



# Productivity Enhancement Solutions

**PRODUCT CATALOGUE**



[www.nexuspneumatics.com](http://www.nexuspneumatics.com)



PRODUCTIVITY ENHANCEMENT SOLUTIONS

## PRODUCT INDEX

### Standard Products Division

Marking Machines

Readers & Scanners for DPM

Overhead Aluminum rail systems

Industrial Manipulators

Air Hoists & Air Balancers

Manual Dispensing Applicators

Toggle Clamp & Clamping Solutions

### Systems Division

VIN Marking Machines

Customised Traceability Solutions

Material Handling Systems

# Marking Machines

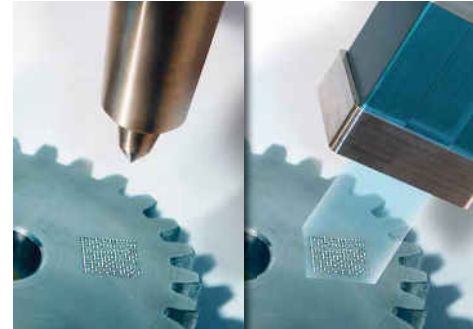
## Why do components have to be marked?

Designating, coding, identifying, marking – our company providing information like this would not exist without the need for numbers, letters, codes and combinations of these, and without such meaningful identification there would be chaos everywhere.

This applies both for products of our everyday life as well as for industrial goods.

Why are products marked?

1. Organization in manufacturing
2. Quality assurance / ISO 9000 / CE symbol
3. Product liability
4. Protection against plagiarism



Scribing



Dot-peening



DataMatrix code



Vibropeening

## Stylus-/ Scribe Marking Technology

### Your higher-level control system

Standard EK- and EG-Box: Ethernet, RS232/RS422  
Optional EK- and EG-Box: Profibus-DP; Profinet-IO; 24 I/O; DeviceNet; Ethernet IP



EG-Box



EK-Box

### Reading systems



DMR220



DMR310



DMR210



DMH100



DMH220

### BORRIES Marking units



312



313



315



322



Built in Units



Workshop Units



Handheld Units





INDUSTRIAL IDENTIFICATION

Our team focusses on developing innovative DataMatrix, QR-Code and 1D Barcode and OCR readers. Our 2D code and ID systems guarantee seamless traceability and optimisation of production processes.

Our technical expertise and many years of experience for scanning directly marked codes on all materials and surfaces has given IOSS an excellent reputation as a manufacturer of ID systems.

In addition to standard scanning systems, our product range contains code readers specially developed for directly marked DataMatrix, QR code, barcodes and OCR script. Our systems are used in the automotive industry, automation applications, in the solar, electronics and semiconductor industries and also in the pharmaceutical and medical technology sectors.



