**Item #** _____

**Job** _____

## SmartTray™ System

Designed to maximize productivity by accelerating throughput, minimizing PCB handling damage and providing superior ESD protection. The 18" x 26" footprint handles multiple-sized boards.

The ESD-safe SmartTray facilitates efficient tracking of work-in-process and finished goods with the use of bar code technology.

Molded from Metrostat,™ a material offering premium ESD protection, the SmartTray fits all Metro tray cart systems as well as all competitive bottom-loaded models, and most tray based cart systems in today's marketplace.

Put the SmartTray advantage to work for you!





*SmartTray™ engages with wire cart design to provide optimum ergonomic access.*

## Features:

• Bar code labeling

• Color coding

• Detent system

• Metrostat™ material

• Universal design

• Cart color coding

## Benefits:

• Trays & tray contents can be tracked throughout manufacturing/assembly process.

• Trays & tray contents can be scanned while in cart, as opposed to scanning each item individually.

• Trays & tray contents can be sorted & categorized according to product type, application, or dedicated to a specific production line.

• Trays can be suspended in cart for optimum ergonomic access.

• Offers permanent ESD protection for sensitive electronics parts.

• SmartTrays can be used with all bottom-load tray cart designs, Metro and non-Metro models, as well as conveyor systems.

• Carts can be sorted & categorized according to product type, application, or specific production line.

**InterMetro Industries Corporation**
North Washington Street
Wilkes-Barre, PA 18705
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**EMERSON**™

# SmartTray Cart System

Model No. **CBNTC2OM** — shown with accessories



Ergonomic Handles (2)

SmartTray™
Stacking Area

Cart Color Coding

ESD Label Holder
(Label not Included)

ESD Paperwork Basket

SmartTray™
Bar Code Label
(Supplied Blank)

SmartTray™
(shown with inlay)

Stop Bars (2)
(front & back)

ESD Grounding Cable

Vibration Suppression Casters
(2 Brake/2 Swivel)

# Specifications

- **Shelves, posts, slides, handles & stop bars:** ESD safe chrome-plated finish with Metrolac protective coating.
- **Casters:** 5" stem/swivel vibration suppression casters (5MFA series). Two brake, two swivel casters.

## SmartTray Cart Solutions (cart with trays & tray inlays)
*Choose between Metro's premium two-layer tray inlay or the economy inlay (see ESD Tray Inlay section below for more information).*

| Model No. | Description | Tray Inlay Type* | Tray Capacity | Slide Spacing (in.) | (mm) | Width/Length (in.) | (mm) | Height (in.) | (mm) | Approx. Pkd. Wt. (lbs.) | (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CBNTC20MSOL1 | Front-load cart with SmartTrays (20) & tray inlays (20) | Premium | 20 | 1³/₄ | 44 | 28x22 | 711x559 | 49 | 1245 | 160 | 72.5 |
| CBNTC30MSOL1 | Front-load cart with SmartTrays (30) & tray inlays (30) | Premium | 30 | 1³/₄ | 44 | 28x22 | 711x559 | 63 | 1600 | 217 | 98 |
| CBNTCS20MSOL1 | Side-load cart with SmartTrays (20) & tray inlays (20) | Premium | 20 | 1³/₄ | 44 | 22x30 | 559x762 | 49 | 1245 | 160 | 72.5 |
| CBNTC20MSOL2 | Front-load cart with SmartTrays (20) & tray inlays (20) | Economy | 20 | 1³/₄ | 44 | 28x22 | 711x559 | 49 | 1245 | 160 | 72.5 |
| CBNTC30MSOL2 | Front-load cart with SmartTrays (30) & tray inlays (30) | Economy | 30 | 1³/₄ | 44 | 28x22 | 711x559 | 63 | 1600 | 217 | 98 |
| CBNTCS20MSOL2 | Side-load cart with SmartTrays (20) & tray inlays (20) | Economy | 20 | 1³/₄ | 44 | 22x30 | 559x762 | 49 | 1245 | 160 | 72.5 |

**Note:** Refer to Tray Inlay & SmartTray section below for technical & electrical property information

## Olympic SmartTray™

| Model No. | Description | Color | Maximum Load Rating (lbs.) | (kg) | Outside Dimensions Width/Length (in.) | (mm) | Inside Dimensions Width/Length (in.) | (mm) | Height (in.) | (mm) | Approx. Pkd Wt (lbs.) | (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CBNTC-MTRAY | ESD molded fiberglass tray | Black | 150 | 68 | 25³/₄ x 17³/₄ | 654x451 | 23¹⁵/₁₆ x 15¹⁵/₁₆ | 608x405 | 1¹/₈ | 28.6 | 3 | 1.36 |

**NOTE 1:** Tray load rating shown above is based on evenly distributed load in conveyor applications.
**NOTE 2:** SmartTray safe temperature operating range is -20°F to 160°F.
**NOTE 3:** SmartTrays stack efficiently by themselves, as well as with competitive tray designs of the same dimension.
**NOTE 4:** SmartTrays are compatible with all bottom-loaded tray based cart systems, both Metro and non-Metro.

