



COMPANY **PROFILE**

ALUMINUM PARTS & COMPONENTS
FOR GENERAL & INDUSTRIAL APPLICATIONS





CONTENTS

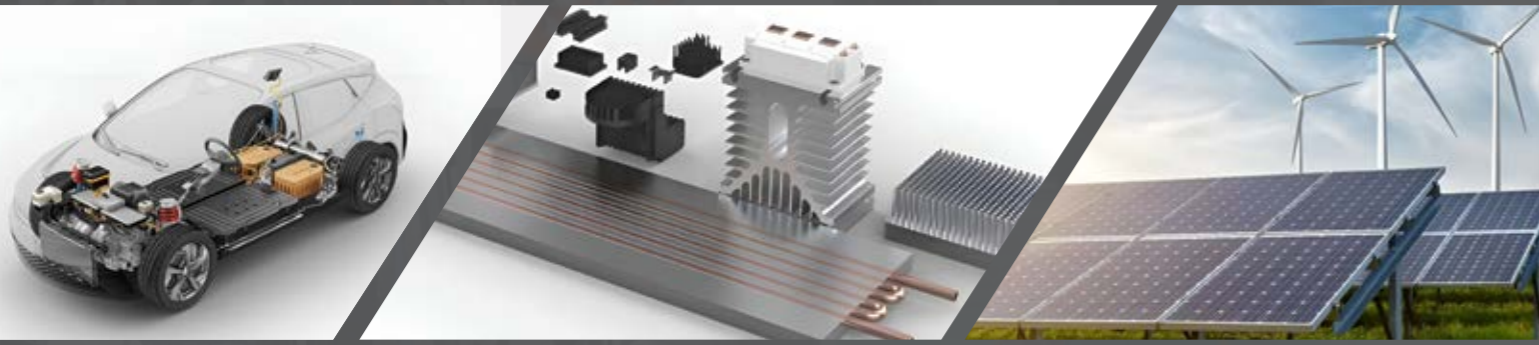
Introduction	04
Vision/Mission/Core Values	05
Organization Chart	06
Products	08
Manufacturing Capabilities	14
Quality Control Process	18
Sustainable Growth With Society	20
Our Clients & Markets	23

Established in 2013, **KIMSEN INDUSTRIAL CORPORATION**

is an **ISO 9001, ISO 14001** and **IATF 16949:2016** certified Full-Service Supplier of **Aluminum Extrusion, Die Cast, Stamped, CNC Machined Parts & Components** and **Assemblies for Automotive/Machinery, Thermal solutions and New energy sectors.**

We serve the North American and global markets from our production facilities in **Bac Ninh, Vietnam.**





ABOUT US

Built on an area of **35,000m²** in Yen Phong Industrial Park, Bac Ninh, KIMSEN factory is equipped with modern machinery and equipment. Along with strict quality control process and a team of experienced engineers, we are proud to bring high quality **Aluminum Extrusion, Die Cast, Stamped, CNC Machined Parts & Components and Assemblies** which meet international standards such as **JIS H 4100:2015 and EN 755-9:2016**, to our customers.

With a sustainable development orientation, KIMSEN has invested in ancillary facilities, with modern wastewater treatment systems, water supply system, gas station, electricity station and more to ensure efficient, safe and sustainable factory operation according to state laws. Along with the investment in modern production lines, KIMSEN has applied the Quality Management System according to **ISO 9001:2015**, Environmental Management System according to **ISO 14001:2015**, Automotive Quality Management System according to **IATF 16949:2016 and 5S - Kaizen** methods.

KIMSEN factory is capable of supplying 10,000 tons of aluminum and 30,000,000 parts & components per year. KIMSEN has a diversified range of products which are being used in a broad range of fields and applications such as **Automotive/Machinery Parts & Components, Thermal Solutions, New Energy** and other parts & components tailored as per customer request.

With the principle of providing customers with international standard products and best quality service, KIMSEN always strives tirelessly to become a professional aluminum manufacturer and a trusting partner in Vietnam and abroad.


 **10** years of experience
in aluminum industry

 **07** Export to
countries

 **10,000** tons of aluminum
per year

 **30** million parts & components
per year

 **03** extrusion lines
(800 tons/ month)

 **50** CNC machines
(milling, cutting, drilling, tapping, etc.)

VISION

KIMSEN aims to become a leading manufacturer and supplier of parts & components and industrial solutions for automotive/machinery, thermal solutions and new energy sectors.