**DMR220**

DataMatrix Reader Automotive



**DMR310**

Code Reader Solar



**DMR210**

Code Reader SEMI

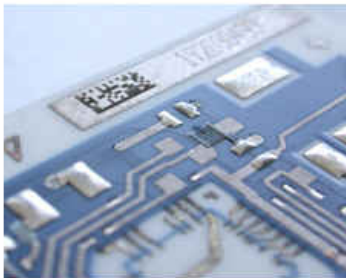


**DMH100**

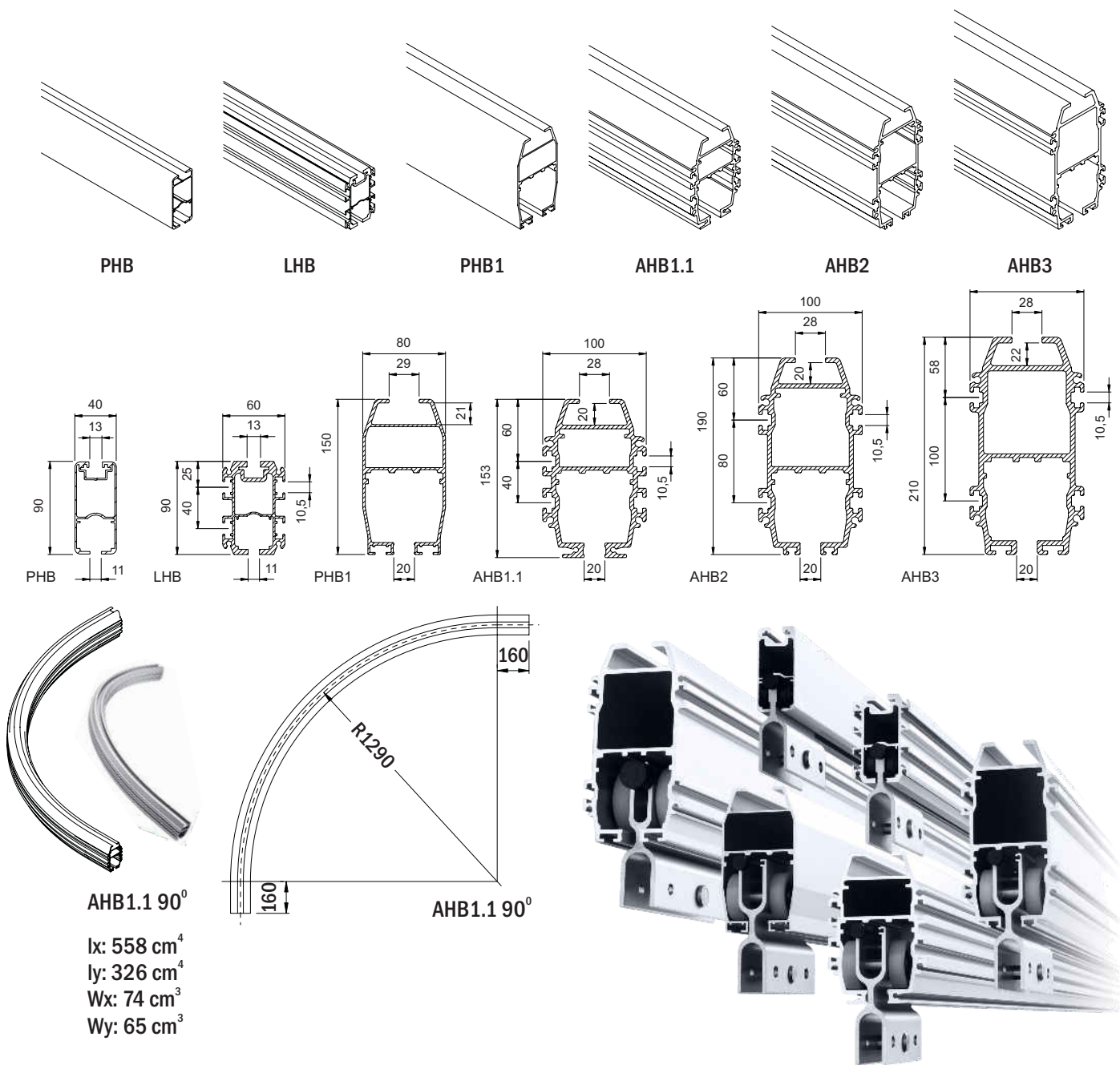
DPM Reader Medical Tools



**DMH200**

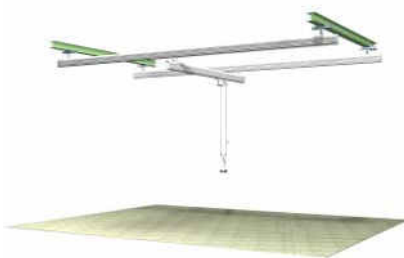


# Overhead Rail Systems



## Installation examples

Overhead steel structure



Goal post steel structure



Canterlever steel pillar



# Air Hoists & Air Balancers

## PRO-AIR UNITS - 3 MODELS

P-03, P-06 & P-12

**BAL-TROL® IS THE COST EFFECTIVE SOLUTION FOR WORKPLACE LIFTING INJURIES.**

### Two mounting styles: Horizontal and Vertical

- For all repetitive lifting applications
- Made to order - travels from 1 foot to 30 feet or more
- Stock sizes available
- Smallest, most compact Bal-Trol
- Same lifting capacity as M&F models
- Simple to operate
- It contains no expensive electronic components or computer parts to fail, overheat, have moisture damage or require reprogramming

