

# WKW

## **Assembly Instructions for Corrugated Round Heads**

### **Proper Assembly Techniques to use for Corrugated Round Heads**

Using the proper assembly techniques for corrugated round heads is very important. Following these few simple steps will allow an assembly to produce finer finishes, maintain better balance, improve accuracies, and allow for truer running heads.

### **Before Assembly**

1. Be sure heads, gibs, screws and knives are clean and free of any dirt or debris. Pay particular attention to the knife slot corrugations to make sure they are in good condition and there is no damage that could lead to improper seating of the corrugations.
2. The flat surface of the gibs should be inspected to be sure they will make flat and full contact against the face of the knife. If there is minor damage preventing proper contact, filing the damage so that it is flat can usually be done. Re-balance the set of gibs to within .2 grams or better.
3. Inspect the cut knives that are intended to be used in the cutterhead. Be sure that the knives are cut to the same length, the ends are square, they are cut from the same bar of knife steel if possible, and that the burrs created by the cut-off are completely removed. Balance the knives in a set or pairs to within .2 grams or better.

### **Assembly**

1. With the head set on an arbor or set up stand, assemble a knife and gib in each slot by tightening the gib screws just enough to snug them in place. It is a good idea to assemble the knife so that one end is flush with one side of the head. This will allow for easier setup if and when realignment of the setup is necessary.
2. After each knife has been positioned, tightening the screws up to the final tightening torque is done by gradually increasing the torque on the screws of each wing, criss-crossing wings 3 times around the head until 25-30 ft-lbs of torque is placed on each gib screw. This technique is used to reduce and

equalize the stress generated on the head body when the gib screws are tightened and will minimize the possibility of head distortion.

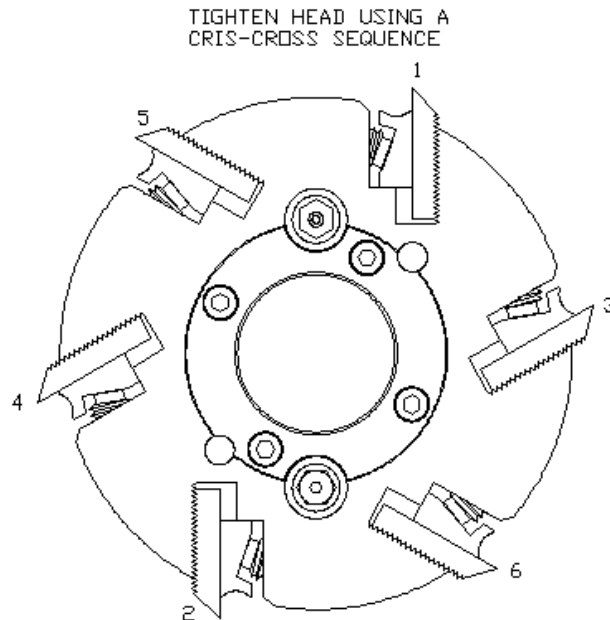


FIG. 230

## Grinding Profiles

To insure that the head is built up to the highest precision there is still one more step to take after the knives are profiled. This only needs to be done if new knives are cut, especially if knives are cut from separate bars.

1. Before the profile grinding process is complete and just before the final finishing pass is made, the knives should be removed from the head and re-balanced to within .2 grams or better. They can then be re-assembled using the instructions above and finish ground.

## Torque to use when tightening gib screws on corrugated round heads:

1/2-13 screws with 1/4" hex wrench- (25-30 foot-pounds)

12MM x 1.75 screws with 6MM wrench-(21-24 foot-pounds)