



**TOASE**

**SYSTEMS ENGINEERING**

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**TOA SE (THAILAND) CO.,LTD.**  
**COMPANY PROFILE**

# TOA SE (THAILAND) CO.,LTD.

## Location:

### Rompo Business Center

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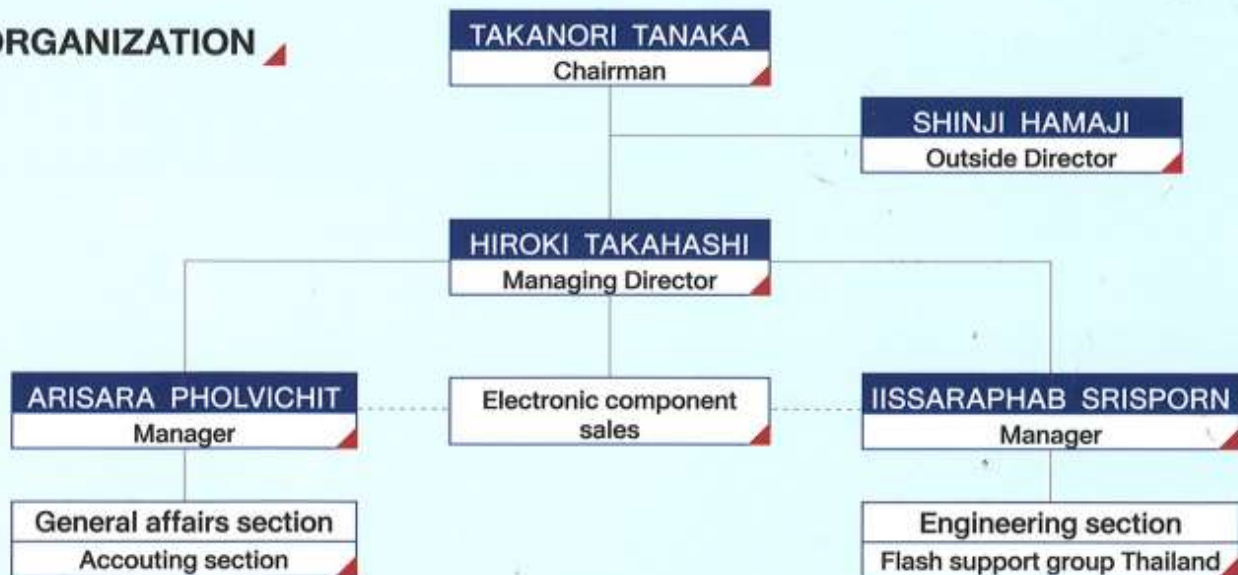
Home Page : <http://www.toase-thailand.com>

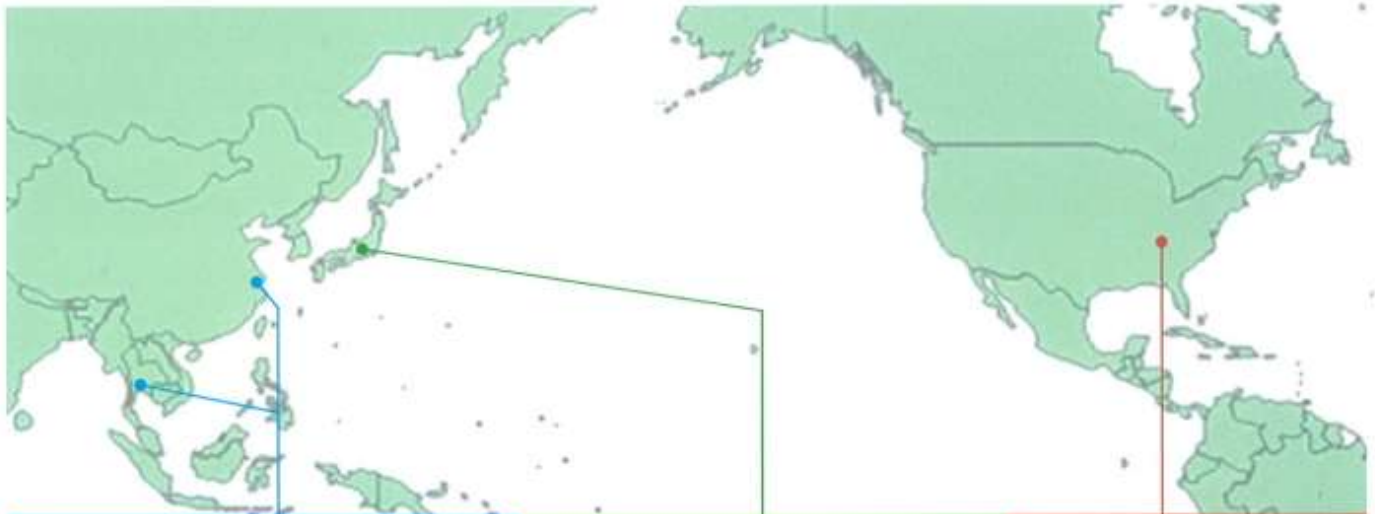


Google MAP



## ORGANIZATION





ASIA PACIFIC	JAPAN	USA
Shanghai TOA FSG Technology Co.,LTD. TOA SE (THAILAND) CO.,LTD.	TOA ELECTRONICS, Inc. TOA Electric Company Hamatou Company Flash Support Group Company	TOA SE, Inc.

