



Nakamura Choukou Co.,Ltd.

27-27 Tsuruta-cho, Nishi-ku, Sakai city, Osaka

+81-72-274-0007



MAIL: hpnc-contact@nakamura-gp.co.jp



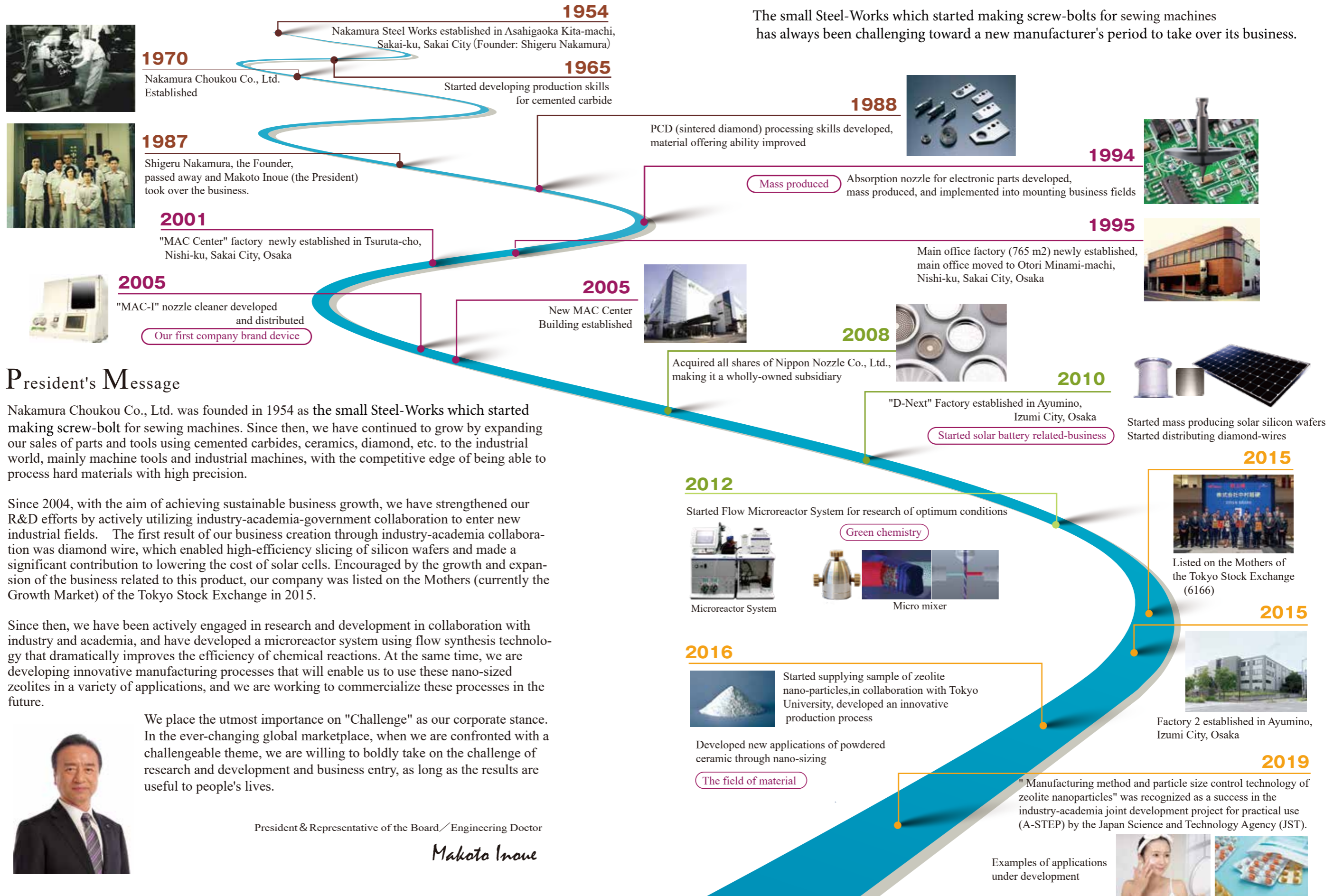
<http://www.nakamura-gp.co.jp/en>



Nakamura Choukou

From Metal-working to Chemical Synthesis

Corporate History



The small Steel-Works which started making screw-bolts for sewing machines has always been challenging toward a new manufacturer's period to take over its business.

