

# Metal & Cable Corp., Inc.

(P) 330-963-7909, [david@metal-cable.com](mailto:david@metal-cable.com)

May 1, 2022

Thank you for your interest in our non-penetrating Magnemount (Patents #7,624,957, 9188276, and 9472937) antenna/equipment and cable mounting system for steel tanks. The Magnemount uses permanent magnets made from a special blend of ceramic materials to achieve its holding power. These magnets, coupled with a unique independently suspended mounting system, allows the Magnemounts to be used on single and double convex curved, as well as flat steel surfaces. **All magnets are fully covered with pads to protect the tank's paint.**

All of the designs described below can be modified to accommodate your specialized needs.

**Note: The capacities detailed in this letter are based on mounting the equipment on surfaces with a diameter of 50 feet or greater. Surfaces with less than 50 feet diameter should have testing conducted for tensile and shear data to be used in structural calculations.**

Data for Structural Calculations on ASTM A36 plate of .250" minimum thickness and .013" maximum thick paint coating. **Please note: No safety factor is included.**

- 1) Pull capacity for each 24" x 24" plate is 1100#
- 2) Shear capacity for each 24" x 24" plate is 500#
- 3) Pull capacity for the CT1000-24-U-2 cable mount is 80#
- 4) Shear capacity for the CT1000-24-U-2 cable mount is 40#
- 5) Pull capacity for the CT1000-24-U-4 cable mount is 160#
- 6) Shear capacity for the CT1000-24-U-4 cable mount is 80#
- 7) Pull capacity for the MMSA-38 cable holder is 30#
- 8) Shear capacity for the MMSA-38 cable holder is 20#

## Model MB (Item number MB36-2)

- 600 #ft overturning moment
- Mast fixed/adjustable — **fixed**
- Footprint — 24" x 24"
- Mast size — 2"OD x .375"W x 36"L
- Clear mast space above support arms or guy wires — 26"
- Unguyed mast
- Price - \$2890.00
- Shipping container — No-charge corrugated carton, or a \$300.00 wood crate which can fit up to 6 mounts.

## Model MA (Item number MA30-2)

- 600 #ft overturning moment
- Mast fixed/adjustable — **adjustable**
- Footprint — 24" x 24"
- Mast size — 2"OD x .375"W x 30"L
- Clear mast space above support arms or guy wires — 28"
- Unguyed mast
- Price - \$3560.00
- Shipping container — No-charge corrugated carton, or a \$300.00 wood crate which can fit up to 6 mounts

#### The 2-plate Model Side Tank Mount (Item number STM2)

- 1200 #ft overturning moment
- Mast fixed/adjustable — fixed
- 2 plates @ 24" x 24" separated by the distance required for the antenna.
- Mast sizes accepted — 3"OD x .250"wall x 144"long, or 4.5"OD x .250"wall x 144"long. (Note the 4.5"OD tube is the same outside diameter as a 4IPS pipe)
- All masts are clear anodized 6061-T6511 extruded aluminum with 35000PSI minimum yield strength.
- Mount comes with 4 U-bolts @ 1/2" diameter of 300 grade stainless and 4 stainless steel nuts
- Dimension from the tower to the top of the mounting plate is 15.5 inches.
- Price — \$5860.00
- Shipping container - \$350.00 The container can hold up to 4 STM2 Magnemounts. Example: An order of 8 STM2 would require 2 containers, plus an additional container for the masts.

#### The 3-plate Model Side Tank Mount (Item number STM3)

- 1800 #ft overturning moment
- Mast fixed/adjustable — fixed
- 3 plates @ 24" x 24" with the top and bottom plates separated by the distance required for the antenna and the third plate in the middle.
- Mast sizes accepted — 3"OD x .250"wall x 144"long, or 4.5"OD x .250"wall x 144"long. (Note the 4.5"OD tube is the same outside diameter as a 4IPS pipe)
- All masts are clear anodized 6061-T6511 extruded aluminum with 35000PSI minimum yield strength.
- Mount comes with 6 U-bolts @ 1/2" diameter of 300 grade stainless and 4 stainless steel nuts
- Dimension from the tower to the top of the mounting plate is 15.5 inches.
- Price — \$8310.00
- Shipping container - \$350.00 The container can hold up to 3 STM3 Magnemounts. Example: An order of 9 STM3 would require 3 containers, plus an additional container for the masts.

#### The 4-plate Model Side Tank Mount (Item number STM4)

- 2400 #ft overturning moment
- Mast fixed/adjustable — fixed
- 4 plates @ 24" x 24" with the top and bottom plates separated by the maximum possible
- Mast sizes accepted — 3"OD x .250"wall x 144"long, or 4.5"OD x .250"wall x 144"long. (Note the 4.5"OD tube is the same outside diameter as a 4IPS pipe)
- All masts are clear anodized 6061-T6511 extruded aluminum with 35000PSI minimum yield strength.
- Mount comes with 8 U-bolts @ 1/2" diameter of 300 grade stainless and 4 stainless steel nuts
- Dimension from the tower to the top of the mounting plate is 15.5 inches.
- Price — \$10765.00
- Shipping container - \$350.00 The container can hold up to 9 STM Magnemount plates. A separate crate is needed for the masts.

