

# Taiwan Maxwave Co., Ltd

INTRODUCTION OF DEFENSE & AEROSAPCE AREA  
BY AVIATION INDUSTRIAL DIVISION (09.2024)

# Who We Are

TAIMAX was founded in 1983 by Frank Yu.  
We are a **chemical manufacturer**  
providing innovative solutions and  
products in highly demanding sectors.

Our clients cover upper/middle/down  
streams of **Chemical and Electronic  
Industries (700+ clients)**, Solar-Cell,  
Semiconductor IC, Water. Treatment, and  
**Aerospace & Defense areas.**

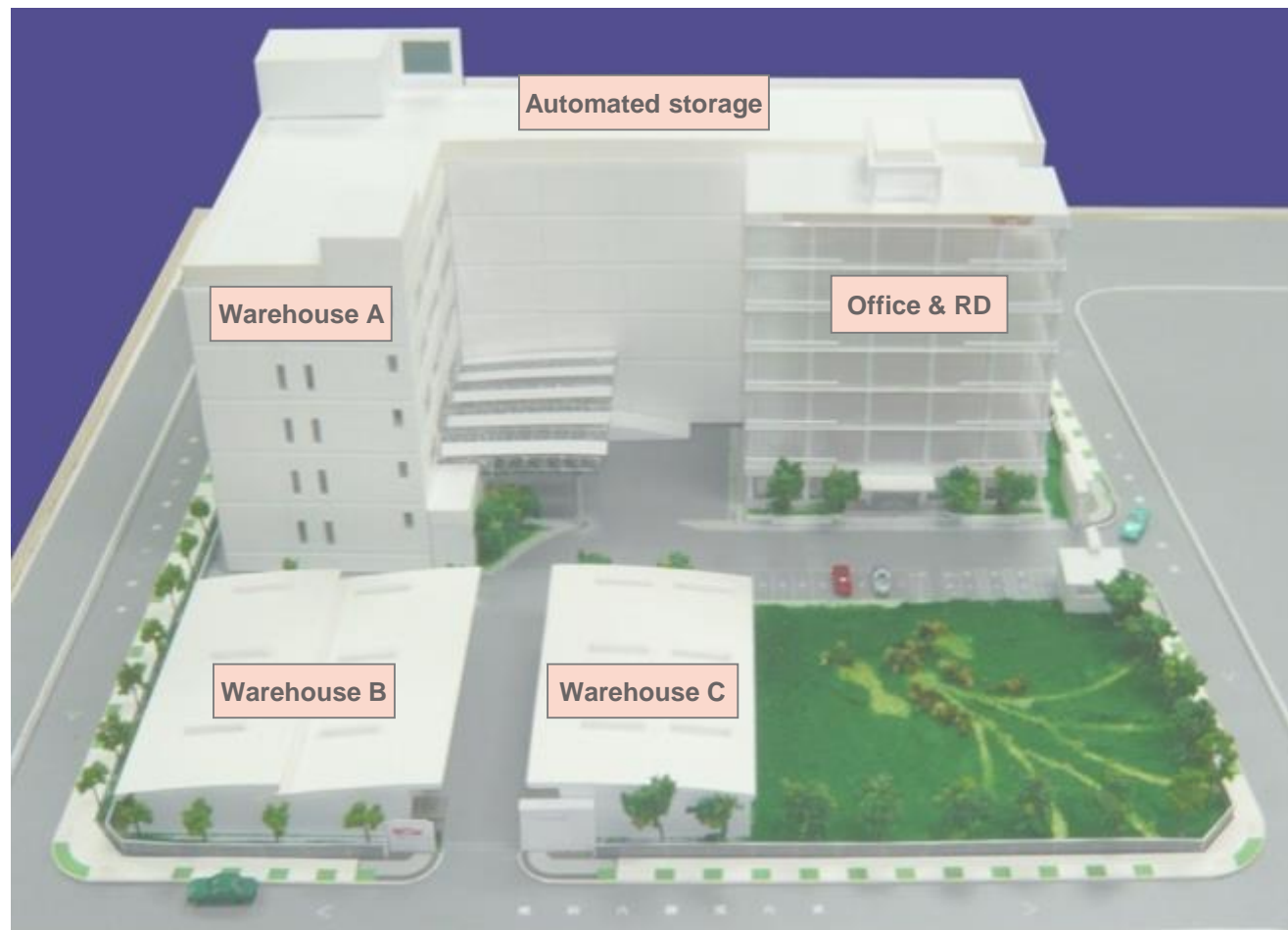
Capital	20 Million USD
Employees	125
Revenue(2022)	50 Million USD

