Product Description

- Hadfield steel has two major features: first, the greater the external impact load, the higher the wear resistance of its surface; second, with the gradual wear of the hardened surface layer, new work-hardening layers will be formed continuously.

- Suitable for wear applications, Wherever severe impact, abrasion and Hadfield steel is needed. Serving the shot blast industry, mining, railroad, foundries, quarries and steel mills.

- Hadfield steel have excellent wear resistance to strong shock and great pressure, they are easy to be cut and welded, but difficult to be machined, and although they have high hardness, their toughness is still very excellent and they can be bent to needed shapes such as cylinders.

- The application data from a user of shot blasting machine is as follows: steel plate sample: 12mm×500mm×1000mm ; diameter of steel cut wire shot: 1.5mm; direct shot blasting; projected distance: 700mm; projection velocity: 75m/s; shot blasting time: 100 hours; the longest continuous shot blasting duration: 9 hours; no obvious change of the thickness measured before and after shot blasting at 10 marked test points had been found.

Properties of Product

- Good ductility
- High abrasive resistance
- Excellent impact toughness
- Sound capability to bear work hardening

Chemical Composition

Brand	C	Si	Mn	P	S
X120Mn12	0.90-1.20	0.30-0.80	11.00-14.00	0.035max	0.030max

Mechanical Properties

Tensile Strength	Elongation	20℃ Impact Resistance	Initial Hardness (HB)	Working Hardness (HB)	180°Cold Bending Test
min116000psi	min40%	min50(J)	190-250	min300	Qualified

Standard

ASTM	EN	DIN	JIS	AFNOR
A128	X120Mn12	1.3401	SCMnH11	Z120Mn12

Specification

Thickness	Width	Length
1/4″-4/5″	36″-72″	200″above

Other sizes are also available, but you should place an order.