

DRIVE YOUR BUSINESS
TO THE NEXT GENERATION

CNC METAL FOLDER

POWER BEND / SMART BEND



Dongyang Industrial Machines

Established in 1985, has been developing various roof tile machines, roll forming machines and various type of customized industrial machines.

Currently, our machines have been installed in more than 15 countries around the world, and we have built a solid reputation for constant development and innovation.

Our success is founded on our strong focus on quality and innovative power. We always try to satisfy the needs of all our customer, and we integrate customer requests into our innovation.

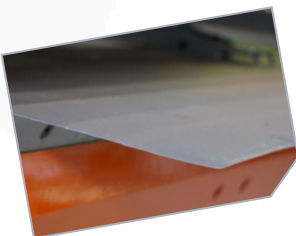
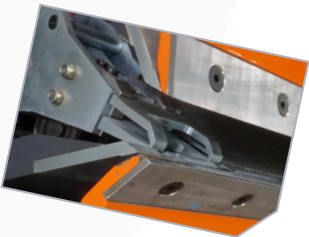
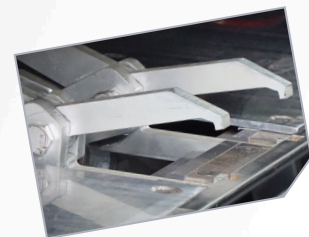


CNC Metal Folder

The existing manual type of bending machine can bend the metal sheet by intricate rotation and turning works depending on the profile requirements. And, it requires involvement by several operators depending on the profile length, material type and weight of the metal sheet

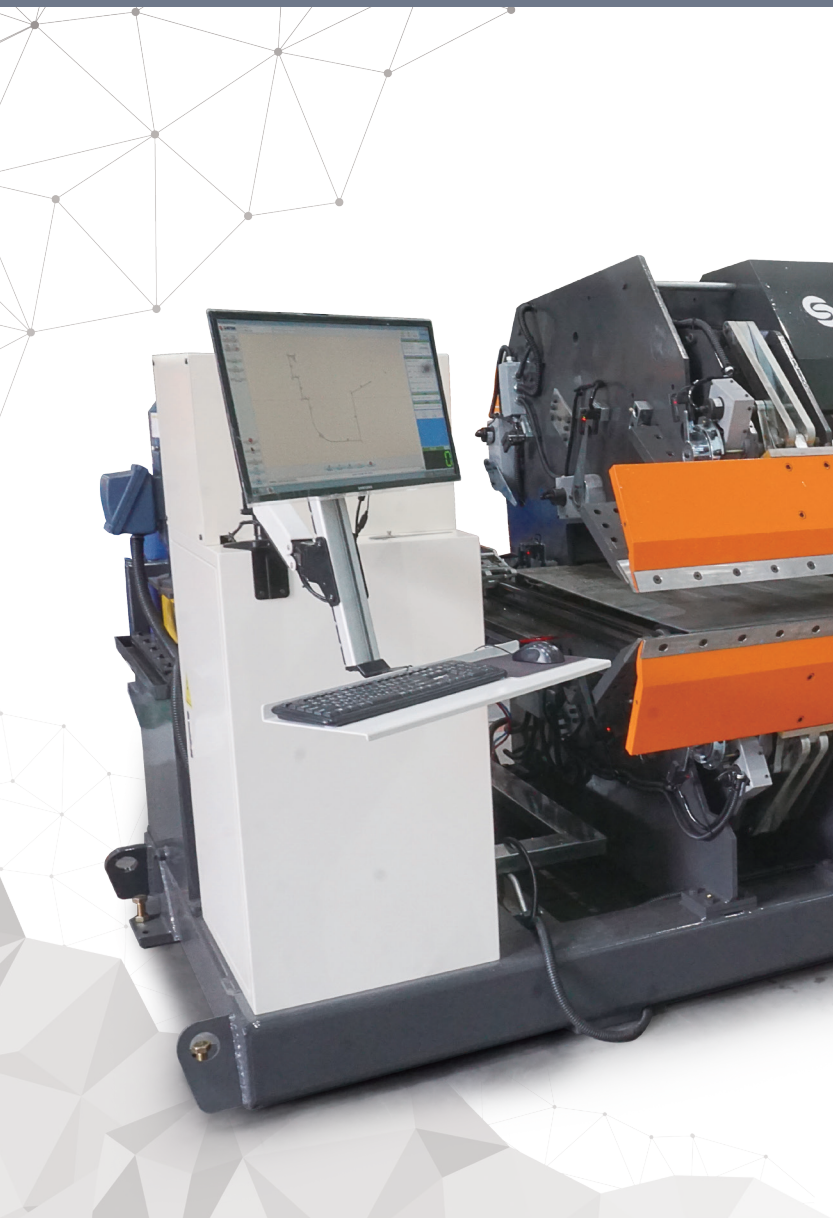
CNC METAL FOLDER by Dongyang Industrial Machines, enable fully automatic bending in two directions without turning around: fully automatically, efficiently, fast and high precision by two-direction bending technology. Automatic controlled Gripper system enable simple and guarantees a precise positioning of the metal sheet parts even at a high operating speed.

