



DN SOLUTIONS

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We Build Great Machines, You Machine Greatness



Automotive parts require more safety.
Aerospace engine parts must withstand high temperatures.
Medical device parts require more precision.
DN Solutions is supporting you, allowing you to surpass
human limits and create a better life.

**MACHINE
GREATNESS™**



The Path Followed by DN Solutions

“ For over half a century, DN Solutions has led the machine tool industry and continues to grow and develop with pride as a leading global company powered by a spirit of **constant challenge and innovation.**”



1976

Constructed the machine tool factory.



1997

Held the 1st Doosan International Machine Tool Fair (DIMF).

2003

Started construction of local factory at Doosan International China Co., Ltd.

1979

Produced 1,000 units of machine tools.

1980

Developed and exported NC lathes (PUMA 10 series).



1994

Established local corporations in the United States and Europe; recorded KRW 100 billion in annual sales of machine tools.

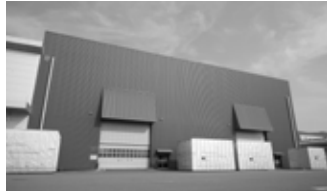
2001

CNC Turning Center and High-speed Machining Center selected as World Class Products.



2008

Established Korea's largest machine tool R&D center.



2013

Completed the construction of the Seongju factory; strengthened the production capacity of large machine tools.



2018

Launched PUMA as the company's Symbol.

2016

Renamed as Doosan Machine Tools Co., Ltd.

2019

Held the 12th DIMF (20th anniversary).

2007

Achieved KRW 1 trillion in annual sales.

2009

The DNM series of Vertical Machining Center selected as one of 23 Kinds of Science and Technology that Make Korea Shine!

2014

The PUMA SMX series and the FM/5AX series selected as the winner of the Red Dot Design Award.



2020

Launched the PUMA SMX5100L.





R&D Competitiveness

“ DN Solutions exceeds human limitations with its **superior R&D capabilities**, enabling customers to experience innovative technologies and look forward to a better tomorrow.



**MACHINE
GREATNESS™**

Core technologies of DN Solutions



High-speed Spindle Technology

This technology minimizes unnecessary waiting time by improving the maximum speed and the acceleration/deceleration performance of the spindle.



High-rigidity Guideway Technology

This technology reduces the frictional force of the guideway for the axis transfer of the machine tool and allows the user to adjust the position and speed by the ball screw.



Thermal Stability Technology

This technology enables the optimization of thermal displacement step by step, from product design to finished product before shipment, through sophisticated modeling techniques.



Convenient Operation Technology

This technology proposes a smart work method in relation to the preparation of a machining program, operation of the equipment, and maintenance, for convenient optimal use of equipment.



Smart Monitoring Technology

This technology provides smart product management support that allows the user to monitor and operate multiple items of equipment remotely.

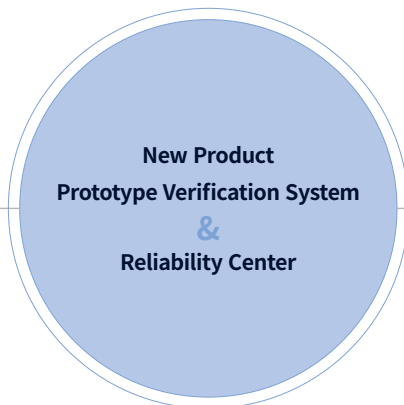


Eco-friendly Technology

This technology has not only improved the performance of the equipment, but also realizes eco-friendly values and high energy savings.

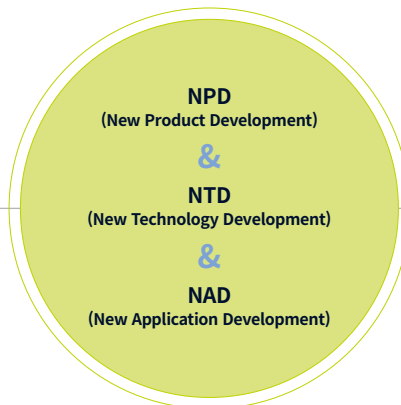
Customer-centered products/technology/application development systems of DN Solutions

Thanks to the R&D Center it established in 2008, DN Solutions is able to respond quickly to the needs of global customers and develop new products/ new technology/new applications with a spirit of endless challenge. DN Solutions continues to make efforts to secure competitiveness, the growth engine for attracting new customers, based on technology recognized by customers.



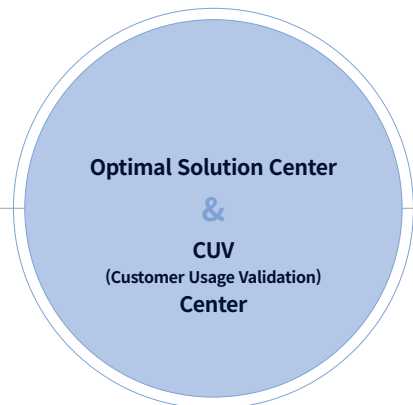
01

DN Solutions assesses the reliability of key units in advance to improve equipment stability and accuracy. Products that pass the thorough a prototype verification system, such as demanding performance verification and legal certification, increase customer satisfaction.



