

Multi Plunger Auto Mold System

The leading company in semiconductor mold designing
and Manufacturing field

TONG JIN CORPORATION





주식회사 동진
TONGJIN CORPORATION



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CEO Message



CEO *Changho Choo*

Welcome to Tong Jin,

I am glad to have this opportunity to introduce the promising semiconductor mold manufacturing company of Tong Jin.

It is widely said that the one word representing the last century might be 'Innovation Era'. As matter of fact, the amount of the wealth and the value having been created during the Era would be much more than the sum created for the several millennium period before the Era. The tremendous outcomes for the Innovation Era might be the results of ongoing Innovation continued throughout the Era, which have made the human being take the advantage of time, space and knowledge efficiently. And the current changes from innovation have been continuing now and tomorrow more positively and more rapidly than yesterday.

It was the characteristic that the hardware industry has been evolved step by step slowly during the last two centuries after the Industrial Revolution commenced around three centuries before in mid 1700's. However, the industrial evolving paradigms after the semiconductor created have been showing totally different style demonstrating that the core competitive factors would be just small and speedy software systems rather than big and relatively slow hardware components. As such, it can be said that the presence of semiconductor would be the turning point of the Industrial Evolvement. The current reputation of IT Korea might be proudly gained by the very benefits of the nation's notable evolvement of the semiconductor industry.

Regularizing Innovation in order to be the global leader

Tong Jin established in 1992 by capital and technical tie-up with TOWA, a Japanese semiconductor equipments company, has challenged in the semiconductor mold and precision tool manufacturing business for the first time in Korea where there were no specialist of the same. Tong Jin holds firm position in the business with the best technology and fine quality so far.

The Semiconductor Multi Plunger Auto Mold System, originated by TOWA Japan since 1980's, represents the history of semiconductor mold development, the quality of which is currently well regarded as the international standard. And the system has been blooming nowadays as Tong Jin could have finally integrated the production system from design to manufacturing as the results of its constant efforts to improve the technology.

For the past three decades, Tong Jin has mutually grown with our clients by widely accommodating their Needs which are Reliability and Economical efficiency. It is commonly assured that the evolvement of semiconductor is the core medium of future changes, as it has done to date during the last century. In this sense, Tong Jin has boundless pride to the fact that it has taken the important role for the evolution of semiconductor industry. The development of the semiconductor industry will be the very core axis of Korea's economic growth.

Tong Jin and all its family members put every efforts to create future oriented value and prosperous tomorrow via regularizing innovation policy, and try hard to provide more than what clients demand. Tong Jin's client supporting system has been integrated vertically and horizontally by the benefits of its global networks' excellent services and technologies, which would assist Tong Jin to be able to provide the best value and the optimal solution, when-ever and/or where-ever.

Tong Jin promises to be the reliable partner for our valuable clients at the center of the changes.



About Tong Jin



Tong Jin, Demonstrating Ongoing Growth

Tong Jin officially announces to regularize its Speed Management Policy providing information promptly and solutions optimally, through well organized Global Networks and excellent Know-hows accumulated for the past 30 years since establishment. For example, Tong Jin has been equipped with the Product Line set-up capability and with well organized A/S System. Tong Jin will continue to strengthen R&D functions, to integrate affiliates horizontally for procuring major parts in time, and to establish a Full Line Up system, which would be a great help in realizing the ideal client solution policy of Total Service System.

Tong Jin as the expert with its advanced technology, will lead the world market.

Tong Jin established in 1992 by capital and technical tie-up with TOWA, a Japanese semiconductor equipments company, has well equipped with its cutting edge technology in designing Semiconductor Mold, and equipped with well integrated production system of Multi Plunger Auto Mold System manufacture. Tong Jin closely responds to clients demanding both reliability and economic feasibility assurance. Even at this time, Tong Jin has been evolving itself together with TOWA Japan, which is the world's leading expert in semiconductor packaging equipment field.



Moral Management



Tong Jin constantly improving to create the quality of both products and services, based on its multidisciplinary human resources backed by their outstanding technology, and based on the humanistic spirits in terms of its Moral Management Policy.



Responsibility for improving customer satisfaction.

Tong Jin believes that the genuine company values can be gained only when the customers satisfy enough. To this end, Tong Jin has been creating better quality of product and service via providing specialized high quality of products and differentiated satisfactory level of services.



Basic Work Ethics of Managers and Employees

Tong Jin's all members do their own tasks fairly in conformity with the MODUS-OPERANDI, and to develop themselves constantly based on the spirits of challenge to carry out something new from their own desires and dreams, which well reflects the basic work ethics of Tong Jin.

