



**BIMETALLIC WEAR PARTS**




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Hensley's bimetallic wear resistant products are designed to protect your equipment from impact and high abrasion, reduce your maintenance costs, and keep your machines and attachments running for longer periods of time.

Available in a variety of shapes and sizes, these products are easily installed and can be cut or bent prior to welding to provide customized protection for areas of high wear.

These products feature a high chromium white iron metallurgically bonded to a mild steel backing plate. The white iron has a hardness of at least 700 Brinell and provides incredible abrasion resistance while the mild steel backing plate is easily weldable with minimal preparation.



Safety First! Hensley Industries, Inc. recommends following all safety protocols when using our products and utilizing all PPE. PPE should comply with worksite regulations as well as any applicable local, state or federal requirements (OSHA and MSHA) to help avoid injuries. Keep others at the safe distance to ensure safety.

# PRODUCTS OVERVIEW

## PRODUCTS

- ▷ Chocky bars
- ▷ Wear buttons
- ▷ Bolt protectors
- ▷ Skid bars
- ▷ Wear bars
- ▷ Grizzly bars
- ▷ Trapezoidal plates
- ▷ Truck bed liners



## APPLICATIONS

- ▷ Get adapters
- ▷ Get wear caps
- ▷ Bucket protection
- ▷ Crusher liners
- ▷ Conveyor chutes
- ▷ Feeder deck plates
- ▷ Grizzly screens
- ▷ Truck beds



## FEATURES

- ▷ Abrasion resistance
- ▷ Impact protection
- ▷ Simple installation
- ▷ Easily weldable
- ▷ Many applications
- ▷ Custom fit
- ▷ Reduce maintenance
- ▷ Extend work cycles



**CHOCKY BARS**



**WEAR BUTTONS**



**BOLT PROTECTORS**



**SKID BARS**



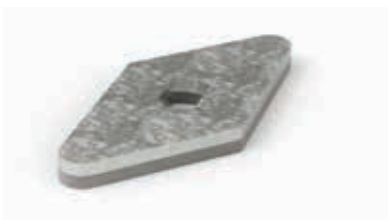
**WEAR BARS**



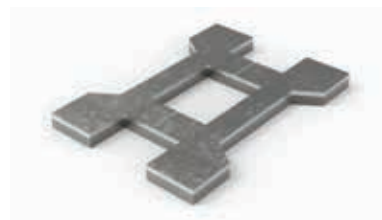
**GRIZZLY BAR**



**TRAPEZOIDAL PLATE**



**TRUCK BED LINER**

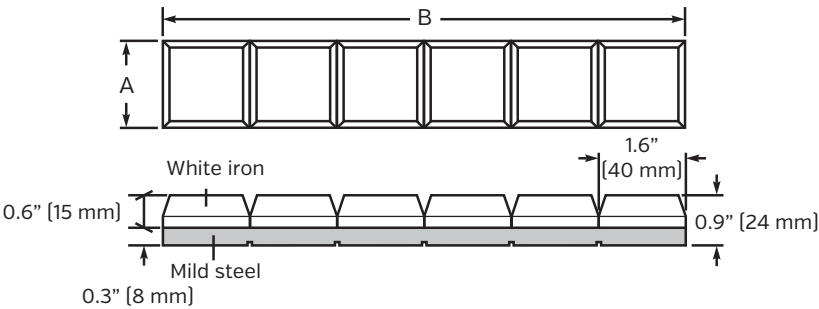


# CHOCKY BARS



Most popular for replacing hardfacing and clad plate.

- ▶ Easy to cut and shape over contoured surfaces



| PART NUMBER | DIMENSIONS |     |     |     | WEIGHT |     |
|-------------|------------|-----|-----|-----|--------|-----|
|             | A          |     | B   |     |        |     |
|             | IN         | MM  | IN  | MM  | LB     | KG  |
| CB25N       | 1          | 25  | 9.4 | 240 | 2.1    | 1   |
| CB40N       | 1.6        | 40  | 9.4 | 240 | 3.5    | 1.6 |
| CB50N       | 2          | 50  | 9.4 | 240 | 4.3    | 2   |
| CB65N       | 2.6        | 65  | 9.4 | 240 | 5.7    | 2.6 |
| CB100N      | 3.9        | 100 | 9.4 | 240 | 8.7    | 3.9 |
| CB130N      | 5.2        | 131 | 9.4 | 240 | 11.7   | 5.3 |