LOAD CAPACITY			
RATIO	P-03 80 PSI	P-06 80 PSI	P-12 80 PSI
8:1	18 Kgs	34 Kgs	68 Kgs
6:1	27 Kgs	45 Kgs	91 Kgs
4:1	36 Kgs	57 Kgs	136 Kgs

Examples:

#### Model - PH12/6-7-H

Pro-Air, Horizontal Mtg., 91 kgs cap., 7' travel, speed handle control

#### Model - PH06/8-4-SL

Pro-Air, Horizontal Mtg., 34 kgs cap., 4' travel, Slim-line Sensi-touch control

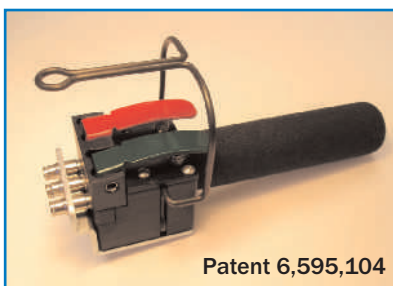
#### Model - PV03/6-6-B

Pro-Air, Horizontal Mtg., 27 kgs cap., 6' travel, balance control



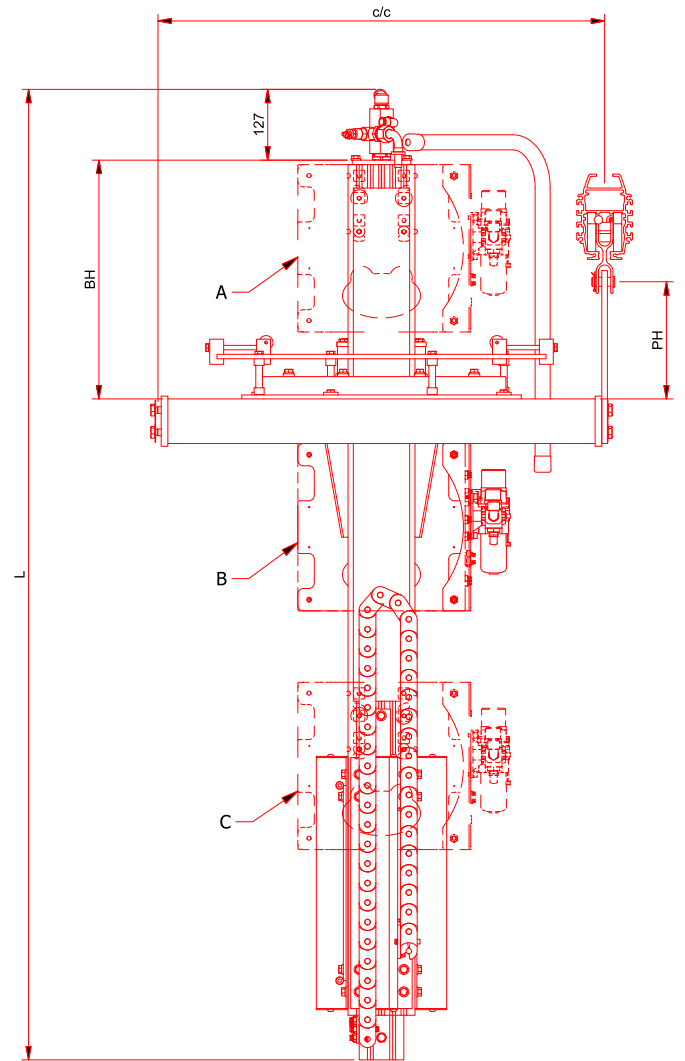
**BALANCER WITH HIGH RELIEF  
REGULATOR**

