Nicks N Blue

Company Background Information

Nicks N Blue Co.,Ltd

Nicks N Blue Co.,Ltd. develops and supplies a variety of products, from CAD/CAM integrated solution development related to mold processing to MCT processing related solutions. Nicks N Blue Inc. is a company that helps customers grow by guiding various national support projects so that mold manufacturers can improve their competitiveness through research and development easily and without burden.
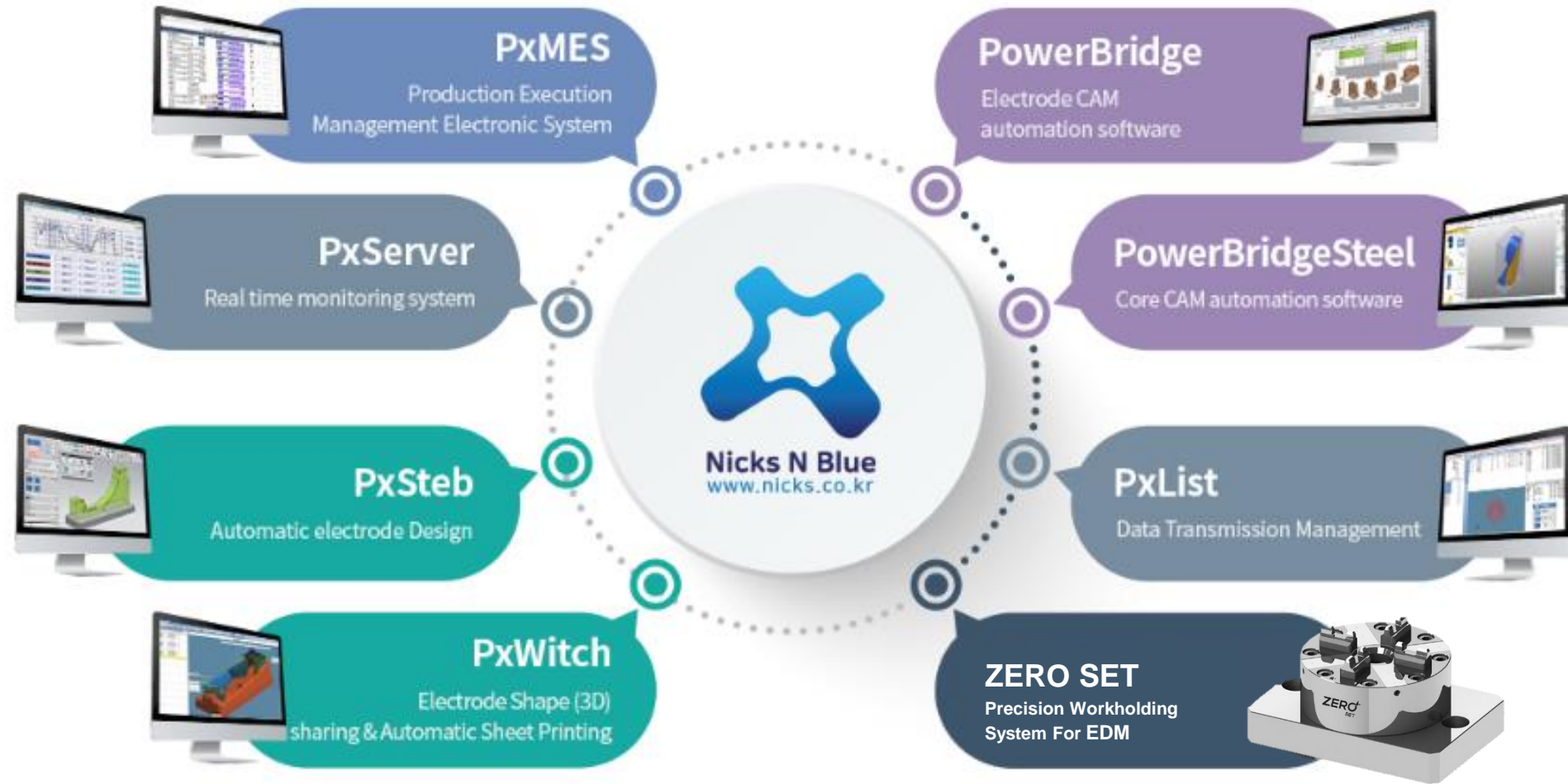
History

