



RUX HARDFACE[®]

Resources Unity takes pride in providing a complete suite of overlay wear plates. We offer an extensive range of overlay wear plates that are perfect for any application.

Our unique competitive advantages in material technology and capability in design offer wear performance in maximum demanding applications, and the technology and quality guarantee the durability of all our products.

The overlay wear plates are made of premium quality raw materials, including Chromium Carbide, Tungsten, Carbide, and Titanium Carbide. All these products can be customized according to customers' requirements.

Standard C30 Chromium Carbide Overlay



Description

- Standard C30 is a Chromium Carbide Overlay wear plate made by extra hard-clad plates.
- It comes with added additives to give higher abrasion resistance in high-stress applications with low-impact conditions.
- Its hardness can range from 58-62 HRC based on weld thickness.
- Operating temperature up to 1100° F.

Application

- Our Chromium Carbide Overlay wear plate can be used as Conveyors, Crushers, Feeders and Hoppers. It's one of the most cost-effective solutions.
- Can also be used in ROM bin, Apron Feeder chute and different hopper chute lining systems.
- Can be cut by plasma cutter.
- It can be joined by welding the substrate to the substrate using 309 weld wire/rod.

Design Features

- Our Chromium Carbide Overlay wear plate includes hairline cracks.
- These crosscheck cracks are properly design for purpose of release stress concentration, which is a big benefit for the materials.
- Offers premium wear resistance, and sizes can be customized according to requirements.

Properties

- It's a proven cost-friendly solution compared to other traditional abrasion-resistant steels
- Best suited for resistance to wear by abrasion, fretting, cavitation, and particle erosion in higher temperature uses.
- Best moderate to low impact abrasion resistance.
- Doesn't require much maintenance and is easy to install.

Premium C30+W

Chromium + Tungsten Carbide Overlay

Description

- Our Chromium + Tungsten Carbide Overlay is composed of Tungsten Carbide granules for increased hardness.
- It comes with chromium overlay material technology for higher wear zones of the ROM bin, Apron Feeder chute and various hopper chute lining systems.
- Uniquely designed to work perfectly in harsh environments.


Application

- Can be used in ROM bin, Apron Feeder chute and various hopper chute lining systems for higher wear zones.
- Best suited for newly commissioned equipment where wear conditions are undefined.
- Synchronized wear liner relining schedule for individual equipment
- Can be cut by Plasma cutter.

Design Features

- Leveraging unique design to withstand harsh environments.
- Comes with custom wear technology for higher wear zones.
- Available in different sizes and can be customized as per the client's requirements.

Properties

- It is a low-cost solution compared to other premium type of carbide material technology.
 - Easy to install and remove.
 - Requires less maintenance.
- 

TUFF C30 Overlay Plate



Description

- Our TUFF C30 overlay plate is ideal for withstanding the application of high-impact energy.
- TUFF 30 introduces Nanomaterial technology into the overlay weld product series.
- Our TUFF 30 has similar level of resistance to abrasion as standard C30 however no chip-off of overlay under high impact energy.

Application

- TUFF C30 is ideal for the application of the dump truck tray lining system, where normal overlay technology proves inefficient in taking high-impact energy.
- Helps to eliminate three pairs of standard replacement wear plates.
- Can reduce manpower hours during three replacement cycles.
- Helps to increase the service time of the truck.
- Increases production output and revenue.

Design Features

- It comes with fine grain sizes to improve impact toughness while reducing friction.
- TUFF 30 introduces Nanomaterial technology into the overlay weld product series.
- All our products are uniquely designed and specifically made for various purposes.
- Available in different sizes and can be customized as per the client's requirements.

Properties

- Our overlay plate comes with 10mm, 20mm thickness and 66 - 69 HRc.
- Easy to install and remove.
- Requires less maintenance.

W4 Tungsten Carbide Overlay



Description

- Our W4 tungsten carbide overlay plate is ideal for fine particle abrasion with low impact.
- When compared to others, it can outlast old traditional overlay plates by more than 10 times in some applications.
- The technology involved in this product allows thicker overlay compared to laser cladding technology.

Application

- Tungsten Carbide Overlay is used in heavy wear along with high-flow applications to increase run time.

Design Features

- Our Tungsten Carbide Overlay enables complex spool fabrication so that clients can maximize the lifespan of their assets.
- It can be fully customized to the client's requirements.

Properties

- It's a proven cost-friendly solution compared to other traditional abrasion-resistant steels
- Ideal for fine particle abrasion with low impact.

K2 Titanium Carbide Overlay



Description

- K2 is made up of premium quality titanium and carbide to make it extra durable to withstand the harshest environments.
- It is considered the most cost-friendly version of W4 with the lower requirement on surface finish.
- It comes with in-built technology, which is generally used for small or thin items to allow 2mm overlay coating.

Application

- Commonly Used in pumps, volute impellers and suction plates or bearing liners.
- Titanium carbide overlay also works as apron-feed liners, chute liners, and gyratory crusher liners in the mining industry.
- Tungsten Carbide Overlay is used in heavy wear along with high-flow applications to increase run time.

Design Features

- Made of premium quality titanium and carbide to make it extra durable to withstand the harshest environments.
- It is the best cost-friendly solution.
- Comes with in-built technology which is generally used for small or thin items to allow 2mm overlay coating.

Properties

- It offers pocket-friendly solutions compared to premium material technology.
- Easy to install and remove.
- Requires less maintenance.