President's Message

Nakamura Choukou Co., Ltd. was founded in 1954 as the small Steel-Works which started making screw-bolt for sewing machines. Since then, we have continued to grow by expanding our sales of parts and tools using cemented carbides, ceramics, diamond, etc. to the industrial world, mainly machine tools and industrial machines, with the competitive edge of being able to process hard materials with high precision.

Since 2004, with the aim of achieving sustainable business growth, we have strengthened our R&D efforts by actively utilizing industry-academia-government collaboration to enter new industrial fields. The first result of our business creation through industry-academia collaboration was diamond wire, which enabled high-efficiency slicing of silicon wafers and made a significant contribution to lowering the cost of solar cells. Encouraged by the growth and expansion of the business related to this product, our company was listed on the Mothers (currently the Growth Market) of the Tokyo Stock Exchange in 2015.

Since then, we have been actively engaged in research and development in collaboration with industry and academia, and have developed a microreactor system using flow synthesis technology that dramatically improves the efficiency of chemical reactions. At the same time, we are developing innovative manufacturing processes that will enable us to use these nano-sized zeolites in a variety of applications, and we are working to commercialize these processes in the future.

We place the utmost importance on "Challenge" as our corporate stance. In the ever-changing global marketplace, when we are confronted with a challengeable theme, we are willing to boldly take on the challenge of research and development and business entry, as long as the results are useful to people's lives.

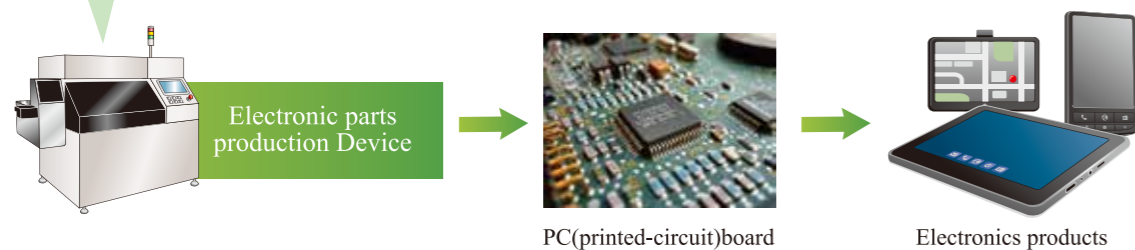
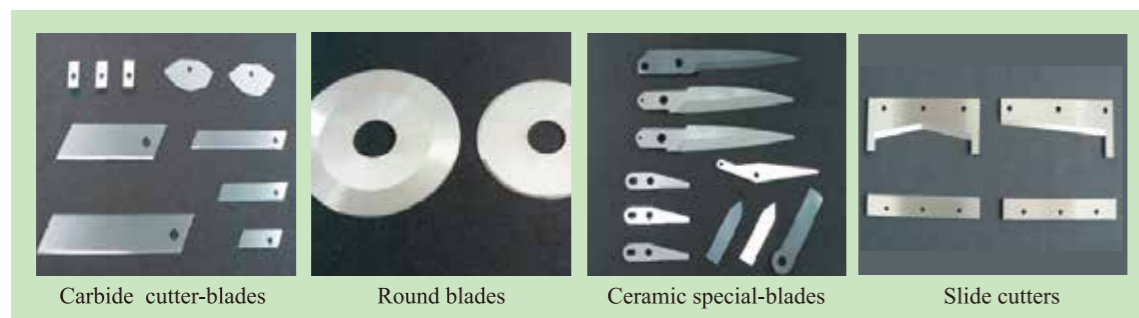
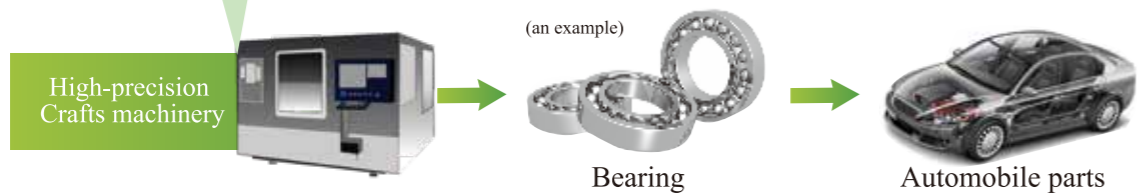
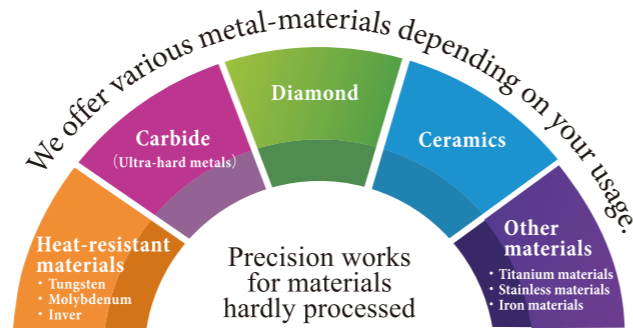