40+  
Years  
Innovation





# Guanyin Research & Production Center



- Total of 14,800 m<sup>2</sup>
- Office & RD Building
  - R&D Application Lab
  - QC Lab
- Automatic Storage System & Warehouse A (30 meter in height, 3 aisles, 5076 storage units)
  - Mixing Production Line
  - Packaging Line
  - Chemical Storage
- Hazardous Warehouse
  - Warehouse B: Dangerous goods warehouse
  - Warehouse C: Explosion-proof warehouse
- Warm/Cold Storage

# Milestone

## Establishment & Agency

**1983** Established Taiwan Maxwave Co., Ltd.

1983 Represent Eastman Kodak (US)

1992 Sole agent: ISP (US)

1997 Sole agent: KMG Chemicals Corp (US)

**2003** Ship-to-Stock certificate from TSMC

2003 Sole agent: OOC (JP)

## Certificate

**ISO 9001**

**ISO 14001**

**ISO 45001**

**AEO**

## Manufacturer Branding

**2005** Local manufacturer - Taimax brand

2006 ISO 9001:2000 quality system certified

2007 Sole agent: Timcal (EU)

**2008** GPMS green product system in place

**2009** Establish QC laboratory

2010 Agent: Enthone (US)

2011 Sole agent: ECSC and Q-Pilon (JP)

**2012** Guanyin/Taoyuan factory grand opening

2013 Agent: APROS (KR)

2013 Sole Agent: COMET X-Ray (CH)

2013 Sole agent: HITEC (NCBJ) (PL)

## Global Development

2015 Sole agent: VISICONSULT and SGL(EU)

2016 Sole Agent: ULTRACOR (US)

2017 Sole Ageng: HAYDALE (UK)

**2017** Best Distributor in ASIA of CARESTREAM NDT

**2018** Golden Reward by NCSIST

2018 Sole agent: SEDAL Ceramic (ES) & NIDEK (JP)

2019 Park Aerospace and SAINT GOBAIN Quartz (US)

2020 Sole Agent: Arquimea (SP)

2021 Sole Agent: Nitrochem (PL)

2022 Sole agent: MESKO (PL)

2023 Sole Agent: Avibras (BR)

# TAIMAX Aerospace & Defense

Chemical company specialized in **Materials**, **Nondestructive Equipment** and **Defense**.

**Partners** with globally renowned manufacturers (selected)

▣ **America:** Ashland, SAINT-GOBAIN Quartz, Carestream,

KMG, Park Aerospace, ULTRACOR etc.