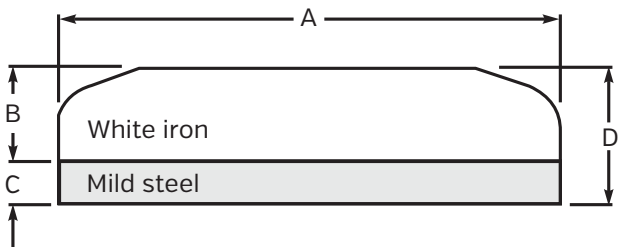
**NOTE:** All chocky bars have a pre-notched backing plate to make it easier to break apart and bend.  
Good for contoured surfaces.

WEAR BUTTONS



Ideal for smaller areas requiring wear resistant material.

- Requires less welding time and material than conventional wear plate



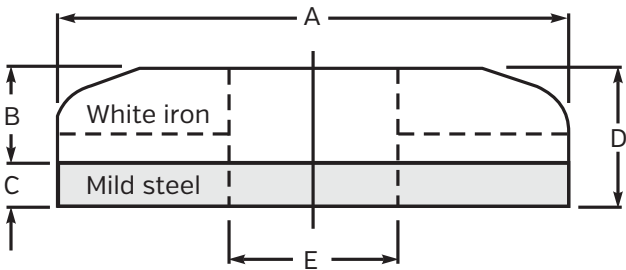
| PART NUMBER | DIMENSIONS |     |     |    |     |    |     |    | WEIGHT |     |
|-------------|------------|-----|-----|----|-----|----|-----|----|--------|-----|
|             | A          |     | B   |    | C   |    | D   |    |        |     |
|             | IN         | MM  | IN  | MM | IN  | MM | IN  | MM | LB     | KG  |
| WB60        | 2.4        | 60  | 0.8 | 20 | 0.4 | 10 | 1.2 | 30 | 1.4    | 0.6 |
| WB75        | 3          | 75  | 0.8 | 20 | 0.4 | 10 | 1.2 | 30 | 2.2    | 1   |
| WB90        | 3.5        | 90  | 0.8 | 20 | 0.4 | 10 | 1.2 | 30 | 3.2    | 1.5 |
| WB115       | 4.5        | 115 | 0.8 | 20 | 0.6 | 15 | 1.4 | 35 | 6.2    | 2.8 |
| WB150       | 5.9        | 150 | 1   | 25 | 0.6 | 15 | 1.6 | 40 | 12     | 5.4 |

# BOLT PROTECTORS



Developed for secure and adequate protection of exposed nuts and bolts used on cutting edges and similar applications.

▶ Alternative - can be cut in half and placed in front of exposed nuts and bolts in a U-shaped configuration



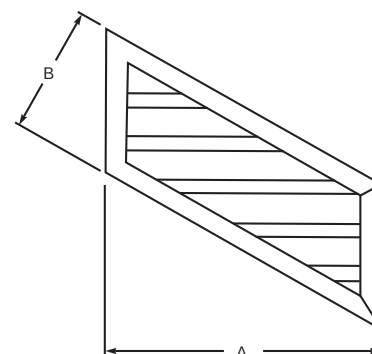
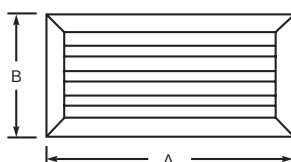
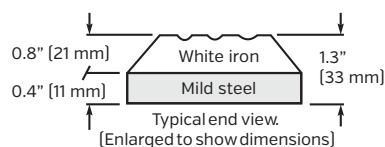
| PART NUMBER | DIMENSIONS |     |     |    |     |    |     |    |     |    | WEIGHT |     |
|-------------|------------|-----|-----|----|-----|----|-----|----|-----|----|--------|-----|
|             | A          |     | B   |    | C   |    | D   |    | E   |    |        |     |
|             | IN         | MM  | IN  | MM | IN  | MM | IN  | MM | IN  | MM | LB     | KG  |
| WB60        | 3          | 75  | 0.7 | 17 | 0.3 | 8  | 1   | 25 | 1   | 25 | 1.5    | 0.7 |
| WB75        | 3.9        | 100 | 0.7 | 17 | 0.3 | 8  | 1   | 25 | 2   | 50 | 2.1    | 1   |
| WB90        | 3.9        | 100 | 0.9 | 24 | 0.3 | 8  | 1.3 | 32 | 2.8 | 70 | 2      | 0.9 |

## SKID BARS



Most popular for replacing hardfacing and clad plate.