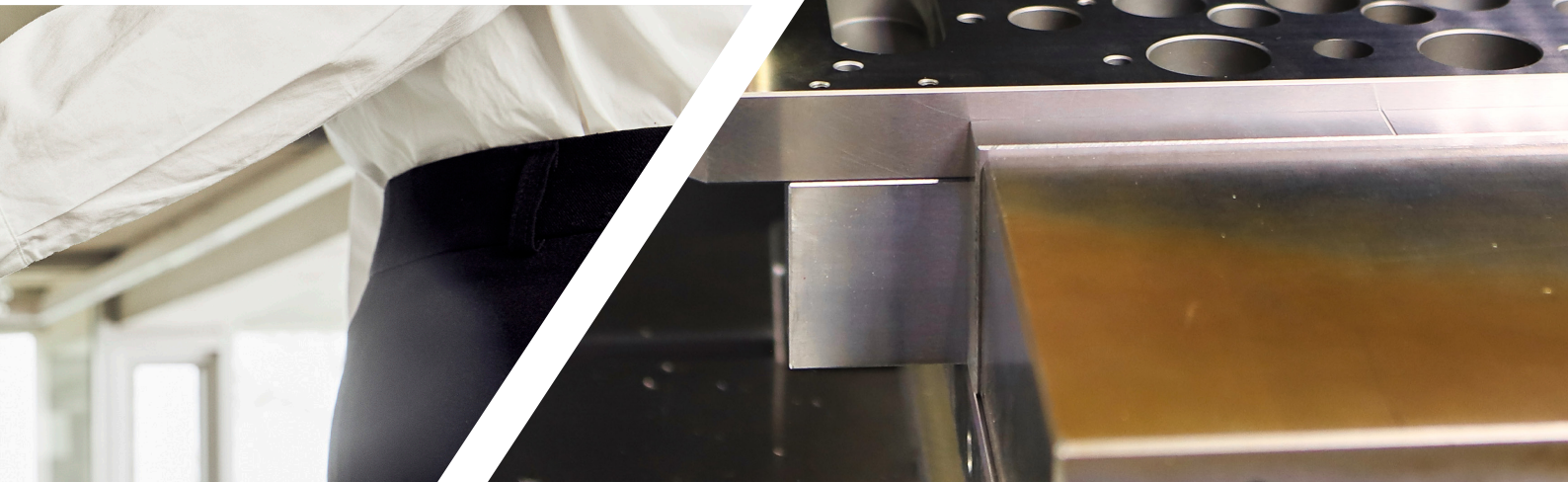


Contribution to social development

Tong Jin as a member of the society, has responsibilities and obligations as a corporate citizen that contributes to the development of the local community. Tong Jin runs healthy business, creates additional employment, and fulfills the taxpaying obligation faithfully.



Product Quality Management



Tong Jin deems its top priority is to shut perfectly off any harmful element being accidentally contaminating its products, in order to guarantee the best quality of goods and the most satisfactory level of customer services. Tong Jin concentrates on the strict control of its Product Quality Management Policy.

Harmful Material Management Policy(HMMP)

Strict Management of Harmful
Material Treatment System

Design
Eco-friendly products

Sustainable reformation of
the policy, HMMP

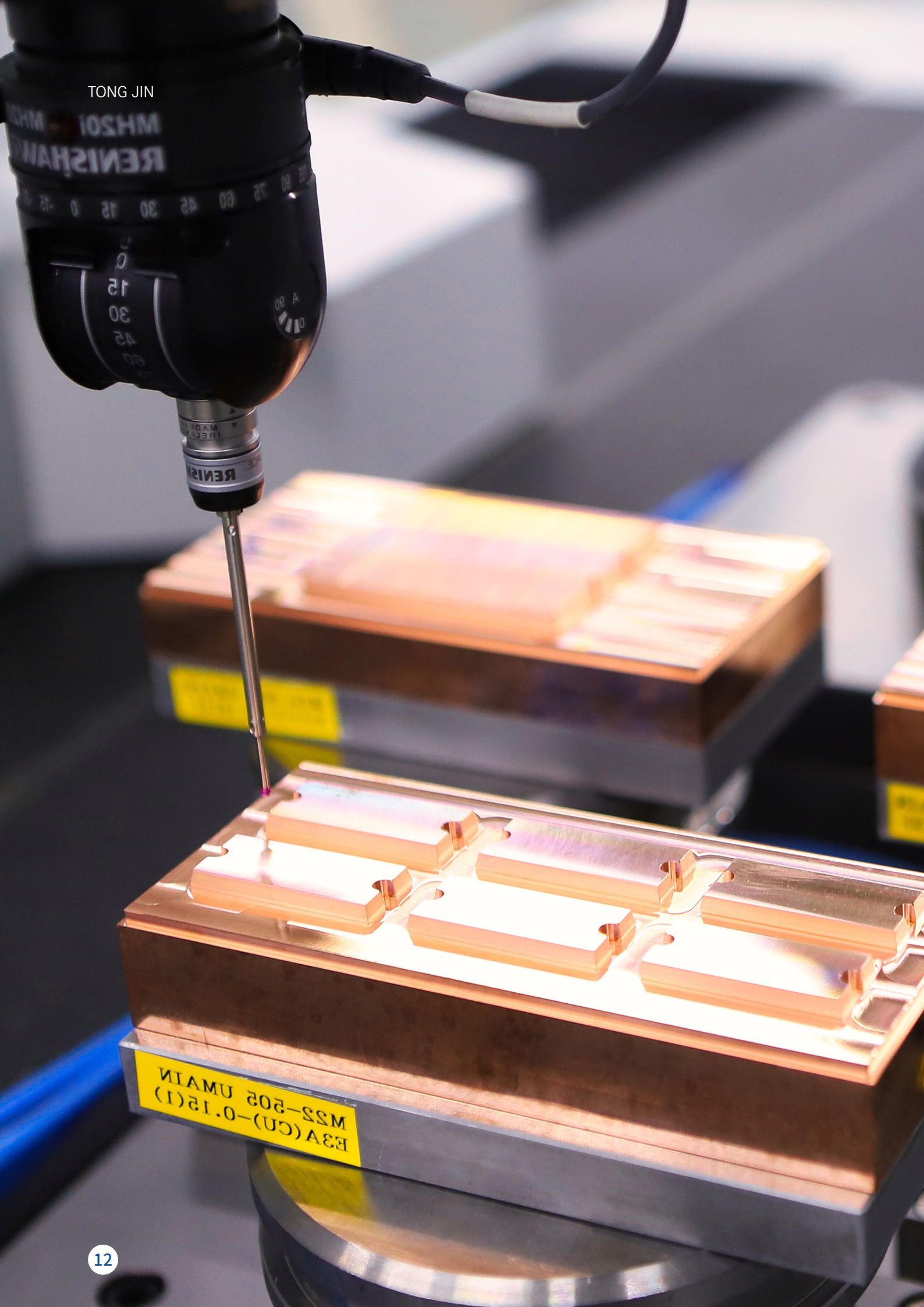
Product Quality Control Policy

Trusted Product
Quality(PQ)

Most satisfactory level of
Customer Services(CS)

Sustainable improvement of
both, PQ and CS

TONG JIN



TONG JIN

Ideal Employee of Tong jin

Multidisciplinary human resources of expertises who are characterized with open-minded, consistently challengeable, and one team oriented towards their goals.