▣ **Europe:** COMET, SAINT-GOBAIN, IMERYS, SGL,

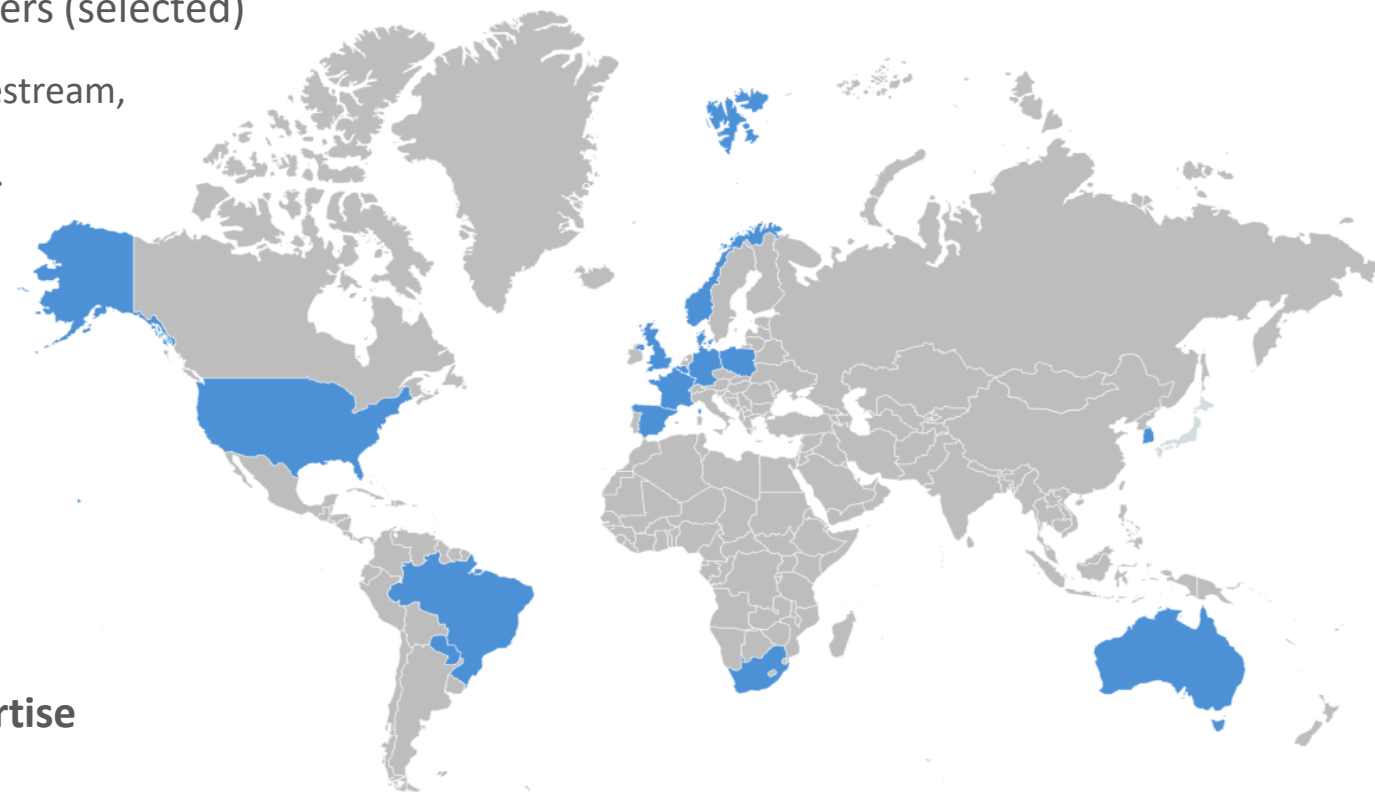
VisiConsult, HITEC, NITROCHEM,

HAYDALE, PGZ, etc.

▣ **Asia:** APROS, SAINT-GOBAIN, OCI, etc.

▣ **Oceania:** Kymera

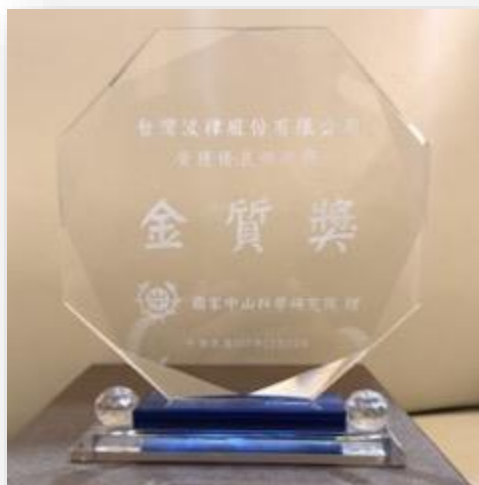
**Maintenance and Integrated Solutions Expertise**





# NCSIST Golden Reward - Best Supplier 2018

- Total Taiwan Suppliers: 5000+
- Listed Qualified Suppliers: 1000
- **Golden Award: 6 Best Suppliers**