02

The NPD (New Product Development) & NTD (New Technology Development) systems & NAD (New Application Development), the strengths of DN Solutions, consists of a customer-oriented product development process that closely identifies and actively reflects customer needs.



03

The machining and assembly system, which contains the experience and know-how accumulated by our engineers over half a century, provides customers with a total solution. In addition, it researches and develops optimal machining methods with proven productivity and precision and ensures productivity with the best design.





Innovative Advanced Technologies

“ DN Solutions provides smart machines that can realize **flexible automation** and **digital machining** through our self-developed software, and **customized solutions** for each industry as well as for precision machining.

The advanced technologies of DN Solutions helps our customers' business lead people's lives in a better direction.



CUFOS

With its customer-friendly interface, CUFOS minimizes the operational waste of equipment and improves the utilization rate through intuitive operation and customization according to the usage environment.



Customer-friendly interface



Increased productivity



Maximized work efficiency



CNC D300

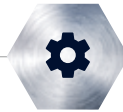
DMT's CNC D300 provides a control system optimized for the T4000, Lynx, and PUMA GT series, and features an enhanced user convenience and maintenance function.



Increased productivity



Enhanced user convenience



Strengthened maintenance function



SKETCH-TURN

This NC programming automation software enables the user to design optimized machining programs for DN Solutions' turning centers with minimal knowledge of machining processes.



Increased productivity



Shorter programming time



Shortened machining cycle time



IDOO CONTROL

IDOO Control is a smart factory solution that provides optimized equipment operation required in the era of the Fourth Industrial Revolution through monitoring and analysis based on facility big data.



Monitoring & alarm messenger function



application of metal cutting industry standards



Specialized functions of automotive parts industry



Extensive Product Line-up

TC Turning Center

Small

Large



PUMA MX series / PUMA SMX series Multitasking Turning Center



PUMA TT series / PUMA TL series Multi-axis Turning Center



PUMA TW series / PUMA TS series 2-Spindle Simultaneous Machining Turning Center **PUMA AW II series** Aluminum Wheel Machining Turning Center



PUMA series / PUMA GT series High-performance Turning Center



Lynx series Global Compact Turning Center

Lynx XG series Quartz Grinding Horizontal Turning Center



PUMA ST GS II series Swiss Turn-type Turning Center



PUMA V series / PUMA VT series High-speed Vertical Turning Center



PUMA VTR series Large Ram-type Vertical Turning Center



PUMA VD series Disc Brake Machining Vertical Turning Center

“ We provide about 400 kinds of products designed to meet our customers’ diverse needs.

MC Machining Center

Small

Large

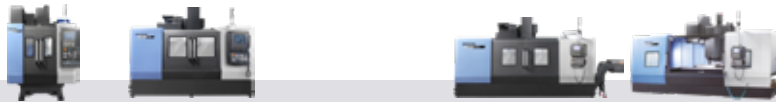


FM 5AX series / DNM 5AX series / VC 5AX series / DVF series High-speed, High-precision 5-Axis Machining Center

VCF II series Multipurpose Machining Center



VM series / DVM series / NX II series / MP series / MD series Mold Machining Center



DNM series / Mynx II series High-speed High-rigidity Machining Center



XC series / DMP series High-productivity 2-Spindle Machining Center

VC series High-speed Powerful Heavy-Duty Cutting Machining Center



T series Tapping Center



LH series / HC II series / NHP series High-speed Horizontal Turning Center



NHM series / HM series High-rigidity Horizontal Machining Center



DHF series / HFP series 5-axis Horizontal Machining Center



DBC series / DBD series NC Boring Machine/ Double Head Boring Machine



BM series / DBM series / DCM series 3-axis/5-face Double-Column Type Machining Center



Namsan Factory in Korea

Founded in 1976, the Namsan Factory is the largest and most representative production base of DN Solutions, and boasts state-of-the-art facilities and flexible production systems. It has an R&D center that develops world-class products as the largest machine tool research center in Korea. In particular, there are facilities such as turning centers, machining centers, NC boring, double column type machining centers as well as 5-face machining center that can process 5 faces in one setting, and an FMS line that can operate for up to 72 hours unattended. The precision machining room and the spindle head assembly site for machining high-precision parts are thoroughly maintained at a constant temperature, humidity, and state of cleanliness.

“ DN Solutions pours all of its passion and knowledge into developing flexible, high-quality, high-performance products that meet the needs of every customer.