<b>TOA ELECTRONICS, Inc.</b>	Head Office.
Location: Midori-ku, Nagoya, Aichi Japan	
<b>TOA Electric Company</b>	Design and installation of industrial automation systems.
Location: Midori-ku, Nagoya, Aichi Japan	Design and fabrication of power distribution switchboard and automated control panel. Design, manufacture, and sales of set top box and embedded system products Provide environmental solution
<b>Hamatou Company</b>	Sales of semiconductors, electronic components, industrial products, and electron tubes
Location: Hamamatsu, Shizuoka Japan	ODM(Original Design Manufactuer) service. EMS(Electronics Manufacturing Service) Design and sales of microcontroller application products Design, manufacture, and sales of Enterprise PDA and handheld products
<b>Flash Support Group Company</b>	Design, manufacture, and sales of device programmers and accessories
Location: Hamamatsu, Shizuoka Japan	Design, manufacture, and sales of applied microcontroller products Devise programming services products
<b>Shanghai TOA FSG Technology Co.,Ltd.</b>	Design and installation of industrial automation systems.
Location: Shanghai, China	Design and fabrication of power distribution switchboard and automated control panel Design, manufacture, and sales of device programmers and accessories Design, manufacture and sales of applied microcontroller products Import / export / sales of electric mechatronics products, semiconductors, electric equipments, and automated facillies
<b>TOA SE, Inc.</b>	Design and installation of industrial automation systems
Location: Kentucky, USA	Installation, relocation, and consuruction of factory facilities

### TOA SE (THAILAND) Tie-up Company

HODAKA ELECTRONICS (THAILAND) CO.,LTD.	
Location: Bangkok Thailand	Various Measures, Power Supply and Power Control Products, Testing Equipment of Environment Simulation, Shield Box & Shield Room Production

# Electrical Installation and Design

- ◆ Power systems
- ◆ Industrial systems
- ◆ Automatic systems
- ◆ Communication systems



# Piping Fabrication, Installation and Design



◆ Fire pipe

◆ Air Header and air pipe



◆ Refrigerant pipe

◆ Chiller water pipe



# DUCT WORK

We provide duct design both small and industrial systems.  
And installation of various ducting systems. Including the installation of large industrial fan used on ducting systems.

## SPIRAL DUCT



## RECTANGULAR DUCT



## BLOWER FOR INDUSTRIAL INSTALLATION





# CIVIL WORK

## Piling Work ▲

We work all in one for Construction service from start to end of project



## PIT and TRUCK SCALE ▲



## STEEL STRUCTURE ▲





# CLEANROOM TECHNOLOGY

## INSTALLATION CLEANROOM

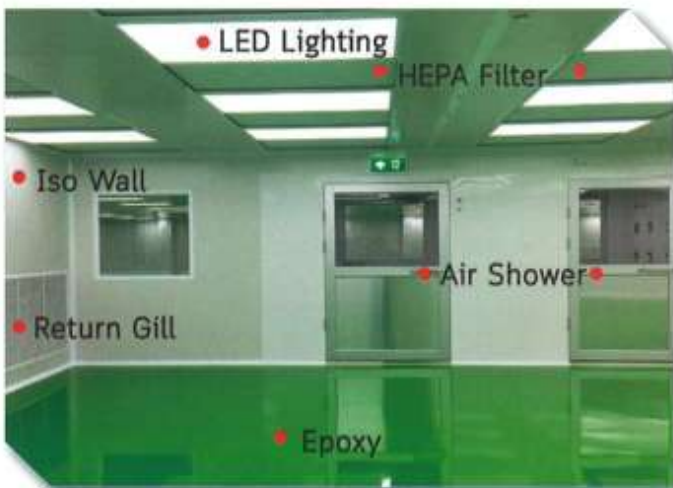
### CLEANROOM DESIGN STANDARDS

For those companies that need to adhere to specific design standards, they must understand that cleanrooms can be built and operated to meet different cleanliness classifications, depending on the environmental conditions required for their use.