Consistent Challenge

Consistently challenging and trying to make positive changes towards their future goal.

challenge



Open-Minded

Open-minded communication with positive mental attitude, respecting each other

open-mind

**TONG JIN**

Expertise

Top level expertise with their desirable mind-set toward ownership and responsibility.

professionalism



Passion

Passion to achieve goals without giving up the zest

passions





Innovative Technology and Big-Sky Thinking

step

01

Tong Jin has regularized to make official announcement of the business results, and to hold union-company meeting regularly, in order to maintain current good labor-management relationship, and to achieve the best level going forwards. Tong Jin and all family members work and grow up together as one body and spirit to the same goal.

step

02

Tong Jin has been able to become the nation's leading company in the barren field of Korean semiconductor mold industry, mainly that it made R&D investment consistently since its establishment 30 years ago. Tong Jin has been implementing the two rules, one to train 10% of employees at the ordinary time, so called "10% Training Rule", and the other to invest 10% of total sales as R&D expenditure, so called "Investment 10". Through consistently paying attention to the two rules, Tong Jin is convinced to lead the future semiconductor mold industry of Korea throughout the remaining 21st century as well.

step

03

Tong Jin will continue to provide the optimal solutions at any circumstance to the valuable clients, which will be realized thanks to its long lasting strong (1) technology relationship sharing the source technology with Japanese TOWA which is the world's leading expert in the semiconductor equipment industry, and (2) trading network relationship establishing international service technology converged networks with HI-TEK International Inc. which is the nation's leading trader of IT equipments.

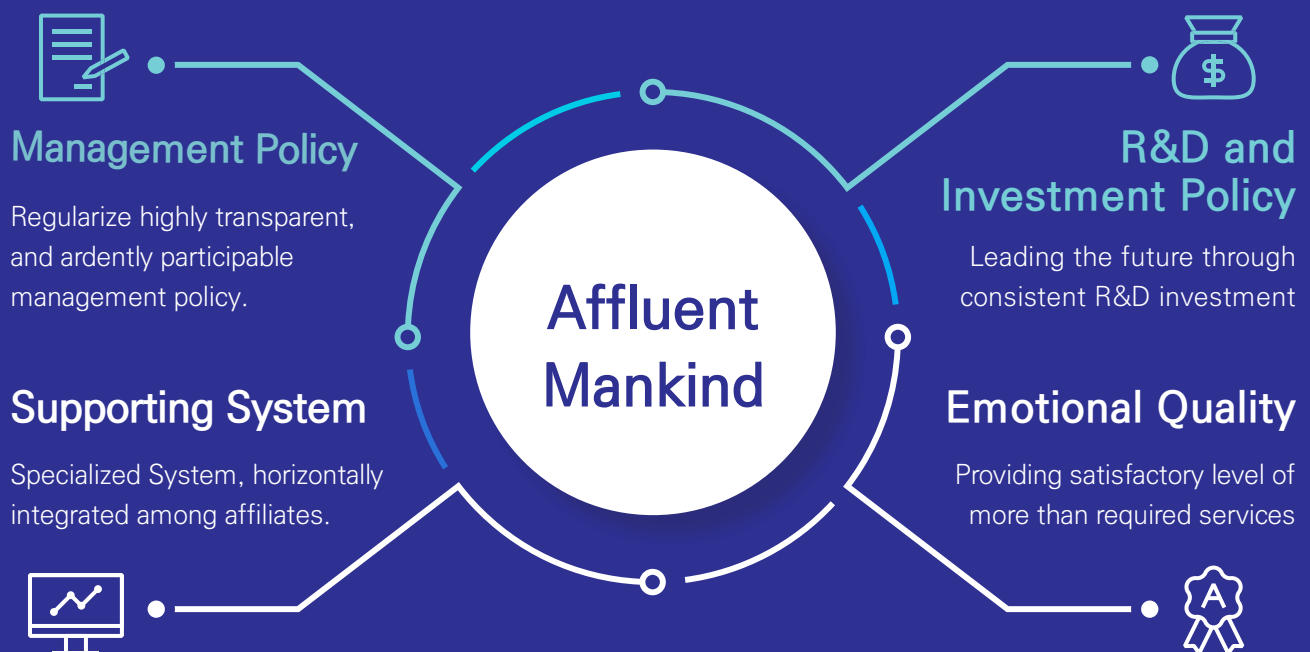
step

04

Tong Jin has set up the mandatory rule to provide specialized high quality of products and distinctive satisfactory level of services. Tong Jin has made efforts to provide perfect quality of products and more than required satisfactory level of client services, which is Tong Jin's permanent and invariable promises to its customers.

Mission

Tong Jin believes that the “Semiconductor” sector has been the core medium leading the speedy changes we experienced throughout the last century, and would be no doubt to be the key component as well leading the future changes for the coming century. Tong Jin will contribute to the mankind with new technology and ideas that come true.



Core Value



TONG JIN History

TONG JIN is proud of a quite long history since its foundation in 1992.

It has been developed and grown successfully for the past three decades, together with its valuable customers, via matching with the client's needs requiring reliance and economic feasibility.

TONG JIN promises to provide the best level of technologies and the most satisfactory level of client services going forward.