Seongju Factory in Korea

The Seongju Factory, which began operating in January 2014, intensively produces large, high-end equipment to meet the rising demand and growth of the large machining market. It was designed to have a height of 20 meters and a floor space of 15,292m² in order to produce large horizontal and vertical turning centers, large boring machines, and 5-face double column type machining centers, and is equipped with a crane capable of lifting up to 50 tons. It is a state-of-the-art factory backed with the know-how and expertise that DN Solutions has accumulated in more than fifty years of producing machine tools.



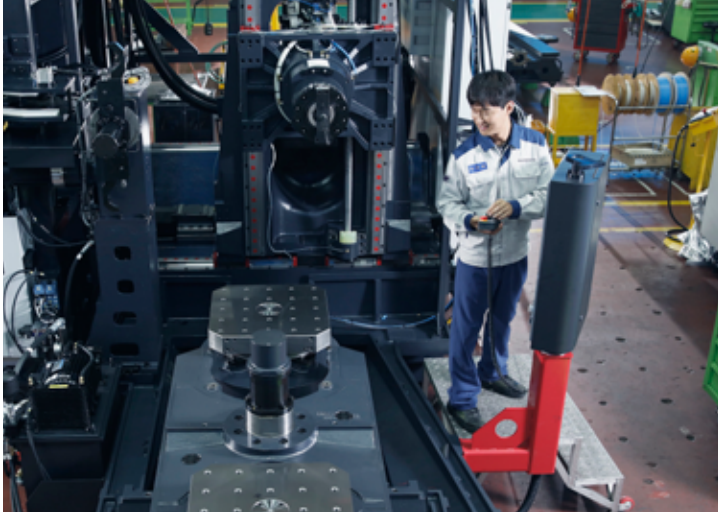
Yantai Factory in China

The Yantai Factory was established as a local corporation in 2003, and began producing unit 1 in 2004 in order to respond to the characteristics of the Chinese market by producing products locally. It manufactures products tailored to the needs of Chinese customers through its research and development system and engineering organization, and supplies automation systems. In addition, productivity has been increased with the in-house machining of core parts, high-precision maintenance, and the operation of unmanned automated systems, making it the company’s forward base for targeting the Chinese market.



Flexible Manufacturing & Quality Management System

DN Solutions pursues customer satisfaction with flexible manufacturing management systems, reliable products that have been thoroughly verified, and the highest quality.



I. Customer-oriented Manufacturing System & Smart ERP System

Flexible manufacturing systems, from product development to production, can meet the needs of customers in a rapidly changing market. The smart ERP system, which manages integrated processes within the company, realizes global business standardization and responds quickly to external changes.

II. Performance that Meets Global Standards

DN Solutions has obtained national and international certification marks such as CE in Europe, ETL in North America, GB in China, and KCs in Korea, and offers high-performance products that meet global standards by identifying what the customers want first of all.

III. Thorough Quality Certification & Guarantee of Precision

All products of DN Solutions are thoroughly verified during the new product development (NPD) stage. For major parts, quality and reliability are guaranteed through the machine tool part approval process (MTPAP). Furthermore, as an ISO17025 certified company (International Accredited Calibration Institute), DN Solutions uses a variety of instruments to conduct and operate internal calibrations to the strictest level to ensure the high accuracy and precision of its products.