- ▶ Ideal for bucket bottom protection
- ▶ Trapezoidal shape offers optimum protection for spade bucket lips
- ▶ 2 standard shapes in rectangular and trapezoidal



| PART NUMBER | TYPE* | DIMENSIONS |     |     |     | WEIGHT |     |
|-------------|-------|------------|-----|-----|-----|--------|-----|
|             |       | A          |     | B   |     |        |     |
|             |       | IN         | MM  | IN  | MM  | LB     | KG  |
| SB205       | 1     | 11         | 279 | 3   | 75  | 11.2   | 5.1 |
| SB409       | 1     | 6.1        | 154 | 4   | 101 | 7.7    | 3.5 |
| SB410L      | 2     | 6          | 152 | 4   | 101 | 8.6    | 3.9 |
| SB410L      | 2     | 6          | 152 | 4   | 101 | 8.6    | 3.9 |
| SB403       | 1     | 8.4        | 214 | 4   | 101 | 10.9   | 4.9 |
| SB404L      | 2     | 8.5        | 216 | 4   | 101 | 11.6   | 5.3 |
| SB405R      | 2     | 8.5        | 216 | 4   | 101 | 11.6   | 5.3 |
| SB406       | 1     | 11.8       | 300 | 3.9 | 100 | 15.4   | 7   |
| SB407L      | 2     | 12.2       | 310 | 4   | 101 | 17.5   | 7.9 |
| SB408R      | 2     | 12         | 305 | 3.9 | 100 | 16.8   | 7.6 |

\*Type 1: Rectangle, Type 2: Trapezoid

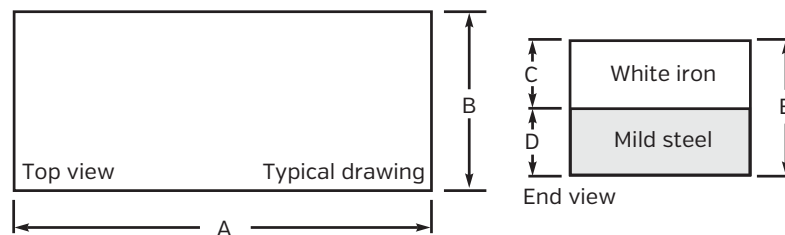


## WEAR BARS



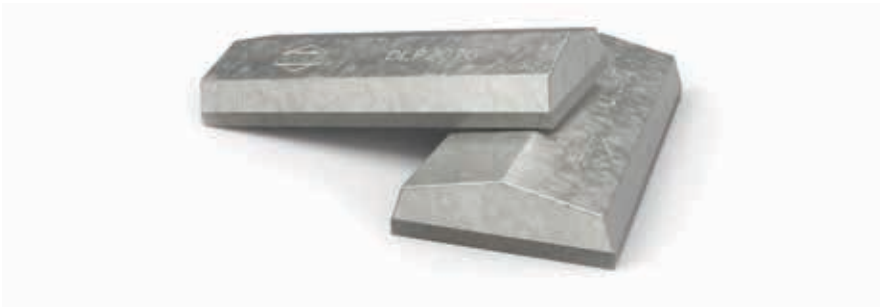
Popular for rock-box protection, impact areas and transfer points.

