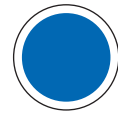


Double-C[®]

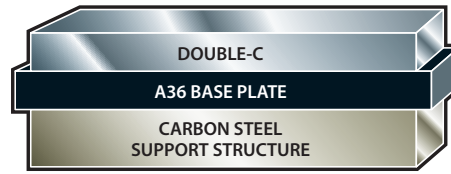
CHROMIUM CARBIDE OVERLAY



Color Code:
BLUE



Double-C Chromium Carbide Overlay is the perfect solution to premature equipment and part wear in extremely abrasive conditions with low to moderate impact. Double-C was engineered utilizing an innovative new cladding process to create the most wear-resistant surface available.



Double-C's low carbon steel base allows for weldments, bolts, and stud attachments. The alloy overlays provide a surface with superior wear resistance. Double-C reduces your maintenance costs and virtually eliminates unnecessary downtime.

Double-C has proven durability and value through punishing use in the mining industry, coke, cement, and asphalt plants, power utilities, and pulp & paper mills.

Typical Analysis

- Carbon 4.8
- Silicon .50
- Chromium 26.8
- Manganese 2.06

Available Sizes

Standard Thickness	Cladding Overlay	A-36 Base Plate
3/8"	1/8"	1/4"
1/2"	1/4"	1/4"
5/8"	1/4"	3/8"
3/4"	3/8"	3/8"
7/8"	3/8"	1/2"
1"	1/2"	1/2"

All standard plate sizes, custom sizes, and strip sizes upon request.

General Characteristics

Double-C is a fusion-clad chromium carbide composite overlay that has been permanently bonded to a carbon steel base. Double-C carries a hardness rating of Rockwell C 60–62. Characterized by a high chromium and high carbon content, this material is more resistant to wear, corrosion, and heat.

- **Base plate** ASTM A36 is used to enhance Double-C weldability and ductility.
- **Appearance** Double-C overlay is applied in 1" to 1-1/4" beads on the base metal, giving the product a ribbed appearance. The cladding process produces natural stress relief cracks, providing maximum wear life in heavily abrasive applications by relieving stresses in the plate. The stress relief cracks are limited to the overlay and do not extend to the base plate. Double overlay is recommended for severe wear applications.
- **Heat resistance** Double-C is effective up to 1250°F with an abrasion ratio of 20:1 over heat resistant steels. Repeated heating and cooling does not affect its wear-resistant properties.
- **Impact resistance** The mild steel base metal absorbs shock, providing moderate resistance to impact-type wear. The impact resistance of Double-C improves with the thickness of the base metal.

Fabrication Instructions

Using proper fabrication methods, the mild steel base and arc-welded overlay bends readily. Double-C can be specially rolled and formed to your specifications at our plant.

- **Cutting** Use plasma burning equipment, air arc, or abrasive saws when cutting, piercing, or beveling Double-C. Best results are obtained when cutting from the low carbon steel side.
- **Welding** When welding Double-C into position, it is recommended that the weld extend thicker than the mild steel base plate. The life of the weld joint can be enhanced by running a bead of hard surface along the welded area. These precautions will prevent wearing of the mild steel base plate as well as overlay chipping.