**ISO 14644-1 Cleanroom Standards**

Class	maximum particles/m <sup>3</sup>						FED STD 209E equivalent
	≥0.1 μm	≥0.2 μm	≥0.3 μm	≥0.5 μm	≥1 μm	≥5 μm	
ISO 1	10	2.37	1.02	0.35	0.083	0.0029	
ISO 2	100	23.7	10.2	3.5	0.83	0.029	
ISO 3	1,000	237	102	35	8.3	0.29	Class 1
ISO 4	10,000	2,370	1,020	352	83	2.9	Class 10
ISO 5	100,000	23,700	10,200	3,520	832	29	Class 100
ISO 6	1.0×10 <sup>6</sup>	237,000	102,000	35,200	8,320	293	Class 1,000
ISO 7	1.0×10 <sup>7</sup>	2.37×10 <sup>6</sup>	1,020,000	352,000	83,200	2,930	Class 10,000
ISO 8	1.0×10 <sup>8</sup>	2.37×10 <sup>7</sup>	1.02×10 <sup>7</sup>	3,520,000	832,000	29,300	Class 100,000
ISO 9	1.0×10 <sup>9</sup>	2.37×10 <sup>8</sup>	1.02×10 <sup>8</sup>	35,200,000	8,320,000	293,000	Room air

### TURBULENT CLEANROOM



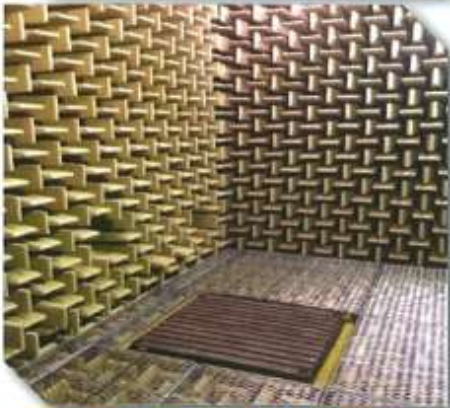
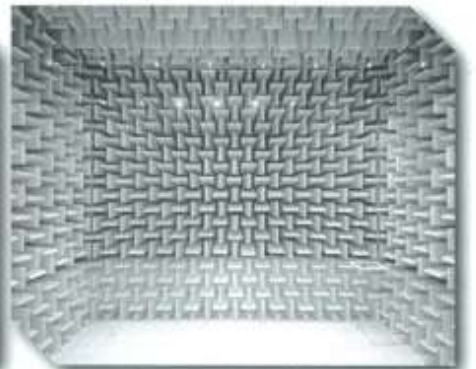
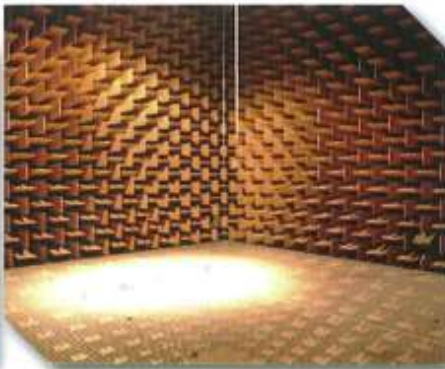


# ANECHOIC CHAMBER ROOM (SOUND PROOF ROOM)

## INSTALLATION INTRO. ▲

The room used for reducing the echo or reflection has the ability to reduce the noise. The sound is clearer and clearer. Suitable for use in music room, recording room, movie room, music, games. Special classrooms, conference rooms, seminar rooms, industrial facilities, entertainment venues or other rooms that emphasize echo reduction.

## CONSTRUCTION ANECHOIC CHAMBER ROOM ▲



**Sound waves** can pass through even the smallest hole or opening in holes, walls, or any material. Acoustic foams are installed to reduce noise pollution as they remove echoes and background sounds not by blocking the sound but by absorbing it.

### Enhance sound quality

Acoustic foams are cut in tiles with pyramid or wedge shapes. They work not only to absorb sounds, but also to enhance the quality of sound and speech in a room. Dealing with both mid and high fre-

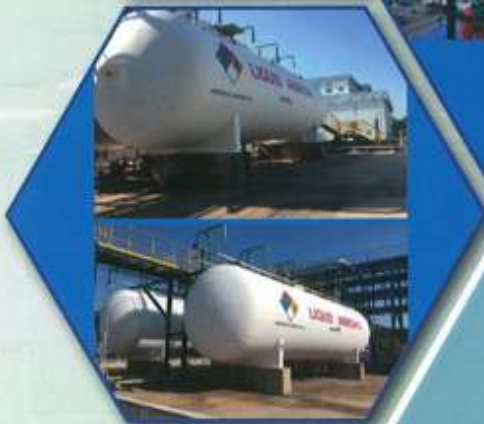
quencies at the same time, acoustic foam can also be counted as a type of cost-friendly heat reduction facility that is placed in corners of the room or wherever optimal sound mixes are needed as bass traps to minimize sound echoes.