- ▶ Chute protection in both low and high stress abrasion
- ▶ Many shapes and sizes available - see chart below



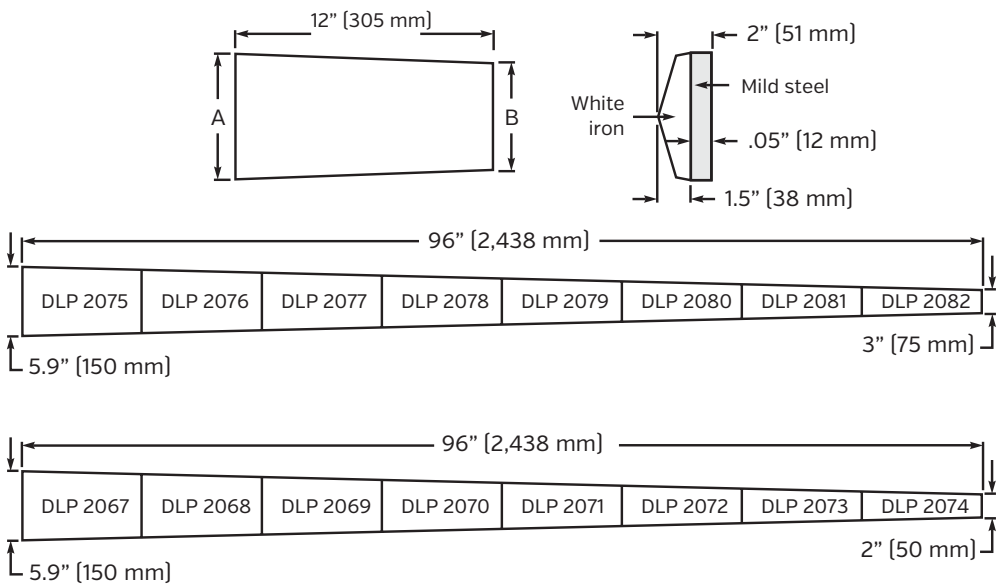
| PART NUMBER | DIMENSIONS |     |     |     |     |    |     |    |     |    | WEIGHT |      |
|-------------|------------|-----|-----|-----|-----|----|-----|----|-----|----|--------|------|
|             | A          |     | B   |     | C   |    | D   |    | E   |    |        |      |
|             | IN         | MM  | IN  | MM  | IN  | MM | IN  | MM | IN  | MM | LB     | KG   |
| DLP4        | 11.8       | 300 | 1.5 | 38  | 1   | 25 | 0.3 | 8  | 1.3 | 33 | 6.5    | 2.9  |
| DLP125      | 9.1        | 230 | 2   | 50  | 1.5 | 38 | 0.5 | 12 | 2   | 50 | 10     | 4.5  |
| DLP184      | 5.9        | 150 | 3   | 75  | 1.1 | 29 | 0.4 | 10 | 1.5 | 39 | 7.6    | 3.4  |
| DLP201      | 17         | 432 | 2   | 50  | 1.1 | 28 | 0.4 | 10 | 1.5 | 38 | 15.5   | 7    |
| DLP201A     | 16.9       | 430 | 2   | 50  | 1.5 | 38 | 0.5 | 12 | 2   | 50 | 18.3   | 8.3  |
| DLP270      | 10         | 254 | 2   | 50  | 0.5 | 12 | 0.3 | 8  | 0.8 | 20 | 4.1    | 1.9  |
| DLP295      | 6          | 152 | 1.5 | 38  | 1   | 25 | 0.3 | 8  | 1.3 | 33 | 3.3    | 1.5  |
| DLP352      | 8          | 203 | 8   | 203 | 0.9 | 22 | 1.4 | 36 | 2.3 | 58 | 39.4   | 17.9 |
| DLP453      | 11.8       | 300 | 2   | 50  | 1.5 | 38 | 0.4 | 10 | 1.9 | 48 | 12.6   | 5.7  |
| DLP569      | 7.9        | 200 | 3   | 75  | 1.1 | 29 | 0.4 | 10 | 1.5 | 39 | 10     | 4.5  |
| DLP619      | 5.9        | 150 | 3   | 75  | 2   | 50 | 0.4 | 10 | 2.4 | 60 | 11.4   | 5.2  |
| DLP995      | 12         | 305 | 5.9 | 150 | 0.7 | 18 | 0.2 | 5  | 0.9 | 23 | 19.8   | 9    |
| DLP1191     | 11.8       | 300 | 1   | 25  | 0.6 | 15 | 0.4 | 10 | 1   | 25 | 3.2    | 1.5  |

GRIZZLY BARS



Popular for rock-box protection, impact areas and transfer points.

