

## JTS GRAVER INFORMATION

The following information will help you to choose the correct shapes graver and show you how to prepare the graver.

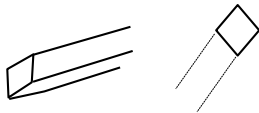
**Check out the following link for a practical demonstrations;**

<https://jewellery-training-solutions.thinkific.com/courses/graver-preparation>

### Graver Shapes & sizes

There are many shapes & sizes to choose from when it comes to starting your setting tool collection. The following Vallorbe carbon steel graver shapes & sizes are recommended for the JTS setting course.

#### **Square**



Size reference points

Square gravers can be used for lifting grain engraving and decorative cutting. Recommended size between 2mm & 2.5mm

#### **Flat**



Size reference points

Flat gravers can be used for bright cutting engraving decorative cutting & setting. JTS recommends size between 1.2mm & 1.4mm

#### **Half round**



Size reference points

Half round gravers are used mainly for lifting grain. JTS recommends a 1mm and a 1.4mm graver (the larger graver can be modified for neater cut work)

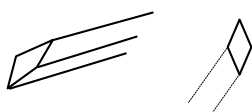
#### **Onglette**



Size reference points

Onglette gravers can be used for bright cutting and finishing around settings. Recommended size between 2mm & 2.5mm

#### **Lozenge**



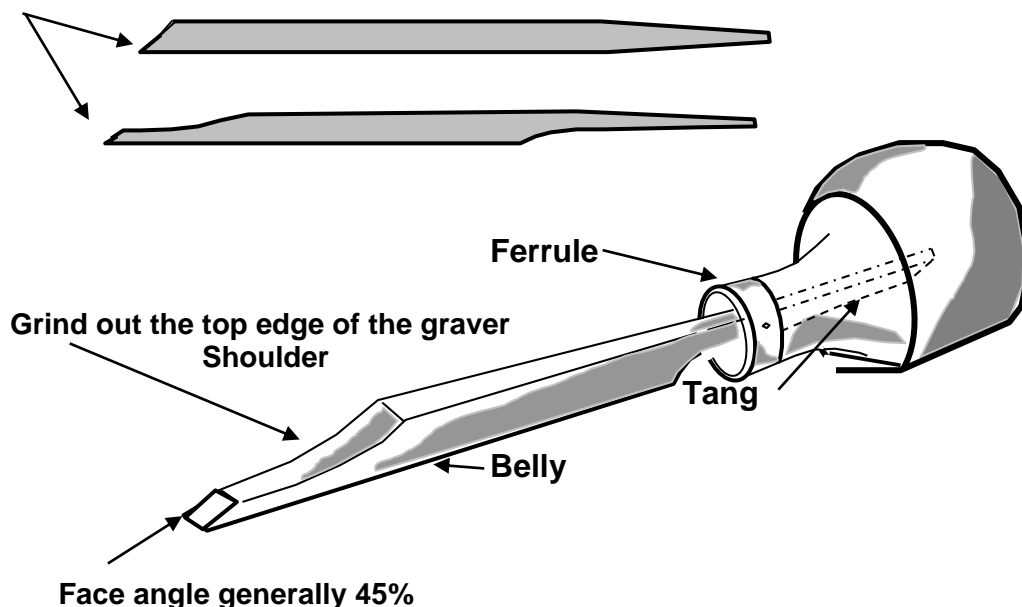
Size reference points

Lozenge gravers can be used for lifting grain and decorative cutting & engraving. Recommended size 2.5mm

### Set up of a Flat graver:

The same procedure applies for the half round & onglette. The square & Lozenge graters require less preparation work.

Side view before shaping and after. The tang can also be shaped at both edges to keep it central.



### Working out the graver length

A common method of gauging the correct length is to place the handle in the centre of the palm of your hand, place the blade tip approximately 10mm from the end of your third finger and mark the graver at the rim of the ferrule.



When you have followed the steps below and the graver is prepared, the graver face should be approximately 10mm past the thumb position when the graver is held comfortably. This is the ideal graver length. If you are comfortable with using the graver at this length you can use it to mark off the rest of your graver collection.

### **1. Fixing the graver to the handle**

Grind a notch into the edges of the tang where the marking is then grind the end of the tang shortening it so that it finishes approximately half way into the handle when fitted. Make the tang pointed for fixing into the handle.

Clamp the graver into a vice and tap the handle firmly onto the graver. Remember to protect the sides of the graver from serration in the vice jaws with vice guard protectors. If your handle has a flat spot, line it up with the belly or the point of the graver.

### **2. Shaping the graver**

Approximately 30mm of the top of the graver from the cutting end is removed by grinding to form the shoulder. The shoulder reduces the area of the cutting face making sharpening quicker and more accurate. Care should be taken not to overheat the steel when grinding which will soften the cutting face of the graver. Keep the steel cool by grinding with light pressure and cooling in water. The final shape may be achieved with the silicon carbide sharpening stone.

### **3. Sharpening the graver**

Correcting the angle of the face can now take place using the sharpening stones. An angle of 45 degrees is recommended for most setting work. The angle for some gravers may be increased to 60 degrees to help strengthen the cutting edge. An angle lower than 45 degrees will weaken the cutting edge which may cause it break.

### **4. Polishing the graver**

Polish the belly of the tool with the 2000 grit emery paper. The emery paper should be a perfectly flat surface, to achieve this place it on a piece of Perspex or glass. Providing a flat polishing surface prevents the edges of the tool being rounded during his process. A final rub on leather will give the steel a polished surface that will transfer to your work.