2022

- 10 Declaration of ESG Management, targeting to improve the level of Sustainable Management, Quality Management, and Moral Management. (ESG: Environmental, Social and Governance)



2020

- 01 Automated Production Line completed (Possible to work 72 hours consecutively)

2012

- 01 Factory Expansion 631.5m² completed
 · Factory I: 119.3m²
 · Factory II: 371.06m²
 · Other 141.14m²

2010

- 09 Factory II Expansion 325m² completed

2018

- 10 Factory Expansion 563.95m² completed (Laboratory, Inspection Sites)
 03 Adjustment of Equity Holding Ratio (HI-TEK International Inc.; Acquired 40% of equity interest on TOWA, Japan)

2009

- 11 Awarded the USD5Million Export Tower (Ministry of International Trade and Industry)
 08 Acquired ISO 14001 Certificate
 04 Acquired INNO-BIZ Certificate (The Small and Medium Business Administration)

2016

- 12 Awarded the USD10million Export Tower (Ministry of Trade, Industry and Energy)

2005

- 02 Acquired ISO 9001 Certificate

2015

- 09 Factory Expansion 492.25m² completed (Factory Site)

2004

- 11 Awarded the USD3million Export Tower (Ministry of Commerce, Industry and Energy)
 06 Being Selected as an Outstanding Technology Enterprise [blue-chip company] (Technology Credit Guarantee Fund)

2002

- 02 Acknowledged as a CLEAN Company (Ministry of Employment and Labor)

1997

- 04 Increased Paid-in-Capital (Capital KRW800 million)
- 02 Factory II Construction completed – 3 stories building (Factory, Office, Dormitory) Building Space 1,774m²

1995

- 05 Factory I Construction completed – 2 stories building (Factory, Training Hall, Restaurant, and Staff Lounge)
- 02 Being supported as a Tax Reduction or/and Exemption (Finance and Economy Council)
High Level Technology Products (Semiconductor Molds and Semiconductor Equipments)

1994

- 11 Capital Increased, and Equity Participation of Foreigner, TOWA Japan acquired 50% of stakes for Equity Participation



1992

- 07 Incorporated



Cooperates / Affiliates



Stabilization of the Strategic Partnerships and Heightening Corporate Reputation



HI-TEK International Inc.

750, Gukhoe-daero, Yeongdeungpo-gu,
Seoul, Korea (Geumsan B/D Room 911)

Business : Trading Electronics Equipments
Machineries and related Services

T. +82-2-784-3014
F. +82-2-784-7367

TOWA Corporation

5 ,Kamichoshi-cho, Kamitoba, Minami-
ku, Kyoto, Japan

Business : Manufacturing and sales
of Semiconductor Equipments, and
Ultra-Precision Molds

T. +81-75-692-0250
F. +81-75-692-0270

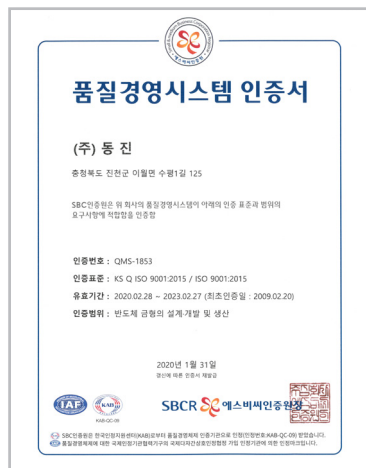
Nidec-Read Korea corporation

10, Songjeol-ro, Heungdeok-gu,
Cheongju-si, Chungbuk, Korea

Business : Manufacturing PCB
Inspection System

T. +82-43-276-2840
F. +82-43-276-2844

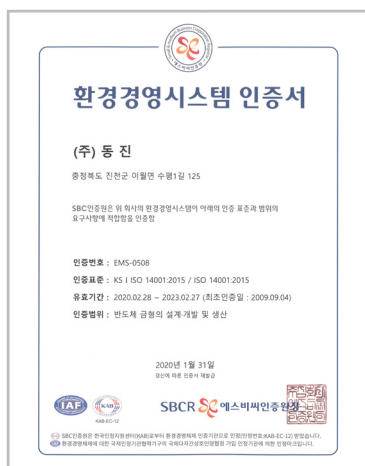
TONG JIN Certificates



ISO Certificate (Quality, Korean)



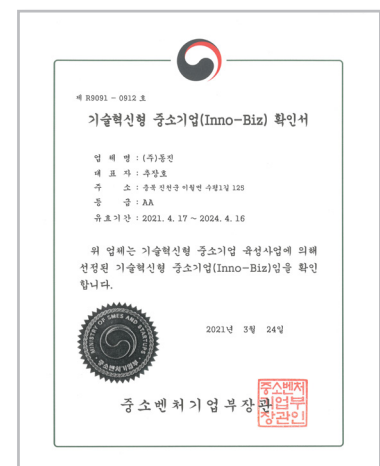
ISO Certificate (Quality, English)



