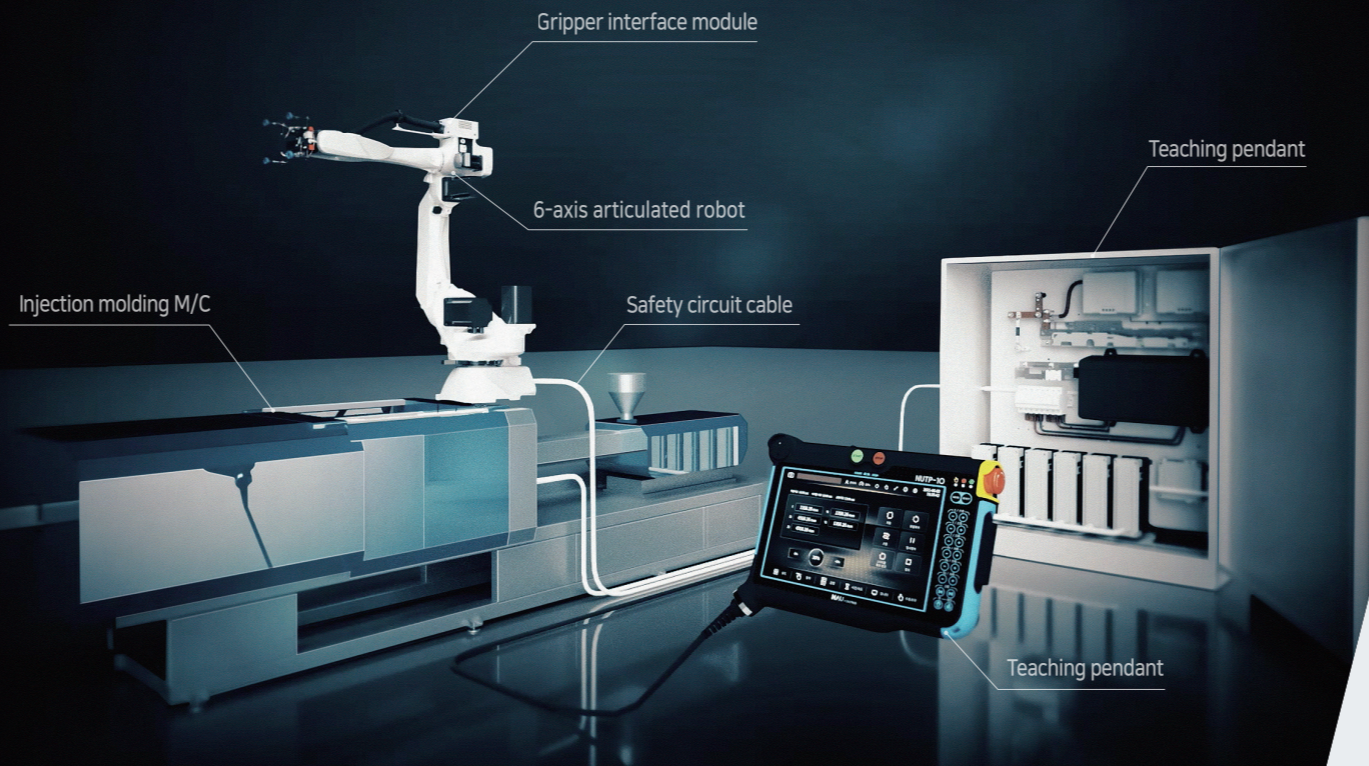




6 multi-axes takeout robot for plastic Injection molding, **NURO X**

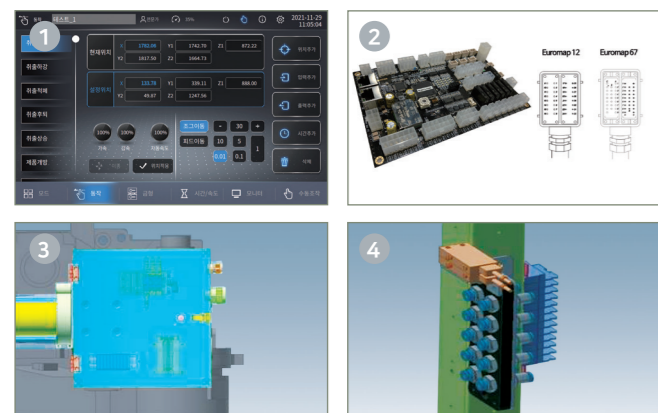


Despite the continuous advancement of injection molding technology, the robotics market in Korea faced many problems in employing articulated robots in flexible automation on plastic injection molding machines. Furthermore, the existing multi-joint robot was difficult for beginners to use, making it impossible to enter the production line immediately.

NURO X series is a multi-joint robot dedicated to injection molding machines. It can easily be ordered on the field without the need of an engineer. A simple operating system, a compact structure, high accuracy, and high speed allow it to respond flexibly in the field, assure high reliability, and maximize production efficiency.

They are highly recommended to be used in applications requiring higher accuracies, such as taking out, cutting, insertion and post-processing, packaging, and transportation.

# NURO X Series



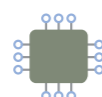
### 1 User-centric easy-to-use UI

NEO 6X's intuitive UI allows even an unskilled worker to easily maneuver the robot.



### 2 Easy to establish communication

An interlock board is applied to make it easy to establish a communication between a robot and an injection molding machine through internationally standardized interface for communication (EUROMAP12, EUROMAP67).