National Chung-Shan Institute of Science and Technology Award Ceremony





# Automatic Warehouse & Mixing/Refilling Plant



**ADVANCED  
PRODUCTION  
EQUIPMENT**



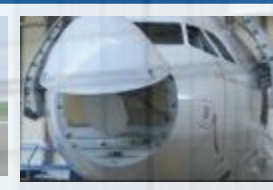
## Electronic Chemicals



## Advanced Materials

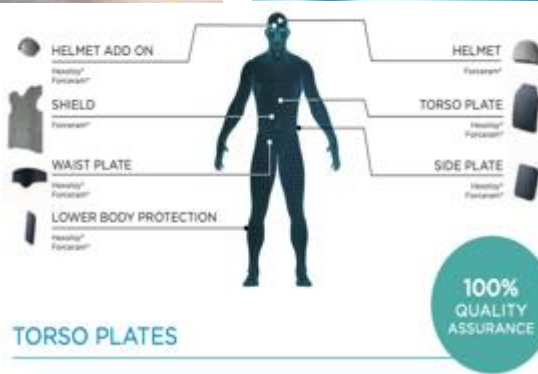
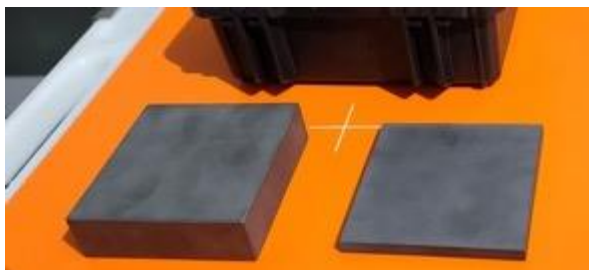


## Aviation



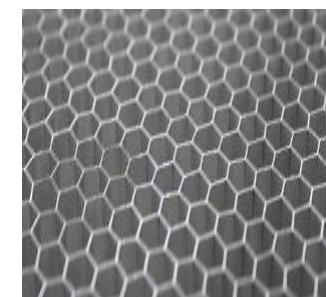


# Advanced Materials (Military Related Products)



## Special Products & Military Applications

- Armour Applications (Body, Vehicle, Aircraft)
- Ceramics
- Quartzes Fiber/ Veil / Yarn
- Honeycomb board
- Nitride-bonded SiC
- Directly sintered SiC
- Iron Powders (EMI/RFI, Cores, Toroid, Metal injection molding)
- Carbon fiber / Prepre
- Special Military Chemicals
- Special Functional Materials (Plasma Reactor)



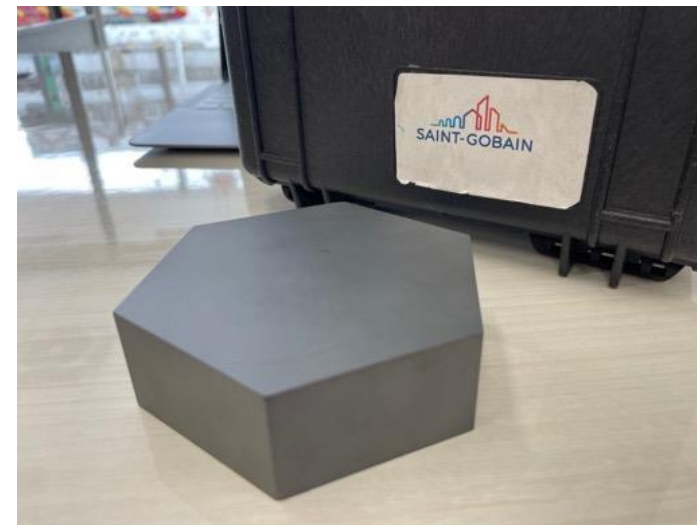
# STANAG 4569 Level 6 condition



The STANAG 4569 level 6 comprises the 30X165 AP-T and 30x173 ADSPFS-T sabot rounds that have a capability to penetrate up to 116mm conventional steel armour.

NATO STANAG 4569 Level 6 from 27,5-72,5° NATO impact angles

New composite armour solution that combines metallics, ceramics, and fibre materials to optimize the ballistic performance for a NATO STANAG 4569 Level 6 solution