#### The 5-plate Model Side Tank Mount (Item number STM5)

- 3000 #ft overturning moment
- Mast fixed/adjustable — fixed
- 5 plates @ 24" x 24" with the top and bottom plates separated by the maximum possible
- Mast sizes accepted — 3"OD x .250"wall x 144"long, or 4.5"OD x .250"wall x 144"long. (Note the 4.5"OD tube is the same outside diameter as a 4IPS pipe)
- All masts are clear anodized 6061-T6511 extruded aluminum with 35000PSI minimum yield strength.
- Mount comes with 10 U-bolts @ 1/2" diameter of 300 grade stainless and 4 stainless steel nuts
- Dimension from the tower to the top of the mounting plate is 15.5 inches.
- Price — \$13215.00
- Shipping container - \$350.00 The container can hold up to 9 STM Magnemount plates. A separate crate is needed for the masts.

Model MASS (Item number MASS48-2)

- 1650 #ft overturning moment
- Mast fixed/adjustable — adjustable
- Footprint — 72" x 72"
- Mast size — 2"OD x .375"W x 60"L
- Clear mast space above support arms or guy wires — 23"
- Guyed mast
- Price - \$11400.00
- Shipping container — \$350.00 This container can hold up to 3 Magnemount MASS models.

Model MASS Cell (Item number MASSCELL108-2)

- 1650 #ft overturning moment
- Mast fixed/adjustable — adjustable
- Footprint — 72" x 72"
- Mast size — 2"OD x .375"W x 120"L
- Clear mast space above support arms or guy wires — 70"
- Guyed mast
- Price - \$11400.00
- Shipping container — \$350.00 This container can hold up to 3 Magnemount MASS models.

Model MASS XL (Item number MASSXL131-2)

- Capacity: 1650 #ft overturning moment
- Mast fixed/adjustable — adjustable
- Footprint — 72" x 72"
- Mast size — 2"OD x .375"W x 144"L
- Clear mast space above support arms or guy wires — 36" standard, but can be modified to up to 90"
- Guyed mast
- Price - \$11400.00
- Shipping container — \$350.00 This container can hold up to 3 Magnemount MASS models.

Model Stability Mount (Item Number STABILMT)

- Capacity: 1100# vertical, 500# shear
  - Application: Commonly, reinforcing railings and stabilizing towers mounted on catwalks
  - Stability Mounts can be linked for higher capacity
  - Attachment: 304 grade stainless steel forged eyebolt in the center of the plate
  - Footprint — 24" x 24"
  - Price - \$1500.00
  - Shipping container: no charge corrugated carton on a pallet, unless over 6 ordered. Then, a \$300.00 shipping crate is required
-

## Cable and cable tray holding systems

### Model Cable Holder (Item number CT1000-24-U-2)

**This model should only be used for holding cable and conduit WITHOUT A TRAY OR COVER.**

- Uses heavy duty 12 Gage 304 SS Unistrut framing channel for long maintenance free life.
- Uses Unistrut clamps for holding cables or cable tray. The Magnemount magnets come standard with 300 grade stainless steel hardware.
- Spacing on tank: Minimum recommended spacing is every 2 feet for vertical applications and every 3 feet for horizontal applications (across the tank top). Spacing recommended by Structural Engineers reflecting local conditions prevail.
- Capacity — 80# perpendicular to the surface / 40# shear to the surface.
- Price - \$130.00

### Model Cable/Cable Tray Holder (Item number CT1000-24-U-4)

**This model can be used for holding cable and conduit with or without a tray or cover.**

- Uses heavy duty 12 Gage 304 SS Unistrut framing channel for long maintenance free life.
- Uses Unistrut clamps for holding cables or cable tray. The Magnemount magnets come with 300 grade stainless steel hardware.
- Spacing on tank: Minimum recommended spacing is every 2 feet for vertical applications and every 3 feet for horizontal applications (across the tank top). Spacing recommended by Structural Engineers reflecting local conditions prevail.
- Capacity — 160# perpendicular to the surface / 80# shear to the surface.
- Price - \$195.00

### **Our new, highest capacity cable tray model.** Model Cable/Cable Tray Holder (Item number CT1000-24-U-5)

**This model can be used for holding cable and conduit with or without a tray or cover.**

- Uses custom made heavy duty 12 Gage 304 SS Unistrut framing channel for long maintenance free life.
- Uses Unistrut clamps for holding cables or cable tray (across the tank top). The Magnemount magnets come with 300 grade stainless steel hardware.
- Spacing on tank: Minimum recommended spacing is every 2 feet for vertical applications and every 3 feet for horizontal applications. Spacing recommended by Structural Engineers reflecting local conditions prevail.
- Capacity — 200# perpendicular to the surface / 100# shear to the surface.
- Price - \$225.00

### Model SA-38 Cable Holder (Item number MMSA-38)

**This model can only be used for holding a single cable.**

- We attach a Commscope model SA-38 adapter to our high strength magnets and our patented flexible mounting system
- Capacity — 30# perpendicular to the surface / 20# shear to the surface.
- Spacing on tank: Minimum recommended spacing is every 2 feet for vertical applications and every 3 feet for horizontal applications (across the tank top). Spacing recommended by Structural Engineers reflecting local conditions prevail.
- Price - \$46.00