Powered by Epiroc

Surface Mining

DOMITE®

Long-life for the ultimate in protection in extreme applications

Domite® Benefits

- Increased production
- Less downtime
- Reduced maintenance costs

Domite is a combination of high chromium white iron metallurgically bonded to a mild steel backing plate, achieving a high-strength joint. The white iron modified AS 2027 15/3 CrMo has a nominal hardness of 700 Brinell (63 Rc) and contains primary carbides up to 1500HV, providing maximum abrasion resistance protection for your equipment.

The mild steel is easily weldable with minimal preparation and acts as a cushion for white iron, enabling it to handle impact and abrasion in the most extreme applications.

Proven in the field

Chute lined with Domite Mk2 Rock box liners.

Gyratory Primary crusher, Svelda 60x89, Spider arms and hub are enhanced with Domite buttons, chocky Bars and skid bars and thus gives a considerable increase in wear life.

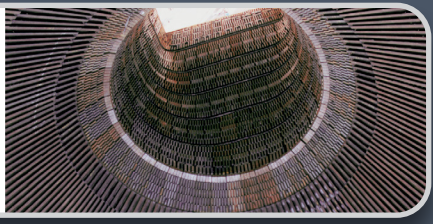
Arm guard liners for a 60x89 Superior Cone crusher protection, with custom Domite parts welded to cast steel frames, giving years of protection.

Domite wear protection on tunnel borer.

Coal sizer using Domite tips, replacing conventional hard-facing and high labor maintenance costs.

Dredge blocks on suction drag head replacing Nihard castings which could wear out prematurely or fall off.

Surge bin protection using 50mm square bars, DLP1101, DLP125, to create dead-box effect, supplied on large pre-made panels. Still in service after 10 years.



Applications

- Dragline/shovel buckets
- Loader/excavator buckets
- Chute liners/rock box bars
- Feeder pan liners
- Quarry and mining grizzly screens
- Shredder/grinder tips
- Cane knife edges
- Adapters wear caps
- Dredging industry wear

Product, service and size

- Fast delivery and service
- Standard and custom-made parts available
- An extensive range of sizes existing
- Large stock of pieces ready for assembly
- Emergency supply conditions possible, through negotiation

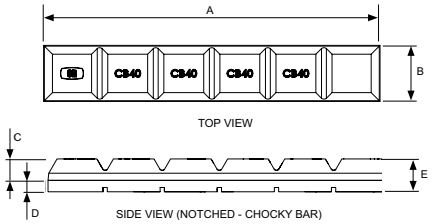
Technical support and advice

- Offer long-life wear solutions, based on existing successful applications
- Liner material upgrade and improvement
- Design capability and recommendations
- Wear audits in liaison with mine and design personnel
- Regular visits and inspections to discuss wear problems and solutions
- On-site product trials to prove product performance
- Wear packages, design and layouts for draglines, excavators, rope shovels, and dippers

Contact CR Powered by Epiroc or your authorized dealer for price and availability.

CHOCKY BARS

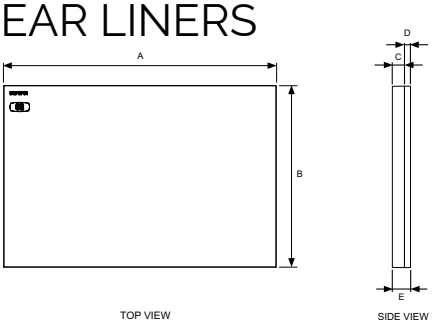
- Most popular for replacing hardfacing and clad plate
- Easy to cut and shape over contoured surfaces



	DIMENSIONS (mm)					WEIGHT
PART	A	B	C	D	E	kg
CB25N	240mm	25mm	15mm	8mm	23mm	0.9
CB40N	240mm	40mm	15mm	8mm	23mm	1.5
CB50N	240mm	50mm	15mm	8mm	23mm	1.9
CB65N	240mm	65mm	15mm	8mm	23mm	2.5
CB90N	240mm	90mm	15mm	8mm	23mm	4
CB100N	240mm	100mm	15mm	8mm	23mm	4.3
CB130N	240mm	13mm	15mm	8mm	23mm	5.6

STANDARD WEAR LINERS

Standard wear liners are used in specific wear applications providing excellent protection of chutes and conveyor transfer points.