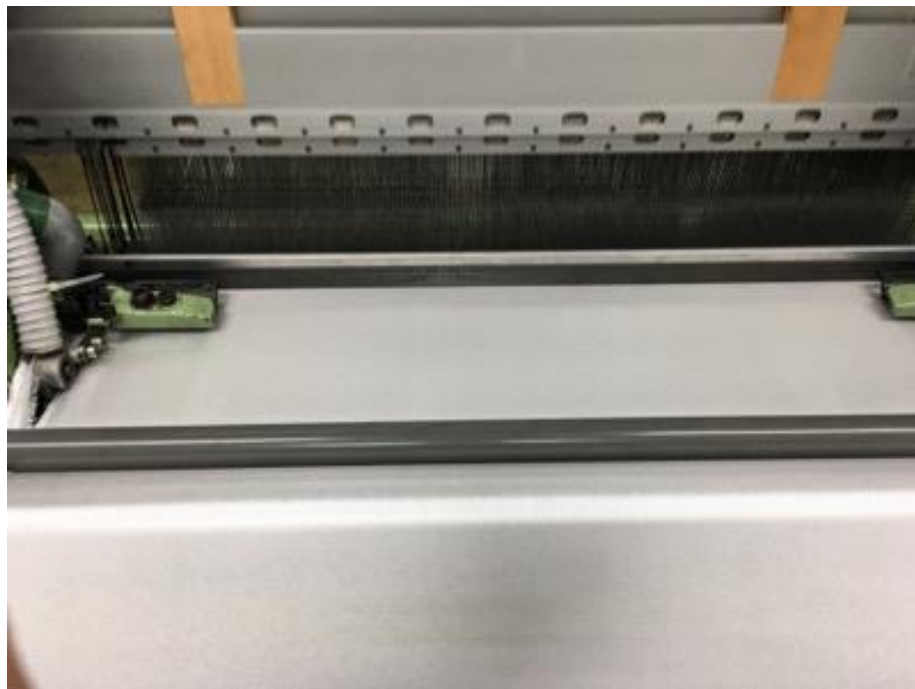
# Quartz Fabric for Drone & Training Craft

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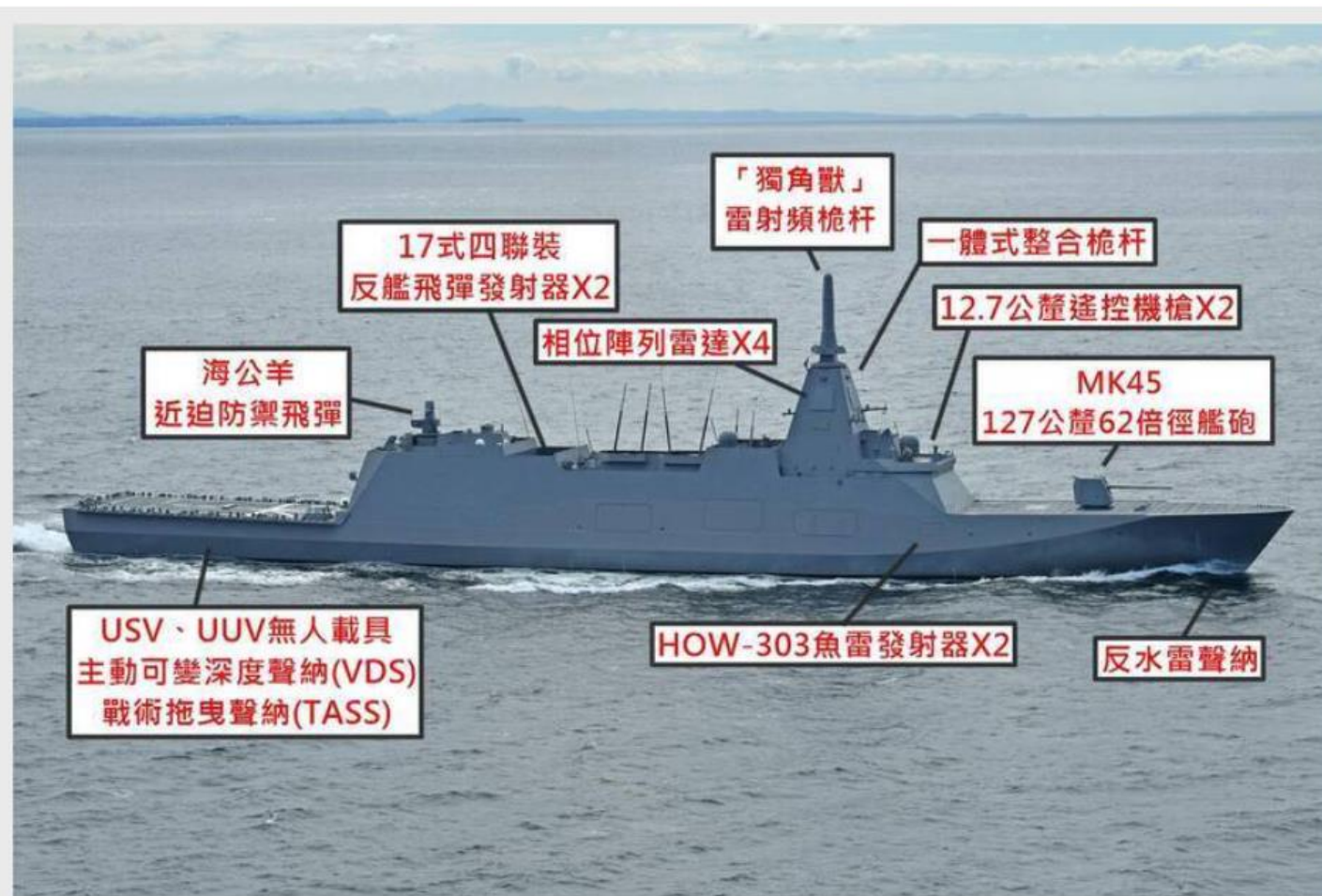