Year	Month	Event
2021	06	- Registered as a smart factory AI supplier
	10	- Developed NCPangpang, a smart MCT integrated management system
		- Developed T-BLOCK MACHINE and carried out patent applications
		- Developed quick clamp system for discharge
2020	01	- Developed PxManager, an early model for smart machines
	10	- Carried out national support project smart workshop pilot project
2019	11	- Relocated headquarters to Gunpo
		- Registered as a smart factory supplier
	12	- Changed company name to Nicks N Blue Inc.
2017	05	Developed electrode-only smart machine system
2016	12	Developed smart core machine in partnership with Hwacheon Machinery Co., Ltd.
2015	04	- Acquired patent related to NC machining operation system
	05	- Certified as venture business
	10	- Developed core-only automatic CAM system (PxBridge)
2014	11	Established an affiliated research institute
2011	03	- Developed automatic CAM system (PxBridge)
	05	- Developed 3D Data automatic shape information system (PxWitch)
	08	- Developed NC Data transmission management system (PxList)
2010	03	Established Nix Corporation

특허증
가공계획 수립과 가공시간 예측이 가능한 NC
공작기계 운용 시스템 및 방법

상표등록증
PxServer

상표등록증
PowerBridge

특허출원번호통지서
방전가공 전극용 흑연블록의 가공장치

특허출원번호통지서
방전가공용 흑연블록의 가공장치

저작권 등록증
PxList(피엑스리스트)

저작권 등록증
PxWitch(피엑스위치)

저작권 등록증
PxServer(피엑스서버)

저작권 등록증
PxManager(피엑스매니저)

저작권 등록증
PxSteb(피엑스스텝)

저작권 등록증
PowerBridge Steel(파워브릿지스틸)

저작권 등록증
PowerBridge(파워브릿지)

Organization Chart

President

Technical Support Division

- Customer Service
  - Domestic
  - Overseas
  - Franchise
  - Exhibition
- Solution
  - Smart Factory Support Project
  - Consultation
- R&D
  - New Product
  - Improvement Planning
  - Blueprint Production
- Quality Assurance
  - Claim
  - Inspection
  - Subcontract Quality Management
  - Measuring Device Management

Management Support Division

- Finance
- Human Resources
- General Affairs

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www.nicks.co.kr

Nicks N Blue Solution Line-Up

PxMES
Production Execution
Management Electronic System

PowerBridge
Electrode CAM
automation software

PxServer
Real time monitoring system

PowerBridgeSteel
Core CAM automation software

PxSteb
Automatic electrode Design

PxList
Data Transmission Management

PxWitch
Electrode Shape (3D)
sharing & Automatic Sheet Printing

ZERO SET
Precision Workholding
System For EDM

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PxMES
Production Execution Management Electronic System

PxMes is an integrated system that enables users to monitor and manage all processes ranging from product orders to production in real time. It optimally manages your manufacturing processes through its real time feedback and precise decision making.
It collects · analyzes · controls the production record, worker activity, facility operation, and product quality's information.

Production Execution Process

Resources · Material Management	Warehousing (Packaging bar code)	Report Management

Resources · Material Management flow:
- Resources · Material Management
- Resources Warehousing
- Import Check
- Site PC / Label Printing
- Resources Status Check
- By date/by resource

Warehousing flow:
- Warehousing Completed
- Resources Entered
- Process Started
- Final Check
- Packaging Process

Completed Product Inventory Management

Packaging Process	Inventory Due Diligence
Operation Commencement Date	Operation Commencement Date
Production Completion Date	Production Completion Date
Warehousing Check Date	Warehousing Check Date
PC	SMART TOA

Completed Product Inventory Management
- Production Record Management
- Facility Maintenance Management
- Deadline Management

Report Management:
- Supplied Resources Status
- Defective Process Status
- Lot Tracking Status

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PxServer Real–time Monitoring System

The PxServer provides a quick view of the operational status of the entire equip-ment. You can always check the facility's overall efficiency (OEE) by collecting the facility's operational information in real time.

NC Monitoring System

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PxSteb — Automatic Electrode Design

PxSteb is an automatic electrode designing program that supports a direct interface on 3D CAD program (UG). It contains functions such as electrode extraction and modeling editing & management and enables an easier and faster electrode (NX). sign.