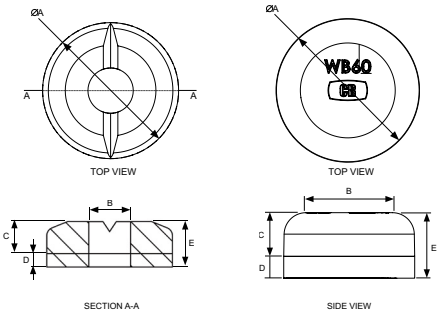


Wear liners can be manufactured to custom shapes and sizes. Nelson studs are fitted according to customer specification at additional charge. Contact CR for more information.

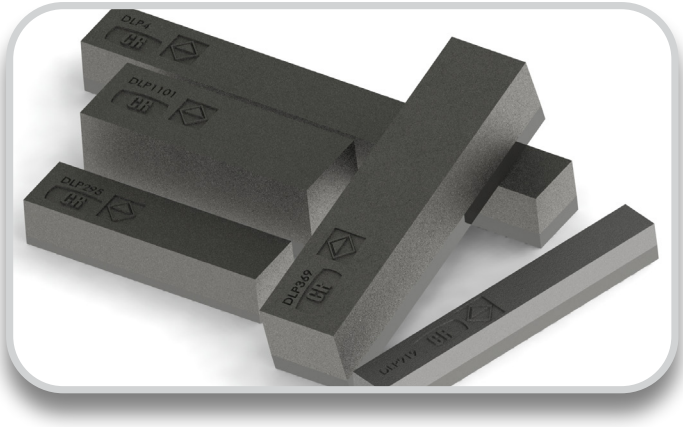
	DIMENSIONS (mm)					WEIGHT
PART	A	B	C	D	E	kg
DLP5701	300mm	450mm	20mm	10mm	30mm	31.8
DLP4677	300mm	300mm	20mm	10mm	30mm	21.2
DLP4682	300mm	150mm	20mm	10mm	30mm	10.6

WEAR BUTTONS

- Ideal for smaller areas requiring wear-resistant material
- Requires less welding time and material than conventional wear plate

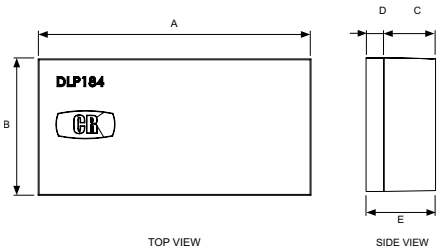


	DIMENSIONS (mm)					WEIGHT
PART	A	B	C	D	E	kg
WEAR BUTTONS						
WB60	60mm	40mm	20mm	10mm	30mm	0.7
WB75	75mm	55mm	20mm	10mm	30mm	1
WB90	90mm	70mm	20mm	10mm	30mm	1.5
WB115	115mm	95mm	20mm	12mm	32mm	2.6
WB150	150mm	130mm	25mm	16mm	41mm	5.7



STANDARD WEAR BARS

- Popular for rock-box protection, impact areas and transfer points
- Chute protection in both low and high stress abrasion
- Many other shapes and sizes available

