

**FVS 700 – MACHINING- AND INSTALLATIONINFORMATION**

**Laminated WEAR parts – CUTTING DETAILS**

High pressure abrasive water jet cutting is preferred cutting method. Thermal cutting using an oxyacetylene torch, Arc-air or plasma is NOT recommended due to high localized heat input and high risk of cracking and delamination.

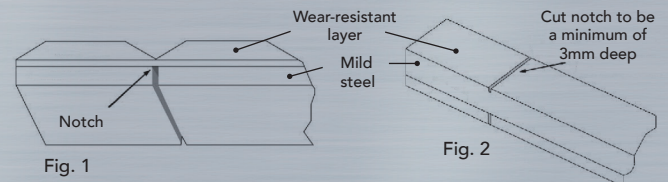
For WEAR parts no greater than 25 mm section thickness, cutting by Abrasive disc is an accepted practice.

CAUTION: Extreme care must be taken when cutting to minimize local pre-heating or cracks and delamination may occur.

Cutting procedure <25 mm section thickness:

1. secure the WEAR part to be cut in a vice or clamp;

Note: the deeper the notch in the White Iron, the cleaner the break.



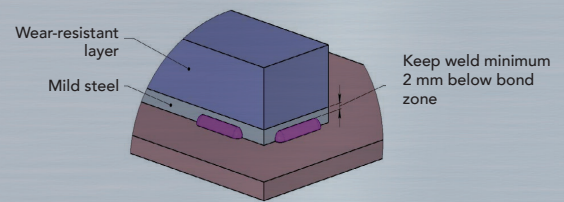
2. notch the backing plate as shown in figure 1;
3. notch the White Iron a minimum of 3 mm deep opposite the notch in the backing plate as per figure 2;
4. wrap the WEAR part with a rag and carefully hit using a soft face hammer. The piece should break cleanly at the notch.

**RECOMMENDED WELDING PROCEDURES  
READ ALL PROCEDURES COMPLETELY!**

**Laminated WEAR parts – WELDING PROCEDURES**

We recommend you always use a soft face hammer and ANSI-approved (Z87.1) eye protection during cutting and bending procedures.

1. ensure that the surface to which the WEAR part will be attached to, is as flat as possible and the area to be welded is clean; clamp and tack weld WEAR part into position;
2. stitch weld, laying 50 mm max length on each run, alternating ends or sides to minimize heat input. Do not deposit weld within 2 mm from the joint line between WEAR part;
3. DO NOT WELD CONTINUOUSLY- continuous welding may cause warpage, layers delamination and cracking. Use thermal crayons to check temperature, maximum allowed 200°C;
4. If a complete peripheral weld is required, use stitch weld method as per step 3;



**5. WELDING RODS:**

- Gas shielded solid MIG wire (1,2 mm dia. max)
- Flux cored wire (1,6 mm dia. max to ASTM/AWS A5.18 classification ER705-6)
- Low hydrogen electrode (3,25 mm dia. max to ASTM/AWS A5.1 classification E7016-1H8 or E7018-1H4)

WE RECOMMEND LOW HYDROGEN WELD RODS OR GAS COVERED CORE WIRE!

**WELDING PROCEDURE OVERVIEW:**

1. READ PROCEDURES COMPLETELY
2. TACK WELD INTO POSITION
3. STITCH WELD WITH (50 mm) MAX. LENGTH ON EACH RUN
4. MAINTAIN 2 mm GAP BETWEEN WELD AND JOINT LINE

**THIS PRACTICE IS SUITABLE FOR WEAR CHOCKY BARS AND WEAR STRIPS ONLY.**

**Laminated WEAR parts – FORMING PROCEDURES**

Note: for severe curves with radius of less than 305 mm, or inside curves, it is advisable to notch the mild steel backing plate opposite the 'V' to assist forming (Figure A).

The WEAR Chocky Bar or Strip may crack during bending. This is normal.

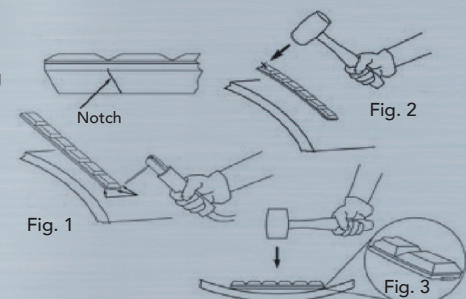
1. clean the surface to which the WEAR Chocky Bar or Strip will be welded;
2. tack weld one end of the WEAR Chocky Bar or Strip (as per the welding procedure) in at least 3 places by 15 mm minimum length per weld (Figure 1);

Note: the deeper the notch in the White Iron, the cleaner the break.

**Inside curves:** starting in the centre strike bar with a soft face hammer to bend bar to match mating radius (Figure 3);

**Outside curves:** hammer down unwelded end with a soft faced hammer to bend bar to match mating radius (Figure 2)

3. stitch weld as per the weld procedure.



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