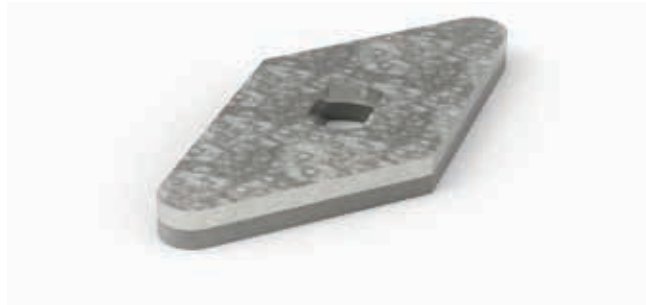
- ▶ Abrasion and impact protection for feeders and other equipment wear areas
- ▶ Many shapes and sizes available - see charts below



| PART NUMBER | DIMENSIONS |     |     |     | WEIGHT |      |
|-------------|------------|-----|-----|-----|--------|------|
|             | A          |     | B   |     |        |      |
|             | IN         | MM  | IN  | MM  | LB     | KG   |
| DLP2075     | 5.9        | 150 | 5.9 | 150 | 31.4   | 14.2 |
| DLP2076     | 5.6        | 141 | 5.6 | 141 | 29.1   | 13.2 |
| DLP2077     | 5.2        | 131 | 5.2 | 131 | 27     | 12.2 |
| DLP2078     | 4.8        | 122 | 4.8 | 122 | 24.8   | 11.2 |
| DLP2079     | 4.4        | 113 | 4.4 | 113 | 23     | 10.4 |
| DLP2080     | 4.1        | 103 | 4   | 102 | 20     | 9.1  |
| DLP2081     | 3.7        | 94  | 3.3 | 84  | 12.5   | 5.7  |
| DLP2082     | 3.3        | 84  | 3   | 75  | 11.2   | 5.1  |

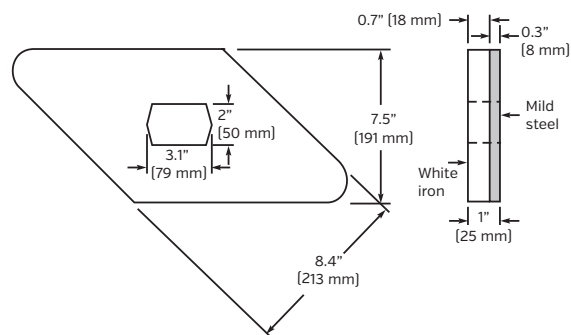
| PART NUMBER | DIMENSIONS |     |     |     | WEIGHT |      |
|-------------|------------|-----|-----|-----|--------|------|
|             | A          |     | B   |     |        |      |
|             | IN         | MM  | IN  | MM  | LB     | KG   |
| DLP2067     | 5.9        | 150 | 5.9 | 150 | 30.4   | 13.8 |
| DLP2068     | 5.4        | 138 | 5.4 | 138 | 28.2   | 12.8 |
| DLP2069     | 4.9        | 125 | 4.9 | 125 | 25.2   | 11.4 |
| DLP2070     | 4.4        | 113 | 4.4 | 113 | 22.4   | 10.2 |
| DLP2071     | 3.9        | 100 | 3.9 | 100 | 19.9   | 9    |
| DLP2072     | 3.5        | 88  | 3.5 | 88  | 17.1   | 7.8  |
| DLP2073     | 3          | 75  | 3   | 75  | 13.7   | 6.2  |
| DLP2074     | 2.5        | 63  | 2.5 | 63  | 10.9   | 4.9  |

## TRAPEZOIDAL PLATE

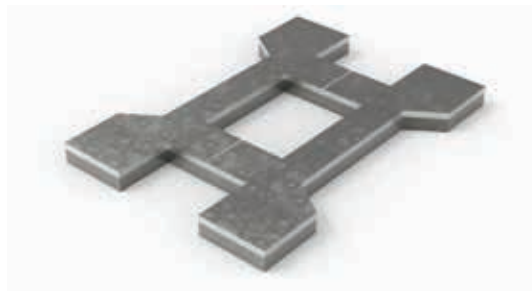


Ideal for smaller areas requiring wear resistant material.