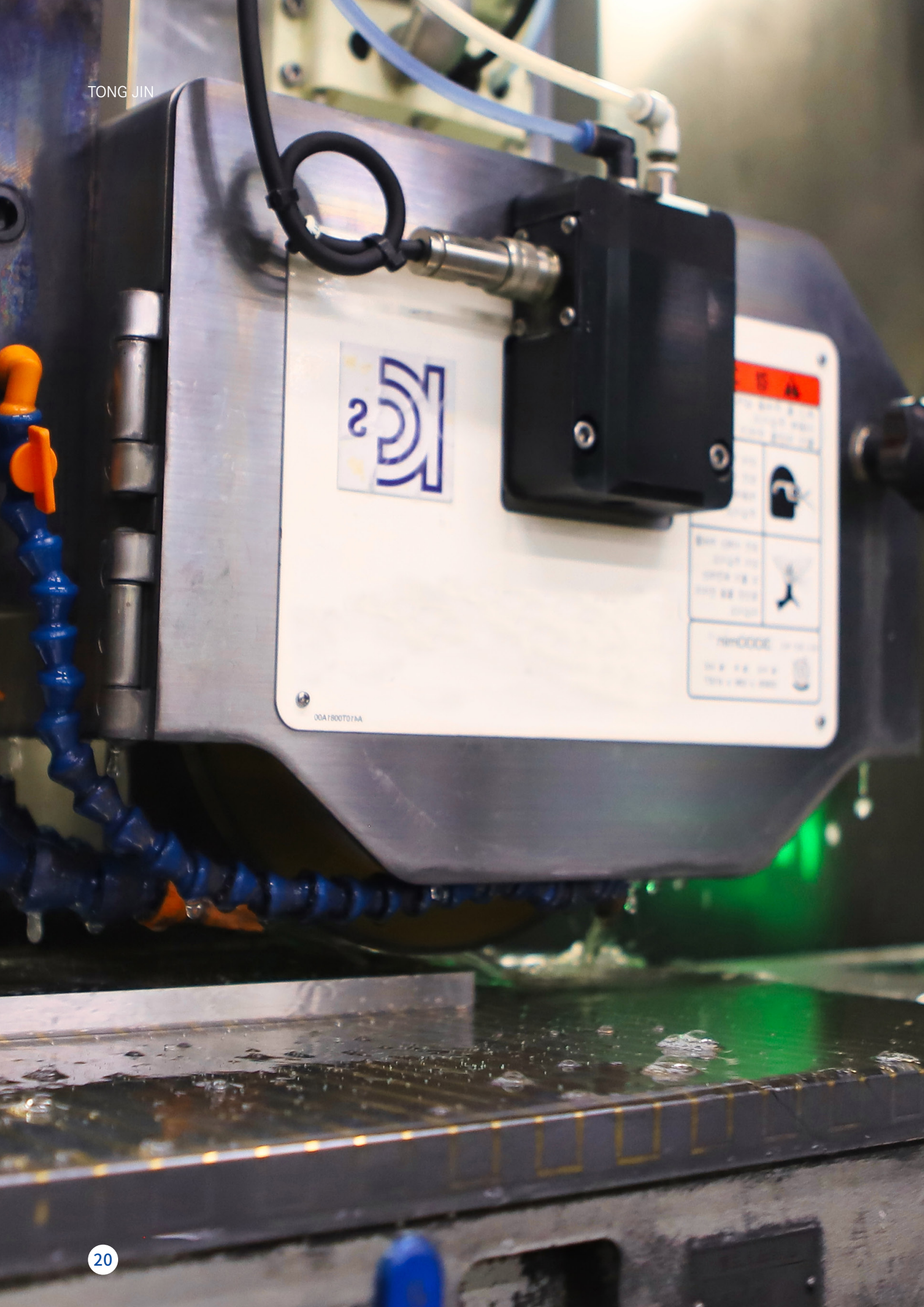
ISO Certificate (Environmental, Korean)



ISO Certificate (Environmental, English)



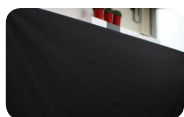
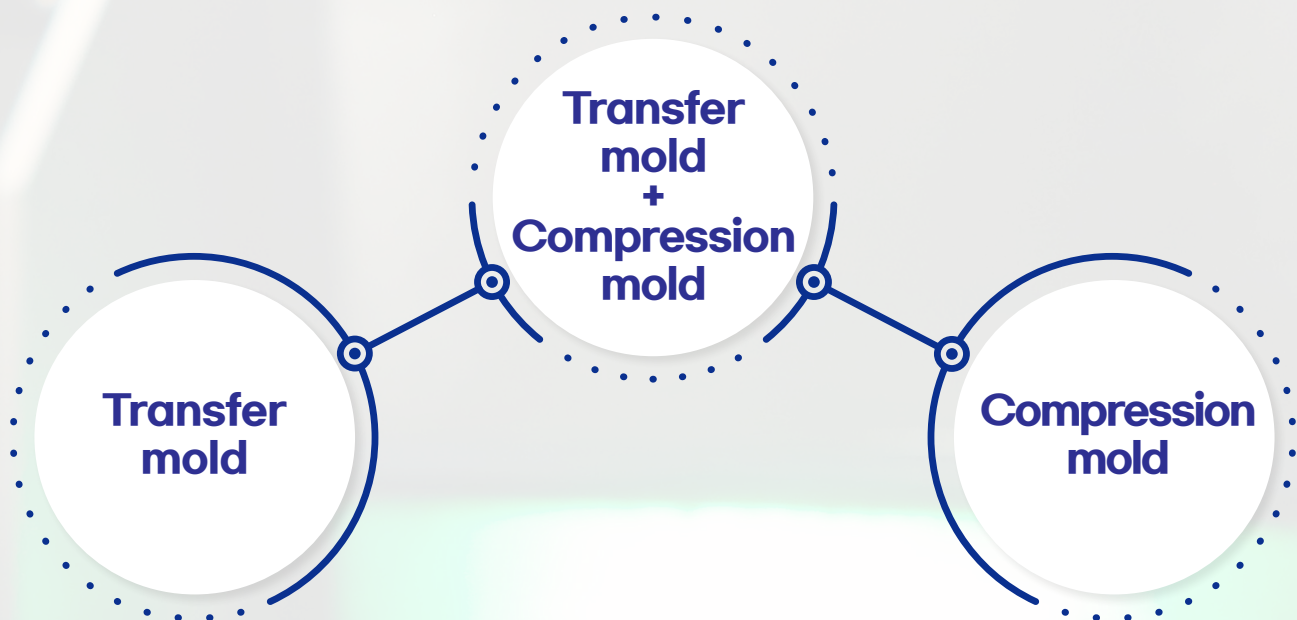
Inno-Biz (Innovative Technology Type Business) Certificate



TONG JIN

Work Scope

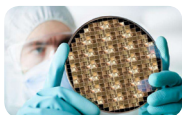
Tong Jin will be with you from designing to manufacturing of Ultra-Precision Molds for Semiconductors.



