



NUSPARK



Automation & Packaging Systems

Company Introduction

BACKGROUND

- ▶ *Nuspark Inc* was formed in 1999 by a group of gifted engineers with high level expertise in automation, robotics and packaging.
- ▶ Their goal was to assemble a team who prioritize attention to detail and precise execution.
- ▶ On this foundation Nuspark was built to deliver expertise, solutions and values to our customers that exceed their expectations - from the concept to production.

Company Introduction

GENERAL

- ▶ *Located in Toronto, Canada, in the* fourth largest metropolitan area in North America.
- ▶ *Nuspark* has brought many small to medium sizes companies into the realm of automation, while supporting our international clients.
- ▶ *Providing service for* the Automotive, Food, Pharmaceutical, Personal Care, and Consumer Goods markets in both North America and Europe with installations in 15 countries.
- ▶ *Nuspark* can deliver solutions that perform in the real world....your automation and packaging operations!

Company Introduction

GENERAL cont.

Nuspark R&D team constantly analyzes new and emerging technologies to insure that we continue our reputation for innovation.

This core philosophy of innovation combined with our commitment to excellence has made *Nuspark* a recognized industry leader in Automation, Cartoning, Case Packing, Tray Packing, Palletizing and Custom Engineered solutions.

Key Strengths and Advantages

Professional Team

Engineering

A professional team of highly skilled mechanical designers, electrical and control engineers plans, drafts and shapes each project from concept to fabrication and assembly. 30% of Nuspark staff is dedicated to engineering functions.

Assembly and manufacturing

We have the resources for full in house operation. Our personnel are able to perform all aspects of the manufacturing process including:

- welding,
- machining of components from raw material
- electrical assembly
- mechanical assembly

Technical Support

- Full installation
- Assistance or take-over of integrated line assemblies for customers
- After sales support
- Hands on customer training

Key Strengths and Advantages

Overview

- ▶ In-house machine shop
- ▶ In-house welding
- ▶ In-house electrical controls and panel design/assembly
- ▶ Programming for AB, Schneider Electric, PacDrive, Omron, Bosch Rexroth and Siemens
- ▶ PMMI member
- ▶ FANUC Preferred Integrator (class 4)
- ▶ ABB, Yaskawa, Epson, Denso robots integration
- ▶ Pro/Engineer 3D mechanical development software
- ▶ Key geographic location with service to all major North American markets

Assembly Facility



Sales and Marketing

International Clients



Sales and Marketing

Canadian Clients



Summer Fresh



APOTEX



Sales and Marketing

Customer Base

- **ABC Group**
- Amway Corp
- Alcon
- Apollo Health Care
- Apotex
- Barrie House Tea and Coffee
- Baxter
- Bradford Coffee Roasters
- Cardinal Health
- Central Life Sciences
- Cedar's Mediterranean Foods
- Dole
- **Dorman**
- Eastman Kodak
- Ellis Coffee
- **Flex-n-Gate (Canada, Mexico)**
- Gavina Coffee
- General Electric
- **Goodyear**
- Great Lake Cheese
- HerbaLife
- **Honda (Canada)**
- Intelligent Blends
- Kellogg's
- Kraft Foods
- Lavit
- Maple Leaf
- **Mayco International (USA)**
- **Mitchell Plastics (Canada)**
- **Multimatic Mfg (the company of Magna International)**
- Nestle
- **Novares**
- Parmalat
- Playtex
- RJ Reynolds
- Sanofi Aventis
- Silgan Plastics
- Starbucks (Marich Confectionary)
- Steam Whistle
- Sun-Rype
- T. Marzetti
- Twin Labs
- Trilliant Food and Nutrition
- **Ultra Mfg**
- Westins
- Wyeth
- **Teknion Furniture Systems**

Our Partners



- Nuspark is a level 4 Integrator (>25 robots per year)
- Nuspark is on track for 50+ robot installations in 2018
- Fanuc offers global support with more than 250 locations throughout the world.