Features And Advantages

Modeling analysis and management	Electrode modeling and editing
• Automatic flat face search	• After creating it by clicking Create Box,
• Automatic under cut search	• Create electrode by clicking Trim/Subtract
• Automatic minimal radius search	• Automatic text imprinting (convenient when inputting shift value on setting grade)
• Blueprint & data import and export	• Automatic reinforcement of rib (reinforcement cylinder, grade angle setting available)
• Measurement of modeling size and angle	• Shift/symmetry/multiple duplication
• Synchronization with power mill	• Automatic setting step formation
	• Layer and category management

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PxWitch — Electrode shape (3D) sharing and automatic sheet printing
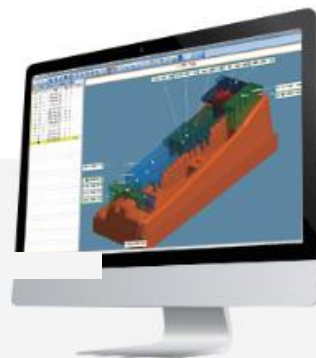
PxWitch is a program that directly opens a modeling information of IGES and NX UG's modeling information through its unique interface technology made with an efficient utility for electrode processing. It automatically prints out documents such as electrode layout, setting plan, part lists, etc simply by clicking an icon.
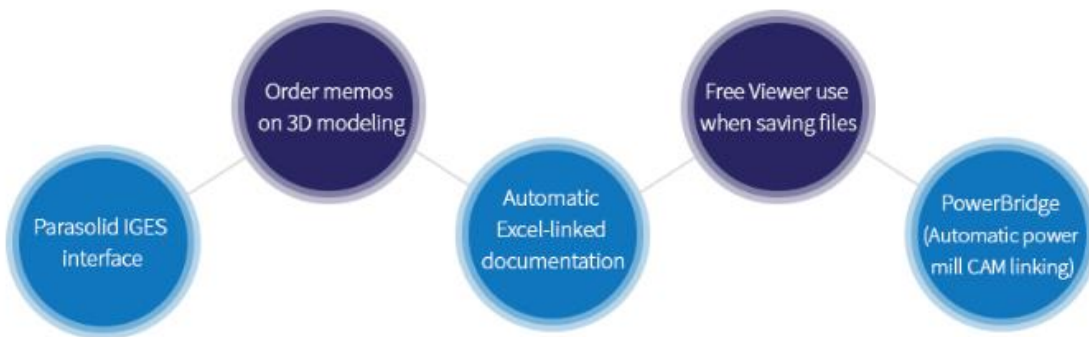
Program Document

Position Map

Setting Map

Part List

Material Purchase

Features And Advantages

- Can attach memos on 3D modeling displays to order, warn, or notify relevant departments.
- Its file sharing function stimulates a faster and accurate communication of processes (planning, NC, discharging, ideas)
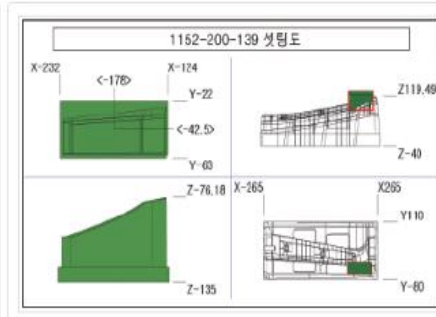- Its on-site Viewer allows the realization of zero-blueprint policy.

Process flow

Parasolid IGES interface → Order memos on 3D modeling → Automatic Excel-linked documentation → Free Viewer use when saving files → PowerBridge (Automatic power mill CAM linking)
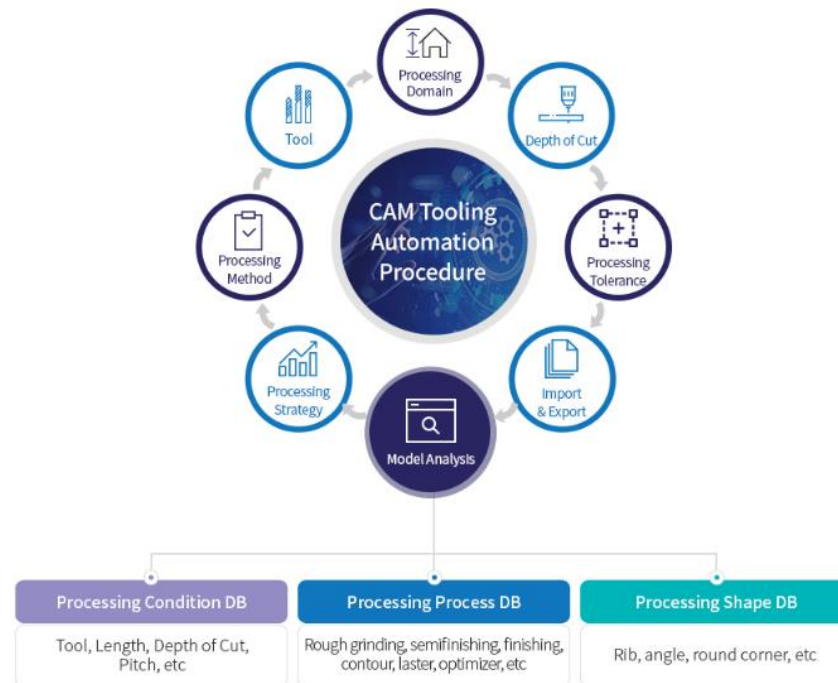
Nicks N Blue Solution Line-Up