# Quartz Fabric for Drone & Training Craft

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# Quartz for Navy application



《軍武頻道》圖解介紹最上級護衛艦。(圖片擷取自日本海自，記者吳哲宇製圖)

- Our quartz is qualified in Japan on this UNICORN dielectric mast.
- Thanks to its superior dielectric and mechanical performance.
- The ability of quartz to operate at all frequency allows some flexibility in the design which is also a plus.

YouTube:

<https://www.youtube.com/watch?v=-VbbrmAKZnA>



# Quartz for Navy application



- Saint Gobain's Quartzel® yarn is used to produce Thermal Protection Systems (TPS) used as launching pads in various Navy.
- Its ability to resist not only extremely high temperature but also its excellent durability.

YouTube:

<https://www.youtube.com/watch?v=YRptBzvvpPk>





## Electronic Chemicals



## Advanced Materials



## Aviation Industry



# Military & Aviation Client List (selected)

## Government & Military

- NCSIST
- ITRI
- Air Force
- Arsenal

## Civil Aerospace

- AIDC
- AvioCast
- NFT
- EGAT
- Aerowin
- Global Tek
- GEEVERGREEN

## Other Industry

- FROCH Enterprise
- Advanced Group
- Formosa Petrochemical Corp.
- Fusheng Precision