President & Representative of the Board / Engineering Doctor

Makoto Inoue

Wear-resistant Parts

We manufacture long-lasting & wear-resistant parts by utilizing ultra-hard materials like sintered diamond, carbide and ceramics.



Adsorption Nozzle (Mounter Nozzles)

PC (printed-circuit) Board is utilized in Personal Computers, Smart Phones and TVs, etc. And a nozzle on mounting machines which configure electronics products on PC Board absorbs them by vacuum and places them on it.



Nozzle Production Line

It contributes to prolongation of nozzle life, high holding stability of electronics products and mounting efficiency ratio by utilization of diamonds and ceramics for nozzle top which is easy to be worn.

Chip mounters

Adsorption nozzle

The tips of our adsorption nozzles are mounted with

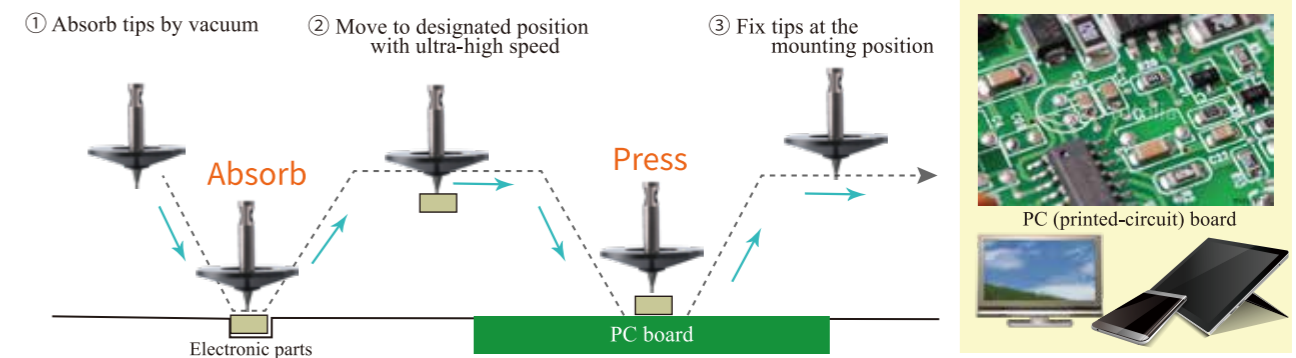
- Sintered diamond
- Ceramics

improved

- wear-resistance
- mounting percentage

Electronic parts

※ This is only an image.



Automatic Nozzle Cleaner

We are one of the pinoeers who introduced the cleaning machine of nozzles for electronic parts operated only by a bit of water and air. We continue the development for further smaller sizes and new applications, and their productions and sales.