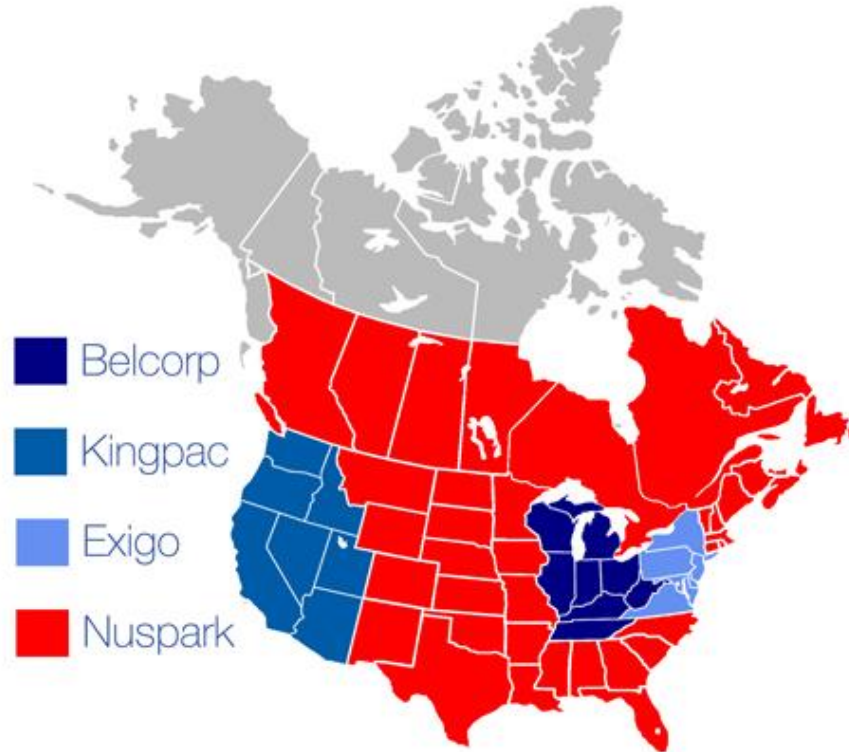
- Nuspark has been a PMMI member 2003
- Nuspark has participated in Leaders in Packaging 2017 and 2018.
- The PMMI Foundation supports students pursuing careers in packaging and processing.



- Nuspark has participated in PAC tour initiative in 2018 allowing vendors to see the complete Nuspark development process first hand, from design to debugging.
- PAC offers a wide range of programs that offer opportunity for innovation, networking, specialized packaging training.



Local Representation



Nuspark Brand

Company Focus

- ▶ ***Nuspark Inc.*** began with a focus on custom engineered automation projects.
- ▶ As our design library grew we began to identify parallels in the solutions and focused on adapting these solutions into standard modules. The standard product line now consists of Assembly Robotic Cells, Casepackers, Cartoners, Tray Packers and Palletizers.
- ▶ Placing an emphasis on customer values and the ever growing complexities of the automotive and packaging industry, Nuspark has designed its products with unmatched customization and versatility.

Nuspark Brand

Automation Focus: **Products, Components and Sub-assemblies**

- ▶ ***Car Air Outlets***
- ▶ ***Car Door Hinges, Latches and Pedals, Clutches***
- ▶ ***Car Boards, Panels and Covers***
- ▶ ***Car Air Boxes and Ducts***
- ▶ ***Windshield Lace Application***
- ▶ ***Furniture Metal Sheet Frames Stamping***

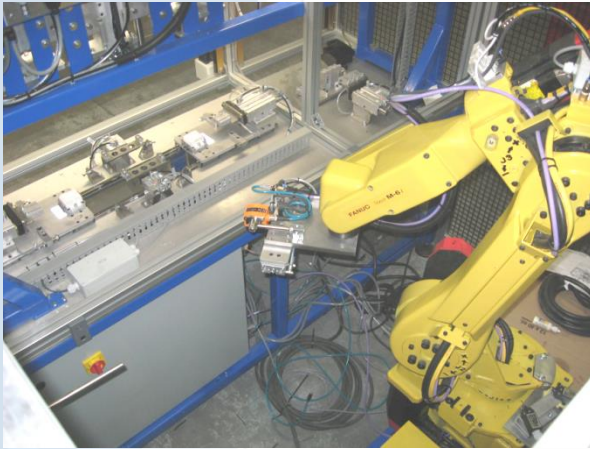
Nuspark Brand

Automation Focus: **Technology**

- Robotic Systems
- Automatic Assembly
- Vision systems & Testing
- Clip Insertion
- Staking
- Heat Staking
- Ultrasound Staking
- Riveting
- Flaring
- Stamping
- Tape Application
- Grease Application
- Foam Application
- De-gating