KIMSEN - Moving Forward in the Manufacturing World

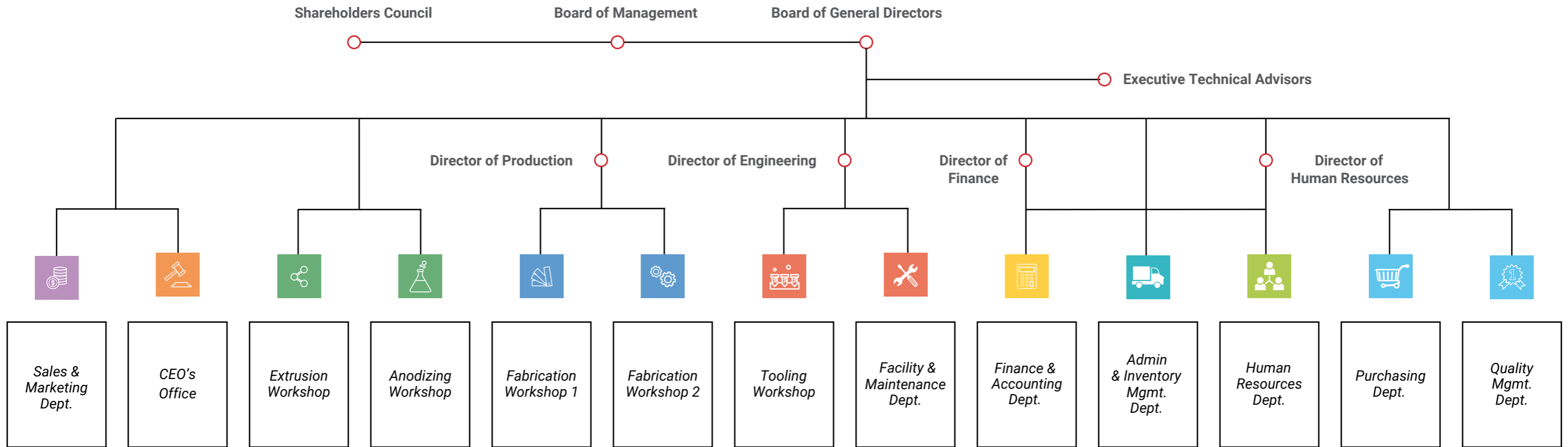


CORE VALUES



ORGANIZATION CHART

Dated: 22/04/2024



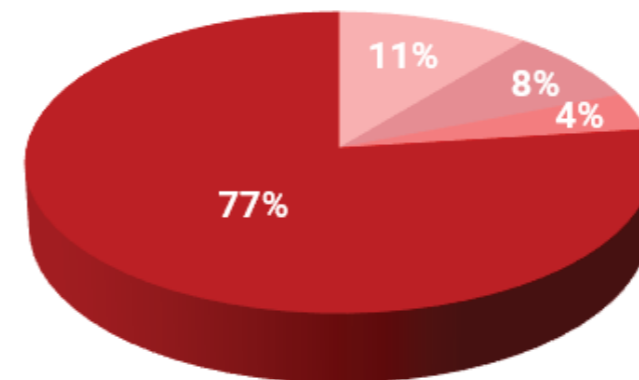
HUMAN RESOURCES

Here at KIMSEN, we consider human resources the most important factor contributing to the development of the Company. Therefore, KIMSEN focuses on building a professional, dynamic and empathetic working environment which offers equal opportunity for each member. We are proud to have a team of well-trained personnel who are passionate and devoted to the development of the Company.



Structure of Employees

Employees: 250 (up to April 2024)



- Managers & Supervisors
- QC
- Engineer
- Other staff



INDUSTRIES WE SERVE

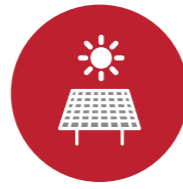
KIMSEN produces diversified range of aluminum products which are being used in a broad range of fields and applications such as Automotive/Machinery Parts & Components, Thermal Solutions & New Energy. We provide OEM/ODM service, custom design for unique shape and weight requirements at a competitive cost on high volume orders.



