

X'TRALIFE NM WEAR PLATE

XL-NM2K



A Rich chromium carbide alloy deposit up 35% chromium in 1st pass for excellent wearresistance. Improved version of XL-CC X'tralife Wear Plate.

1. SALIENT FEATURES

- a) Lowest Dilution
- b) Uniform hardness throughout deposit.
- c) Carbides present throughout the hardlayer.
- d) More alloy content over x'tralife wearplates



CUSTOMER ADVANTAGES

- Highest Wearresistance
- Uniform wearresistance for every mm of wear.
- do-----
- Greatly increased wear life.

2. AVAILABLE SIZES

1400 X 3000 mm, 1250 x 2750 mm

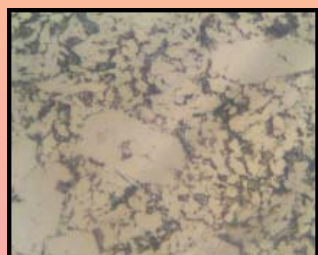
SURFACE PHOTO



3. THICKNESS

6+4,8+4,10+4,10+5,8+6 etc.

4. MICROSTRUCTURE



5. PHYSICAL PROPERTIES

- a) Hardness - 59-61 Rc
- b) Alloy Basis- Cr,C,Mn,Si
- c) % of Primary Carbides - 45-50%
- d) % of Secondary carbides - 8-10%

6. APPLICATIONS

- a) Fan Housing Liner
- b) Fan Blades
- c) Screens



ABRASION TEST RESULT

Material	Weight Loss (g)
M.S	4.000
Wear Plate	0.12

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X'TRALIFE NM WEAR PLATE

XL-NM2K1



A Rich complex chromium carbide alloy deposit with higher chromium in 1st pass for excellent wearresistance. Improved version of XL-61 X'tralife Wear Plate.

1. SALIENT FEATURES

- a) Lowest Dilution
- b) Uniform hardness throughout deposit.
- c) Carbides present throughout the hardlayer
- d) up to 55 -60% primary carbides & 20-30 % secondary carbides
- e) Contains Niobium carbides.



CUSTOMER ADVANTAGES

- Highest Wearresistance
- Uniform wearresistance for every mm of wear.
- do-----
- Greatly increased wear life.

2. AVAILABLE SIZES

1400 X 3000 mm, 1250 x 2750 mm

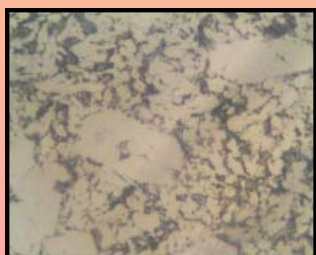
SURFACE PHOTO



3. THICKNESS

6+4,8+4,10+4,10+5,8+6 etc

4. MICROSTRUCTURE



5. PHYSICAL PROPERTIES

- a) Hardness - 62-64 Rc
- b) Alloy Basis- Cr,C,Mn,Si. Nb
- c) % of Primary Carbides - 55-65%
- d) % of Secondary Carbides - 25-30%
- e) % of Boride - 8-10%

ABRASION TEST RESULT

Material	Weight Loss (g)
M.S	4.000
Wear Plate	0.09

6. APPLICATIONS

- a) Fan Housing Liner
- b) Fan Blades
- c) Screens
- d) Discharge Chute



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X'TRALIFE NM WEAR PLATE

XL-NM2K2



A Rich chromium carbide alloy deposit with higher chromium in 1st pass for excellent wearresistance. Improved version of XL-62 X'tralife Wear Plate.

1. SALIENT FEATURES

- a) Lowest Dilution
- b) Uniform hardness throughout deposit.
- c) Carbides present throughout the hardlayer
- d) up to 55 -60% primary carbides & 20-30 % secondary carbides
- e) Contains niobium & Boron carbides.



CUSTOMER ADVANTAGES

- Highest Wearresistance
- Uniform wearresistance for every mm of wear.
- do-----
- Greatly increased wear life.

2. AVAILABLE SIZES

1400 X 3000 mm, 1250 x 2750 mm

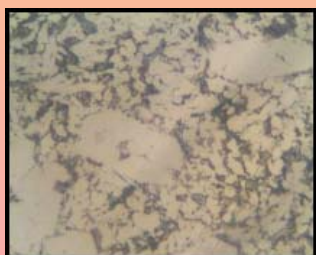
SURFACE PHOTO



3. THICKNESS

6+4,8+4,10+4,10+5,8+6

4. MICROSTRUCTURE



5. PHYSICAL PROPERTIES

- a) Hardness - 62-64 Rc
- b) Alloy Basis- Cr,C,Mn,Si. Nb, B
- c) % of Primary Carbides - 55-65%
- d) % of Secondary Carbides - 25-30%
- e) % of boroide - 8-10%

ABRASION TEST RESULT

Material	Weight Loss (g)
M.S	4.000
Wear Plate	0.09

6. APPLICATIONS

- a) Fan Housing Liner
- b) Fan Blades
- c) Screens
- d) Discharge Chute



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QUESTIONS AND ANSWERS ABOUT X'TRALIFE WEAR PLATE



6. Is X'TRALIFE wear plate better than a built-up made with good hardfacing?

Yes, A weld-applied conventional facing will have many fewer carbides in the finished coating due to dilution and other factors. Test and services results have shown that heavier carbide concentration extends life many times. The dilution levels in X'TRALIFE wear plate is hardly 5 - 10%.

7. What is the abrasion resistance of X'TRALIFE wear plate?

Wear ratios over other materials vary with application and product handled but 8 mm overlay X'TRALIFE wear plate on 12 mm backing would outlast 25 mm MS by 10 - 12 times as liners in crusher.

8. What is the hardness of X'TRALIFE wear plate?

Usually this question is asked to determine relative abrasion resistance between materials. Since this is a composite material, true hardness test is reliable measure of the analysis and indicates the quality of carbide . Hardness of X'TRALIFE wear plate is minimum of 55 Rc. Also it will vary depending on grade of wear plate

9. What are the tensile and compressive strengths of X'TRALIFE wear plate?

Tensile strength can not be measured accurately due to its composite nature. Service shows the tensile strength to be about the same as the base material. In compression the material will be much stronger with one thickness of X'TRALIFE wear plate hard layer being about the equivalent of three thickness of steel. Stiffness will be much increased where the X'TRALIFE wear plate is in compression.

10. What is the impact resistance of X'TRALIFE wear plate?

Two types of impact must be considered. The first would be called shock resistance. This involves the entire part and is a measure of its stiffness and toughness. Toughness will be about that of mild steel with much greater stiffness towards deformation when struck by a falling heavy body. The second type of impact involves small, hard particles moving at high velocities. When such a particle strikes a carbide crystal at a high angle it can cause shattering and result in eroding the hard layer in an accelerated manner.