



Level of
design:
Intermediate



TORQUE KNOT BANGLE

By Holly Cattel

What you'll need:

3mm Sterling Silver Round Wire	HSA 300
2x 6mm Sterling Silver Solid Balls	NVQ 104X
Sterling Silver Charm Bead	NVQ1 CB17
Easy Silver Solder Panel or Easy Silver Solder Paste	CTB 500 PAT 021
Hand Torch	999 955C
Soldering Sheet	999 969
Soldering Block	999 968
Reverse Action Tweezers, Bent & Straight	999 987A
Pickling Powder	855 1060
Bangle Mandrel	999 804
Rawhide Mallet	997 3118
Nylon Mallet	997 3102
2.9mm Ball Burr	980 030
Flat Cut 2 Hand File	999 458
3 Square Needle File	997 2813
Borax or Flux	998 098E 997 6418
Calico Hard Mop	999 AFS
Wool Soft Mop	999 AGD
Tripoli	998 198
Rouge	998 189

1: MEASURE THE WIRE

Measure the wire to the required length. For this project I've used 7" length to make a 60mm diameter bangle.

2: PREPARE THE WIRE

File the ends of the wire flat.

3: GENTLY HEAT

Anneal the wire ready for forming.

**4: QUENCH & PICKLE**

After annealing, quench the wire in water, then put it into the safety pickle until clean.

**5: SHAPE THE WIRE**

Using the bangle mandrel, raw hide mallet and nylon mallet, loosely shape the wire to your desired shape making sure there is a big enough gap at the top to add the beads (approximately 30mm). You may need to repeat step 3-5 a few times until the bangle has formed.

6: CREATE A RECESS

Using the 3mm ball burr, create a recess for the 6mm Silver bead to sit into. Make sure you check the fit using the 6mm bead as you drill.



7: BE PATIENT

Once you're happy with the seat of the bead, you can now solder. Use your bent reverse action tweezers to clamp the bangle upright with the straight reverse action tweezers holding the bead. This can be fiddly so patience is required! Flux the seat and join, then add your solder.

7

**8: CHECK YOUR WORK**

Once you're happy with the join, quench and pickle.

9: ADD THE BEAD

Slide on the decorative bead and prepare for soldering the second 6mm solid bead. Because the decorative bead has been oxidised, it is essential not to get this hot. This can be covered with heat protection paste (999 AAH) or a damp piece of tissue tightly wrapped around the bead.

10: BRING THE HEAT

Solder as in step 7.

11: PICKLE THE JOINT

Once you're happy with the join, quench and pickle but you must not pickle the decorative bead as this will remove the oxidation. You can do this by creating your own jig or harness.

11

**12: CLEAN & TIDY**

If you're happy with the solder join, clean up any excess solder using the 3 square needle file around the join. Make sure you follow the shape of the bead and wire.

13: CHECK FOR NICKS

Check over the wire and beads. There shouldn't be any heavy nicks. However, if there are, these will need to be removed before polishing. This can be done with emery paper.

14: POLISH

Using your hard mop and tripoli, polish the bangle. Try to avoid polishing the decorative bead.

15: FINAL POLISH

Once you're happy with the initial polish, start your final polish using your soft mop and rouge.

16: FINISH

When polishing is complete, clean off the excess polishing compound with washing up liquid and a soft cloth, then dry and you're finished.