Robotic Systems

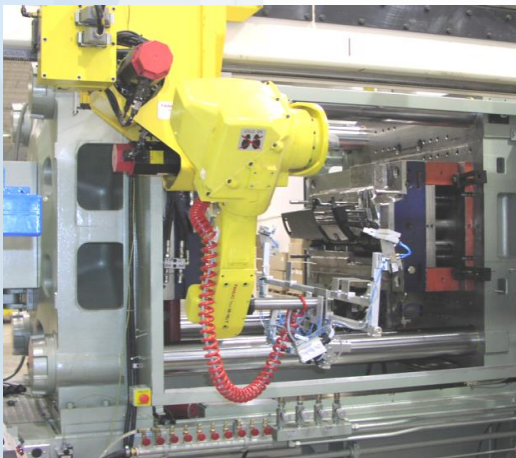
**Chrysler Grand Caravan
Air Outlet Assembly**



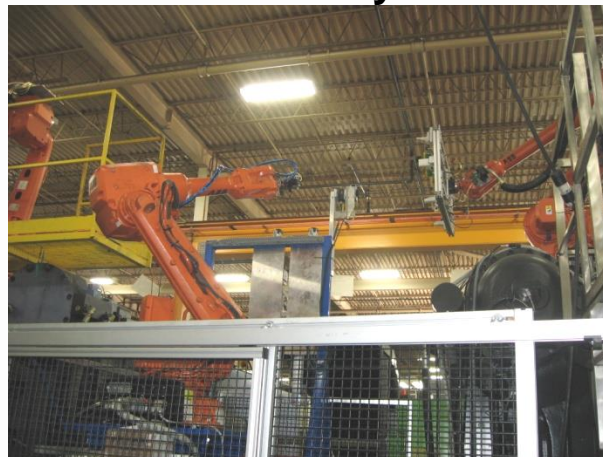
Weston Bakeries Pie Packing



GM Truck Panel Assembly



**GM Lift Gate Lower Clip
Assembly**



Implemented at:

General Electric Mfg

Parmalat Mfg

Valtec Mfg

Hunjan Mfg

Weston Bakeries

Rain Bird Mfg

Steam Whistle

ABC Group

Automatic Assembly

Toyota Highlander Door Hinge Assembly



Ford ETC Pedal Assembly Line



Implemented at:

Flex-n-Gate

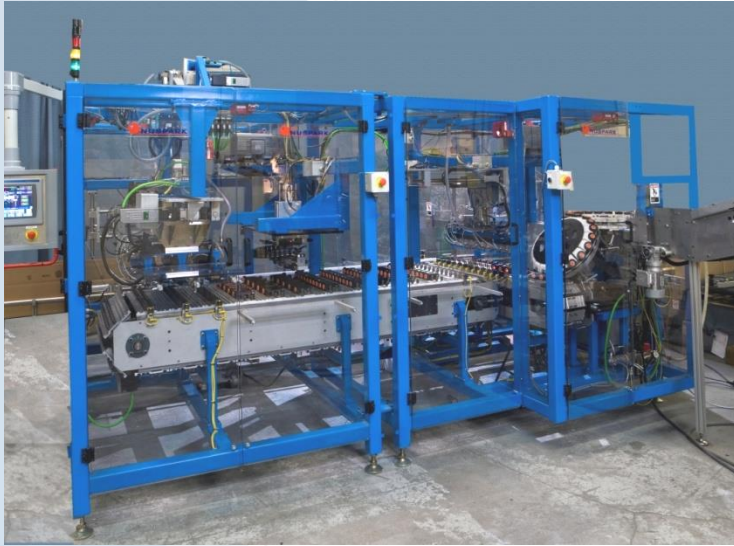
ABC Group

Ultra Mfg

Valtec Mfg

Multimatic Mfg

Material Handling



Implemented at:

General Electric

PMP Mfg

Ropak

Ultra Mfg

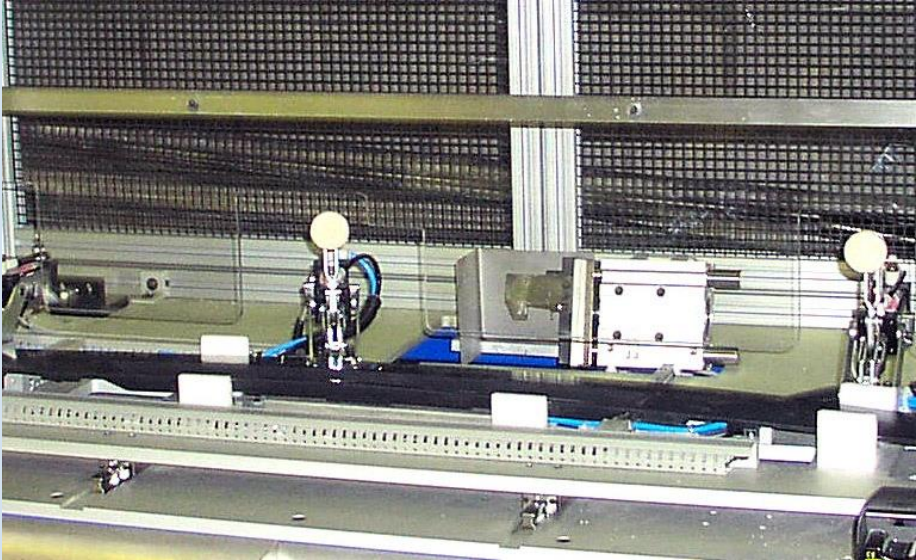
Rain Bird

Steam Whistle

Collins & Aikman Mfg

De-gating

Nissan Sentra Dash Board de-gating



Implemented at:

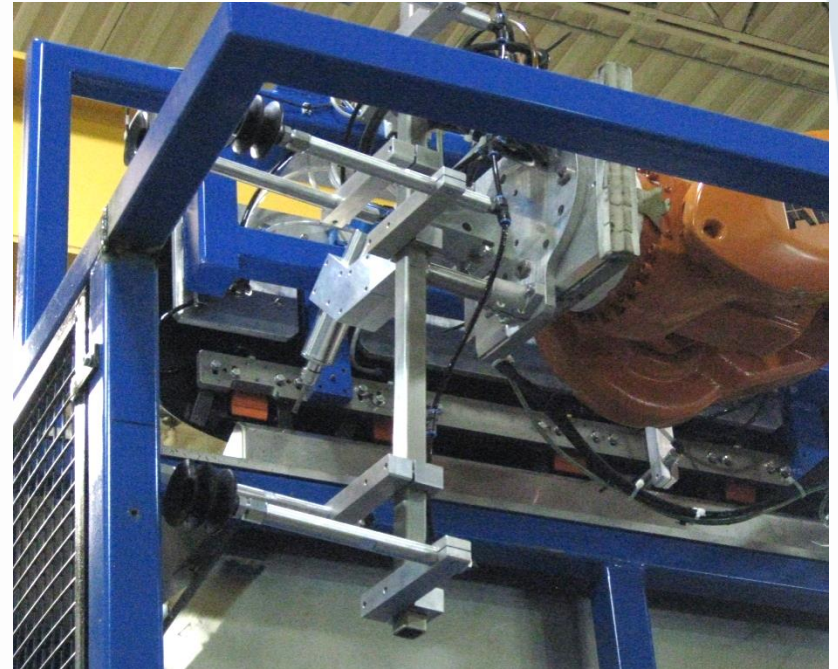
Ultra Mfg

PMP Mfg

**Mitchell Plastics
Mfg**

ABC Group

**Ford Edge Spoiler Robotic de-gating
(routing)**



Clip Insertion

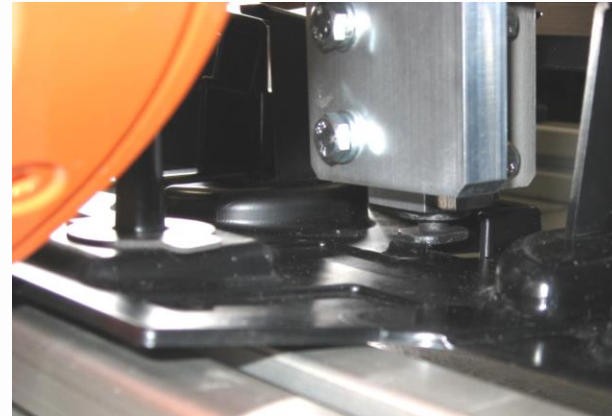
Ford Truck Front Panel Assembly



Implemented at:

ABC Group
Decoma Polybrite Mfg
Ultra Mfg
Mitchell Plastics Mfg

ABC Group Robotic Clip Insertion



Staking

Honda Civic Door Hinge Staking

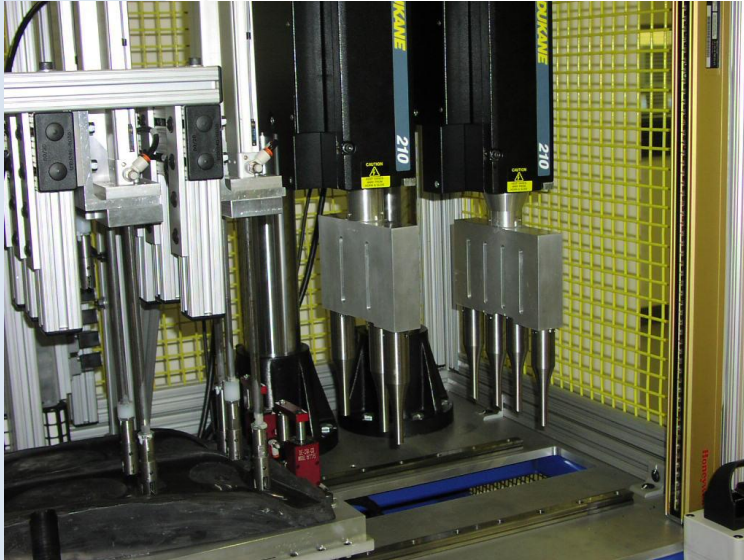


Implemented at:

**Multimatic Mfg
Anton Mfg**



Ultrasound Staking



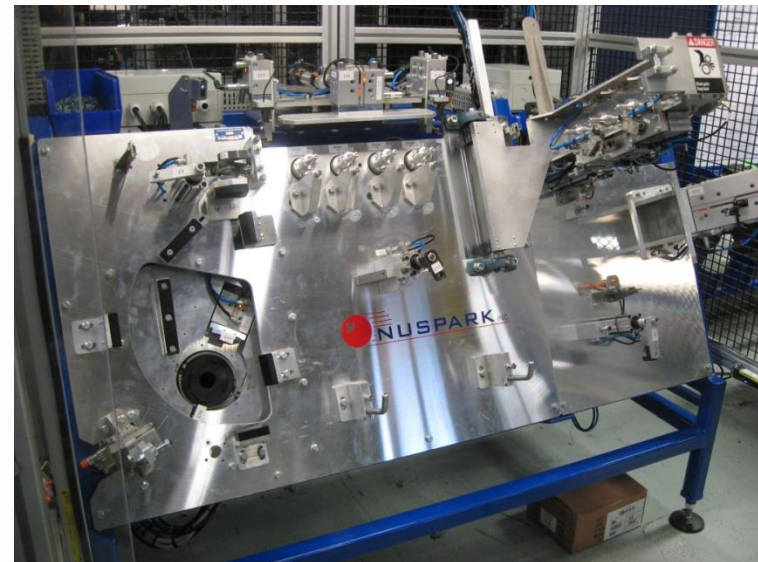
Implemented at:

Hunjan Mfg

PMP Mfg

ABC Group

Ultra Mfg



Heat and Infrared Staking

Chrysler Minivan Top Air Hood Infrared Staking



Implemented at:

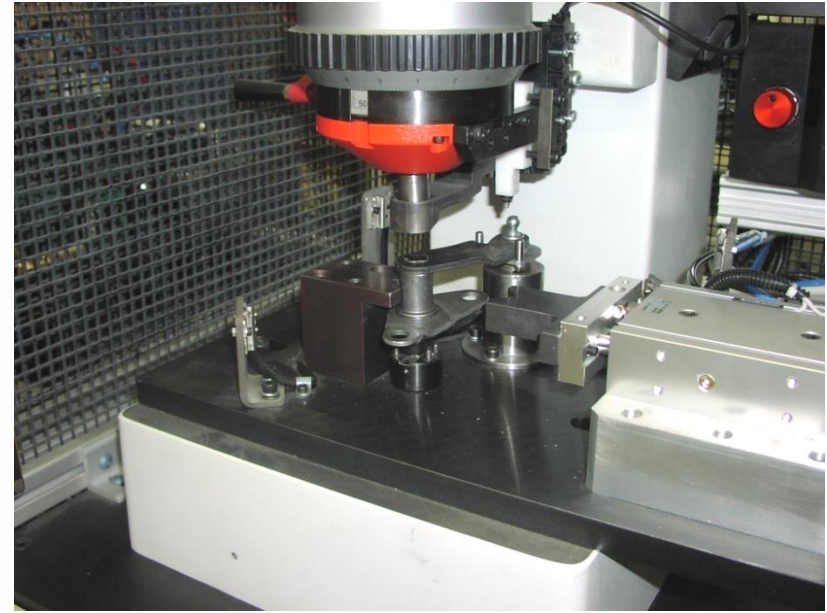
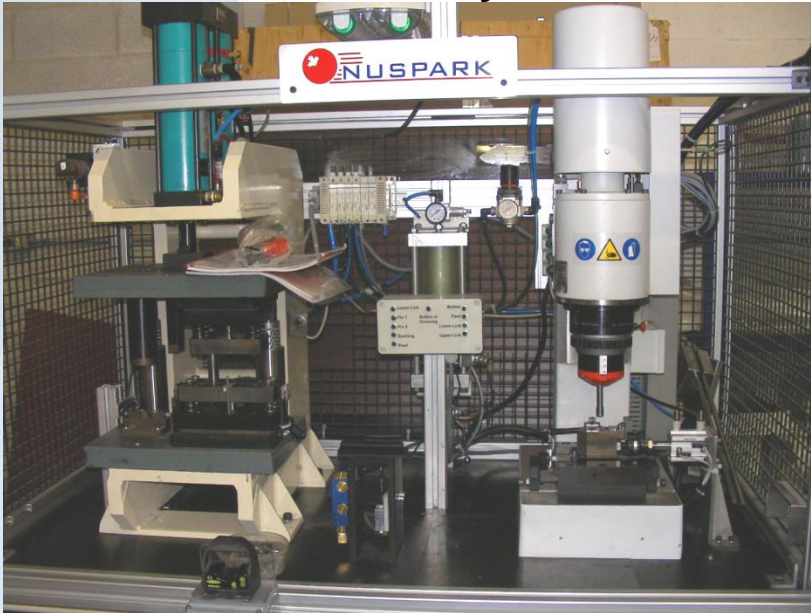
Mitchell Plastics Mfg

