Vol. 8

VARIOUS KINDS OF SPECIAL SHAPE

For punching with a turret punch press, various types of special shape tooling are used.

JOINT TOOLING

When processing a large number of products with one piece of material (sheet), a joint type is used to hold the products together.

There are two types of joints: MICRO JOINT and WIRE JOINT.

MICRO JOINT

Fix the product to the base material with a small joint and give vibration to the workpiece after processing.

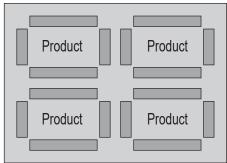
1. Joint of corner part

The outer periphery is removed at square or rectangle, and a part is connected without cutting off the corner as shown in the right figure.

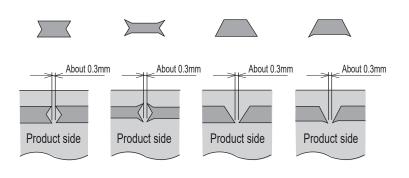
Detail of Joit

0.1~0.2mm

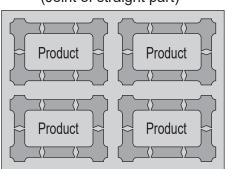
Cases of micro joint processing (Joint of corner part)



2. Joint of straight part (When the corner is rounded.)



Cases of micro joint processing (Joint of straight part)



The number and width of micro joints vary depending on the thickness, material, shape and size of the workpiece. It is recommended to actually process and check with reference to the above dimensions.

VARIOUS KINDS OF SPECIAL SHAPE

WIRE JOINT

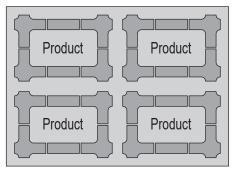
Use a wire joint larger than a micro joint to hold large products together.

Detail of Joint

0.5~1mm

Product side

Cases of micro joint processing



CORNER RADIUS

Use the corner radius type (CR type) to Round the corners of the product. Typical corner radius types are as follows.

Standard Corner radius tool	Corner radius tool with tangent line	Corner radius with joint
		Product

NIBBRING RADIUS TOOLING

There are the following methods for removing holes larger than the size of the punching.

- 1. Slitting processing by Round Nibbling Method
- 2. Slitting processing by Curved tool punching Method

Round Nibbling Method	Curved tool punching Method	Radius tooling with Joint
The punched surface becomes wavy.	The central part pulls out with a round or square shape, and the outer peripherynibble with a rounded shape.	Provide a joint and remove the joint after processing.

For More information, please contact CONIC tool sales desk.

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