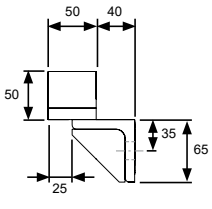


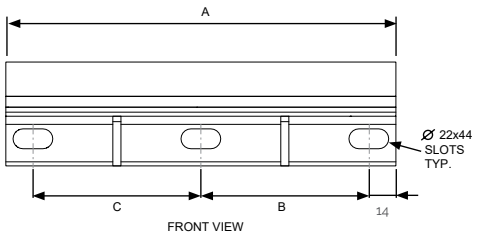
	DIMENSIONS (mm)					WEIGHT
PART	A	B	C	D	E	kg
DLP919	200mm	25mm	15mm	10mm	25mm	1
DLP1191	300mm	25mm	15mm	10mm	25mm	1.5
DLP295	153mm	38mm	25mm	8mm	33mm	1.5
DLP4	300mm	38mm	25mm	8mm	33mm	3
DLP184	150mm	75mm	29mm	10mm	39mm	3.4
DLP337	127mm	51mm	38mm	12mm	50mm	2.5
DLP369	210mm	50mm	38mm	12mm	50mm	4.1
DLP125	230mm	50mm	38mm	12mm	50mm	4.5
DLP201A	432mm	50mm	38mm	12mm	50mm	8.5
DLP1101	150mm	50mm	40mm	10mm	50mm	2.9
DLP343	190mm	50mm	40mm	10mm	50mm	3.7
DLP453	294mm	50mm	40mm	10mm	50mm	5.5
DLP2017	300mm	50mm	40mm	10mm	50mm	5.9
DLP352	206mm	203mm	38mm	20mm	58mm	19
DLP392/20	241mm	100mm	38mm	20mm	58mm	11
DLP619	150mm	75mm	50mm	10mm	60mm	5.3

MICROLEDGES

- Designed specifically for chutes, bins, transfer points and hoppers which handle and store fine, crushed ores.
- Creates a "dead-box" effect in these applications, extending the maintenance life of bins, chutes, transfer points and hoppers, with ore-on-ore wear effect
- Reduces the need for added wear plate inventory and costs in these applications
- Cost-effective wear solution and ease of installation and use

Five popular sizes available or custom-designed to suit specific needs

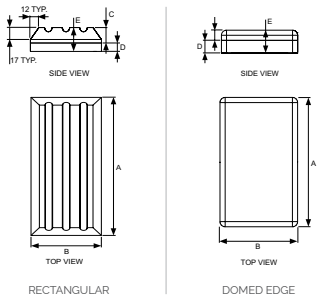




	DIMENSIONS (mm)					WEIGHT
PART	LENGTH A	B	C	WIDTH	THICKNESS	kg
SDP304	128mm	68mm	-	50mm	50mm	3.6
SDP296	190mm	130mm	-	50mm	50mm	5.5
SDP299	210mm	150mm	-	50mm	50mm	6
SDP297	230mm	170mm	-	50mm	50mm	6.6
SDP298	432mm	186mm	-	50mm	50mm	12.5

SKID BARS

- Far superior to standard Q&T wear plates offering greater wear life
- Available in straight, or domed shapes
- Geometrically designed to increase wear life
- Excellent for bucket protection and fixed plant applications

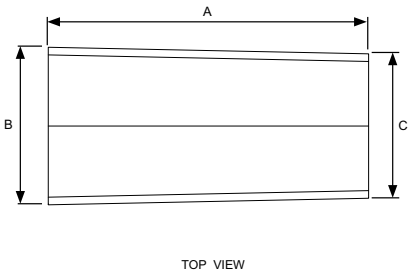


	DIMENSIONS (mm)						WEIGHT
PART	TYPE	A	B	C	D	E	kg
RECTANGULAR							
SB403	1	214mm	101mm	22mm	12mm	34mm	5.1
SB406	1	302mm	101mm	22mm	12mm	34mm	7.3
SB409	1	154mm	101mm	22mm	12mm	34mm	3.7
DOMED EDGE							
SB412	3	250mm	150mm	15mm	25mm	40mm	13.1
SB413	3	200mm	150mm	20mm	25mm	45mm	10.5
SB414	3	250mm	250mm	20mm	25mm	45mm	21.9

GRIZZLY BARS

Contact CR or your authorized dealer for price and availability.