Ultra Mfg

PMP Mfg

Riveting

Toyota Corolla Door Hinge Assembly

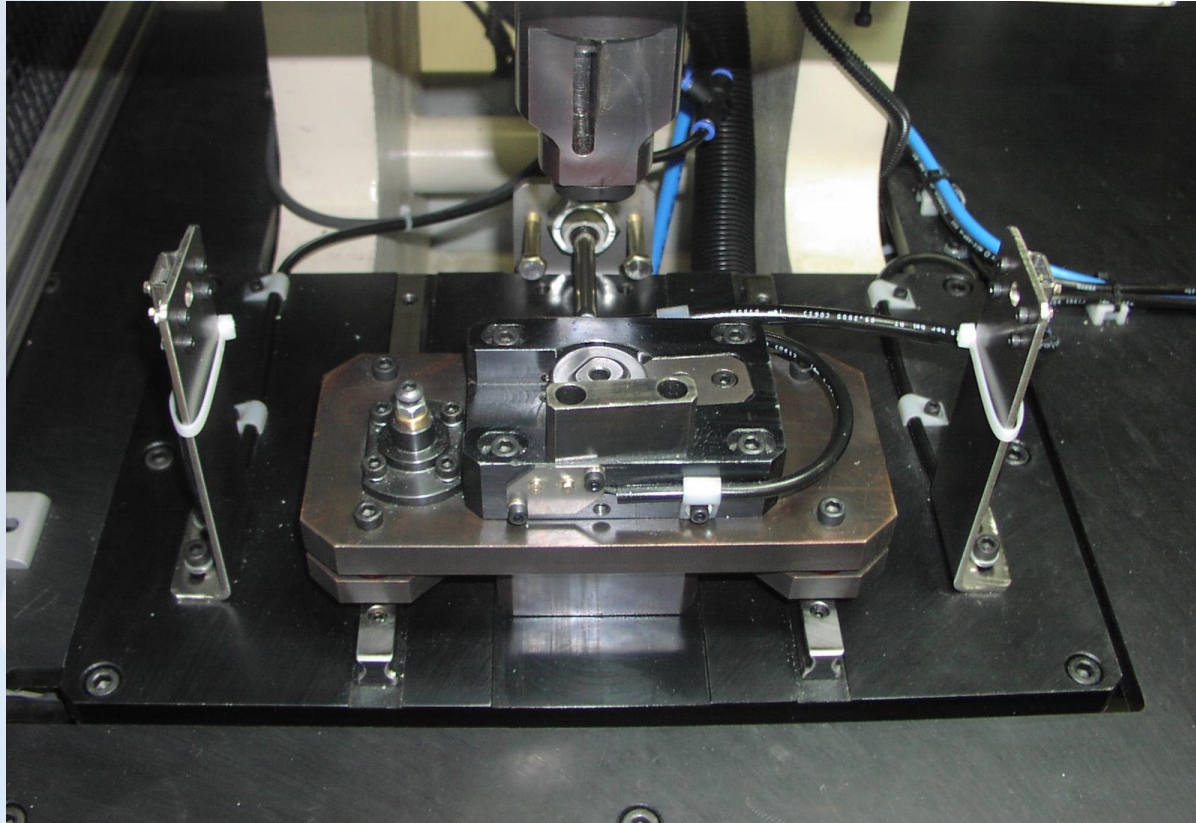


Implemented at:

Anton Mfg

Multimatic Mfg

Flaring

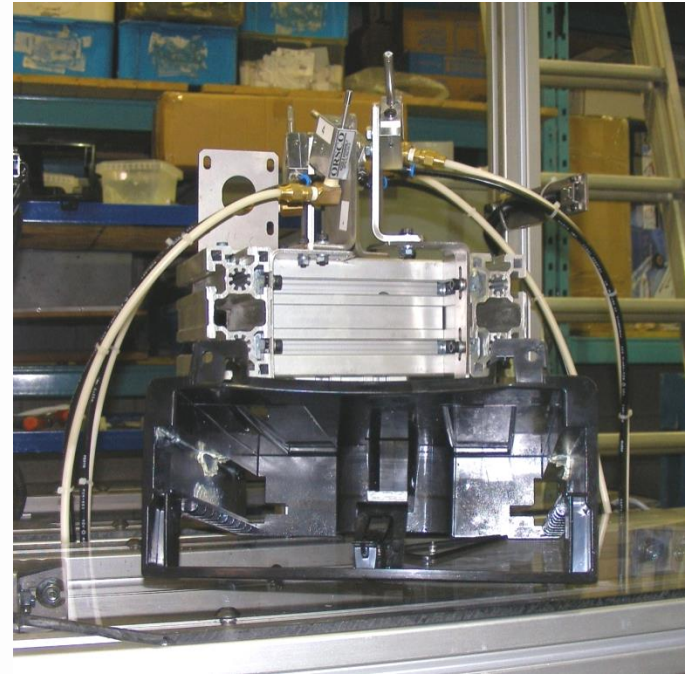
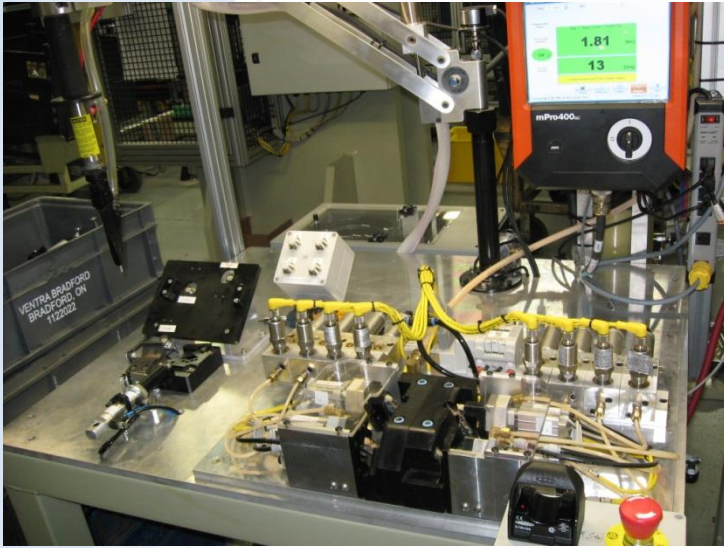