### CBNTC-MTRAY Electrical Properties:

| Property | Test Method | Value |
|---|---|---|
| RTT Resistance | ESD S4.1-1997 | $1.8 \times 10^5 - 1.4 \times 10^7$ Ohms |
| RTG Resistance | ESD S4.1-1997 | $1.4 \times 10^6 - 2.8 \times 10^6$ Ohms |
| Surface Resistivity | ANSI/EOS/ESD-S11.11-1993 | $1.0 \times 10^6 - 9.9 \times 10^9$ Ohms/Sq. |

## ESD Tray Inlays

| Model No. | Description | Color | Width/Length (in.) | (mm) | Thickness (in.) | (mm) | Approx. Pkd Wt. (lbs.) | (kg) |
|---|---|---|---|---|---|---|---|---|
| CBTC-INLAY01* | **Premium** rubber inlay, two-layer | Blue (topside)/Black (bottomside) | 24.125x16.1 | 612x410 | 0.06 | 1.5 | 1.5 | 0.68 |
| CBNTC-INLAY02** | **Economy** vinyl inlay, single-layer | Blue | 24x16.125 | 610x410 | 0.125 | 3 | 1.5 | 0.68 |

*CBTC-INLAY01 offers maximum ESD protection, as well as superior resistance to heat, abrasion, and chemicals. The soft dissipative top layer makes it ideal for use in soldering and assembly areas. Easy to clean and maintain.
**CBNTC-INLAY02 provides soft-surface inlay for cushioned PCB transport. Inlay provides static dissipative ESD protection. Not recommended for use in soldering and assembly applications.

### CBTC-INLAY01 Electrical Properties:

| Property | Test Method | Value |
|---|---|---|
| RTT Resistance | ESD S4.1-1997 | $4.6 \times 10^6 - 9.0 \times 10^6$ Ohms |
| RTG Resistance | ESD S4.1-1997 | $2.3 \times 10^6 - 4.7 \times 10^6$ Ohms |

### CBNTC-INLAY02 Electrical Properties:

| Property | Test Method | Value |
|---|---|---|
| RTT Resistance | ESD S4.1-1997 | $1.2 \times 10^7 - 9.0 \times 10^7$ Ohms |
| RTG Resistance | ESD S4.1-1997 | $1.4 \times 10^7 - 2.0 \times 10^7$ Ohms |

## SmartTray Carts

| Model No. | Description | Tray Capacity No. | Slide Spacing (in.) | (mm) | Width/Length (in.) | (mm) | Height (in.) | (mm) | Approx. Pkd. Wt. (lbs.) | (kg) |
|---|---|---|---|---|---|---|---|---|---|---|
| CBNTC20M | Front-Load Cart (short) | 20 | 1³/₄ | 44 | 28x22 | 711x559 | 49 | 1245 | 80 | 36 |
| CBNTC30M | Front-Load Cart (tall) | 30 | 1³/₄ | 44 | 28x22 | 711x559 | 63 | 1600 | 97 | 44 |
| CBNTCS20M | Side-Load Cart | 20 | 1³/₄ | 44 | 22x30 | 559x762 | 49 | 1245 | 80 | 36 |

**NOTE:** CBNTC20M & CBNTCS20M are each load rated at 25 lbs. per level/500lbs. per cart. CBNTC30M is load rated at 20 lbs. per level/600 lbs. per cart.
**NOTE:** Each cart comes complete with 4 vibration suppression casters (2 brake/2swivel), a grounding cable, 2 push handles (except CBNTC30M), & 2 stop bars.

# SmartTray™ System
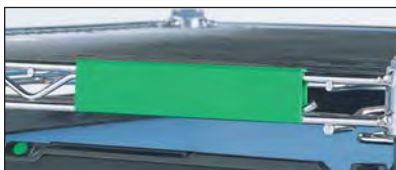
# SmartTray™ Accessories

## ESD Cart Covers
Conductive on the outside and static dissipative on the inside. Cover material is durable and comes standard with brass zippered front flap and side paperwork pouch.

Model No. CBNTC-CC20
fits SmartTray Cart  # CBNTC20M

Model No. CBNTC-CC30
fits SmartTray Cart  # CBNTC30M

Model No. CBNTC-CCS20
fits SmartTray Cart # CBNTCS20M

## Color Shelf Markers
Designed to color code cart.

Tan
Model No. CSM6-T

Red
Model No. CSM6-R

White
Model No. CSM6-W

Yellow
Model No. CSM6-Y

Blue
Model No. CSM6-B

Green
Model No. CSM6-G

Color Markers measure 6"L x 1.25"H. Order in units of one.

## ESD Label Holder
Identify cart assignment or function with Metro's ESD-safe label holder (label not included).

Model No. 9990PESD
(3"L x 1.25"H)

Model No. 9990P6ESD
(37"L x 1.25"H)

## ESD Paperwork Basket
Store work order information, inspection record and other accompanying documentation in this convenient, durable and ESD-safe basket. Easy-on, easy-off design. Not recommended for use with ESD Cart Covers. Measures 13.375"L x 5"W x 7"H.

Model No. H209C

*All Metro Catalog Sheets are available on our website:* **www.metro.com**

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