Patent No.  
7,798,472





# Manipulators



## Technical specification Mechlift Pro 100

Technical data	Mechlift Pro 100
Max load <sup>1</sup>	100 kg
Max torque	500 Nm
Stroke SL	500-1500 mm
Length	SL+740 mm
Tare weight <sup>2</sup>	57-127 kg
Noice level	<70 dB (A)
Suspension height PH	50-490 mm

<sup>1</sup> With parallelogram: 70 kg

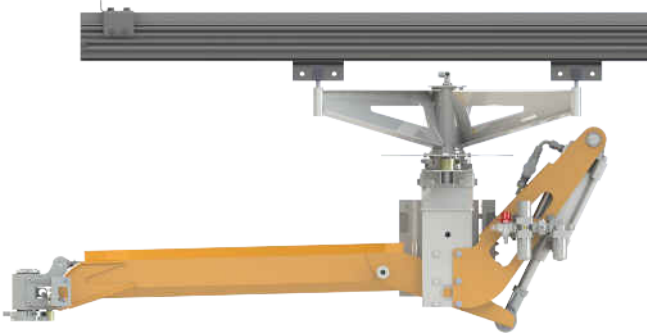
<sup>2</sup> Depends on configuration

Technical data	Mechlift Pro 100
Lifting speed	0-40 m/min
Rotation <sup>3</sup>	0-310° (360°)
Media <sup>4</sup>	Air, non-lubricated, 40 µm
Air consumption	18,7 l <sub>n</sub> /m <sub>SL</sub> (at 6 bar)
Work pressure	5,5-7 bar
Work temperature	5-40 °C (indoor use)

<sup>3</sup> 360° by removal of rotation stops

<sup>4</sup> To Mechlift Pro: 0,3 µm: FRL unit is included

# Manipulators



Mechspace Pro 70



Mechspace Pro 70P



Mechspace Pro 150P



Mechspace Pro 150

## Overview Mechspace Pro 70/70P/150/150P

Technical data		70 / 70P	150 / 150P
Max load	kg	70	150
Max moment	Nm	500	1500
Stroke SL	mm	900	1250
Max tare weight	kg	100 / 195	200 / 330
Air consumption	l <sub>n</sub> /cycle	8	16
Work pressure	bar	5 (4-7)	6 (5-7)

Mechspace Pro	
Media	air, non-lubr. (40 µm) <sup>2</sup>
Noice level	<70 dB (A)
Work temperature	5-40°C (indoor use)

<sup>2</sup> To MS Pro: 0,01 µm, FRL unit is included



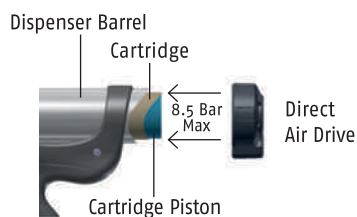
# Sealer/Adhesive Dispensing Applicators



Automotive Applications



## Airflow 3



### Cartridge

- Low - medium viscosity
- Compact applicators - ideal for tight spaces
- 6.8 bar (100 psi) regulator