MAC-III Eco & Powerful

Cleaning by a bit of water and air

Before No solvent After

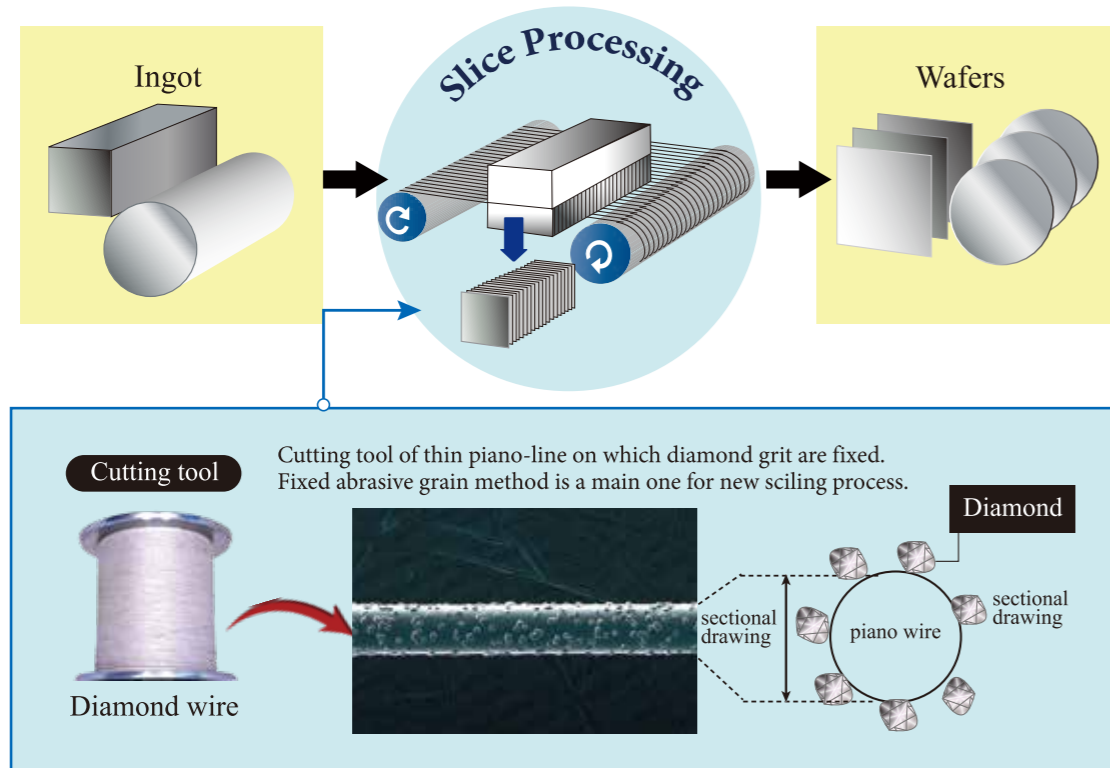
5 minute

Mac-III Cleaning Power!

In 2004, we started research and development of diamond wire in collaboration with industry, academia and government. We have been selling diamond wires since 2010, and have made a significant contribution to the global spread of diamond wires for solar panels by taking advantage of our uniquely developed and designed production facilities.

What is Diamond Wire?

Slicing wafers, which are used as substrates for solar panels and semiconductors, into thin strips from ingots (lumps). Used as a "thread saw".



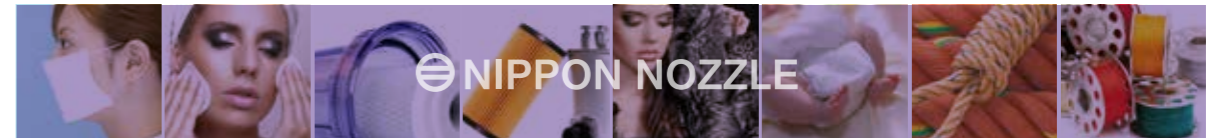
New Diamond Wire Production Equipment

High-speed production of high-concentration and high-dispersion diamond wires

PHX-01

Image recognition equipment to diagnose quality
Automatic control of the number of diamond grains per row
Unique feedback
High-precision CCD camera inspects all four rows of wires

As a pioneer of spinning nozzle that we started its business in 1928, Nippon Nozzle brand's products are active in the wide-range of fields not only in textile industry but also in airline, automobile, architecture and medical industry. We continue proposing techniques and products required by new era in advance through notifying market needs with timely manner.



