

July 3, 2025
AMADA CO., LTD.

Launch of CR-010B Collaborative Robot for Bending Systems

Easy setup for bending automation, regardless of operator skill level or installation location



AMADA CO., LTD. (Isehara City, Kanagawa Prefecture; President: Takaaki Yamanashi) will launch sales of the CR-010B collaborative bending robot that makes it easier for anyone to automate bending processes beginning July 3rd.

The CR-010B is a collaborative bending robot that addresses issues such as the shortage of robot operators, cost, and installation space required for the introduction to bending automation. The robot is detachable, making it possible to switch the use of the press brake between human and robotic operation according to the details of the processing required and the situation of the personnel. Additionally, the system is equipped with a simplified robot program creation tool that links with the NC equipment of the press brake for the creation of robot programs without CAM software. Bending automation systems that can handle complex shapes require programming with dedicated CAM for each different workpiece. However, with the CR-010B, narrowing down the options to the unique differentiating functions offered by AMADA makes it easier for anyone to perform program creation and operation to minimize introduction costs. Additionally, the collaborative robot has an external force detection function, and also a laser scanner is used to monitor people approaching the equipment. This eliminates the need to install a barrier to prevent entry into the area and reduces the space required for the system installation.

Industries using sheet metal processing machinery are currently facing a shortage of laborers, aging of technical staff, and passing on skills to the next generation. AMADA will continue to solve these problems with the latest machines and technologies and with proposals for innovation in production.

■ Main features

1. Flexible operations

The CR-010B can be easily attached to and detached from the press brake and can also be retrofitted on existing press brakes equipped with NC equipment from AMNC 3i onward. It realizes flexible press brake operations, where human workers can perform the processing of complex shapes and items where the production is of a wide variety of items in small quantities, and the robot can be used to process simple shapes and mass production items. Additionally, efficient production can be realized with operations according to the personnel availability, such as with different methods of operation between the daytime and the nighttime.

2. Simplification of robot programming

The simplified robot program creation tool makes it easier for anyone to create programs for the robot. The pendant is used to read the program from the NC equipment of the press brake and then record the pre and post bend positions for the robot. After that, the operator enters the loading and unloading information specific to the robot and the program is generated. This system makes it possible to efficiently create a robot program that would normally require teaching, regardless of the operator's skill.

3. Achieving both safety and reduced space

A laser scanner that monitors the surrounding area is used to detect when a human worker enters within the range of motion. Safety is ensured by automatically switching between high speed, reduced speed, and stopping as appropriate for the different areas monitored. This eliminates the need for a barrier to prevent entry. As a result, the space for the installation is reduced and it is easy both to equip existing press brakes with the robot and to install the system as a replacement for existing equipment. Additionally, when bending is complete, the position in which the robot holds the workpiece during unloading greatly reduces the risk of a human worker coming into contact with the material held by the robot.

■ Specifications

Model		CR-010B
Installation area W and D: Laser scanner monitoring area, H: When in standard posture	mm	W:3700 × D:3140 × H:1850
Max. workpiece size	mm	400 × 400
Min. workpiece size	mm	50 × 50
Number of grippers		3 types (Gripper exchange performed manually)
Robot payload	kg	10 (Including gripper weight)
Max. workpiece mass	kg	3.37 (Depends on the gripper used)
Loading device		1 unit (Can be split into two)

- **Start of sales** July 2025
- **Annual sales target** 15 units/year
- **Sales price (excluding tax)** 22.32 million yen(base price)

End

* The information in this release is subject to change without notice.