

# TRIANGLE ENGINEERING

## Weld Coupon Abrasive Cutter (WTC-20HR) Time study performed May 2015

The following time studies were completed to demonstrate the rapid removal of weld specimens to exact dimensions using our Weld Coupon Abrasive Cutter. The first welded assembly used in our time study was created with two 6" sch. XXH x4" A106B beveled both ends @ 37-1/2deg match bored .04" land, joined using the SMAW process. The second welded assembly used in our time study was created with two 2-3/4" OD x .625" wall x 4" A106B beveled both ends 37-1/2deg match bored knife edge, which were joined using the SMAW process. Timed results are listed below.

### 6" XXH (.864") Coupon assembly:

- Removal of four 3/8" thick side bend specimens
  - SB1 = 2 minutes 10 seconds (includes one relief cut)
  - SB2 = 1 minute 10 seconds
  - SB3 = 1 minute 6 seconds
  - SB4 = 1 minute 7 seconds

### 2-3/4" x .625" Monster Coupon assembly:

- Removal of four 3/8" thick side bend specimens
  - SB1 = 2 minutes
  - SB2 = 1 minute 15 seconds
  - SB3 = 1 minute 10 seconds
  - SB4 = 1 minute

Belt sanding preparation of the (4) side bend specimens totaled 3 minutes.

Four 3/8" thick side bend specimens formed to uniform 180 degree bends totaled 2 minutes 30 seconds.

Unlike the radiographic testing process, destructively testing welds using Triangle's Coupon Cutter does not require any cool down period of the welded assemblies prior to commencing the testing process.

Triangle's Coupon Cutter also removes side, face and root bend specimens to exact dimensions dramatically minimizing the grinding and preparation process prior to guided bend testing.

If you wish to see Triangle's Coupon Cutter in operation please contact us and we can arrange field demonstration.