# Special color and Painting work

## HEAT EXCHANGE PAINTING ▲



Special painting  
Professional work  
Beyond color for you



## EPOXY PAINTING ▲



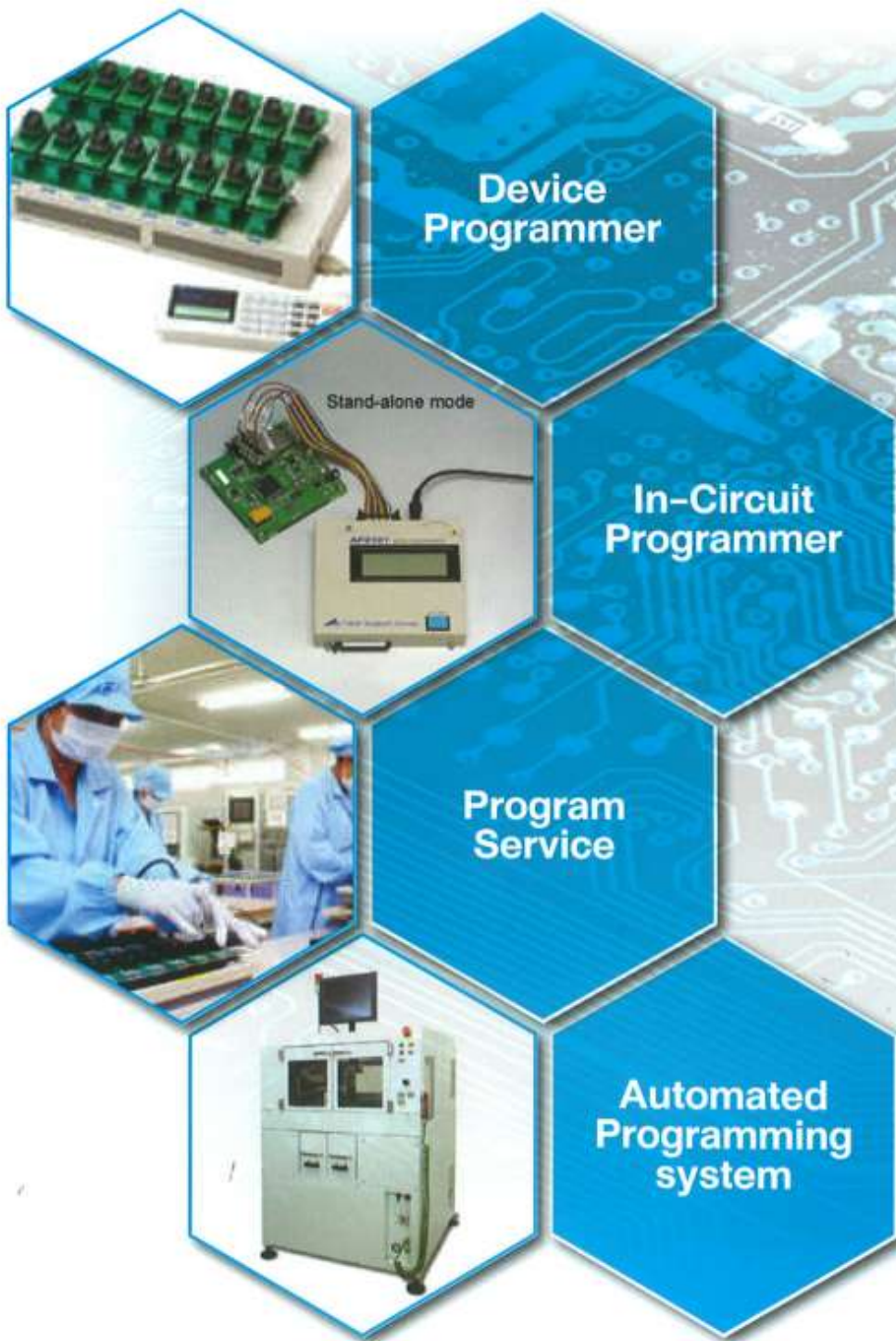
Support for high quality manufacturing  
**Automated Programming System**

Compact, production,  
and low cost  
**TEH2724/30C**

Programming / marking /  
inspection / by one unit  
**TEH2724LS**  
Laser marking available

**Quick Flexible product for device**

 **Flash Support Group**



Responding swiftly and flexibly to customer demands and market changes, we precisely support your business needs

Flash Support Group is developing and producing device programmers, automatic programming systems and accessories as well as providing high quality programming services utilizing its own company's products



[www.toa-hd.co.jp](http://www.toa-hd.co.jp)