AUTOMOTIVE/MACHINERY PARTS & COMPONENTS



THERMAL SOLUTIONS



NEW ENERGY

AUTOMOTIVE/MACHINERY PARTS & COMPONENTS

AUTOMOTIVE

Extrusions deliver an efficient geometry offering multiple functions:

- Crash energy absorption
- Torsional stiffness
- Considerable strength with minimal weight
- Leak-free fluid transfer through structural members



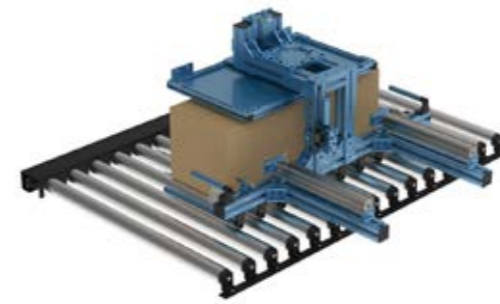
EV Battery Tray/Housing



Truck Body Frame



MACHINERY PARTS & COMPONENTS



Packaging Picking Application



Automatic CNC Router



Shaft-Sliding Linear



Multi-purpose Pillar



Motor Housing



Custom Machined Parts

THERMAL SOLUTIONS

Aluminum has gained prominence in heat sink applications due to its excellent thermal conductivity, lightweight nature, and ease of manufacturing. The versatility and effectiveness of aluminum extrusions as heat sinks have led to their widespread adoption across numerous electronic devices:

- Consumer Electronics
- Computer
- Communication

EXTRUSION HEAT SINK



HEATPIPE HEAT SINK



SKIVED FIN HEAT SINK

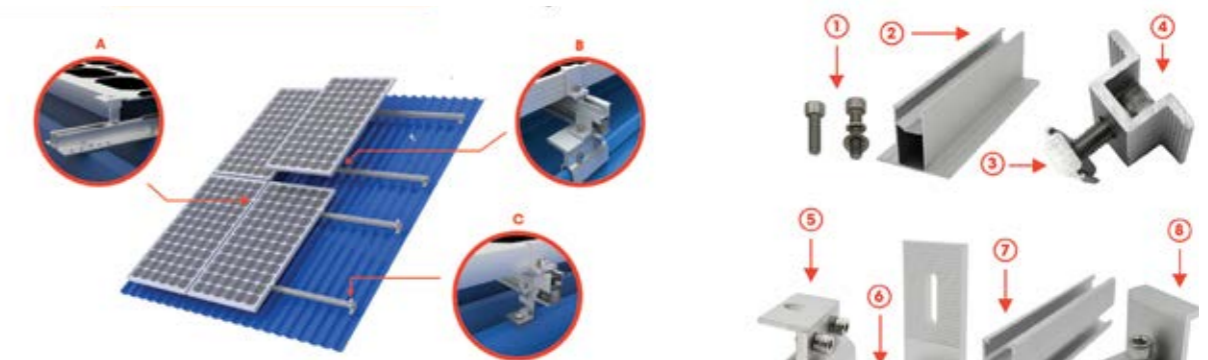


NEW ENERGY

With its lightweight strength and unmatched corrosion-resistance and durability, aluminum is widely used to build renewable energy platforms like solar panels. Aluminum components with anodized coating help the solar panels for strong weather adaptability, easy operation and maintenance.



SOLAR MOUNTING & RACKING SYSTEMS



- | | | |
|------------------|-----------------------|------------------|
| 1. Bolt | 5. Klip-lok clamp kit | 9. Screw |
| 2. Rail | 6. L foot mount | 10. L foot mount |
| 3. Nut | 7. Rail | 11. Bolt & Nut |
| 4. Mid clamp kit | 8. End clamp kit | 12. Rail |



PRODUCT STANDARDS & SPECIFICATIONS

CHEMICAL COMPOSITION (Alloy No.: 6005, 6061, 6063, 6082, ADC12, ADC6, A380)

Chemical Composition % (mass fraction)											
Alloy No.	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Other		Al
									Each	Total	
6005	0.4 - 0.9	0.35 max	0.35 max	0.5 max	0.4 - 0.8	0.3 max	0.25 max	0.1 max	0.05 max	0.15 max	Remainder
6061	0.4 - 0.8	0.7 max	0.15 - 0.4	0.15 max	0.8 - 1.2	0.04 - 0.35	0.25 max	0.15 max	0.05 max	0.15 max	Remainder
6063	0.2 - 0.6	0.35 max	0.1 max	0.1 max	0.45 - 0.9	0.1 max	0.1 max	0.1 max	0.05 max	0.15 max	Remainder
6082	0.7 - 1.3	0.50 max	0.1 max	0.4 - 1.0	0.60 - 1.2	0.2 max	0.2 max	0.1 max	0.05 max	0.15 max	Remainder

Chemical Composition % (mass fraction)											
Alloy No.	Cu	Si	Mg	Zn	Fe	Mn	Ni	Sn	Pb	Ti	Al
ADC12	1.5 - 3.5	9.6 - 12.0	0.3 max	1.0 max	1.3 max	0.5 max	0.5 max	0.2 max	0.2 max	0.3 max	Remainder
ADC6	0.1 max	1.0 max	2.5 - 4.0	0.4 max	0.8 max	0.4 - 0.6	0.1 max	0.1 max	0.1 max	0.2 max	Remainder
A380	3.0 - 4.0	7.5 - 9.5	0.1 max	3.0 max	1.3 max	0.5 max	0.5 max	0.35 max	-	-	Remainder

