



# DEEMEX

## WEAR PLATES

English Version

[www.deemex.gr](http://www.deemex.gr)



## The Company:

ELKAT SA has strived to improve existing technologies and develop new products against abrasion. DEEMEX WearPlates is a range of products that meets the requirements of total wear solutions, based in the creation of a high-density Chromium Carbide Matrix. A matrix which is well known worldwide to be responsible for extreme wear resistance and high hardness which simultaneously provides an effect that reduces the loss due to abrasion. For each case after calculating all the parameters separately and by adding extra carbides like Boron and Niobium more products have been developed in order to provide the best available and tailor-made solutions that fit best each occasion.

## Field of activity:

Engineering Solutions

- Client Orientated Designs
- Technical and Economical Analysis

WearPlates

Custom Constructions

Pipes / Chutes

Earth Moving Equipment

- Blades
- Armors

Mining Equipment

- Buckets
- Silos

## Available Patterns



**DEEMEX**



**Series**

### DMX 100

C. (%) : 3.2 – 4.7  
Cr. (%) : 22 – 27  
Other : Mn, Fe  
Hardness Rockwell : 50 – 56

Plate Thickness  
Plate :  $\geq 3\text{mm}$   
Coating :  $\geq 3\text{mm}$

### DMX 105

C. (%) : 4.5 – 5.5  
Cr. (%) : 27 – 32  
Other : Mn, B, Fe  