Spinnerets for Synthetic Fiber

We develop, manufacture, and sell spinning nozzle manufacturing components such as nozzles for wet spinning and melt spinning.

Spinning

Liquid, the raw material for chemical fibers, is extruded through small holes to form a thread.

Wet Spinning Spinneret Dry Spinning Spinneret Melt Spinning Spinneret

High-precision processing of holes of various shapes with Japanese brand technology that foreign manufacturers cannot match.

Nonwoven Related Products

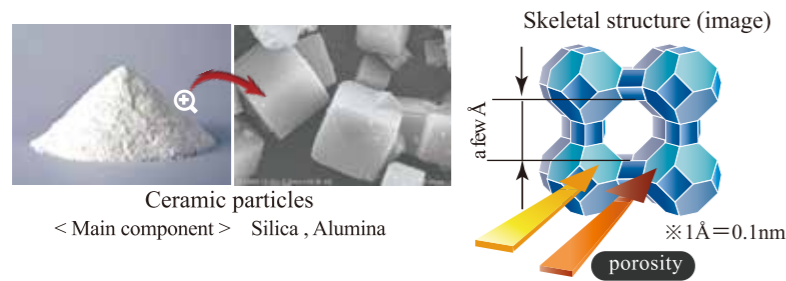
We develop, manufacture, and sell manufacturing components related to nonwoven manufacturing, such as spunlace nozzles and meltblown production equipment.

This is a sheet of intertwined fibers without weaving. The raw material, melted resin, is extruded from the end of a nozzle to form a sheet by lamination of continuous fibers.

Melt Blown T die & Nozzle

Production Equipment for Melt Blown Nonwoven Fabric

What is Synthetic Zeolite?



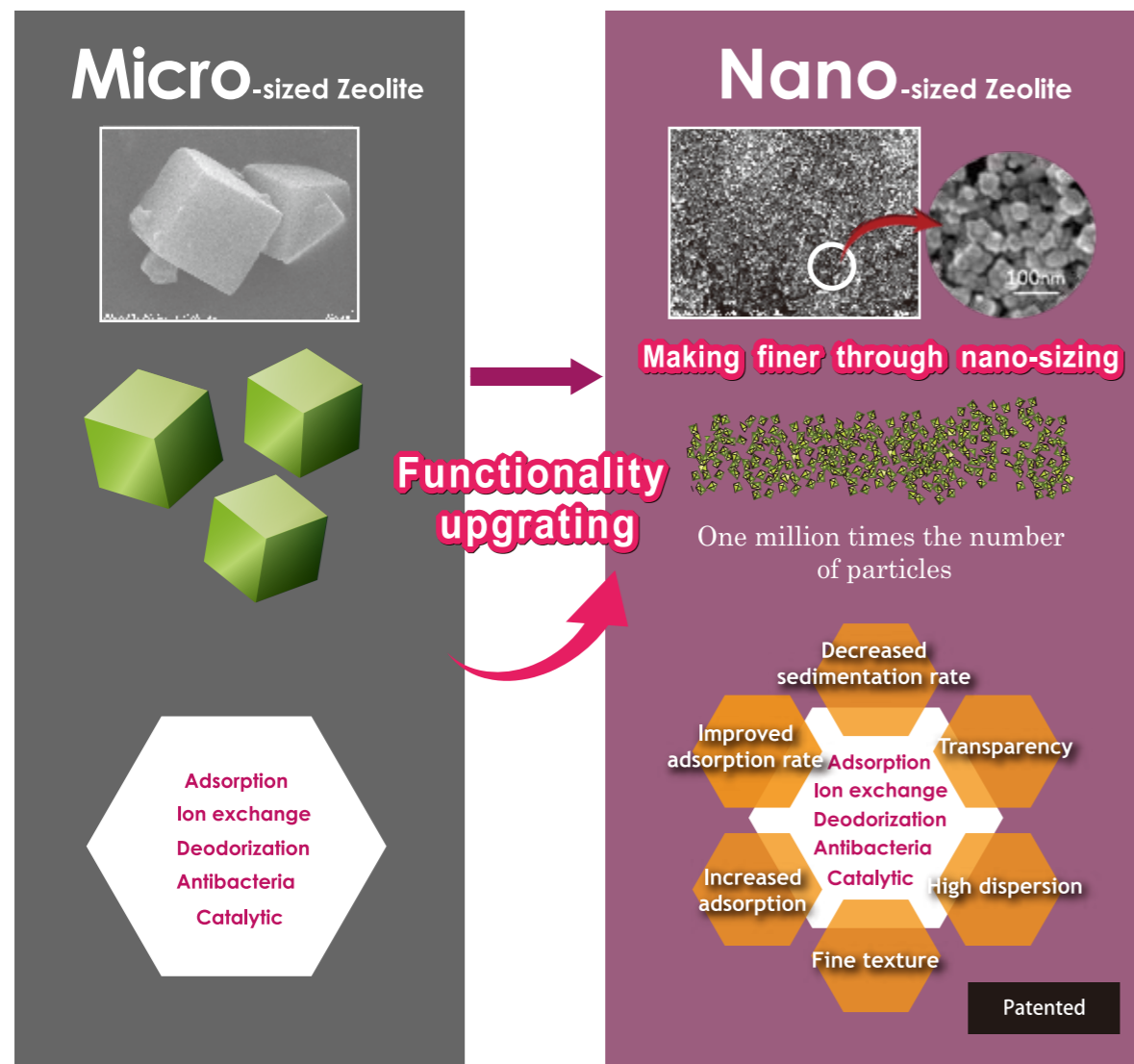
Zeolite is composed of mainly silica (silicon dioxide) and alumina (aluminum oxide), and characterized by a microporous molecular structure.