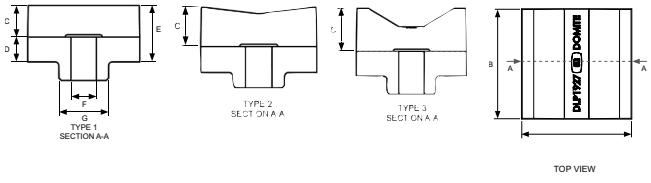
- Custom-made Grizzly bars are available on request
- Significantly improved wear life and reduced downtime



SHREDDER/GRINDER TIPS

Contact CR or your authorized dealer for price and availability.

- Cost-effective as compared to hard facing
- Superior edge retention and sharpness
- No need to rebuild edges
- Increased production and cutting efficiency
- Easy to install and maintain



DOMITE Fitting Procedure

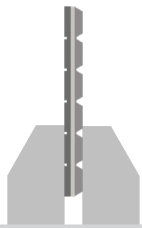
Product Safety

Any fitting or fabrication work should be carried out in accordance with applicable site safety standards, ensuring use of approved hard hats, eye protection, steel-toed shoes and protective gloves. Always use a soft-faced hammer when performing the work as described in these instructions.

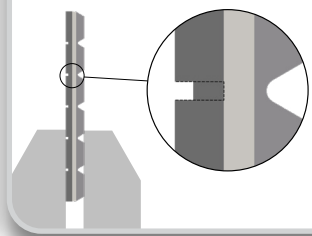
Cutting Details

Cutting Procedure 25mm Section Thickness

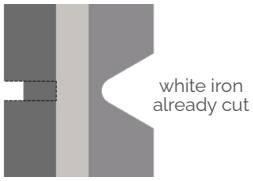
1. Secure the Domite piece to be cut in a vice or clamp.



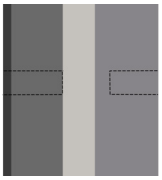
2. Notch the backing plate. See also shown in (Fig 1).



3. Notch the backing plate through to white iron casting. If white iron is not already notched, eg., Chocky Bar is already notched, notch the white iron a minimum of 3mm deep opposite the notch in the backing plate, as per (Fig 2).

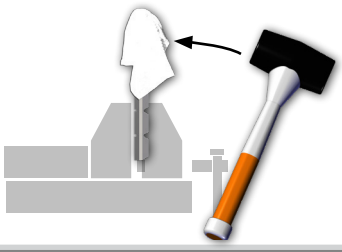


Chocky Bar Example



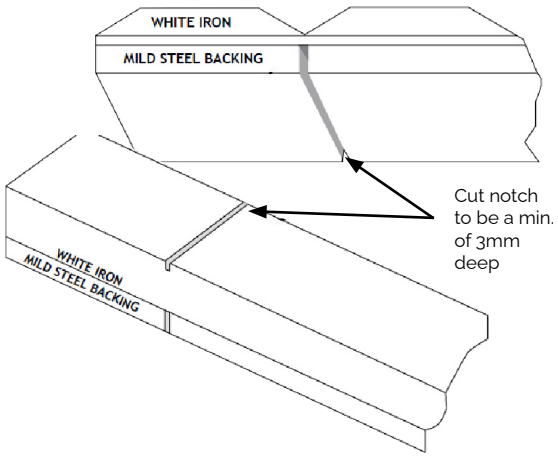
Wear Bar Example

4. Wrap the Domite with a rag and carefully hit using a soft-faced hammer. The piece should break cleanly at the notch.



CAUTION: Extreme care must be taken when cutting to minimize local pre-heating. Failure to do so may result in cracking or delamination.

High-pressure abrasive water jet cutting is the 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. Submerged plasma cutting is acceptable for Domite up to 30mm total thickness. For Domite no greater than 25mm section thickness, cutting by abrasive disc or saw is an accepted practice.



