



Divilo™

JHW-recommended Press fitting Manual for  
Divilo Punch Nib

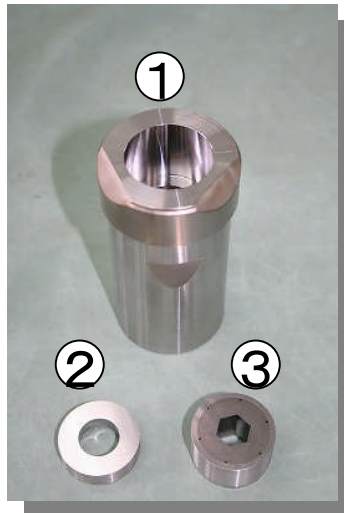
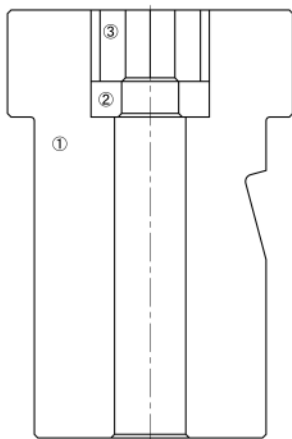
Technical data

**JAPAN HARDWARE CO.,LTD.**

**“ JHW-recommended Press fitting Manual for JHW-made Divilo Punch Nib”**

- \* Shows the press fitting procedure for standard punch dies.
- \* JHW’s recommended values are shown for case material, hardness, and other conditions.
- \* Case’s inner diameter assumes a straight finish.

Basic structure



- ① Case  
(SKD61 HRC45-47)
- ② Back liner  
(SKD11 HRC60±1)
- ③ Split punch nib (Divilo)

Other things to prepare

- Press (preferably that with a welding force exceeding 1500kN)
  - Lubricants (recommended “Houghto-draw 650” or oil)
  - 3 types of presser foot
    - Large : those larger than the ring’s outer diameter
    - Medium : those slightly smaller than the ring’s outer diameter
    - Small : those slightly smaller than the ring’s inner diameter
- \* All presser feet Surface-ground.

**1. Things to check prior to press-fitting**

- Is the case’s inner diameter of regular dimensions?
- Is the inner surface of the case rough?(approx. Ra0.4-0.8)
- Does the case’s inner diameter have a straight finish?
- Can a back liner be used with it?
- Has the degree of parallelism for the press cylinder and plate been calculated?
- Has a lubricant for press-fitting been prepared?
- Has the degree of parallelism for the presser foot been calculated?

## 2. Press-fitting preparation



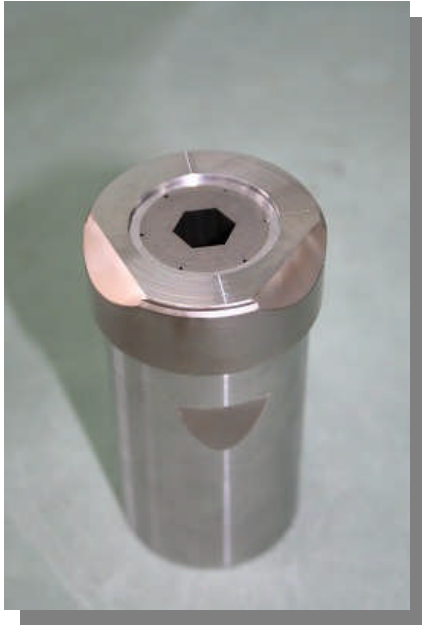
- Insert the back liner into the case.
- Apply a very small amount of lubricant with your finger to the perimeter of the press-fitted round portion of the hex nib. (be very careful not to apply too much!)
- Place parallel to the end face of the case.
- Place it on the press. (so that it sits in the center)
- Place the presser foot (large) on top of the nib, press the cylinder down, and stop to check once if it is level just before it makes contact.

## 3. Press fitting



- Slowly lower the cylinder and press it down.
- Once it is pushed to the end face of the case, next place the presser foot (medium) on top of the nib. (ensure that it does not extrude from the ring's outer diameter)
- Lower the cylinder again and after pushing it down to the bottom, rotate the die 120° and push down 3times. (this is to limit any nib tilt or float)
- Next, place the presser foot (small) on the nib's carbide portion, and once again push down 3times while rotating 120° .

## 4. Checking



- After press fitting is complete, conclude by checking that the nib is press-fitting to the regular depth of the case.
- When this procedure is complete, please conduct finishing procedures and any additional work.

## 5. Other precautions

- Please avoid over-lubrication as it could cause the nib to float or be ejected.
- Due to cuts to the upper side of the case, the shrinkage of the width across flat following press fitting could become uneven.
- The content of the above manual is only JHW's recommendations and is not guaranteed.
- Please contact us for any questions, etc. you may have.



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