	psi / bar			Kg
310 ml	1.5 kN	600 g		
400 ml	1.5 kN	770 g		

### Airflow 3 Sachet

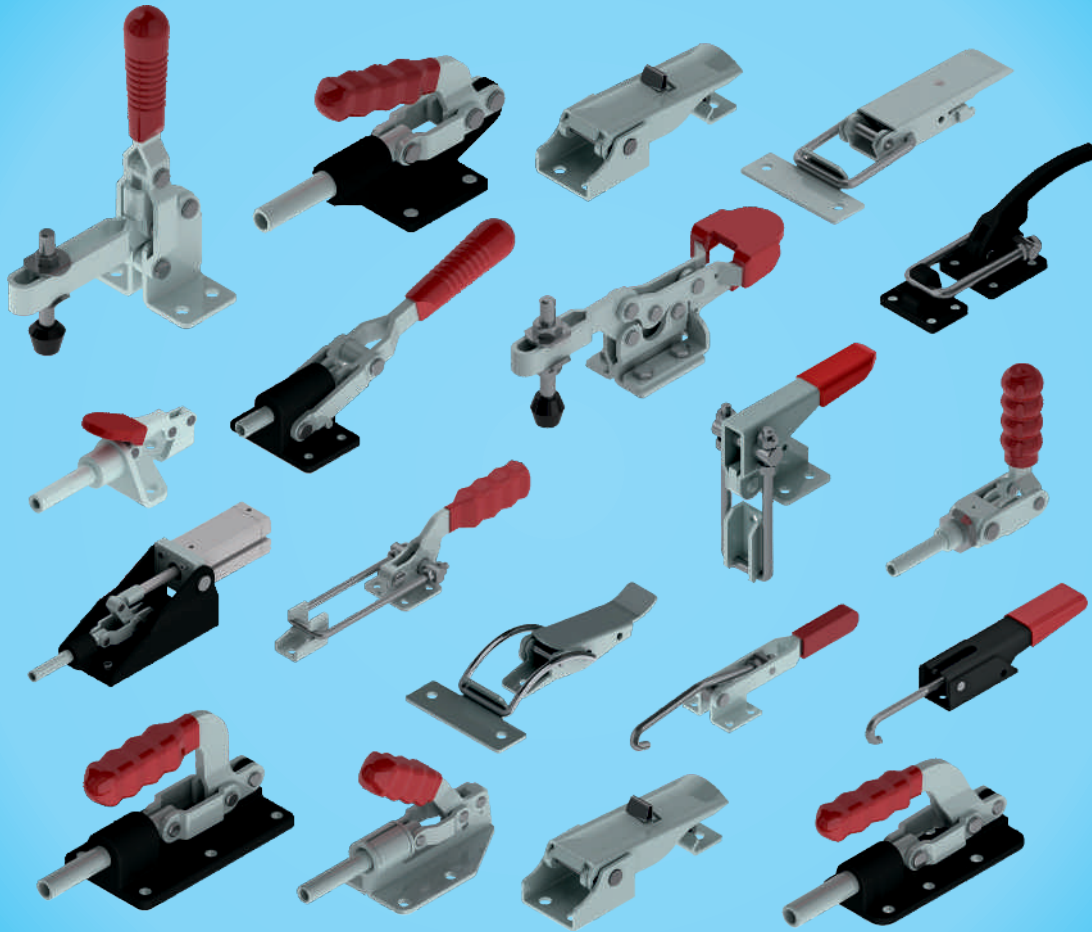
- Low - medium viscosity
- For larger volume material - up to 600 ml sachets
- Floating plunger assembly - relatively small waste of material
- 6.8 bar (100 psi) regulator (others are available)

	psi / bar			Kg
310 ml	1.5 kN	780 g		
400 ml	1.5 kN	800 g		
600 ml	1.5 kN	820 g		

# Toggle Clamps & Clamping Solutions

Toggle Clamps  
Latches  
Pneumatic Clamps  
Swing Clamps

Automotive Clamps  
Leveling Pads  
Clamping Devices  
Fixture Elements



Steel-Smith is one of the largest manufacturers of Innovative Toggle Clamps, Pneumatic clamps, Latches and Clamping Elements for all industry applications.

More than 800 different types of our clamps are delivered worldwide.

