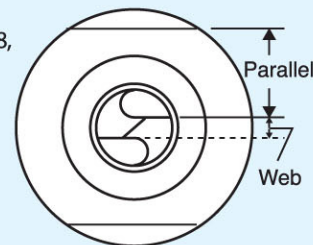


Twist Drill Bit

OPERATION

- Determine the drill material, then choose the proper grinding wheel. (CBN for HSS material drills) (SD for carbide material drills)
CBN grinding wheel is the standard accessory.
- Preset the scale of Web Adjustment Shelf (on the right side); turn it by clockwise to the end and then turn counterclockwise to "zero".
- A. Choose the proper size of collet. Put collet into collet chuck.
* Insert collet into collet chuck by 45° angle.
B. Fasten the clamping nut a little bit for inserting the drill through the collet chuck.
Keep the drill out of the nut about 5mm and tighten the drill by chuck set until the drill will not drop from the chuck set but the drill still can be adjusted.
- A. Adjust the scale of web diameter (on the right side) according to the drill diameter. For example: A new drill, diameter at 8mm (Length 80mm), the web scale should be adjusted to 8, when the length of the 8mm drill become 70mm, the web scale should be adjust to 9.
B. Insert the chuck set into the cutting edge grinding shelf and turn it right to the end.
Make sure the chuck set tightly connecting with the grinding shelf.
C. Push the drill into the end and turn it right until it stops by the web block.
D. Turn the chuck set right to the end and tightens it.
E. Turn the chuck set a little to the left and taking it out gently.
*Make sure that the cutting lip of drill is parallel with the slot of clamping nut before starting grinding job. If it is not parallel, adjust it again.
*For the same diameter of a drill, the shorter length of a drill, the higher scale of web adjustment shelf need to be increased.
- Turn the power switch on and wait until the motor rotation is stable (about 10 seconds); put the chuck set into grinding shelf. The slot of fix clamping nut must fit with the two pins of grinding shelf. Gently put the chuck set into shelf grinding until reach the grinding slip. Grind the drill by moving left and right until the noise stops. And then turn to the other side. Grind the drill with the same way.
*The grinding size of drill is $\Phi 12\text{mm} \sim \Phi 26\text{mm}$.
*The point angle of drill is 90° to 140°
(90° only apply to Spotting Drills until 12mm)
*While grinding, don't hold the stem of the drill, it will affect the accuracy.
- Put the chuck set into Web Thinning Grinding Shelf, move left and right until the noise stops. Turn the chuck set to other side and grind it by the same way until noise stops.
*The insertion and ejection of the clamping nut set from Web Thinning Shelf, must make sure that the center of the slot in clamping nut is fitted with the pin of Web Thinning Shelf.
- Please clean the ash on each grinding shelf after finishing the grinding job.



Remark:

- For grinding the deep hole drills, increase the scale of Web Adjustment Shelf.
- For grinding high spiral drills, increase the scale of web adjustment by (Diameter x 2)