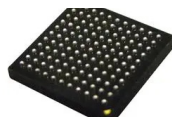
Extra Large Panel
(660mmx540mm)



LED



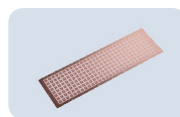
Wafer Level Package



MAP BGA
(100mmx300mm)



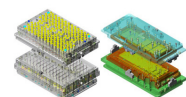
ECU Module



MAP QFN
(100mmx300mm)



IPM



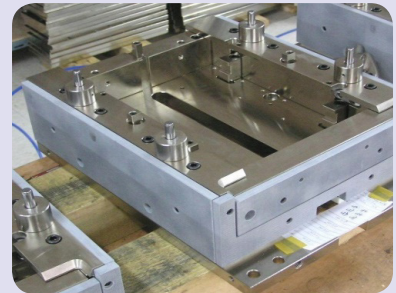
Transfer mold
(100mmx300mm)

TONG JIN Products

Transfer Mold

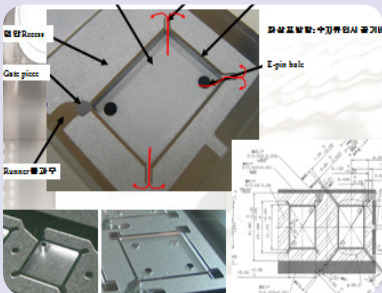


Mold for Auto Molding System



Chase Holder

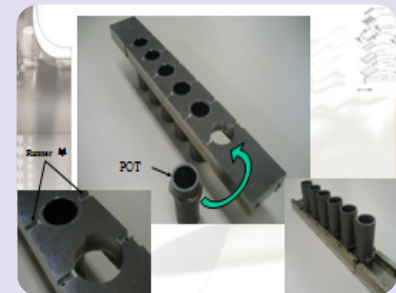
Parts



Main Cavity Block

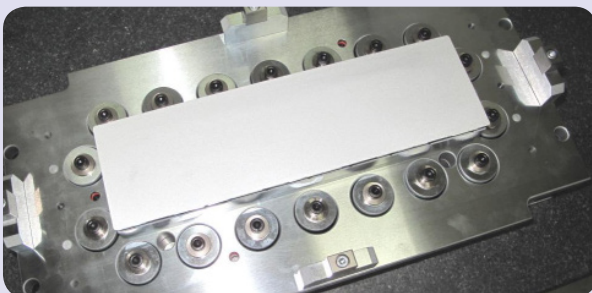


Upper Tool Cull Block



Lower Tool Pot Block

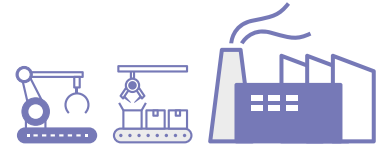
Compression Mold



Mold for PMC



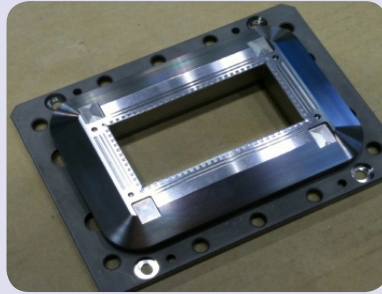
Mold for LCM



I Parts



Moving Cavity Block(A)

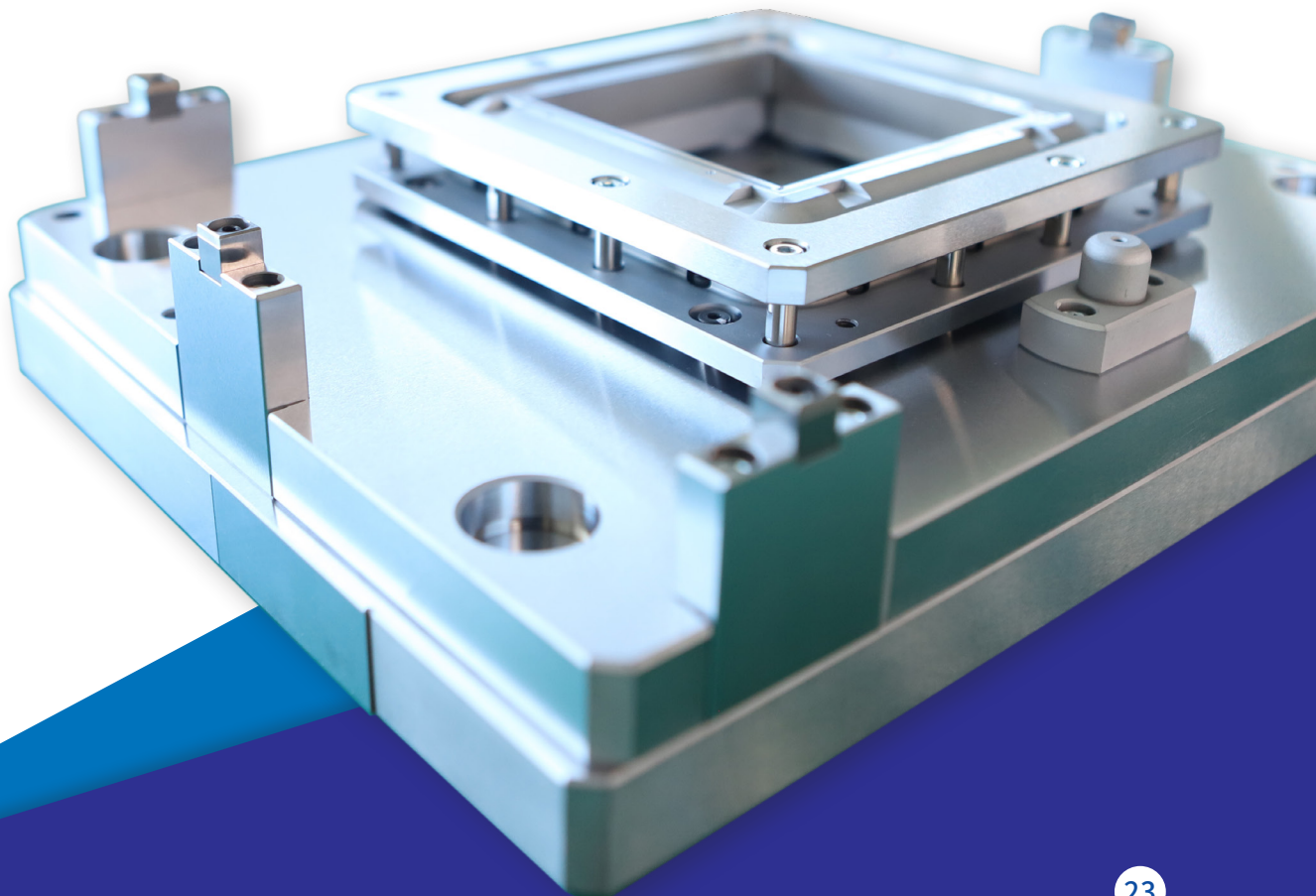


Moving Cavity Block(B)



