Panel	0.20
Southern Europe	Solar Panel	0.01
South Asia	N/A	0
Domestic Market	Solar Panel	33.13

Product Capabilities

Production Capacity		
Product Name	Production Line Capacity (Monthly)	Actual Units Produced (Previous Year)
Solar Panel	150 MW / Month	Confidential

Production Machinery			
Key Machine Name	Brand & Model No.	Quantity	Condition
Integrated Scribing and Welding Machine	Xiaoniu & CHn40T	16	Acceptable
Full Automatic High Speed Typesetter	Xiaoniu & CP120S	8	Acceptable
Automatic Welding Machine	Xiaoniu & DH180-HP	2	Acceptable
Full Automatic Double Chamber Laminator	Qingdao Boshuo & BSL27870AC-HB	10	Acceptable
Automatic Framing Machine	Shengcheng & SC1624-C11B	4	Acceptable
Automatic Junction Box Welding Machine	Keshengda & KS-01b	2	Acceptable



Key Testing Machinery			
Machine Name	Brand & Model No.	Quantity	Condition
TC Testing Chamber	Baishiqi	1	Acceptable
DH Testing Chamber	Baishiqi	1	Acceptable
Dynamic Mechanical Load	Baishiqi	1	Acceptable
Horizontal Tensile Testing Machine	Qiantong & QT-6201DAW	1	Acceptable
Wet Leakage Test System	Baishiqi	1	Acceptable
Universal Testing Machine	Hongjin	1	Acceptable

TC Testing Chamber	DH Testing Chamber	Dynamic Mechanical Load
		
Horizontal Tensile Testing Machine	Wet Leakage Test System	Universal Testing Machine
		

Production Flow (Solar Panel)

Panel Splitting and String Welding	Glass Feeding	EVA Cutting and Laying
		
Full Automatic Typesetting	Reflow Soldering	Automatic Taping
		
Back Panel and EVA Laying	EL Testing	Laminating
		

Appearance Inspection	Automatic Framing	Automatic Welding of Junction Box
		
Junction Box Glue Injection	Solar Panel Self-Curing	Automatic Rubbing
		
Surface Cleaning	Safety Test	Final EL Testing
		
Automatic Labelling	Visual Inspection	Automatic Grading
		

R & D Capacity




Current Situation			
There are 24 R&D engineers in the company.			
Education Level	Headcount	Work Experience	Headcount
Doctorate	0	Over 30 Years	0
Post-Graduate	1	21-30 Years	1
Graduate	9	11-20 Years	3
Junior College	14	6-10 Years	11
Technical School	0	2-5 Years	8
High School	0	Less than 2 years	1

Brand Situation				
Registration/application No.	Brand Name	For Approval to Use Goods	Validity Date	Ref.
16177350	Refer to the Photo	Class 9	21/Mar./2016--20/Mar./2026	Photo in Certification & Photos
54899008	Refer to the Photo	Class 9	21/Nov./2021--20/Nov./2031	Photo in Certification & Photos

Patent Situation				
Patent No.	The Name of the Patent	The Patent Type	Available Date	Ref.
ZL 2020 1 0416423.7	A fixed connection system of photovoltaic inverter	Invention patent	12/Jan./2021	Photo in Certification & Photos
ZL 2015 1 0665504.X	New clean photovoltaic panel	Invention patent	02/Jan./2018	Photo in Certification & Photos
ZL 2015 1 0665404.7	Water film dedusting photovoltaic panel	Invention patent	02/Jan./2018	Photo in Certification & Photos
ZL 2020 2 2558803.2	A photovoltaic module circuit and a photovoltaic module	The patent for utility model	30/Nov./2021	Photo in Certification & Photos

	junction box thereof			
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

TC Testing Chamber	DH Testing Chamber	Dynamic Mechanical Load
		

Management Systems & Quality Control Management

Quality Management System Certification				
Certification	Certified By	Certificate No.	Business Scope	Expiry Date
ISO 9001	Beijing Xinjiyuan Certification Co., Ltd.	19821QH2077R0M	Production and sales of Solar Panels (PV Modules)	13/Aug./2021 -- 12/Aug./2024
ISO 14001	Beijing Xinjiyuan Certification Co., Ltd.	19821EH0993R0M	Production and sales of Solar Panels (PV Modules)	13/Aug./2021 -- 12/Aug./2024
ISO 45001	Beijing Xinjiyuan Certification Co., Ltd.	19821SH0916R0M	Production and sales of Solar Panels (PV Modules)	13/Aug./2021 -- 12/Aug./2024

Product Certification				
Certification	Certified By	Certificate No.	Product Name & Model No.	Expiry Date
TUV	TUV NORD	4478019406749-367R5A1M7	Crystalline Silicon Terrestrial Photovoltaic (PV) Modules	15/Mar./2022 -- 13/Jun./2024
TUV	TUV Rheinland	R50514510	PV Components for BOS – electrical & DAH001	13/Oct./2021 -- 31/Dec./2049