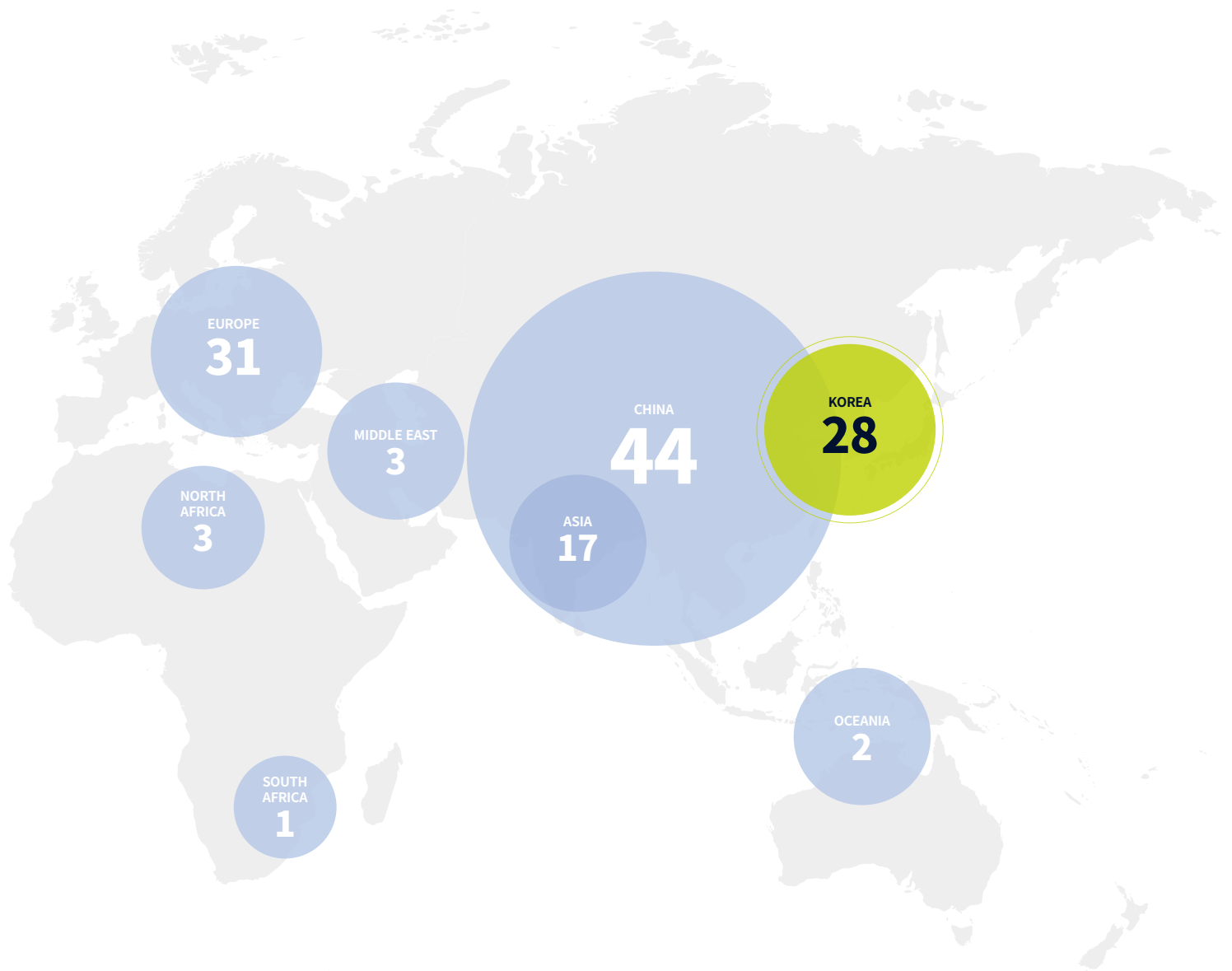
All products of DN Solutions are manufactured in state-of-the-art production facilities to achieve the highest precision and productivity.