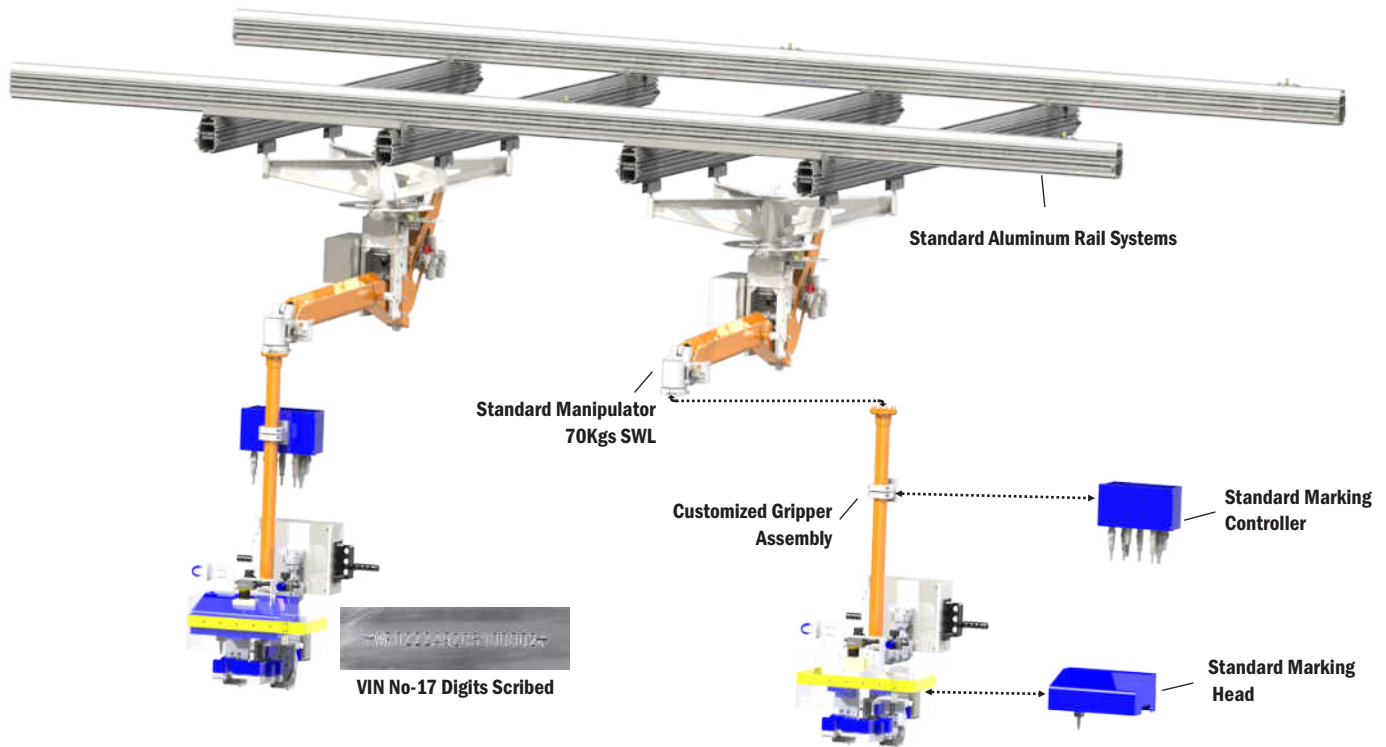
Nexus Pneumatics Pvt Ltd is your information centre and contact.

Steel-Smith clamps are well known for their excellent quality, high safety in use and flexible service.

# Customized Marking Machines

## Customized VIN Marking Solutions for the Automotive BIW/Final Assembly

Nexus Pneumatics Pvt Ltd jointly with Borries Markier Systems (Germany) presents state of the art special solutions for Vehicle Identification Number (VIN) marking systems.



### Technical Data

- Data Input: Manual Input / IPC Interface with Customer's server
- Marking Cycle - 30 Seconds
- Delivery time: 12 - 14 Weeks

### Components Used

- Borries make 322 Marking Unit with EG-Box Controller, VisuWin SE Software
- Movomech make Mechspace Pro 70 kgs Handling System
- Nexus Gripper Mechanism specific to Car body
- Scribing technology for VIN customized to customer specific fonts
- Complete Solution provided by Nexus Pneumatics Pvt Ltd under one roof
- Detailed study of the station layout specific to the customers requirement
- Design & execution of the most ergonomic handling solution for the VIN marking system
- Customized communication methods to the sub-ordinate controls







Gala No.3, Vora Industrial Estate, Chinchpada, Waliv, Vasai (East),  
Thane - 401208. MS, India. Tel-0250-6055355/6055356  
Email: [info@nexuspneumatics.com](mailto:info@nexuspneumatics.com)

[www.nexuspneumatics.com](http://www.nexuspneumatics.com)