Hardness Rockwell : 56 – 60

Plate Thickness  
Plate :  $\geq 3\text{mm}$   
Coating :  $\geq 3\text{mm}$

### DMX 110

C. (%) : 4.5 – 5.9  
Cr. (%) : 32 – 37  
Other : Mn, B, Mo, Fe  
Hardness Rockwell : 60 – 64

Plate Thickness  
Plate :  $\geq 3\text{mm}$   
Coating :  $\geq 3\text{mm}$

### DMX 413

C. (%) : 3.3 – 4.7  
Cr. (%) : 22 – 32  
Nb. (%) : 2.7 – 3.3  
Other : Mn, Mo, Fe  
Hardness Rockwell : 58 – 62

Plate Thickness  
Plate :  $\geq 3\text{mm}$   
Coating :  $\geq 3\text{mm}$

### DMX 415

C. (%) : 3.5 – 4.9  
Cr. (%) : 22 – 32  
Nb. (%) : 4.7 – 5.3  
Other : Mn, Mo, Fe  
Hardness Rockwell : 60 – 64

Plate Thickness  
Plate :  $\geq 3\text{mm}$   
Coating :  $\geq 3\text{mm}$

### DMX 510

C. (%) : 4.2 – 5.9  
Cr. (%) : 18 – 28  
Nb. (%) : 6.7 – 7.3  
Other : Mn, B, Mo, Fe  
Hardness Rockwell : 62 – 67

Plate Thickness  
Plate :  $\geq 5\text{mm}$   
Coating :  $\geq 3\text{mm}$

## **Advantages:**

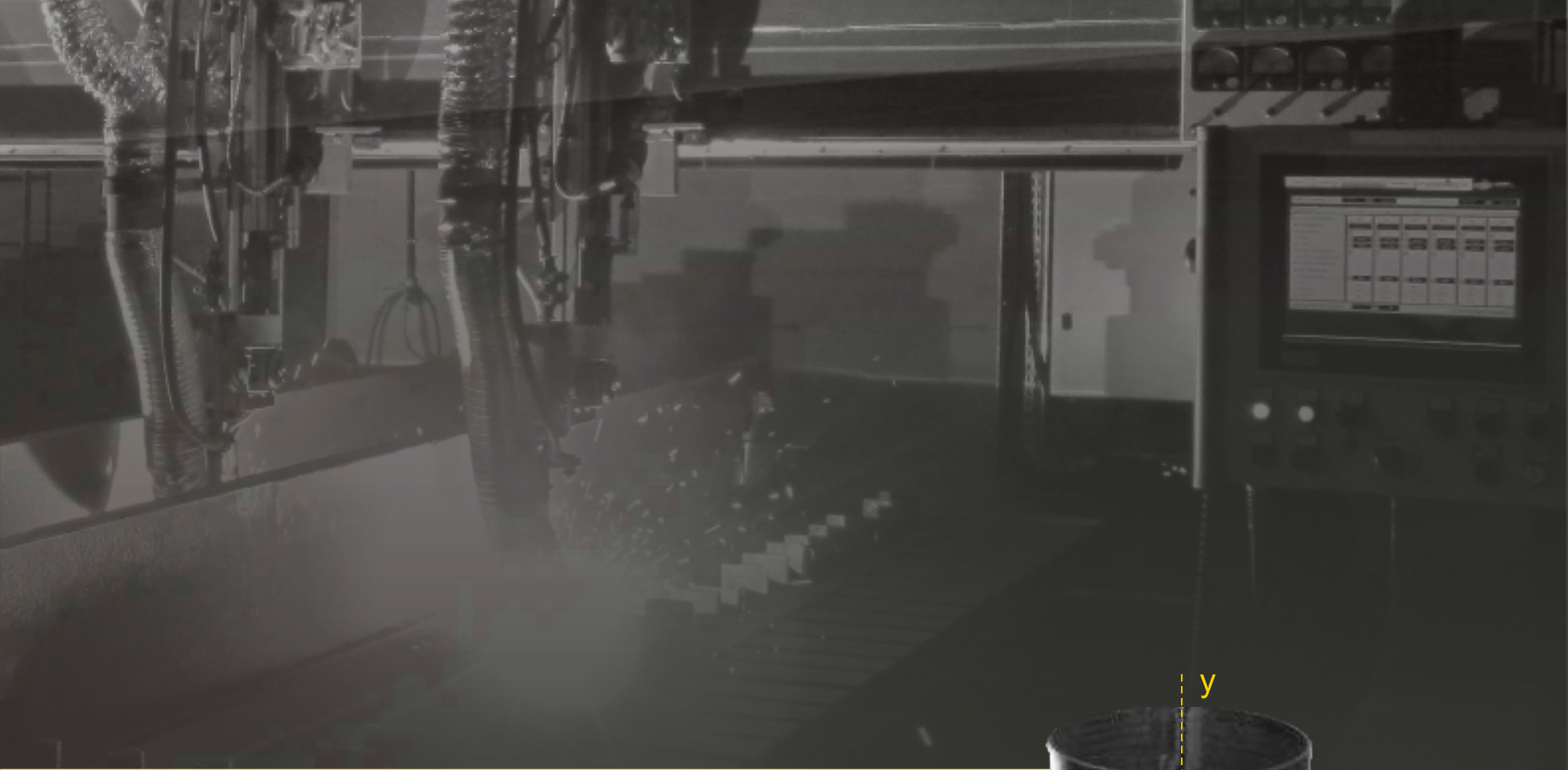
- Combat Abrasion
- Minimize Corrosion
- Resistance to Metal Friction
- Resistance to Temperature
- Minimizing Maintenance and Repairs
- Decreasing Maintenance needs
- Decreasing Production Downtime



  
DMX 415

## **Projects:**

- Blades
- Buckets
- Cement Industries
- Glass factories
- Mining Industries
- Power Plants
- Recycling Industries
- Steel refractories