The intuitive control system enables easy & intuitive operation. Users can create new profiles or manage stored profiles easily. The defined bending sequence is automatically simulated using the bending-sequence calculations and untrained users can create profiles themselves in a short amount of time and verify the bending sequence in advance



CNC Metal Folder drives your business to the next generation.

- Fully automatic bending in two directions without turning around
- Easy and fast design
- Powerful and precise bending
- Easy and simple operation
- Save your cost and improve efficiency



POWER BEND

Powerful, Various features

HIGH-PERFORMANCE HYDRAULIC UNIT

The high-performance double pump hydraulics generate the driving force needed to operate the heavyweight steel colossus.

The most up-to-date double valve block technology is responsible for the direct supply of power.

The standard oil cooler ensures constant operation, equally guaranteed when maximum load is applied.





SMART BEND

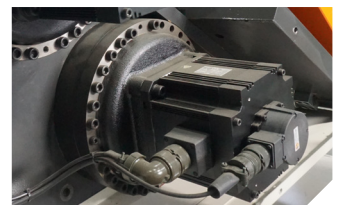
Fast, Precise bending

FAST & PRECISE SERVO UNIT

The most optimized Servo units for SMART BEND enable fast and precise bending operation.

The most up-to-date Servo unit control technology is responsible for the direct drive of SMART BEND.

And, it ensures constant operation, equally guaranteed bending



Functional Introduction

■ FULLY-AUTOMATIC RADIUS ADJUSTMENT

With the fully-automatic radius adjustment system, the clamping tools can be positioned precisely in accordance with the sheet thickness used, therefore achieving perfect folding radius. The automatic material thickness adjustment compensates for different sheet thicknesses.



■ FULLY-AUTOMATIC DOUBLE GRIPPER SYSTEM

The gripper system positions the sheet metal parts fully automatically over a measuring range of 13 mm - 1250 mm.

If the sheet needs a gripper offset during folding, it is done automatically



■ INGENIOUS TOOL GEOMETRY

The clever tool geometry provides high-precision folding results - even with the smallest folds of as little as 13 mm x 13 mm.

The manufacturing of such profiles is achieved with a tool arrangement which offers a folding space measuring 275°.



■ MULTI-SECTION GRIPPER FUNCTION

The multi-section gripper function allows several sheet metal parts to be processed simultaneously and independently of each other.

As a result, the loading and removal of the sheets can be managed by just one single operator, which significantly increases productivity.



■ AUTOMATIC SHEET INSERT AND HANDLING TABLE

The fully-automatic sheet insert and handling table significantly facilitates the loading of the machine with metal sheets.

A metal sheet can then be fed automatically into the machine, aligned



■ PRECISE METAL SHEET CUTTING

The cutting system can optionally be equipped with an electrical cutter. Driven by a maintenance-free timing belt.



■ MACHINE SAFETY CONCEPT

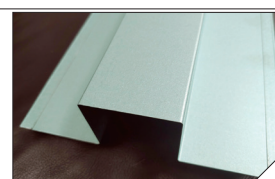
The light curtain and the protective fence guarantee the best possible safety in fully automatic operating mode.

Also, the multi-beam laser system protects the operator in semi-automatic mode.



■ HEM PRE-TENSIONING

Hem pre-tensioning allows uniform closing of a hem flange along the entire length of the machine. Individual pre-tensioning can be programmed via the control system.