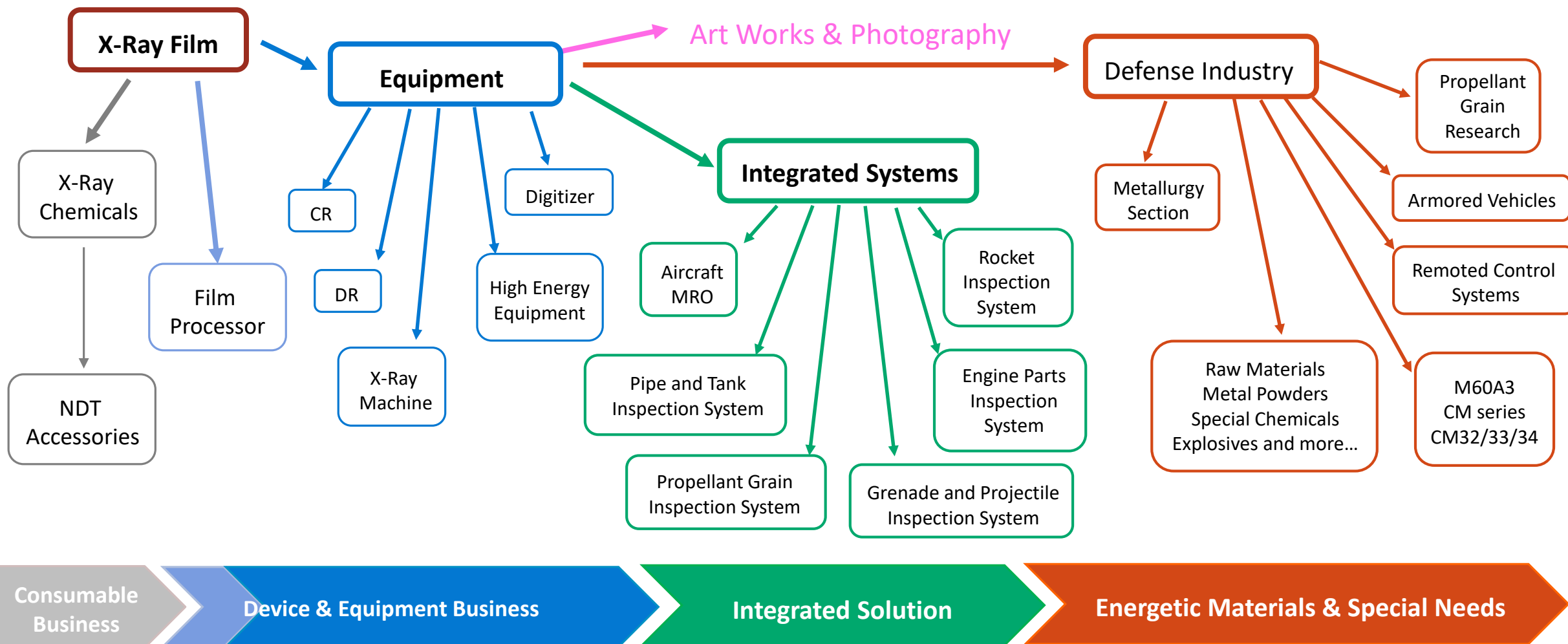
## Power Plant

- Taiwan Power Company
- Nuclear Power Plant

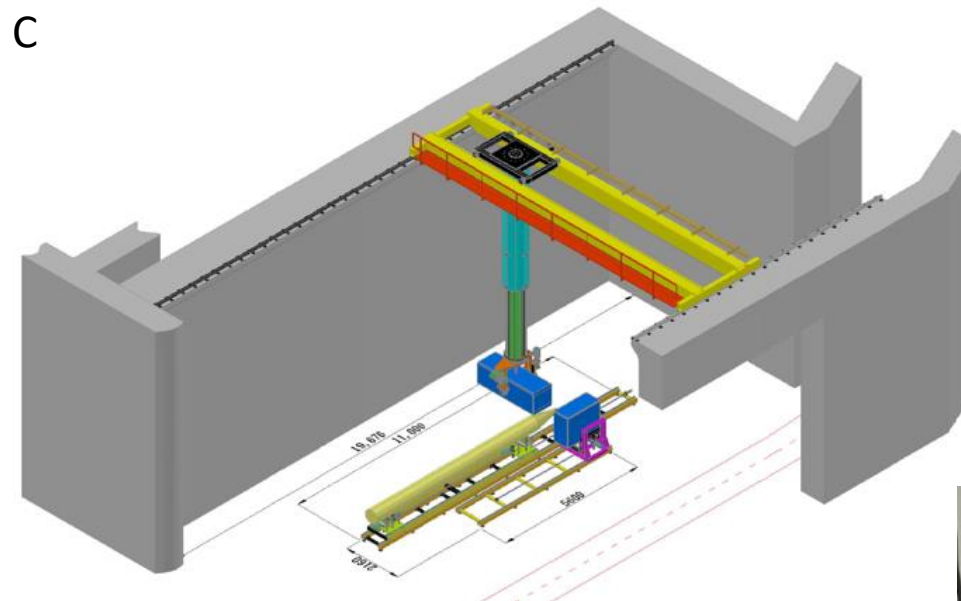
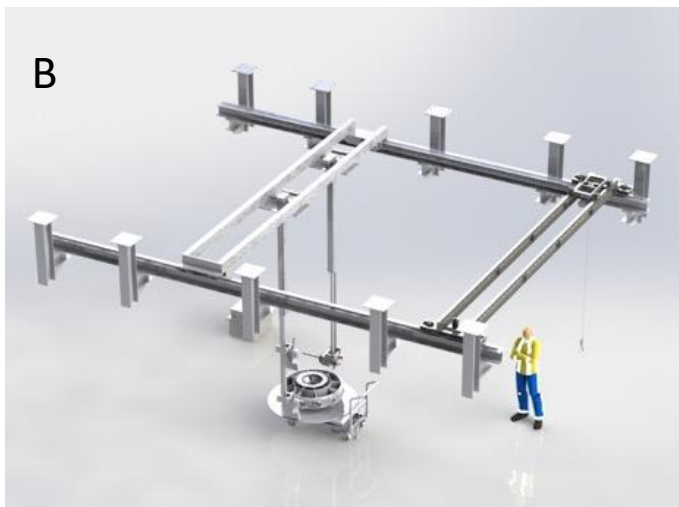
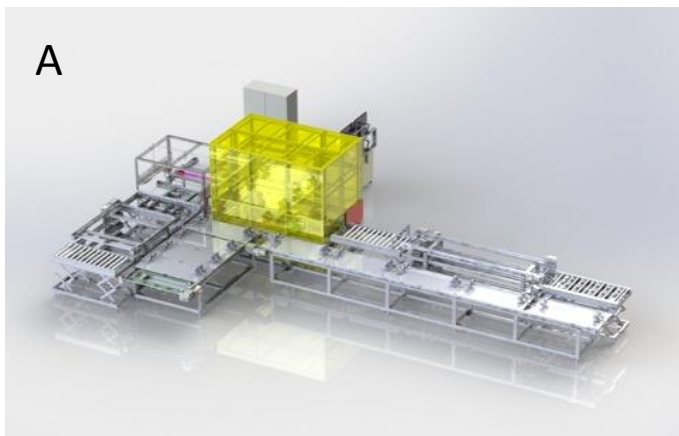
## Selected Client List