- Requires less welding time and material than conventional wear plate

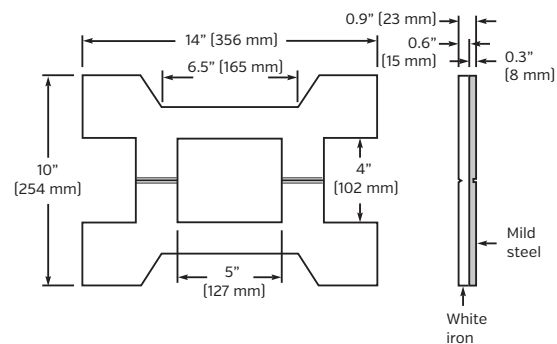


## TRUCK BED LINER



Popular for rock-box protection, impact areas and transfer points.

- Increased protection in high abrasive situations



# WELDING PROCEDURES

## STEP 1

Ensure that the surface to which the bimetallic part will be attached is as flat as possible and the area to be welded is clean.

## STEP 2

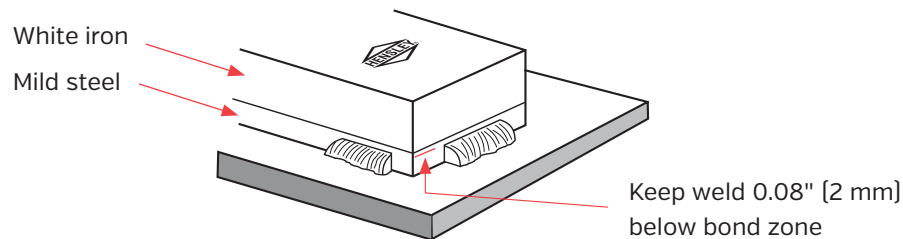
Clamp and tack weld bimetallic part into position.

## STEP 3

Stitch weld, laying 2" [51 mm] max length on each run, alternating ends or similar to minimize heat input.

**NOTES: Do not deposit weld within 0.08" (2 mm) from the joint line between white iron and steel backing plate.**

**Do not weld continuously. Use stitch weld method. Continuous welding may cause warpage, delamination and cracking.**



## FILLER MATERIALS

| PROCESS | AWS                   | JIS                    | NF                           | DIN                         | BS                       | SHIELDING GAS                                |
|---------|-----------------------|------------------------|------------------------------|-----------------------------|--------------------------|--|
| SMAW    | E7018<br>AWS A5.1     | JIS Z3212<br>D5016     | E515B12029(H)<br>NF A 81 309 | E51B10120<br>DIN 8556       | E515B12029(H)<br>BS 2926 | -  |
| GMAW    | ER 70S-6<br>AWS A5.18 | JIS Z3312<br>YGW12     | GS2<br>NF A 81-311           | SG2<br>DIN 8559             | A18<br>BS 2901-1         | 100 CO2<br>90% AR/8% CO2                     |
| GMAW    | E70C-6M<br>AWS A5.18  | JIS Z3313<br>YFW-A50DM | -                            | -                           | -                        | 92% AR/8% CO2<br>90% AR/10% CO2              |
| FCAW    | E70T-5<br>AWS A5.2    | JIS Z3313<br>YFW-C50DM | TGS 51 3.3 BH<br>NF A 81-350 | SG B1<br>CY4254<br>DIN 8559 | T530 GBH<br>BS7084       | 100% CO2<br>75% AR/25% CO2                   |
| FCAW    | E71T-1<br>AWS A5.2    | JIS Z3312<br>YFW-C50DR | TGS 51 3.3 BH<br>NF A 81-350 | SG B1<br>CY4254<br>DIN 8559 | T530 GBH<br>BS7084       | 100% CO2<br>75% AR/25% CO2<br>90% AR/10% CO2 |



**TOO MUCH HEAT INPUT MAY CAUSE CRACKING AND SEPARATION.**

# BENDING CHOCKY BARS

## STEP 1

Clean the surface to which chocky bar will be welded.

## STEP 2

### For outside curves

Tack weld one end of chocky bar [per welding procedures] in at least 3 places using at least 0.6" [15 mm] of weld in each deposit [Fig.1]. Hammer down unwelded end of bar so that the bar bends and follows the curve [Fig.2].