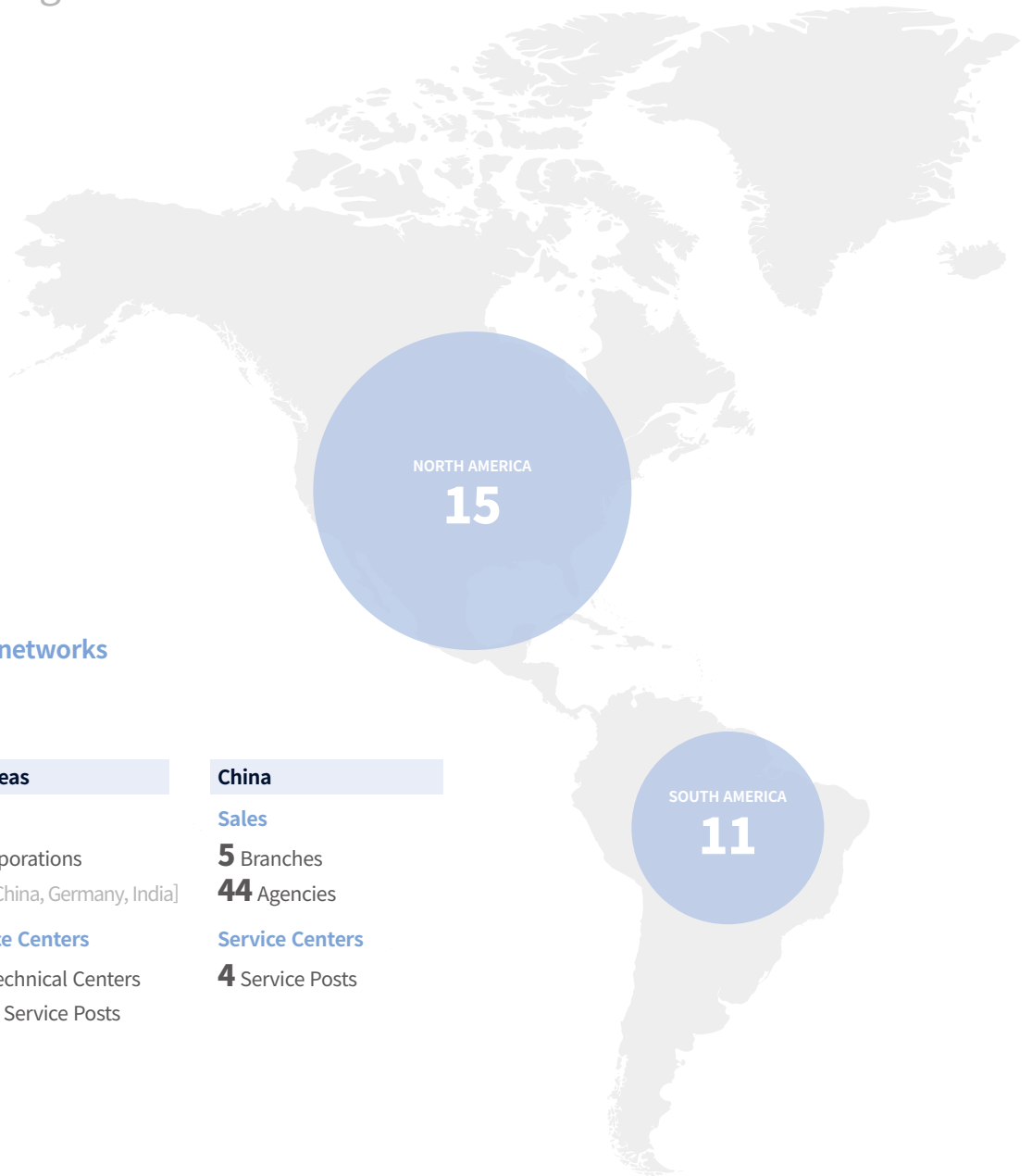


Global Network

“ DN Solutions' has built up its **robust global network** through real-time collaboration in the fields of development, production, and service.



Its global dealer network, spanning the USA, China, India, and Europe among others, is operated as an efficient integrated system from the supply of parts to product-related training, the repair of broken products, and technical support, in order to provide customers with high-quality products, technologies and services.



66 Countries

155 Sales networks

Korea

Sales

6 Branches
28 Agencies

Service Centers

2 Technical Centers
52 Service Posts

Overseas

Sales

4 Corporations
[USA, China, Germany, India]

Service Centers

49 Technical Centers
148 Service Posts

China

Sales

5 Branches
44 Agencies

Service Centers

4 Service Posts

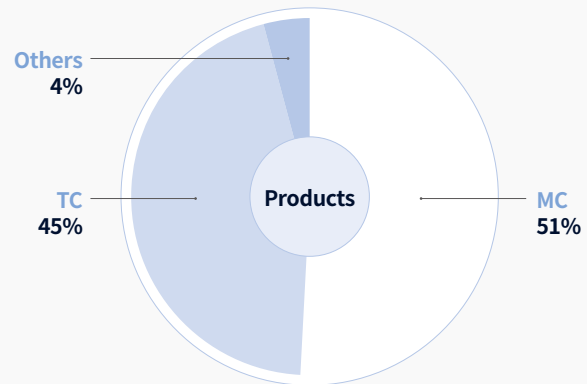


“ DN Solutions identifies the rapidly changing needs of global customers and develops and researches new products on a constant basis.

Demand Status (based on the amount)

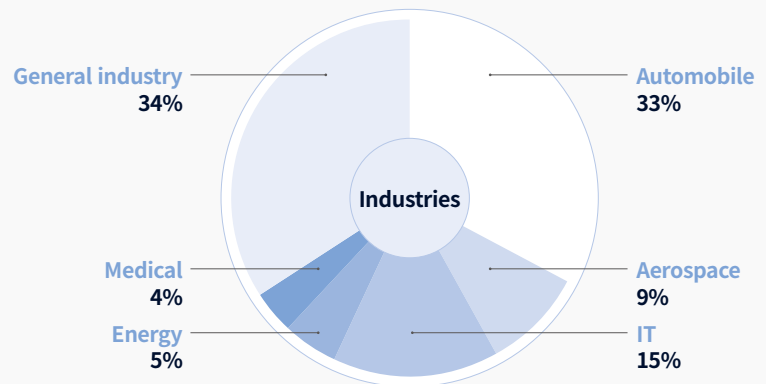
Products

DN Solutions has a full lineup of TC/MC manufactured with its own technology.



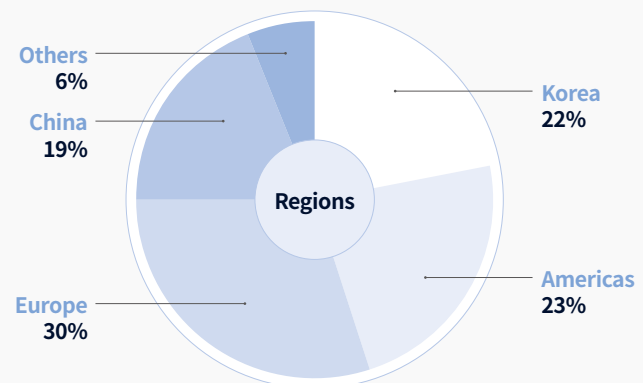
Industries

DN Solutions responds to a variety of demanding industries in the vehicle, aerospace, and IT sectors.