MECHANICAL PROPERTIES (Alloy No.: 6005, 6061, 6063, 6082)

Alloy No.	Temper Grade	Mechanical properties							
		Wall Thickness at specified measuring point (mm)	Tensile stress (N/mm)	Proof stress (N/mm)	Elongation %		Hardness test		
					A 50 (mm)	A	Wall Thickness at specified measuring point (mm)	HV5	Hw Typical value
6005	T5	6 max	245 min	205 min	8 min	-	-	-	13 min
		Over 6 up to and incl. 12	225 min	175 min	8 min	-	-	-	13 min
6061	T6	6 max	265 min	245 min	8 min	7 min	-	-	14 min
		Over 6	260 min	240 min	10 min	-	-	-	14 min
6063	T5	12 max	150 min	110 min	8 min	7 min	0.8 min	58 min	8 min
	T6	3 max	205 min	170 min	8 min	-	-	-	11 min
6082	T5	5 max	270 min	230 min	6 min	8 min	-	-	-
		5 max	290 min	250 min	6 min	8 min	-	-	-
	T6	Over 5 up to and incl. 25	310 min	260 min	8 min	10 min	-	-	-

SURFACE TREATMENT

Anode	8 - 12 μm
Powder coating	$\geq 60 \mu\text{m}$
Type	Natural, sand blasting, hard anodizing, nickel plating, tin plating, powder coating
Color range	Clear, black

In case you have other requirements, please contact us for further information.

DIMENSION AND TOLERANCES

- ▶ Tolerances on sectional dimension
- ▶ Tolerances on camber
- ▶ Tolerances on contour
- ▶ Tolerances on length
- ▶ Tolerances on flatness
- ▶ Tolerances on corner radius
- ▶ Tolerances on angularity
- ▶ Tolerances on twist
- ▶ Tolerances on thickness

*According to standards & specifications as JIS H 4100:2015, EN 755-9:2016, ASTM B221/B221M-14.

PACKAGING



KIMSEN provides quality standard packaging services, which can be customized to customer's specific packaging requirements.



MANUFACTURING CAPABILITIES



EXTRUSION WORKSHOP

Aluminum alloy: 6063, 6005, 6061, 6082
Heat treatment: T4, T5, T6
Machines: 920 UST, 1100 UST & 1880 UST



STAMPING WORKSHOP

35 machines
Services: Cutting, punching, laser engraving, screen-printing, etc.
Accuracy: 0.05 - 0.2 mm



PUNCHING MACHINES

11 machines
Machines: 32, 45, 80, 150, 200 tons

DRILLING & TAPPING MACHINES

17 machines



CNC MACHINING WORKSHOP

50 machines
Services: Milling, cutting, drilling, tapping, etc.
Machine brands: Makino, Fanuc, JIH, Doosan, etc.
Accuracy: 0.01 - 0.03 mm

ANODIZING WORKSHOP

Color range: Clear, black

Type: Natural, sand blasting, hard anodizing, nickel plating, tin plating

Product Standard: JIS H8602 & JIS H8601, AAMA611, MIL-A8625 & MIL-DTL-5541



POWDER COATING WORKSHOP

Product Standard: AAMA 2603, 2604, 2605-13, QUALICOAT

Powder Coating from International brands: AkzoNobel, PPG Coating, Jotun, Tiger Drylac, others as per request



MANUFACTURING PARTNERSHIP

DIE-CASTING WORKSHOP

Aluminum alloy: ADC12, ADC6, A380, HD4 and equivalent

Machines: 350T, 650T & 800T



TURNING WORKSHOP

118 machines

Machines: Ø1.0 - Ø30.0 mm

Materials: aluminum, steel, copper, plastic, etc.



QUALITY CONTROL PROCESS

Our quality process includes:

- The 5 Core Quality Tools – APQP, PFMEA (DFMEA & PFMEA), SPC, MSA, PPAP
- The 7 Basic Quality Tools for Process Improvement
- Quality Improvement Methods – Six sigma, Kaizen, Lean Manufacturing, Toyota Way, Pull System, Pokayoke, Kanban, etc.
- Advanced Metrology Capability (CMM, 2D Scanners) – Measure what we manufacture with precision.



