

WEAR RESISTANT STEEL PLATE

HARD TO RESIST.....!

Brown McFarlane Offer The Widest Range Of Carbon Steel Plate Available Within The UK.



*Profiling Machine, at
Brown McFarlanes Warehouse*

QUALITIES SUPPLIED

- XAR 400* *from*
- XAR 450*
- XAR 500*



Thickness: 3mm - 80mm
Length: up to 1200mm
Width: up to 3000mm

These products are complimented with our range of High Strength Structural Steels:

- PAS 700*
- RQT 701*
- Supralsim 690*
- BS EN10025 - S355 J2G3 / BS 4360-50D

* 690 Minimum Yield Strength



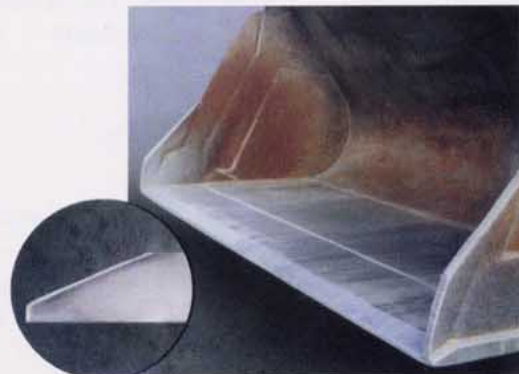
Brown McFarlane Processing Services

We supply Gas or plasma cut profiles to exacting tolerances and formed, drilled or machined parts.

Brown McFarlane, the solution to all your wear problems are just a phone call away.

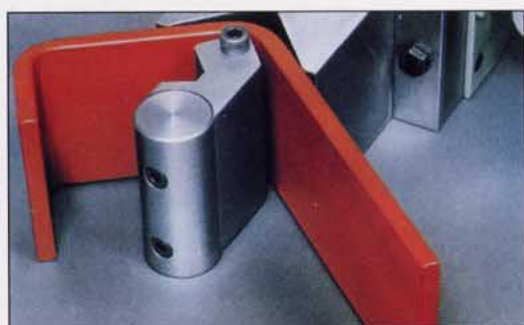


A fast and efficient service, delivering quality approved steel plate and profiles from our extensive warehousing in Stoke on Trent and Glasgow.



TYPICAL APPLICATIONS

- * Line Pans
- * Hoppers
- * Chutes
- * Cascades
- * Quarry Screens & Crushers
- * Waste Compaction Equipment
- * Tipper Bodies
- * Articulated Dump Trucks
- * Quarry Trucks
- * Dozer Trucks
- * Cutting Edges
- * Buckets



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Weldability

XAR special wear resistant steels may be welded by applying any commonly used automatic welding procedures. Pre-heating is normally only required for thicker plates. Consumables can be chosen on the basis of whether or not the weld metal is exposed to an abrasive medium. Where weld joints are not exposed to wear conditions, lower strength, hydrogen controlled mild steel electrodes can be

used. Where weld metal is exposed to abrasive medium, hydrogen controlled electrodes producing a metal weld deposit of approximately the same hardness as the parent plate should be used for the capping passes.

Welding of XAR can be successfully carried out using heat inputs in the range 1 - 2.0 kJ / cm. The interpass temperature should not exceed 250°C.

Machining

XAR steels are more difficult to machine or drill because of their hardness. For 400BHN, use high-grade cobalt HSS E drilling tools. For 500BHN, hard metal drilling tools are

necessary. If you require advice on drilling or you wish us to supply machined parts, please contact either of our offices.

Forming

XAR steels can be readily cold formed. Compared with steels of lower yields, three factors should be considered: (i) higher press forces, (ii) a greater bend radius is required

and (iii) spring back. If you require advice on forming or wish us to supply formed parts, please contact either of our offices

Stock Sizes

Thickness	Length	Width
3	3000	1500
4	6000	2500
5	6000	2500
6	6000	2500
8	12000	2500
10	12000	2500
12	12000	2500/3000
15	12000	2500/3000
20	12000	2500/3000
25	12000	2500/3000
30	12000	2500
35	12000	2500
40	12000	2500
45	8000	2500
50	8000	2500
60	8000	2500
70	8000	2500
80	6000	2500

Other stock sizes are available on short lead times
Details are available on request

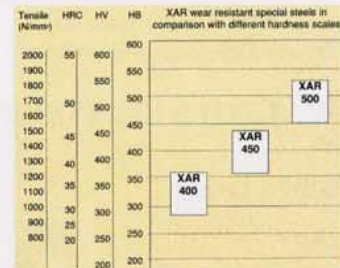
Liner Kits

We can provide a liner kit for your Dump Truck in the least number of parts possible, in XAR 400 Steel.

This supply route guarantees good weldability and fewer welds, thus reducing down time!



Typical Hardness & Chemical Analysis

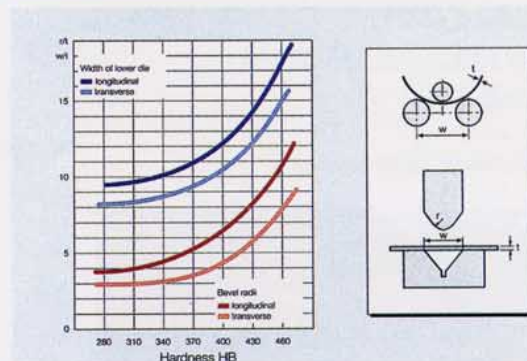


Grade	Condition	C	Si	Mn	P	S	Cr	Mo	B	CE1+3	CET2+3
		max	max	max	max	max	max	max	max		
XAR 400	Q,Q+T	0.20(4)	0.8	1.5	0.025	0.01	1	0.5	0.005	0.42	0.27
XAR 450		0.22	0.8	1.5	0.025	0.012	1.3	0.5	0.005		
XAR 500	Q+T	0.28	0.8	1.5	0.025	0.01	1.00.5	0.005	0.005	0.62	0.41

NOTES: (1) $CE=C + \frac{Mn}{6} + \frac{Cr+Mo+V}{5} + \frac{Ni+Cu}{15}$ (2) $CET=c + \frac{Mn+Mo}{10} + \frac{Cr+Cu}{20} + \frac{Ni}{40}$
(3) Typical values for plate thickness 15mm (4) Plate thickness > 50mm, $C_s \leq 0.28$

Bending

Width of Lower Die and Bevel Radii for XAR Steels



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