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

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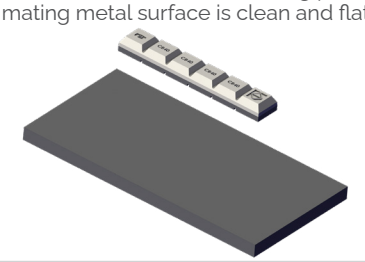
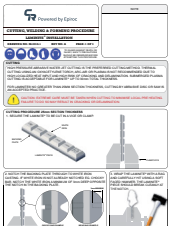
Welding Procedure

CAUTION: Temperature must not exceed 200°C.
Excessive heat input may cause cracking and delamination.

1. Ensure that the Domite backing plate and mating metal surface is clean and flat.



2. Contact a CR representative for the appropriate procedure.



REFERENCE DOMITE WPS PROCEDURES

DO NOT PRE-HEAT DOMITE

3. Clamp and tack weld Domite into position.

4. Stitch weld, laying 50mm maximum length on each run, alternating ends or sides to minimize heat input. Use suitably calibrated device to monitor temperature. Do not weld continuously. Continuous weld may cause warping, delamination and cracking.

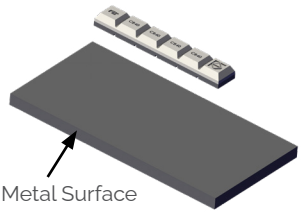
5. Do not deposit weld within 2mm from joint line between Domite and steel backing plate, as shown.

Forming Procedure

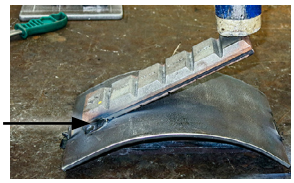
This practice is suitable for Chocky Bars only.

NOTE: For severe curves with a radius of less than 305mm, or inside curves, it is advisable to notch the mild steel backing plate opposite the 'V' to assist forming. The Chocky Bar may crack during bending. This is normal.

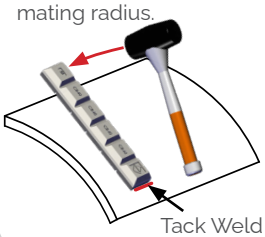
1. Clean the surface to which Chocky Bar will be welded.



2. Tack weld one end of the Chocky Bar (as per the welding procedure) in at least 3 places by 15mm minimum length per weld.

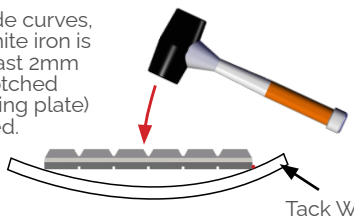


Outside Curves: Hammer down welded end of bar with a soft-face hammer to bend bar to match mating radius.



Inside curves: Starting in the center, strike bar with a soft-face hammer to bend bar to match mating radius.

Note: For inside curves, ensure the white iron is notched at least 2mm (preferably notched down to backing plate) where required.



3. Stitch weld as per the weld procedure.

Stitch Weld

Market Leading Wear

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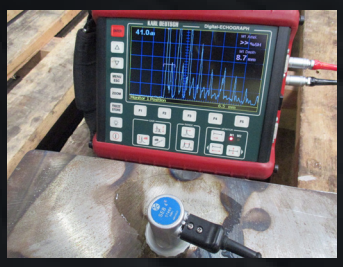
Testing of Domite bond strength is to AS1391-2007 for metallic tensile testing.