PowerBridge — Electrode CAM automation software

PowerBridge is an automated program for machine, processing process, detailed processing conditions for electrode CAM processing. It streamlines repetitive and complex CAM process to enhance machine operation rate and productivity by standardizing NC Data.

CAM Tooling Automation Procedure

Processing Domain · Depth of Cut · Tool · Processing Tolerance · Processing Method · Import & Export · Processing Strategy · Model Analysis

CAM Tooling Automation Procedure

Processing Condition DB	Processing Process DB	Processing Shape DB
Tool, Length, Depth of Cut, Pitch, etc	Rough grinding, semifinishing, finishing, contour, laster, optimizer, etc	Rib, angle, round corner, etc

System Function

Automatic electrode tooling
It automatically recognizes electrode shapes and calculate by selecting the right DB.

Automatic modeling direction recognition
It recognizes the discharge direction to automatically change processing coordinate system.

Multi calculation process
It batch processes process such as existing operations, operation order, NC data printing, symmetry calculation, data name change, validation, etc through multi automation.

Automatic sheet printing
It automatically prints out the operation order forms of clients and other documents such as discharge direction map and material purchase orders.
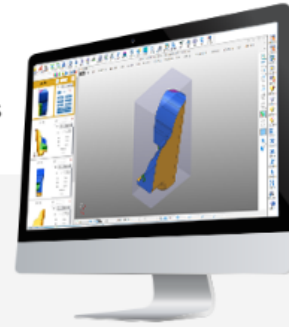
Collision Check
It has an automatic tool path separation coordinate system setting, modeling modification, and automatic block setting functions based on lid, link adjustment, symmetry, shift, rotary editing tool shapes.
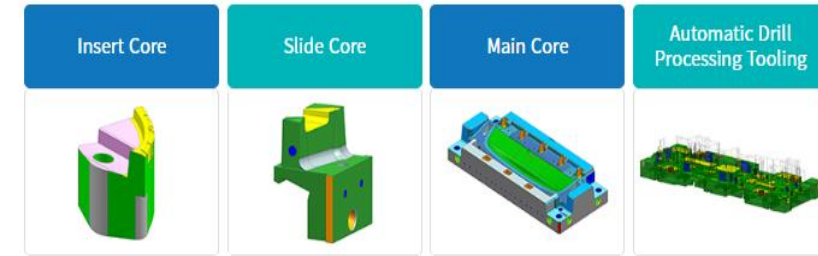
Nicks N Blue Solution Line-Up