Implemented at:

Multimatic Mfg

Anton Mfg

Grease Application



Implemented at:

Flex-n Gate

Ultra Mfg

Anton Mfg

Multimatic Mfg

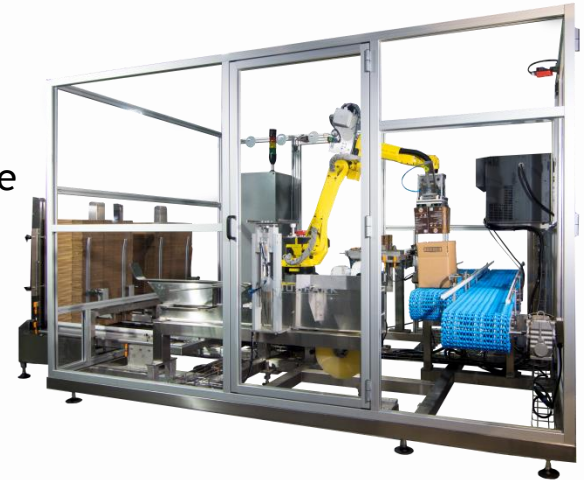
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Nuspark Brand - Packaging

Standard Products

NCP-25 Casepacker

- 3 in1 single cell technology - erect, load, and seal on one frame
- DELTA Style 2 axis robot - single head or dual head
- Powerful Bosch Rexroth Servo motion control platform
- Precise, Repeatable technology
- High speed top load up to 25 cases per minute
- Smallest industry footprint - 160" length X 60" width
- Proven "Pin & Dome" case erection technology - no vacuum
- Heavy duty welded tubular steel frame
- No tools changeover - generally less than 15 minutes



Nuspark Brand - Packaging

Standard Products

Polaris NP-15 Palletizer

- Robot capable in positioning cases in 4 axis (x,y,z and full 360° rotation)
- Capable of running up to 15 picks per minute
- Ability for multiple case/product pick up for higher speed applications
- Pallet magazine holding up to 15 pallets with automated feed system
- Automatic pallet staging and discharge
- Standard stainless steel frame
- Complete wash-down design available



Nuspark Brand - Packaging

Standard Products

VRC-60 Vertical Cartoner

- 12-position indexer that easily generating an output of 60 cartons per minute
- Turn-table design; loading, leaflet/promo feeding, coding and inspection
- Compact 1m x 1m (3' x 3') footprint.
- Suction carton positioning prevents scuffing and scratching of delicate surfaces
- Minimized tool-less changeover time with magnetic detents
- Separation of drive area from product handling area
- Stainless steel frame and cladding.



Nuspark Brand - Packaging

Standard Products

NTP Tray Packer Series

- 3 in 1 single cell technology - form, load and seal on one frame
- DELTA Style 2-axes robot - single or multi head
- High speed top loading up to 50 trays per minute or 600 products per minute
- Precise, repeatable technology
- Smallest industry footprint - 160" length x 78" width
- Heavy duty welded tubular stainless steel frame
- Tool-less changeover, generally less than 5 minutes



Nuspark Brand - Packaging

Coffee Industry

- Nuspark has become a leader in the single serve coffee in Industry providing innovative custom engineered solutions in Tray Packing, Cartoning and Tin Tie Application.
- Nuspark maintains a focus in designing system's which have the smallest industry footprint.
- High speed top loading up to 50 trays per minute or 600 products per minute





Automation & Packaging Systems

Thank you for your valuable time and your interest in Nuspark!