# Aviation Industry Evolutionary Tree (by Products)



# TAIMAX Design & Maintenance Team



Digital Radiography - Cabinet  
Automatic Inspection system





# Products and Integrated Solution Provider

## Consumables

- X-ray films
- Chemicals
- NDT Accessories

## Equipment

- X-ray machine
- Film processor
- CR system
- DR panel
- Film digitizer

## Integration system Total Solution

- Customed Design
- Integration Case Study
- RT inspection system
  - Film solution
  - DR solution
  - CR solution
  - Automatic / Semi-automatic inspection line
- CT system
- Training Services

## Energetic Materials Special Needs

- Explosives
- Special Chemicals
- Pyrotechnic compositions
- Remote Control Systems
- Special Military Materials and Equipment
- Propellants
- Ceramics

# Our Future with EOS

**EOS**



**SLINGER**

One shot, one kill

Precision, lightweight, counter-drone lethality

**EOS**



**DIRECTED ENERGY  
UAS DEFENCE**

A NEW BENCHMARK FOR NEUTRALISING SWARM  
UAS ATTACKS AGAINST KEY INFRASTRUCTURE

# Our Future with EOS

## R150



Light weight  
Precise  
Long Range  
M2HB 12.7mm HMG or 0.50 Cal capable

## R400



Reliable  
Flexible  
Powerful  
Mobile engagements up to 2km with 30mm x 113mm lethality is now a reality

## INTEGRATION

The R400 has been integrated onto a wide range of protected and open topped vehicles as shown below.



Joint Light Tactical Vehicle



Komodo 4x4



NMIR Abjan



Polaris Dagor



Toyota Land Cruiser

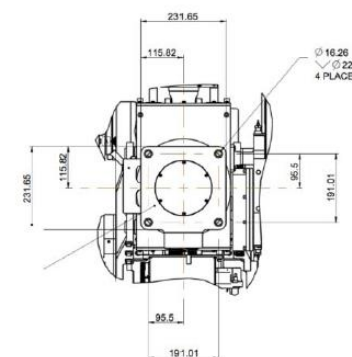
### Platform Integration

Platform integration is quickly and simply achieved via a four bolt plate mount as shown right and via one electrical connector (excluding the M230LF cannon which requires two electrical connectors).

The Below-The-Roof elements comprising the Control Group are located in spare spaces within the vehicle in order to not impact vehicle operation and personnel movement.

Platform integration also assumes the following:

- Vehicles will be made available for survey and analysis by an EOS engineering team.
- CAD data on the vehicle will be made available for the conduct of computer based Finite Element Analysis.



4 Bolt Pattern Interface



HDT Hunter Wolf UGV



HMMWV