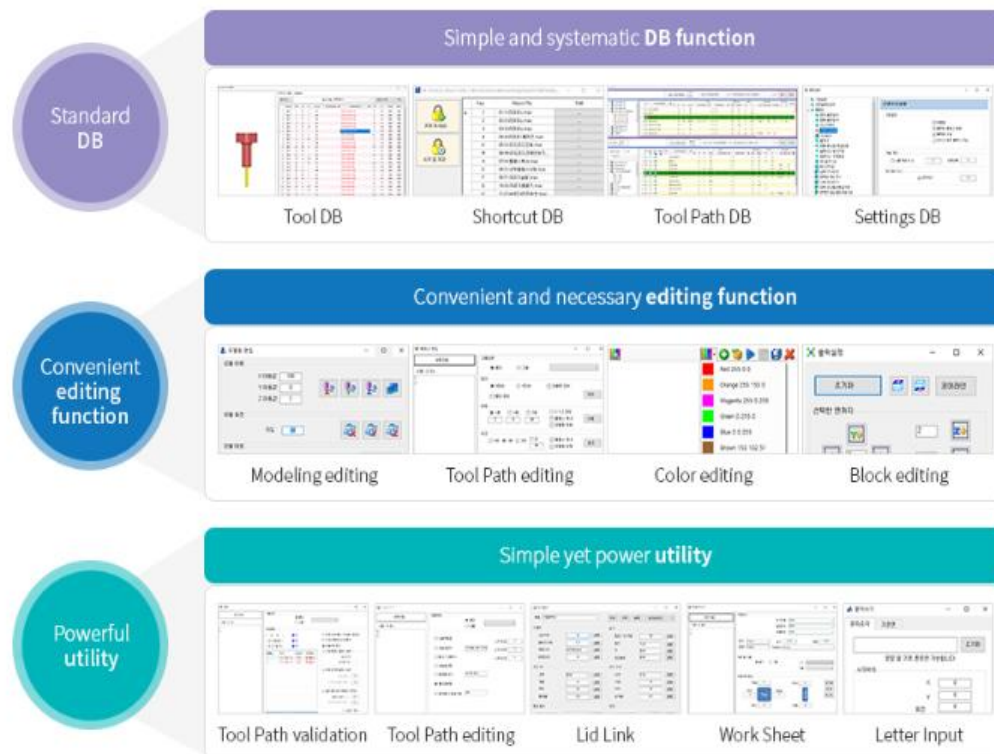## PowerBridge Steel — CAM Automation Software for Cores

PowerBridge Steel is a newer viersion of the previous PowerBridge. It creates the optimal tool paths as it formulates a DB for processing shape DB, processing process, tool condition, and detailed processing conditions.

Applied Parts

Insert Core	Slide Core	Main Core	Automatic Drill Processing Tooling

Main Features

Standard DB

Simple and systematic **DB function**

- Tool DB
- Shortcut DB
- Tool Path DB
- Settings DB

Convenient editing function

Convenient and necessary **editing function**

- Modeling editing
- Tool Path editing
- Color editing
- Block editing

Powerful utility

Simple yet power **utility**

- Tool Path validation
- Tool Path editing
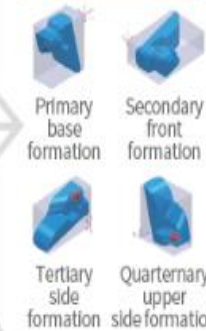- Lid Link
- Work Sheet
- Letter Input

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01. Opening Models

PowerBridge Steel saves variables such as process, tool, detailed processing conditions in a DB and automates CAM tooling process as users select needed DBs.

02. Direction Setting

- Primary base formation
- Secondary front formation
- Tertiary side formation
- Quarternary upper side formation

03. Process DB selection

- Primary setting
- Secondary setting
- Tertiary setting
- Quarternary setting

04. Calculation

Troublesome previous working process that involved repetitive input of operation details such as grinding & finishing options, tool selection, and detailed processing conditions.

It forms and uses a DB that has data of numerous experts about various parts with diverse shapes, size, and height.

Nicks N Blue Solution Line-Up

PxList Data Transmission Management
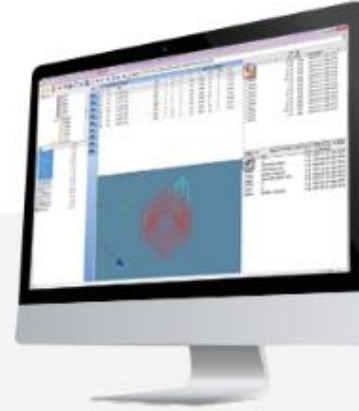
PxList automatically converts the forms or data and machine posts. It is a data transmission management program that automatically edits and manages data such as process, tool length, tool number, and tool radius.

System Procedure

Coordinate System Selection ⇒ **Operation Order Loading** ⇒ **Transmission**

Data transmission and backup, PxListSheet Application

PxList has special functions such as product coordinate shifts, graphic simulations, and internal memory access. It can be used to transmit and backup data for complexers like CNC lathe and turn mill. Apply PxListSheet on PxList allows an easier operation record management through a direct accumulation of every data transmission record.

| **Tool Recognition** Diameter, radius, tool tength Sorting of rough grinding, semifinishing, finishing | Product Coordinate Automatic Number registration | Automatic ATC number setting | **RPM, Feedrat** (Plunge, Automatic processing shift) | Automatic NC data post editing | Multi product processing operation record printing |

Smart Factory
Happy Factory