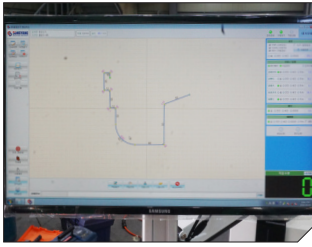


■ MULTI-FUNCTION FOOT PEDAL

The operator manage clamping and bending operation by multi-function foot pedal and it allows very fast and convenient operation over the length of the machine

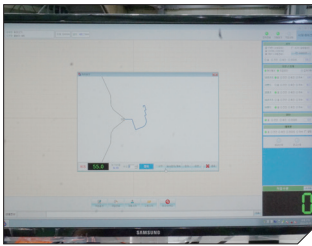


Control Program Introduction



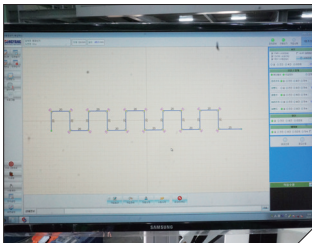
■ QUICK AND EASY PROFILE DRAWING

Intuitive profile drawing on Windows or Linux base control program. New profiles can be created quickly and easily without expert knowledge



■ BENDING SEQUENCE SIMULATION

Bending sequence simulation with collision monitoring system for checking programmed profiles

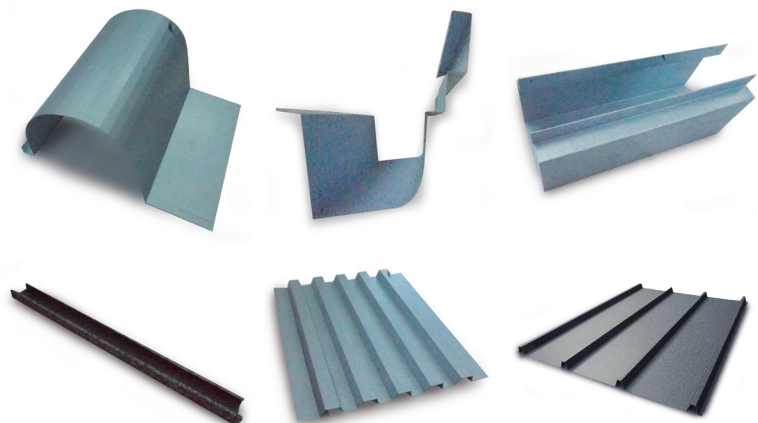
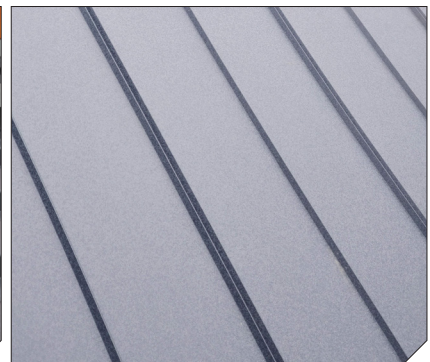
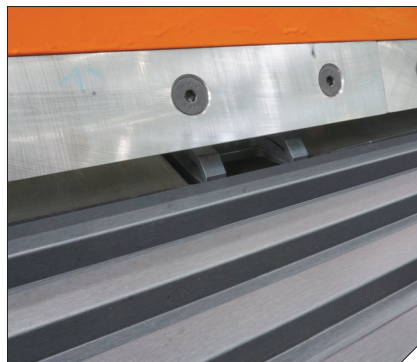


■ PROFILE MANAGEMENT

Profile management system enable save and load profiles in a customized folder structure

■ USER PROGRAMMING FUNCTION

User can configure the setting and motions and it enable more flexible folding capacity. (Min 3mm fold, More duplicate folding profile)





	Hydraulic	Servo
Lengths	3200mm	3200mm
Bending capacity	Max 1.60mm (Steel 400N/mm2)	Max 1.00mm (Steel 400N/mm2)
Back gauge	Gripper system - computer operated	
Shear	Electrical cutter optionally available	
Bending angles	Up to 135°	
Back stop/ Throat depths	1,250mm	
Gripper number	4	3
Bending Accuracy	0.5°	