

Hardalloy[®] 40 TiC



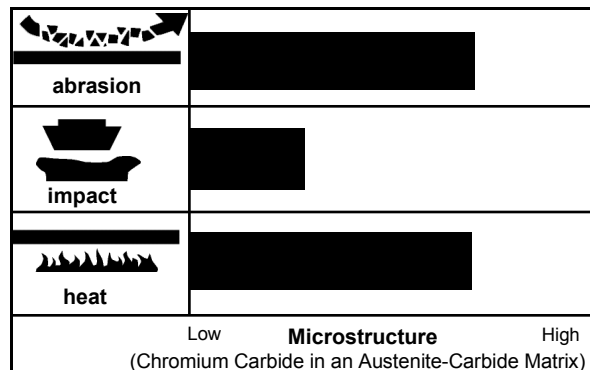
DESCRIPTION:

Hardalloy 40 TiC deposit is a high alloy cast iron containing chromium and titanium as the important alloying ingredients added for increased wear life. It is suited for overlaying surfaces subjected to heavy abrasion and moderate impact. Hardalloy 40 TiC is an excellent overlay material on both carbon steels and austenitic manganese base metals.

OPERATIONAL CHARACTERISTICS:

Hardalloy 40 TiC is designed for DCEP or AC operation in all positions. Operation of the electrode is characterized by a spray-like transfer and low spatter. Shallow penetration minimizes the dilution effect that is frequently undesirable in one-and-two layer deposits.

RELATIVE WEAR RESISTANCE:



TYPICAL WELD METAL PROPERTIES* (CHEM PAD):

Weld Metal Analysis

| | |
|----------------|------|
| Carbon (C) | 3.00 |
| Manganese (Mn) | 1.10 |
| Silicon (Si) | 0.80 |
| Chromium (Cr) | 8.20 |
| Titanium (Ti) | 1.50 |
| Iron (Fe) | Bal. |

TYPICAL MECHANICAL PROPERTIES* (AS WELDED):

| | Number of Layers | As-Deposited on | |
|----------|------------------|-----------------|-----------------|
| | | 1020 Steel | 12-14% Mn Steel |
| Hardness | 1 | 39 Rc | 39 Rc |
| | 2 | 45 Rc | 45 Rc |
| | 3 | 50 Rc | 50 Rc |

Maintains hot hardness up to 1200°F

Not machinable or forgeable

Non-magnetic

Cannot be flame cut

Relief checks

Thickness - 2 layers min./3 layers max.

*The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and Hobart Brothers Company expressly disclaims any liability incurred from any reliance thereon. No data is to be construed as a recommendation for any welding condition or technique not controlled by Hobart Brothers Company.

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RECOMMENDED OPERATING PARAMETERS:

| Diameter | | Type of Power | Optimum Amps |
|----------|-----|---------------|--------------|
| Inches | mm | | |
| 1/8 | 3.2 | DCEP* or AC | 120 |
| 5/32 | 4.0 | DCEP* or AC | 160 |
| 3/16 | 4.8 | DCEP* or AC | 200 |

*Preferred

AVAILABLE DIAMETERS AND PACKAGES:

| Diameter | | Length | | 10-lb. Can |
|----------|-----|--------|-----|-------------|
| Inches | mm | Inches | mm | |
| 1/8 | 3.2 | 14 | 355 | S541144-033 |
| 5/32 | 4.0 | 14 | 355 | S541151-033 |
| 3/16 | 4.8 | 14 | 355 | S541158-033 |

APPLICATIONS:

- Ammonia Knives
- Augers
- Bucket Teeth and Lips
- Bulldozer End Bits and Blades
- Cement Chutes
- Coke Pusher Shoes
- Conveyor Screws
- Crusher Rolls
- Cultivator Chisels and Sweeps
- Dredge Pump Inlet Nozzle
- Hammer Mill Hammers
- Impactor Crusher Bars
- Mil Hammers
- Muller Tires
- Plow Shares
- Scraper Blades
- Sheepsfoot Tampers
- Subsoiler Teeth

TECHNICAL QUESTIONS? For technical support of Hobart Filler Metals products, contact the Applications Engineering department by phone toll-free at 1-800-532-2618 or by e-mail at Applications.Engineering@hobartbrothers.com

CAUTION:

Consumers should be thoroughly familiar with the safety precautions on the warning label posted in each shipment and in the American National Standard Z49.1, "Safety in Welding and Cutting," published by the American Welding Society, 8669 NW 36 St, # 130, Doral, FL 33166-6672 (can also be downloaded online at www.aws.org); OSHA Safety and Health Standards 29 CFR 1910 is available from the U.S. Department of Labor, Washington, D.C. 20210

Material Safety Data Sheets on any Hobart Brothers Company product may be obtained from Hobart Customer Service or at www.hobartbrothers.com.

Because Hobart Brothers Company is constantly improving products, Hobart reserves the right to change design and/or specifications without notice.

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