Test Report			
Test Report	Certified By	Product Name & Model No.	Expiry Date
Test Report	Information Industry Chemical Physical Power Product Quality Supervision and Inspection Center	Solar Panel	10/Mar./2022

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 <u>3</u> 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?	<input checked="" type="checkbox"/> Yes			<input type="checkbox"/> No

Does the company provide after-sales consulting services?		
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 checked="" 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 checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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
The company is going to be a public company.	2 Years

Certification & Photos

Certification

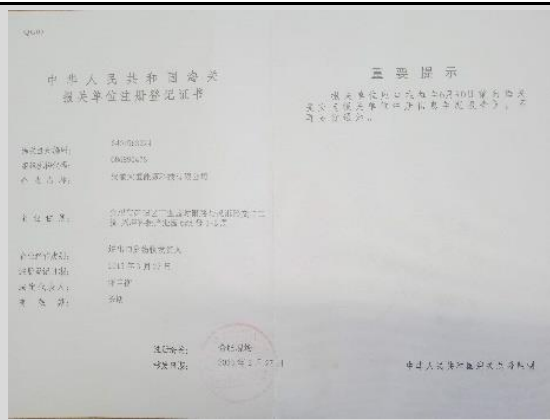
Certificate Photo -- Business License



Certificate Photo -- Permit for Opening Bank Account



Certificate Photo -- Customs Clearance Registration Form



Certificate Photo -- Customs Clearance Record Form



Certificate Photo -- Trademark 1



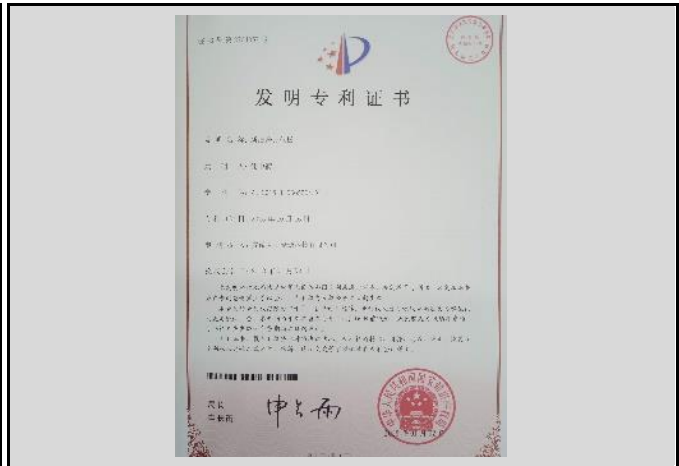
Certificate Photo -- Trademark 2



Certificate Photo – Patent 1



Certificate Photo – Patent 2



Certificate Photo – Patent 3



Certificate Photo – Patent 4



Certificate Photo – ISO 9001:2015



Certificate Photo – ISO 14001:2015



Certificate Photo – ISO 45001:2018



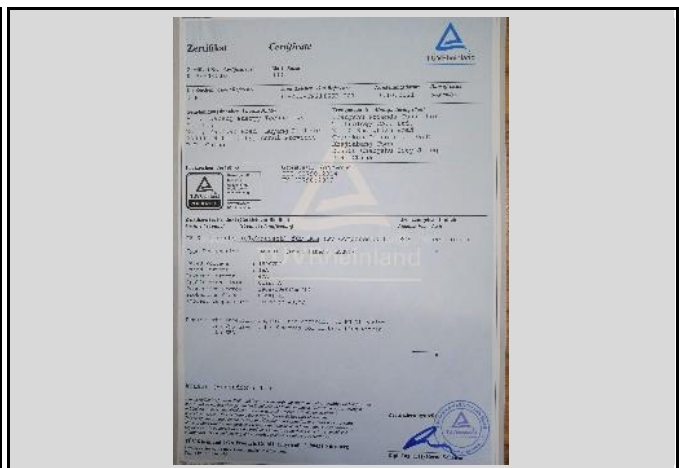
Certificate Photo – Testing Report



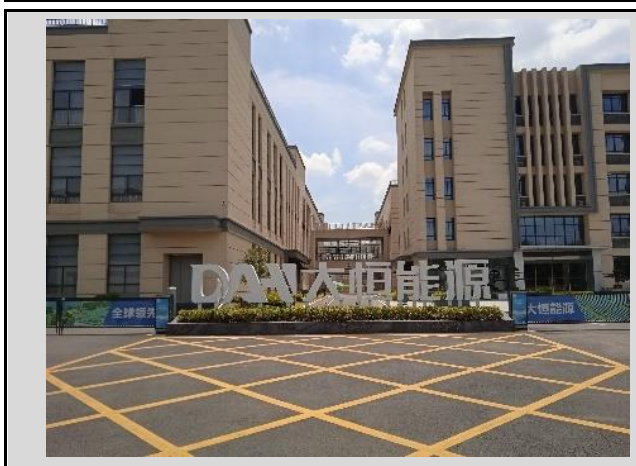
Certificate Photo – TUV 1



Certificate Photo – TUV 2









Company Gate



Office



Workshop	Workshop
	
Warehouse	Warehouse
	
Product Photo	Product Photo
	



-- The END --