Regions

DN Solutions has reached beyond the domestic market into the global market, including the Americas, Europe and China.



As a result, it satisfies the needs of customers in diverse demanding industries and has been recognized for its high global market share.

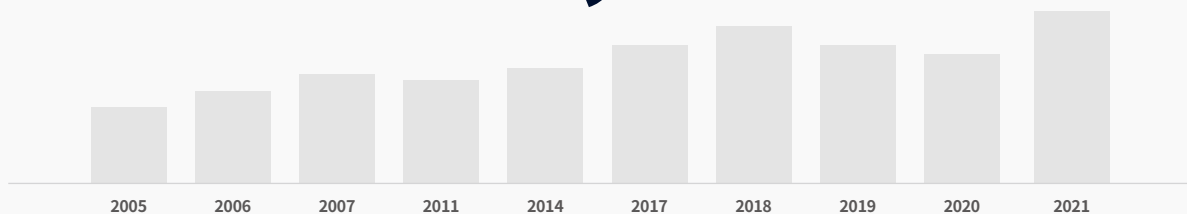
Global Market Share



Sales Performance (based on the number of units)

Cumulative number of sales of units by 2021

248,000 UNITS





Diverse demand industries

“ DN Solutions responds to the diverse demands of global industrial customers including the vehicle, aerospace, medical, and IT sectors.



Automotive

AMTEC Auto LTD, Knorr-Bremse, Linamar Powertrain · Germany
Delphi, Honda Auto · China, Thailand
LINAMAR AUTOMOTIVE SYSTEMS · USA, Canada
SCANIA, VOLVO · Sweden
THYSSENKRUPP · Brazil
TRW · Canada · China · Malaysia · Thailand · USA
BREMBO, DANA ITALIA, SATA · Italy
CIE Automotive · Czech Republic

Aerospace

SAFRAN MESSIER-BUGATTI-DOWTY · Malaysia
GE China · China
Pratt & Whitney, M.S. AEROSPACE, INC. · USA
HONEYWELL AEROS · USA · Mexico · Canada
Rolls Royce · UK · Germany · Canada
Pudak · Indonesia
Ellena, Umbra · Italy
Polymech Industries , Titan · India

Energy

Aker Solutions · Norway
BOSCH REXROTH OIL CONTROL SPA · Italy
DRILLQUIP, FMC · UK
GE OIL AND GAS · USA
NOV · USA · Singapore
OMS OILFIELD SERVICES · Malaysia
WEATHERFORD · China · India · USA · France
WOOD GROUP · USA
Tenaris, Vallourec · Brazil

DN Solutions expands its product lineup according to the volume of demand in each industry, strives to develop new products, and boasts innovative technologies and responsiveness.



IT

Samsung SDI (M) Bhd · Malaysia
Baldor Electric Co., GE, Westinghouse Electric · USA
GE, LG, Samsung · China

Medical

Medtronic Sofamor danek, Smith & Nephew, Biomet, Sandvik
Medical · USA
Smith & Nephew · UK
Biomet, Smith & Nephew · China

General Machinery

BOBCAT, CATERPILLAR · USA
VOLVO · Sweden
CATERPILLAR · UK · Italy
CATERPILLAR, SANY, Foton Lovol International · China



Global Service System

Integrated Service Before and After Sales

Parts Supply	Field Service	Technical Support	Training
Free parts supply Paid parts supply Parts repair	Visiting service Installation and trial operation Regular inspection Preventive maintenance Paid/free breakdown recovery	Processing technology support Answering technical inquiries Technical data support	Programming/equipment operation Equipment maintenance Application engineering

One-stop Problem-Solving Service

CS (Customer Support) System

CSTIP (Customer Support Technical Information Portal)

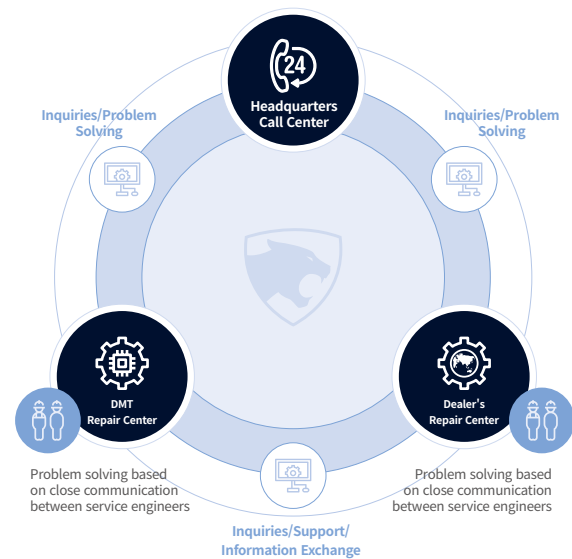
All technical information is provided for the service, including equipment manuals and bulletins.