  
DMX 105



  
DMX 110

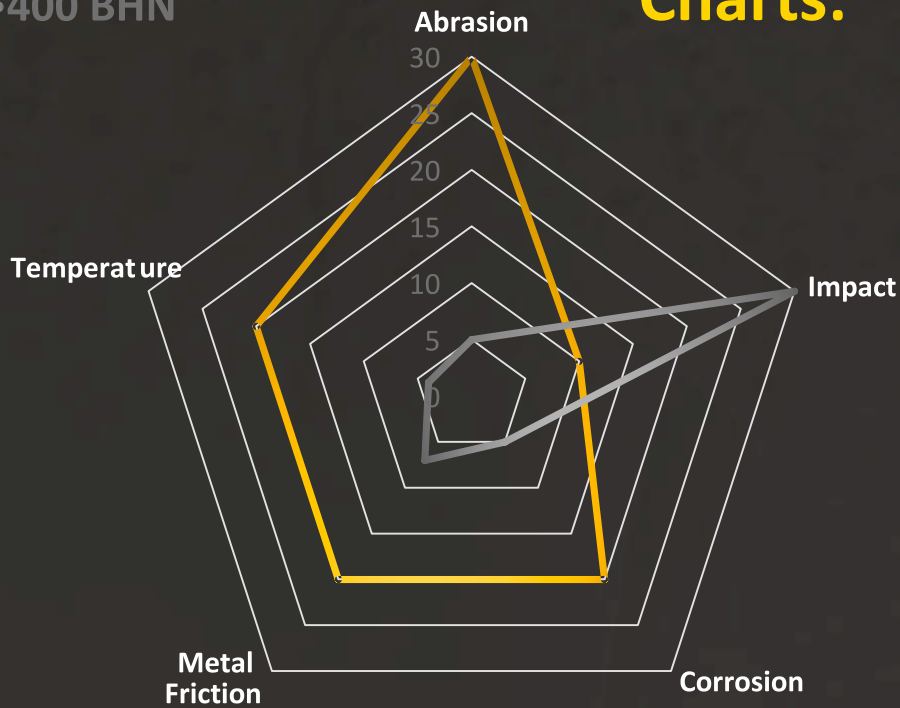


  
DMX 413

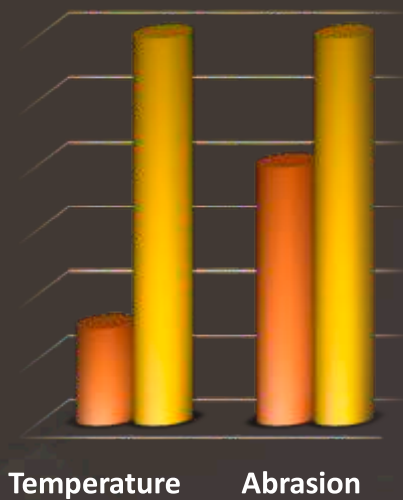
DMX 110

400 BHN

## Charts:

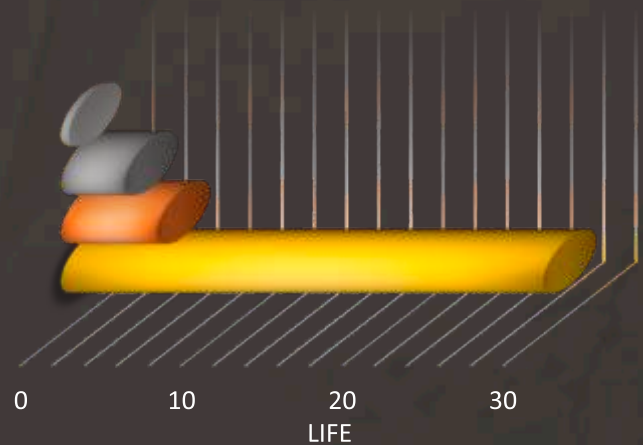


### DMX 4xx Series vs other HardFacing products



HardFacing Products DMX 4xx Series

### DMX 110 LIFE COMPARISON



Mild Steel 360 BHN 400 BHN DMX 110

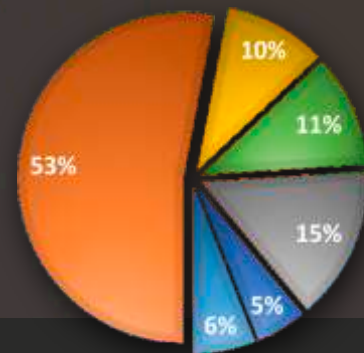


DMX 100



## COMMON EQUIPMENT FAILURE

- Abrasion
- Impact
- Corrosion
- Metal Friction
- Temperature
- Other



## Achievements:

- 3+3mm Wear Plates  
(5% of the worldwide hardfacing productions are able to provide such solutions)
- Layers extra durable to temperature and abrasion simultaneously (DMX 4xx Series & DMX510)
- Multi pattern layer technology (Straight- Wave Pattern)
- Pipes internal hardfacing technology for better stream flow



## Certificates:



ISO 14001:2015



OHSAS 18001:2007



ISO 9001:2015



EN ISO 3834 -2



EN 1090 -2 EXC2:2011



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