

## I. Product Introduction

hard-faced wear-resistant steel plate's basic plate is adopted good rolled plate with good toughness and plasticity. The alloy wear-resisting layer and the basic plate is metallurgical combination, which is strongly combined and cannot fall off.

Under special technique, the surface of plate formed a directional grown eutectic structure, which make the wear resistance of hard-faced wear resistant steel plate reached 14.6 times more than A36/SS400 steel plate.( Abrasive wear test as per ASTM G65)

### \* HP200 (Resistance to medium impact abrasive wear)

HP200 hard-faced wear-resistant steel plate is suitable for the medium impact abrasive wear or rolling compaction wear condition under high pressure.

Hard-facing layer main chemical composition of metal (Wt%)

C	Cr	Mo	Mn	Other
2~5	20~26	+	1~3	2~5

Hard-facing layer hardness: >58HRC

Wear resistant temperature: <500°C

## III Dimension

Model	Specification	Total Thickness	Size	Minimum curling radius
	Base material + wearing layer(mm)	(mm)	(W+L) mm	(mm)
HP100/	5+3	8±0.5	1400×3000	R≥150
HP200/	6+4	10±0.5	1400×3000	R≥150
HP300/	6+6	12±0.5	1400×3000	R≥150
HP400	8+6	14±0.5	1400×3000	R≥250
	10+6	16±0.5	1400×3000	R≥300
	12+6	18±0.5	1400×3000	R≥300
	8+7	15±0.5	1400×3000	R≥250

	10+7	17±0.5	1400×3000	R≥300
	10+8	18±0.5	1400×3000	R≥300
	12+8	20±0.5	1400×3000	R≥350
	15+10	25±0.5	1400×3000	R≥350
	12+12	24±0.5	1400×3000	R≥350
	20+20	40±0.5	1400×3000	R≥350
	...	...	...	...
<p>Remark: 1. This minimum curling radius is subject to the wear-resisting layer turning inward , if wear-resisting layer turning outwards, the minimum curling radius shall be multiply by 2.</p> <p>2. We can also supply the special specification and size according to customer requirement.</p>				

#### IV. Performance Characteristics

- Excellent wear resistance: The wear layer thickness of the plate is 3-12mm, and wear layer hardness is 58-62 HRC. The plate abrasion resistance is 15 to 20 times more than the common steel plate, 5 to 10 times more than low alloy steel plate, 2 to 5 times more than high chromium cast iron. The wear resistance is much higher than that of spray welding and thermal spraying method.
- Good impact resistance: Wear resistant steel plate is a double-layer metal structure, and is metallurgical bonding between the wear resistant layer and basic plate and combined with high strength, which can absorb energy during impact process, and wear layer will not fall off. The product can be used under the strong vibration and impact condition. The casting wear-resistant materials and ceramic materials can not using like this. .
- Good connection performance: The base material of our steel overlay plate is Q235 steel plate that can ensure the plate has good toughness and plasticity, and can offer the strength of resistance to external forces, also can connected other structures by welding, plug welding, bolt connection and other variety of ways. The connector is firm, and not easily to fall off. The connection ways are more than other materials.
- More choices: We can select different thickness plate to be the basic plate, can weld different number of layers and thickness of alloy wear layer, can get many kinds of steel plate with different thickness and function. The plate maximum thickness can be up to 50mm.
- Excellent mechanical property: the chromium carbide overlay plate can be produced to different specifications and sizes according to the requirements and can welded and formed on site, which make the maintenance and replacement work more easy and saving more time.