GPES (Global Parts Engineering System)

Parts reference information by unit is provided in real time for all equipment.

Dealer Portal

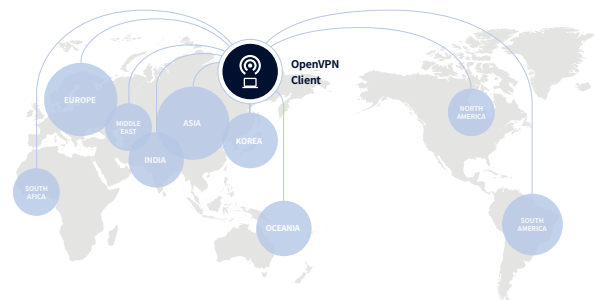
Service/part order management system for customer and field service management.



Remote support service

SOS (Smart Online Service)

R&D engineer support service by connecting the customer using the Internet. Providing worldwide remote support services by configuring a virtual network between the remote PC and customer equipment using a VPN server.



Providing customized training and information

Training services are most important in the manufacturing industry that experiences shortage of labor. We provide regular training courses so that equipment operators can handle and use our products effectively. We also share useful information necessary for installing, maintaining, and controlling our equipment online.

“ Fast service anywhere in the world, 24 hours a day, 365 days a year! With its **organically built global service system**, DN Solutions provides a clear solution to reassure customers whenever problems arise.

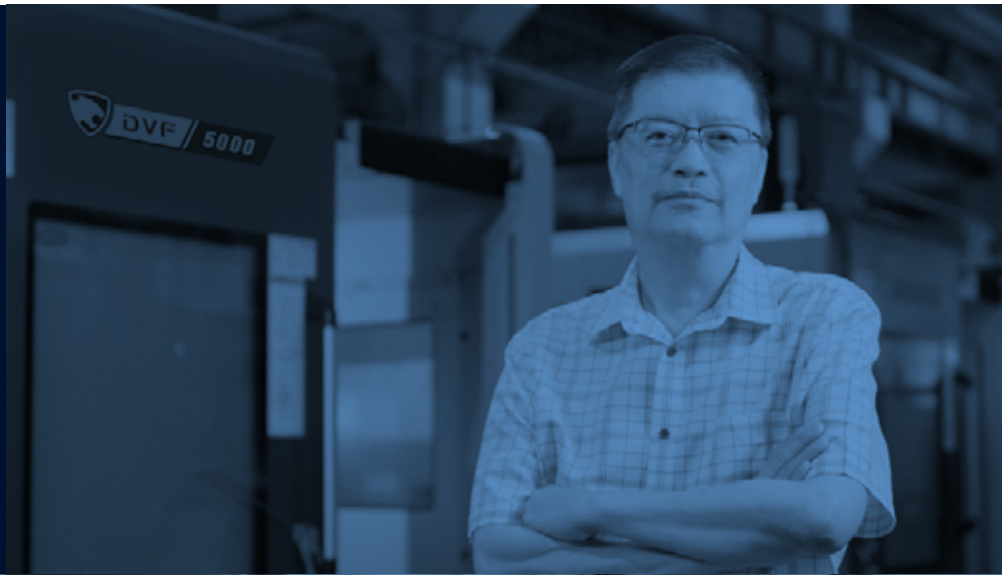


“

More than 80% of our company's 42 items of equipment are from DN Solutions.

After using a product of DN Solutions just once, we chose DMT again without hesitation when buying other equipment. We didn't even consider any other brands.

– Operation Manager of P Company, Singapore



“

Satisfactory results after a deliberate selection process

We chose DN Solutions through a thorough and deliberate selection process from the engineer's point of view, which resulted in increased productivity.

– Production Manager of A Company, Korea

“

Contributes to Stable Supply of Super-Precision Aerospace Parts

We can operate the machine tools at night with a smart machining system, thereby improving our productivity, enhancing the utility of our machine tools, and reducing our costs.

– Representative of H company, England





“ **The most appropriate machine tool to Cut Aluminum Parts**

Quality criteria, demonstrating outstanding performance in the cutting of workpieces of complex shapes.

– Representative of R company, Danish



“ **No problems with complicated and diverse machining!**

Our company's overall machining capability has been improved by being able to actively respond to parts of complex shapes with the equipment of DN Solutions.

– Representative of O Company, Italy



“ **Increased productivity and quality improvement at the same time!**

DN Solutions' equipment has not only improved our productivity but our quality too!