Tensile Stress Testing



Hardness testing



Vision Measurement



CMM Measurement

MANAGEMENT SYSTEMS

KIMSEN has been recognized as an ISO 9001 and ISO 14001 compliant system since 2016. Along with international standards for management system, we apply Japanese 5S - Kaizen and Lean manufacturing methods to maintain stringent quality standards in manufacturing processes, ensuring rigorous quality checks at every stage of production.



ISO 9001:2015
Quality Management System



ISO 14001:2015
Environmental Management System



IATF 16949:2016
International Automotive Task Force



PRODUCT CERTIFICATIONS



EN 7-559:2016
Tolerances for Aluminium Alloy-extruded Profiles



JAPAN INDUSTRIAL STANDARDS

JIS H 4100:2015
Specifies the standards of aluminum used for industrial activities in Japan



Standards Worldwide

ASTM B221/B221M
Aluminium and Aluminum Alloy Extruded Bar, Rods, Wire, Profiles and Tubes Test



RoHS 2011/65/EU (Test report)
Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment



REACH
Registration, Evaluation, Authorisation and Restriction of Chemicals



PFAS FREE
Restriction of Per- and Polyfluoroalkyl Substances

SUSTAINABLE GROWTH WITH SOCIETY

Sustainable development, not only paying attention to business benefits but also making positive contributions to the society and environment, is the long-term orientation of KIMSEN Industrial Corporation.

The responsibility to minimize environmental and society impacts, save energy, maintain the landscape green - clean - beautiful, contribute to the development of the local economy are among important criterias besides production and business efficiency.

FUNDRAISING ACTIVITIES TO BUILD PRESCHOOLS

With the desire to help underprivileged children living in mountainous areas, over the years, KIMSEners have joined hands with other benefactors to build many new schools, helping students have a spacious school to learn and develop.



VOLUNTEER PROGRAM "MÙA GIÓ ẤM"

KIMSEN is a gold sponsor for the "Mùa Gió Ấm" volunteer program of Foreign Trade University students.



THE CONTEST "KIMSEN GO GREEN"

"KIMSEN Go Green" is a contest organized to encourage and promote environmentally friendly actions of all KIMSEners. The contest spread the spirit of living close to nature, limiting the amount of waste, and enhancing the sense of responsibility of each individual to the community.



On the path of development, KIMSEN has always focused on the formulation and development of identity, corporate culture, to create consistency across all operations of the company. Recognizing the importance of the contribution of each individuals to sustainable development of the company, KIMSEN keeps building dynamic, professional and equal working environment of opportunity for all employees of the company in order to maximize the capacity and creativity of individuals.



TRAVELLING & TEAMBUILDING



YEAR END PARTY



KNOWLEDGE SHARING



ANNUAL HEALTH CHECK



SPORTS ACTIVITIES

SUSTAINABLE GROWTH WITH SOCIETY

Through dedicated product development for electric vehicle industry (including electric cars, buses, and trucks) and renewable energy sector (solar), KIMSEN has taken an active role in the global supply chain, furthering the aim of carbon emissions reduction and environmental sustainability.



ENVIRONMENTAL RESPONSIBILITY

As a manufacturer, KIMSEN always strives to build a green and clean working environment to minimize waste chemicals to the surrounding environment.



ALUMINUM RECYCLING

After quality testing, non-standard aluminum products will be recycled to be used as raw materials for other production processes.



WASTEWATER TREATMENT SYSTEMS

Aware of corporate responsibility in protecting the environment, KIMSEN has focused on installation of modern wastewater treatment system, and application of Environmental Management Procedures ISO 14001:2015 at the same time to ensure wastewater output quality full compliance with the law. The application of environmental management system according to international standards is KIMSEN's commitment to contribute positively to environmental protection.



ANCILLARY SYSTEM

In order to ensure efficient, safe and sustainable factory operation, KIMSEN has invested in modern ancillary systems such as water supply system, power station system, gas station, rooftop solar mounting system, etc. This contributes significantly to the sustainable development of our Company.

OUR CLIENTS

Panasonic

BOYD

DAIKIN

VNPT

Hasegawa

K2 systems

VINFAST

DELTA™
PANELS

form

OUR MARKETS

Besides being supplied to the domestic market, our aluminum products have been exported directly and indirectly to overseas markets.



TOTAL SALES REVENUE
30 Million USD

EXPORT REVENUE

account for **52%** TOTAL REVENUE
(including direct export & on-spot export)



Head Office & Factory

Yen Phong Industrial Park, Bac Ninh Pro., Vietnam

Hanoi Office

TTC Tower, No. 19 Duy Tan Str., Hanoi, Vietnam

Phone: +84 981-261-322 (WhatsApp/LINE) (VN Based)

www.kimsen.vn

info@kimsen.vn