W5 Cemented Tungsten Carbide Overlay

RU precisely designs the placement of W5 technology to gain even wear pattern of a product.



Description

- Our Cemented Tungsten Carbide Overlay has all the advantages of hard tungsten for abrasion resistance.
- The technology provides tailor-made solutions to overlay wear zones selectively by product wear pattern.
- Built solid to withstand tough environments.

Application

- Perfect for G.E.T lip wear lining system, or teeth component of earthmoving equipment.
- Our Cemented Tungsten Carbide Overlay is ideal for minimizing material waste to reduce the cost of the product.

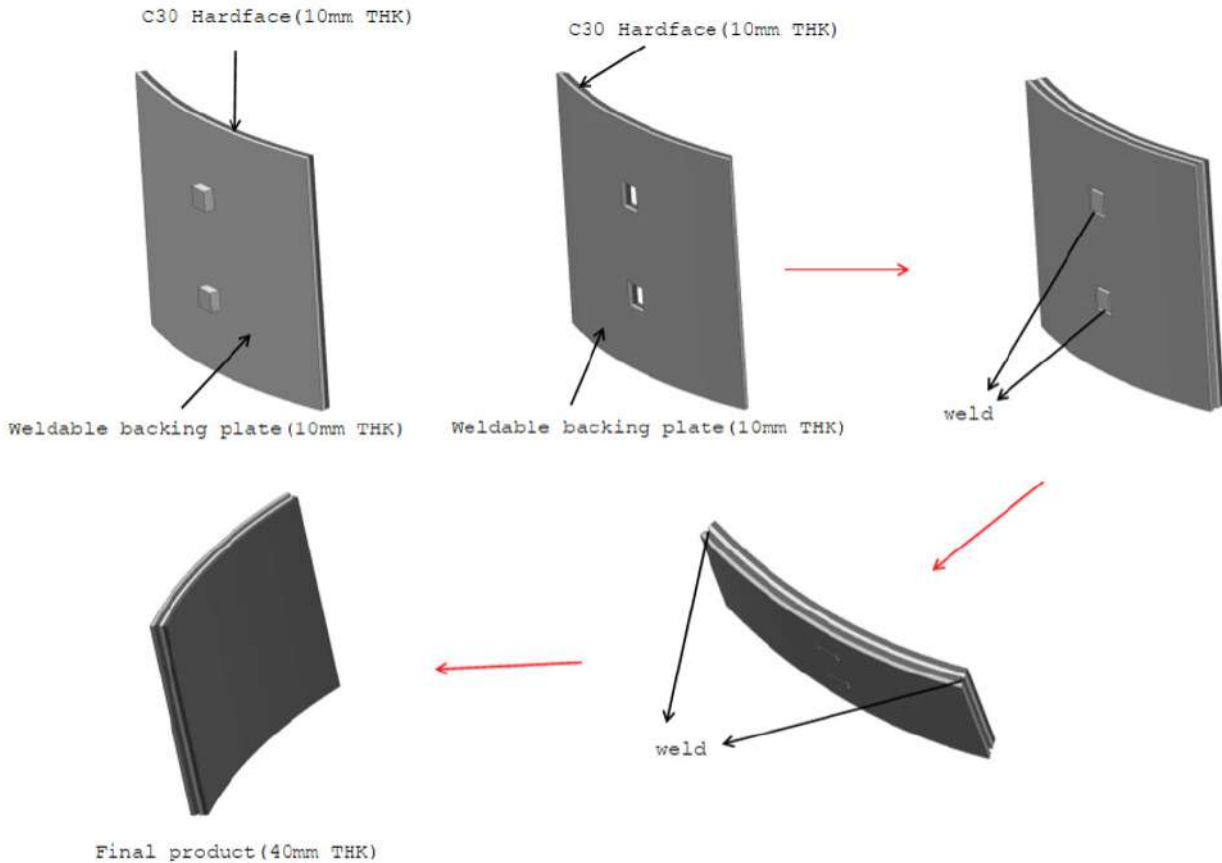
Design Features

- The hard tungsten offers a better advantage for abrasion resistance.
- Specifically designed to take impact by the special cemented tungsten particles in making technology.
- Available in different sizes and can be customized as per the customer's requirements.
- Super durable for numerous applications.

Properties

- It's a cost-effective product that can achieve long-last performance results.
- Offers guaranteed reliability by achieving more even wear profile.
- No chip-off hassle-free technology.
- Easy to install and remove and has fewer maintenance problems.

RU's Innovative Sandwich Overlay Technology



Description

- Understanding the contradiction of hardness versus toughness, and cost versus value, let us introduce our very own RU' s innovative sandwich overlay technology.
- Our sandwich overlay technology compensates for some weaknesses in the mechanical properties of one wear material for another.
- Here at RU, we know and have the experience of where to apply the sandwich overlay technology.

Application

- Our sandwich overlay technology is ideal for constructing thicker overlay however impact resistance is constraint.
- Can help to make structural designs by reducing complexity and production cost.

Mounting System



All wear plates can come with

Pre-welded Stud up from standard 190Nm up to 300Nm torque setting.
Offers studded mounting, which helps to save unnecessary steps in mounting the plate to the frame shell.
Various Bolt Mounting options.

Advantages

Can help to increase safety and environmental protection.
Remove complexity from design structures and reduce production costs.
Simplify installation procedures of wear plate.
Offers guaranteed reliability by achieving more even wear profile.