Moving Cavity Block(C)

TONG JIN



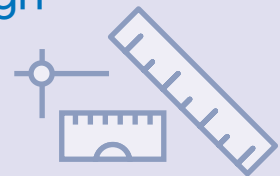


From Designing to Manufacturing, Molding Check Mold



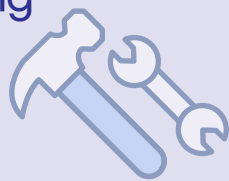
01

Mold design



02

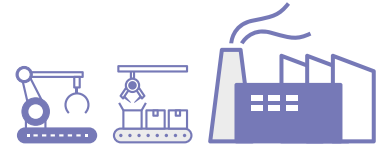
Manufacturing



03

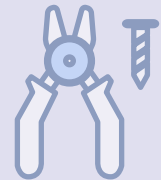
Manufacturing





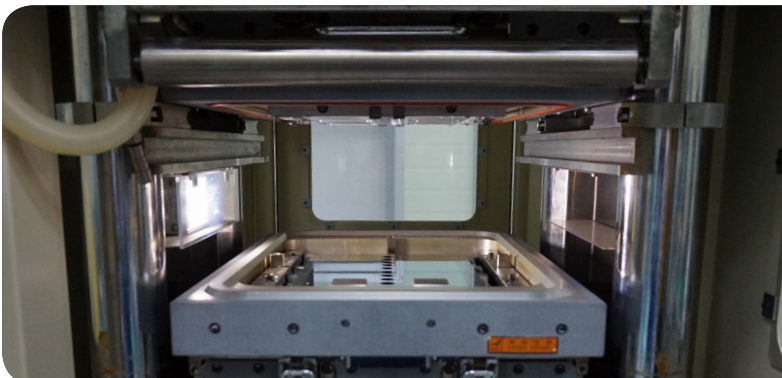
04

Assembly



05

Inspection



06

Check Mold





Manufacturing and Equipments Profile

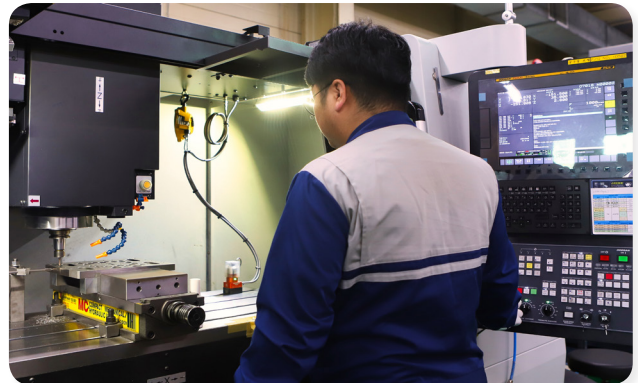
I Automated Multi Manufacturing Process



I Milling / MCT Manufacturing Process



Milling 1



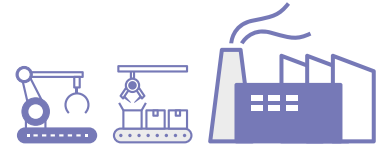
Milling 2



Milling 3



Manufacturing Process of High-Speed Milling



High speed Machining



High speed Electrode Processing Line



Grinding Manufacturing Process



Surface Grinding Line



Forming Grinding Line



Mirror Finish Surface Grinding 1



Mirror Finish Surface Grinding 2



Manufacturing and Equipments Profile

Electric Discharge Process



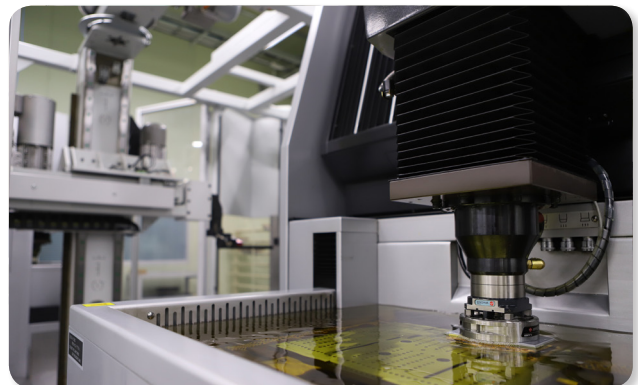
Auto-EDM Line



Auto-Wire-EDM Line

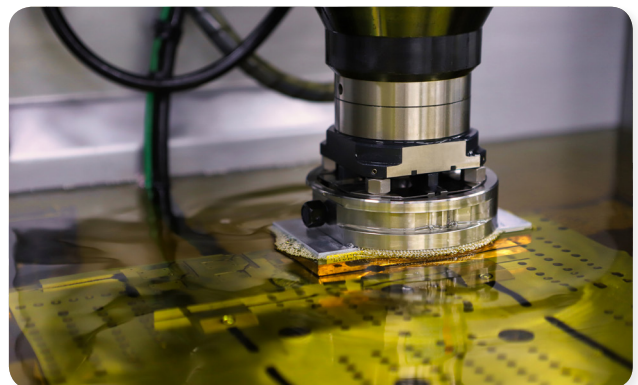


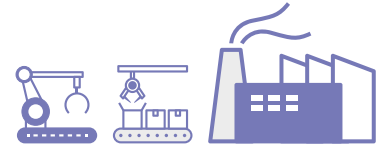
HOLE Auto-Discharge Line



High-Speed Discharge (Linear Driving)

