



STAINED GLASS CRAFTERS

DIAMOND TECH 3000 BAND SAW TRAINING

Training Objective: The member shall demonstrate how to effectively and efficiently:

- a. Cut excessive glass by hand from pattern
- b. Safely operate the Diamond Tech Band Saw using the cut and back off method
- c. Cut single piece straight cuts
- d. Cut single piece curved cuts
- e. Cut double piece single or curved cuts for small pieces

Step	Task	Completed & Initialed
1.	<p>Review safe operation of the Diamond Tech Band Saw</p> <ul style="list-style-type: none">• Evaluate if pattern on glass can be cut by hand• Evaluate if glass can be partially cut by handNever leave saw unattended• Turn band saw on and off (See Video 1a – Clean Area; Video 1b – Safe Operation)• Check water flow to ensure water passes to blade• Adjust water as needed for proper flow and top off water as needed to ensure water covers pump• Do not hold pieces of glass with pliers or other tool• Only hold glass sufficiently large enough to control; do not hold glass too close to blade• Always check to see if cutting surface is free of debris	
2.	<p>Cut excessive glass by hand from pattern</p> <ul style="list-style-type: none">• Place pattern on glass with finely spread Vasoline or similar material (See Video 2 Petro Jelly Application)• If glass can be partially cut by hand, score excessive glass and pinch or break it at the finishing end of the scored line to ensure glass breaks at the intended place along the score (see Video 3a – Clean Scoring of Glass and Video 3b – Minimum Glass to Cut with Band Saw)	
3.	<p>Cut single piece straight cut</p> <ul style="list-style-type: none">• Using finely spread with Vasoline or similar material piece of glass, turn on band saw and check water flow, then place glass on cutting plate aligned with the blade• Feed the glass at a rate that will cut the glass in increments of about an $\frac{1}{2}$" then back off pressure to allow band saw to realign and release tension on blade; do not force material through blade (See Video 4 – Single Glass Straight and Curved Cuts)• Cut glass to specified length, turn off band saw, apply thumb to blade and pull glass piece away from blade; do not attempt to back off blade while saw is in motion! This is where breakages occur.• Cut second straight line from different angle to same ending point and turn off band saw, applying thumb to blade to pull glass piece away from blade if necessary• Removed glass debris from cutting surface	
4.	<p>Cut single piece curved cuts</p> <ul style="list-style-type: none">• Using finely spread with Vasoline or similar material piece of glass, turn on band saw and check water flow, then place glass on cutting plate aligned with the blade• Feed the glass at a rate that will cut the glass in increments of about an $\frac{1}{2}$" then back off pressure to allow band saw to realign and release tension on blade; do not force	

	<p>material through blade (See Video 4 – Single Glass Straight and Curved Cuts)</p> <ul style="list-style-type: none"> • Slowly make small turns per pattern until you reach a stopping point • To cut sharp corners, cut through glass in a curve and then once the cut is complete, turn off the band saw, apply thumb to blade while backing glass away from corner • Do straight cuts from each angle of the corner to the corner point to clean up the cut and turn off band saw and apply thumb to remove glass from blade • Continue with curved cuts until piece is complete • Inspect piece from bottom side to see if any clean up of cut is required • Clean up any glass debris from saw plate 	
5.	<p>Cut double piece straight or curved cuts for small pieces</p> <ul style="list-style-type: none"> • Place larger scrap piece of glass on table saw surface as the bottom layer and cut to sufficient length for next smaller piece of glass to be supported while cutting – this will prevent the small piece to fall below the band saw plate at guide area • Using finely spread with Vaseline or similar material piece of glass, with pattern, turn on band saw and check water flow, then place smaller piece of glass to be cut on top of scrap piece of glass • Feed the glass at a rate that will cut the glass in increments of $\frac{1}{2}$" then back off pressure to allow band saw to realign blade independent of the lower piece of glass providing support; do not force material through blade (see Video 5 Double Glass Cut) • Slowly make small turns per pattern until you reach a stopping point • To cut sharp corners, cut through glass in a curve and then once the cut is complete, turn off the band saw, pick up smaller newly cut glass, apply thumb to blade while backing glass lower glass away from saw plate • Continue with curved cuts until piece is complete • Clean up any glass debris 	
6	Review ring saw cutting angles as it compares to the band saw using forward motion and side-to-side cutting motion	

Member Name (Please Print)

Rec Card No.

Instructor Authorization to Issue Band Saw Badge (Signature)

Date

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