– Representative of R Company, USA





EHS & Social Contribution Activities

“ DN Solutions' eco-friendly management pursues a future where humans and nature live together.”

DN Solutions practices eco-friendly management aimed at promoting symbiosis between humans and nature. Beginning with the development of eco-friendly products, DN Solutions has created a working environment that minimizes environmental pollution and pursues energy-efficient systems. Additionally, taking the lead in promoting eco-friendly management that considers everyone's future with a sense of responsibility commensurate with its reputation as a global brand.



Leading Global EHS

DN Solutions has selected EHS (Environment, Health, Safety) focused on humans and the environment as its core management tasks and is striving to lead the global EHS trend.

Development of clean eco-friendly machines

By thoroughly considering EHS from the product development stage to manufacturing and machining, DN Solutions continues to conduct research and development with the aim of showcasing eco-friendly products with advanced technology.

Compliance with global environmental standards

All DMT work environments are certified and strictly comply with the global environmental standards, Environment Management System (ISO 14001), and Occupational Health and Safety Management System (ISO45001).

Pursuing energy efficiency

DN Solutions develops eco-friendly technologies that increase energy efficiency by supplying power with energy stored in a machine's auxiliary equipment and adopting hydraulic systems with variable speed and pressure.

“ Happiness grows with sharing.
DN Solutions practices the sharing of happiness.

DN Solutions strives to fulfill its corporate social responsibilities through various social contribution activities, by caring for neighbors and the environment and cultivating technical talents. With a focus on support for vulnerable social groups, technical training, and sharing with communities, our various social contribution activities are spreading beyond Korea, to all over the world.



Community Sharing Activities

- Donation to Changwon Hospital
- Eco-friendly spring cleaning activities
- Participation in the Korean Red Cross Blood Donation Campaign

Support for vulnerable groups

- Kimjang Sharing with Love
- Supply of winter goods to Seongsan-gu Office

Technical training programs

- Technical training at Moonsung University
- Cultivation of high-end equipment human resources

Global activities

- Chinese subsidiary delivered relief aid collections to COVID-19 victims.



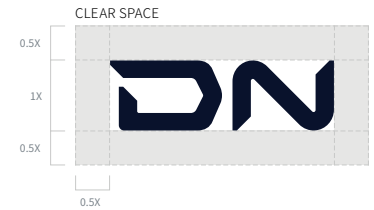
Brand Assets of DN Solutions



| CI |

Corporate Identity

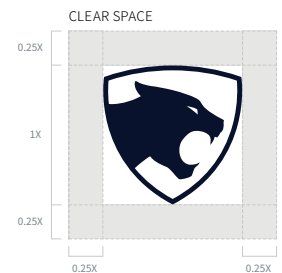
DN Solution's CI is based on the group's English logo, DN, giving a strong and flexible impression while expressing hope for change and growth in the future and converging.



| BI |

Brand Identity

DN Solution's BI is a symbol of a puma, which symbolizes strength, agility and dynamism, and projects the speed, precision and reliability of our products, which are of excellent quality. The triangular shield surrounding the puma expresses half a century of history, tradition and pride while embodying our three strategic directions: product group expansion, regional growth and expansion of industry demand.





DN Solutions' philosophy of putting customers and products first never changes. DN Solutions, the only partner trusted by customers in the machine tool industry, is accelerating towards a future in which it grows with customers with all the passion and pride befitting its status as the top global brand.

Slogan

Reliable Partner / Optimal Solutions / Value for Price

“Machine Greatness,” the slogan of DN Solutions, contains the company’s core values and its vision of meeting the needs of customers who require excellent machining with differentiated values and products.

Color

미래성 / 세련미 / 신뢰

DMT Blue, the brand color of DN Solutions, represents a future in which the company grows with its customers, refinement that leads the times, and an attitude with trust that clearly presents the solutions which customers want.

DN Blue
PANTONE® / 2935 C

Graphic Motif

Focus + Frame

The graphic motif of DN Solutions expresses the philosophy of thinking only of customers and products with the concept of “Focus.” The diagonal line of the slogan box represents the intrinsic characteristic of cutting machining, while “Frame” represents the image of an innovative and professional company.





We uncover customer needs by participating in major international machine tool exhibitions, and releasing various types of new products that keep pace with the latest trends.

Global Exhibitions	SIMTOS	Seoul, Korea	www.simtos.org
	IMTS	Chicago, USA	www.imts.com
	EMO	Hannover, Germany	www.emo-hannover.de
		Milan, Italy	www.emo-milano.com
	CIMT	Beijing, China	www.cimtshow.com
	CCMT	Shanghai, China	www.chinaexhibition.com
	IMTEX	Bangalore, India	www.imtex.in

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	DN Solutions, India Pvt. Ltd	No.82, Jakkur Village, Yelahanka Hobli, Bangalore-560064, India
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