Electric Discharge Robot





I Jig Grinding Manufacturing Process



Jig Grinder 1



Jig Grinder 2



Jig Grinder 3

**TONG
JIN**





Manufacturing and Equipments Profile

I QC Process



3Axis Measuring Instrument



Incoming Inspection

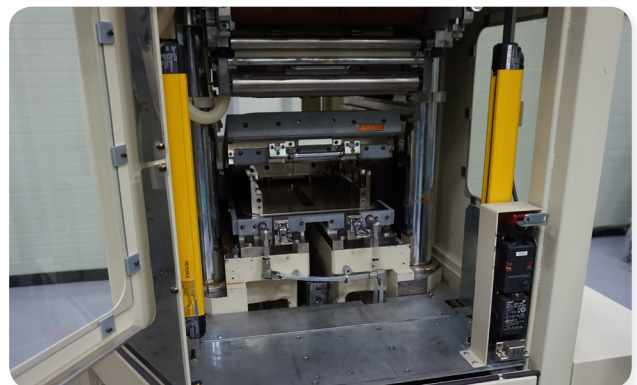
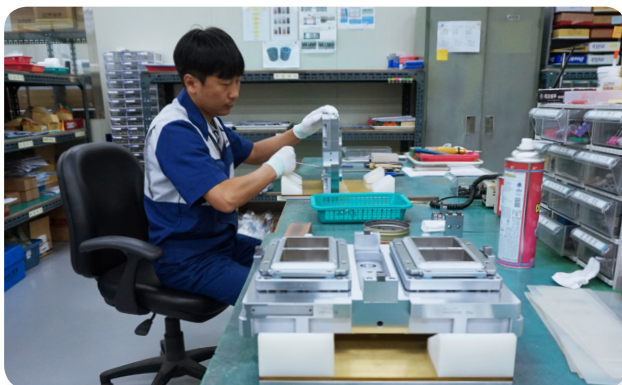


Inspection 1

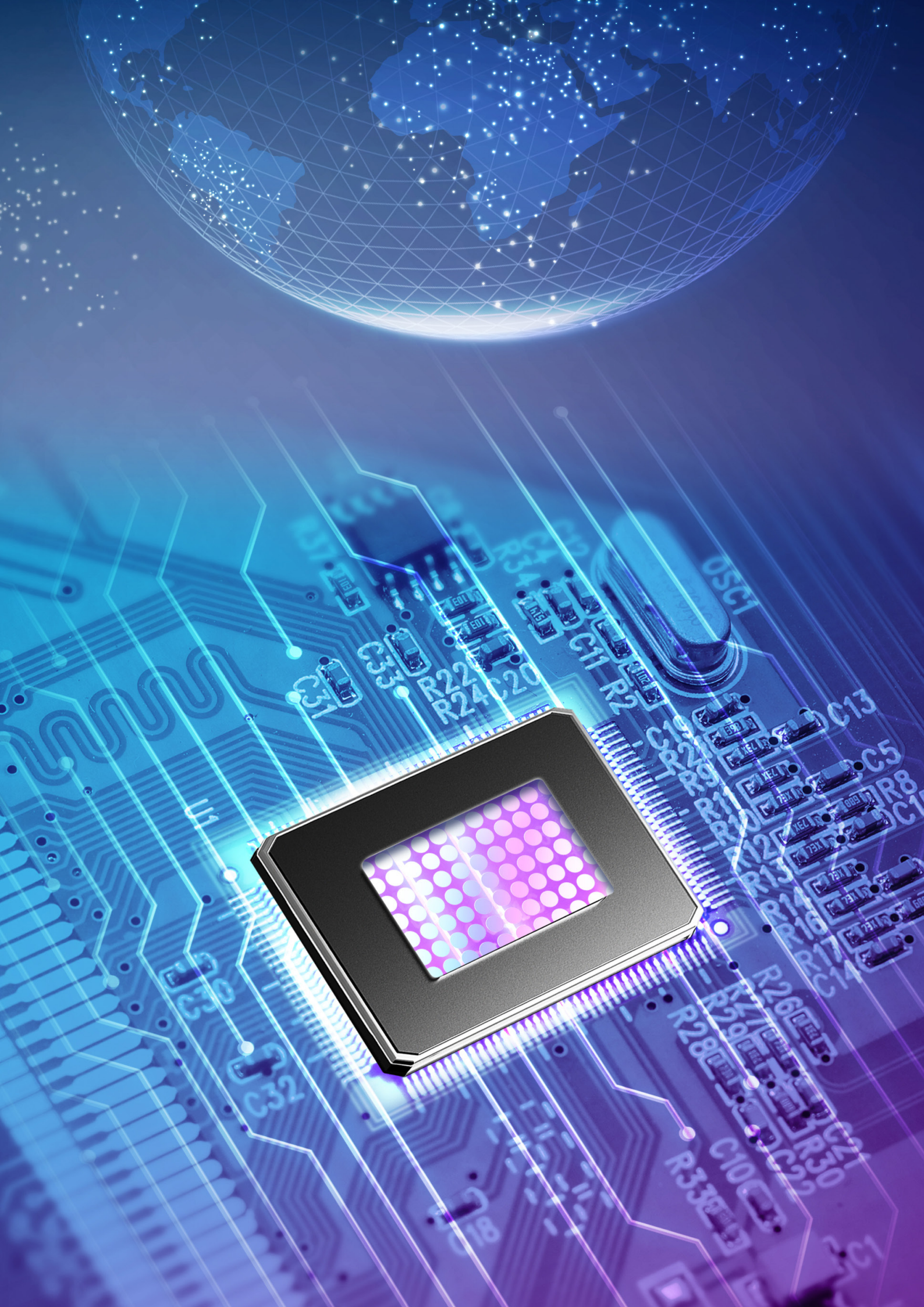


Inspection 2

I Assembly & Check Mold Process



Assembly & Check Mold





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