### 3 Integrated valve box system

The vacuum-controlled integrated valve system is incorporated, with a design enabling the site worker to easily perform valve line related maintenance.



### 4 Easily and simply connectable interface port

The port easily and simply can be connected with the interface, thereby quicker maintenance and repair is possible and minimizes any operation trouble.

## NURO X ROBOT SERIES



### NURO X 7-0.9 Model

- 1) Compact structure to maximize efficiency
- 2) High speed, high repositioning accuracy, maximum production efficiency
- 3) Achieving high accuracy and maximizing arm length



### NURO X 20-1.7 Model

- 1) Ensures high speed and low vibration under high load operation
- 2) Widely used in cutting, polishing, loading and unloading



### NURO X 50-2.2 Model

- 1) With characteristics of high speed and high repositioning accuracy
- 2) Widely used in cutting, stacking, handling



### NURO X 220-3.0S Model

- 1) Stable operation under heavy load
- 2) Widely used in spot welding, polishing, stacking and other occasions



# Smart Teach Pendant **NUTP-7**



## A new concept of smart controller for robot programming made more convenience and easier in various industrial sites

NAU ROBOTICS' Teaching Pendant allows the operator to jog the robot conveniently and easily, even in difficult industrial sites. The interface of NEO 6X displays accurate information about the machine operation on the screen.

In addition, it has the same interface as a smartphone, anyone with no experience with robots or an expert level can easily use it without any training.



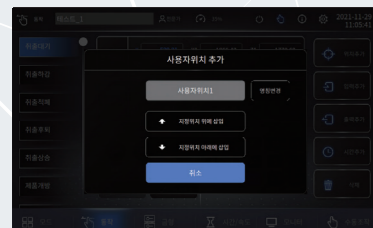
### Intuitive user interface

The user-centric intuitive UI designed much like maneuvering a Cartesian coordinated take-out robot is easy to use even if you are not a trained operator.



### Software optimized in injection molding process

It is possible to easily build a robot system with optimized programming by analyzing the injection molding process such as product take-out, insert, gate cutting, and palletizing.



### Easy to use

NAU ROBOTICS Smart Teaching Pendant has a 7 inch super high bright touchscreen that allows the user to check input values quickly and easily.



### Maximized efficiency by reflecting various working environments

The NEO 6X offers enhanced efficiency by reflecting customer demands in various applications such as small quantity batch production, complex mold structure in injection molding, etc.

## Dimension

Product Model	NURO X 7-0.9	NURO X 20-1.7	NURO X 50-2.2	NURO X 220-3.0S	
Installation Method	Floor Mounted, suspension Installation	Floor Mounted, Inverted Mounted	Floor Mounted, Rack Mounted, Inverted Mounted	Floor Installation	
Freedom of motion	6				
Maximum motion range	910mm	1722mm	2146mm	2674mm	
Motion Range of each shaft	joint No,1	±170°	±180°	±180°	
	joint No,2	+ 100° /-135°	+ 64° /-142°	+ 70° /-130°	+ 60° /-80°
	joint No,3	+ 200° /-75°	+ 165° /-73°	+ 175° /-80°	+ 90° /-83°
	joint No,4	±190°	±360°	±360°	±360°
	joint No,5	±120°	±132°	±115°	±120°
	joint No,6	±360°	±720°	±450°	±360°
Motion Velocity of each shaft	joint No,1	300°/sec	170°/sec	160°/sec	100°/sec
	joint No,2	255°/sec	165°/sec	150°/sec	80°/sec
	joint No,3	320°/sec	170°/sec	130°/sec	85°/sec
	joint No,4	450°/sec	360°/sec	200°/sec	110°/sec
	joint No,5	450°/sec	360°/sec	200°/sec	105°/sec
	joint No,6	720°/sec	600°/sec	285°/sec	200°/sec
Body Weight (cable excluded)	38kg	220kg	550kg	1110kg	
Repeatability	±0.03mm	±0.06mm	±0.08mm	±0.03mm	
Maximum Load	7kg	24kg	50kg	210kg	
Ambient temperature	0~40°	0~40°	0~45°	0~45°	
Body IP code	IP67	IP65 (Dust and drip prevention)	IP65	IP65	
Protection grade of electric cabinet	IP43				
Function	Assembling, Handling	Spray , Cutting , Loading and Unloading	Handling, Loading and unloading, stacking, cutting	Spot Welding, Polishing, Handling, Stacking	

## Guide to **NURO X** Series depending on payload and size

		Injection mold clamping force (Unit: ton)														
		small size					Middle Size					Large Size				
		30 ~ 80	80 ~ 100	100 ~ 150	150 ~ 180	180 ~ 2200	220 ~ 500	500 ~ 650	650 ~ 850	850 ~ 1000	1000 ~ 1300	1300 ~ 1600	1600 ~ 2000	2000 ~ 3000	3000 ~ 4500	
<b>NURO X</b>	<b>NURO X 7-0.9</b>															
	<b>NURO X 20-1.7</b>															
	<b>NURO X 50-2.2</b>															
	<b>NURO X 220-3.0S</b>															



Address: (Gojan-dong 673-8) 42, Aenggogae-ro 449beon-gil, Namdong-gu, Incheon, Republic of Korea  
 TEL: +82-32-719-7040  
 FAX: +82-32-719-4948 (Sales & Marketing Team)  
 +82-32-719-7041 (Purchasing Team)  
 www.naurobot.com www.youtube.com/c/NAUROBOTICS