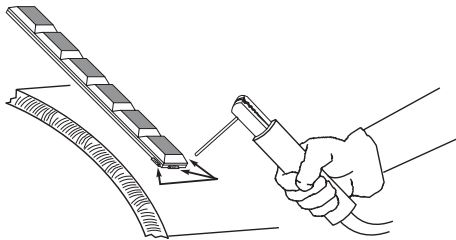


Fig.1

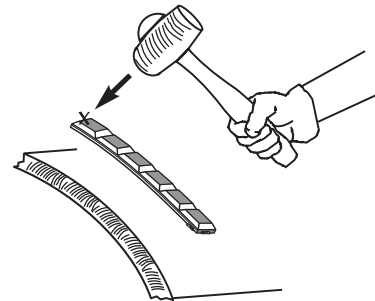
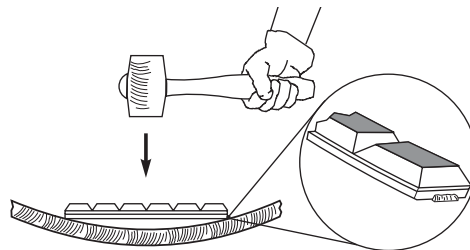


Fig.2

### For inside curves

Tack weld one end of chocky bar [per welding procedures] in 3 places using at least 0.6" [15 mm] of weld in each deposit. Starting in the center strike bar so that the bar bends and follows the curve.



## STEP 3

Stitch weld [per welding procedures] until bar is firmly in place.

**NOTE: White iron may crack during bending. This is normal.**

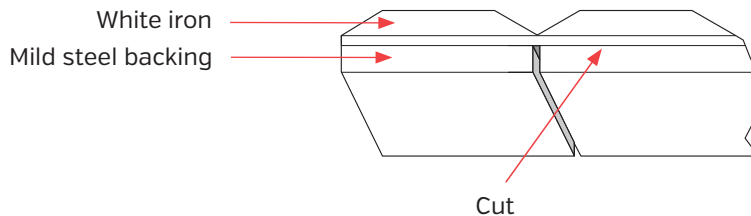
# CUTTING CHOCKY AND WEAR BARS

High pressure abrasive water cutting is the preferred cutting method when available. If not available, cutting by abrasive disc is recommended.

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.

## CUTTING CHOCKY BARS

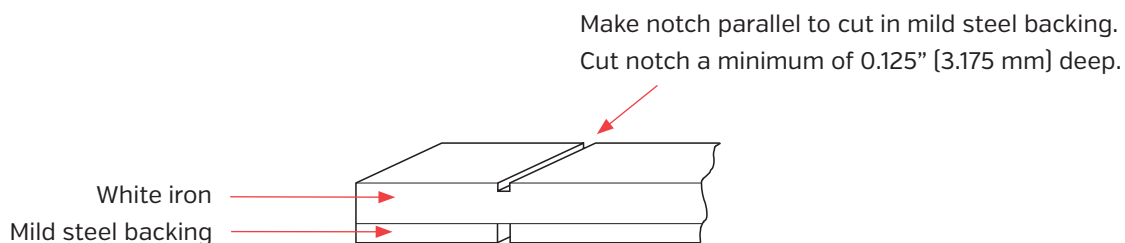
1. Place chocky bar in vise/clamp.
2. Cut through to white iron bond area.
3. Wrap chocky bar with a rag and carefully hit it with a hammer. The piece should break cleanly at the notch.



## CUTTING WEAR BARS

1. Place wear bar in vise/clamp.
2. Cut through to white iron bond area.
3. Cut a notch in the white iron a minimum of 0.125" [3.175 mm] deep and parallel to the cut in the mild steel backing.
4. Wrap the wear bar with a rag and carefully hit it with a hammer. The piece should break cleanly at the notch.

**NOTE: The deeper the notch in the white iron, the cleaner the break.**



**HENSLEY RECOMMENDS YOU ALWAYS USE A SOFT-FACE HAMMER AND ANSI-APPROVED (Z87.1) EYE PROTECTION DURING CUTTING AND BENDING PROCEDURES**

# **HENSLEY... YOUR WEAR SOLUTIONS SPECIALIST**

[www.hensleyind.com](http://www.hensleyind.com)





Since 1947, Hensley Industries, Inc. has dedicated itself to providing superior products and service across the globe.

Hensley's continuous commitment to safety, quality, reliability and our customers enables us to help those in the field every day.

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