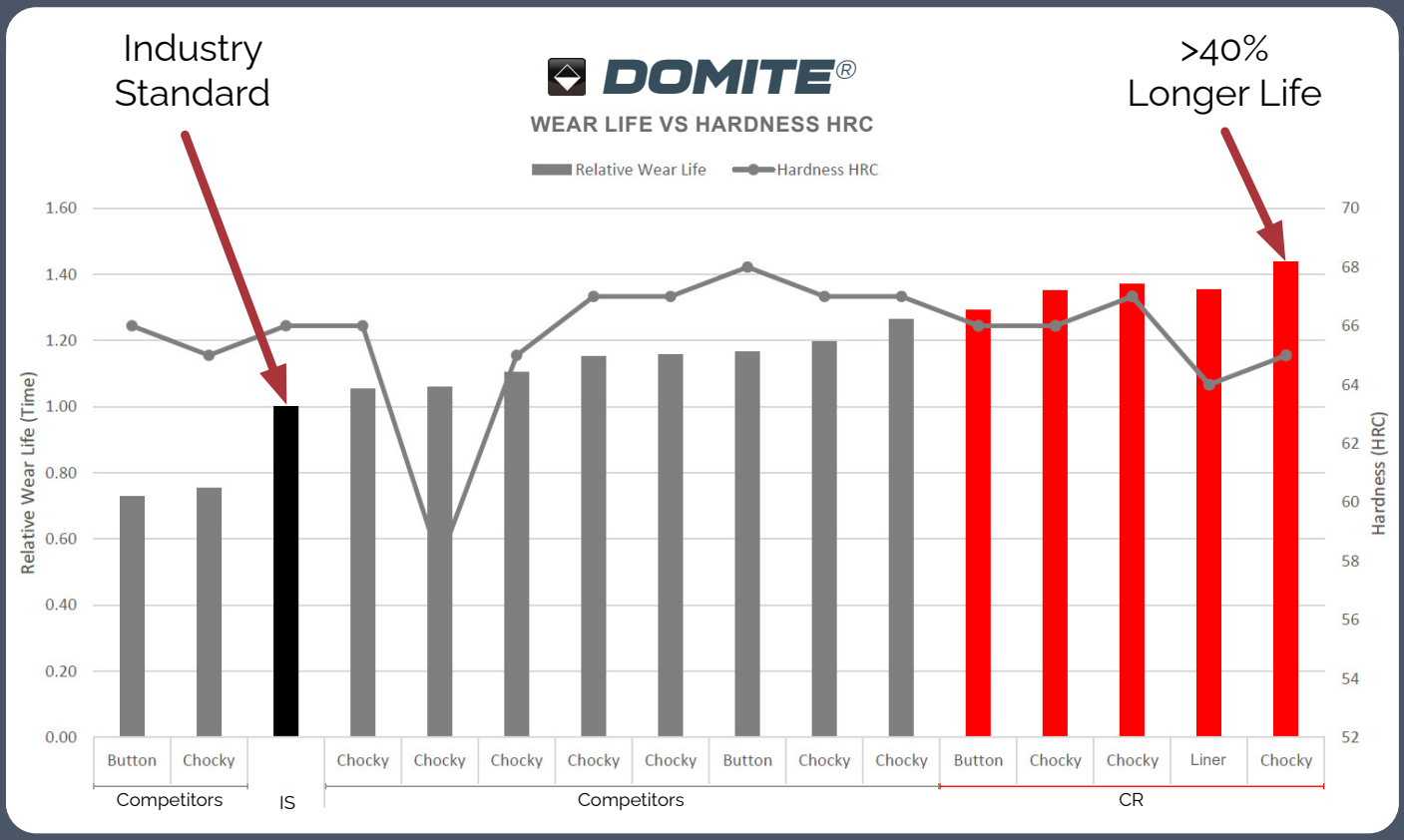
Results of testing shows bond shear strength of up to 460MPa.



Bond Strength is the Foundation

CR completes extensive bond analysis of every production batch, to ensure consistency and stability of bond strength.

Chemistry and wear tests give a complete picture of a product's wear life. Chemistry, and an alloy-rich mixture will deliver the right carbide fraction and equilibrium. The industry standard G65 wear tests show that the right alloy mix and heat treatment will deliver longer wear life and more consistent product, than lean alloy products, despite both achieving the same hardness specifications.



CR Powered by Epiroc is on a mission to revolutionize mining productivity.
We engineer the most advanced surface and underground mining solutions for the world's best miners to unlock productivity, enhance safety, and reduce emissions.

Start the conversation

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