When zeolite spreads, it's a material of the porous structure having innumerable holes like a sponge.

Nanoparticulation Technology

Nakamura Choukou Co., Ltd., in collaboration with Tokyo University, developed an innovative production process for zeolite nano-particles by utilizing the crushing and recrystallizing technology, and succeeded in production of extremely low-cost nano-sized zeolite powder.

A normal zeolite is micron-sized. However, it's possible to improve its basic-performance if nano-sized. And we have wider chances when using zeolite for an optical purpose that requires optical permeability and when attaching zeolite to films or coating liquid and so on.



Nano-sized Zeolite Zeoal®

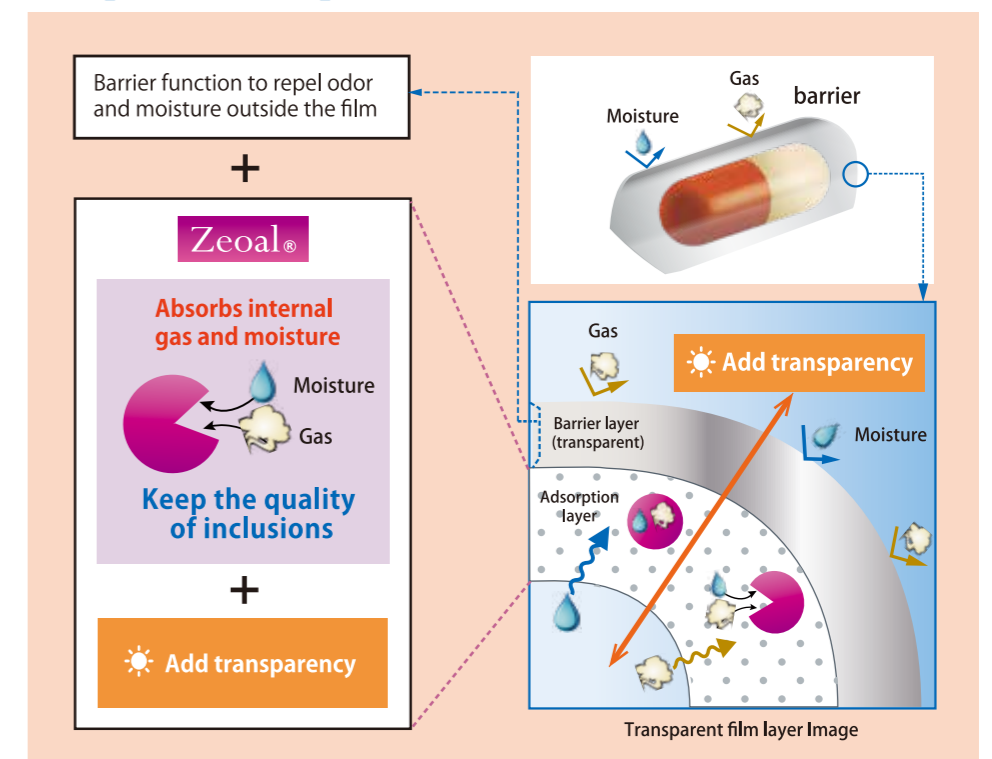


Examples of applications under development

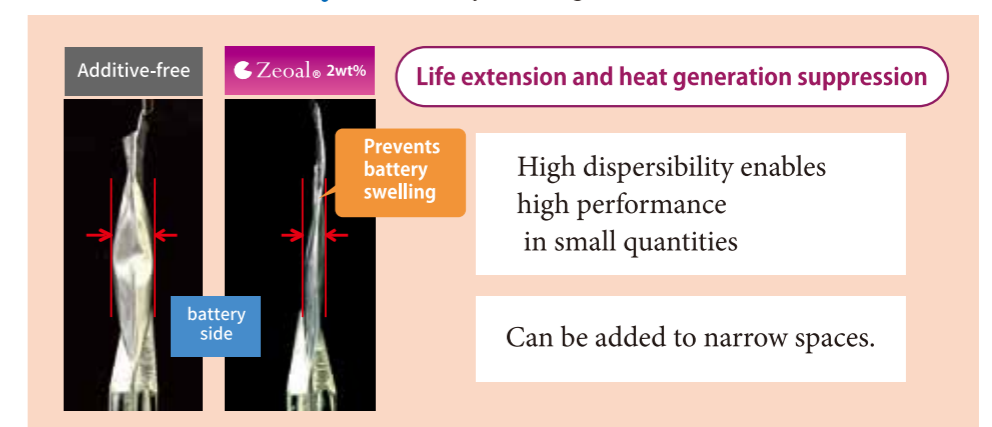


Nanosizing makes it possible to expand into a variety of applications that was previously difficult.

Transparent, adsorption film High transparency is added to adsorption function



Lithium-ion battery For safety and long life



Company Profile

Company Name	Nakamura Choukou Co., Ltd.
Founded on	The 21st, Dec. 1970
Representative	CEO Makoto Inoue
Subsidiary	Nippon Nozzle Co., Ltd.
Overseas Sales Office	Shanghai Nakamura Choukou Trading Co., Ltd.



JQA-QM3339
JQA-EM1988



Stock Security Code
6166



For Business Succession
toward the New Manufacturing Era

List of Offices



Nurturing a Dreamy Future Together

Main Office (MAC Center)

High-precision Equipment Business / Material science business



27-27 Tsurutacho, Nishi-ku, Sakai City, Osaka Postal code / 593-8323

Phone / (+81)72-274-0007 (Reception)

Izumi Factory

Electronic Material Slice Periphery Business / Material science business



2-1-3 Ayumino, Izumi City, Osaka Postal code / 594-1157

Phone / (+81)72-274-0007 (Reception)

Nippon Nozzle Co., Ltd. (Subsidiary)

Chemical Fiber Spinning Nozzle Business



1-1, 2-Chome, Murotani, Nishi-ku, Kobe Postal code / 651-2241
(Kobe High-Tech Park)

Phone / (+81)78-991-6821 (Sales)

MAIL: inq@nippon-nz.com

MAIL: hpnc-contact@nakamura-gp.co.jp



<http://www.nakamura-gp.co.jp/en>

