2020 Ham Catalog
Amateur Radio Towers

Tashjian Towers Corporation has the objective of engineering, designing, and manufacturing the best crank-up towers in the world. This catalog covers the crank-up tower line of products.

The purpose of this catalog is to provide our customers with details of the products that Tashjian Towers supplies. The catalog has general information, tower specifications, and a price list. The catalog lists projected areas for 100 MPH wind. Wind speed requirements may be higher or lower in your specific location. In the event there may be a question of compliance in the design of a tower to state, local, building codes, special engineering calculations and drawings can be prepared at a modest cost.

When a customer orders a tower, the ship date, shipping expenses, sales tax, will be determined. Written quotations will be provided and a signed proposal will constitute an order to proceed. Payment is due upon shipment. New towers orders will require a deposit.

Engineered Towers

Tashjian Towers are engineered by licensed professional engineers to hold today’s bigger amateur antennas. Tashjian Towers are rated to meet the current TIA 222 Standard, Rev. “H” code. Tashjian Towers are designed to meet today’s building codes, anything less is substandard.

Superior Strength

Tashjian use of high strength tubing allows for larger antennas at higher wind speeds. W-series towers have pulley frames on one side, LM-series tower 2 sides, and DX-series towers all three sides.

All Tashjian Towers include the tower base, an operation manual, and winch. Delivery or lead time are 3 months but Tashjian is currently building towers to ship from stock which will reduce lead times. By comparison, the cost to ship a Tashjian Tower is usually lower than other crank up tower manufacturers. Installation is available in California by Tashjian Towers, a licensed California contractor.
**Model No. MW33**

**TYPE:** Self-supporting, extendable, manual crank-up tower.

**SPECIFICATIONS:**

TOWER HEIGHT: Extended 32' – 6". Retracted 11' – 6".

TOWER SUPPORT: Self-supporting, no guys.

WIND LOADING: Engineering analysis indicates the tower will support an antenna with an equivalent effective projected area of 45-ft² at a basic wind speed of 100 MPH, 3-second gust per ANSI/TIA-222-H.

DEAD LOAD: The maximum antenna dead load is 250 lbs.

WEIGHT: The tower with the base weighs 250 pounds.

SECTIONS: The tower is made from four each 10 foot sections, #4, #5, #6 and #7 is the base.

**DESCRIPTION:**

Tower includes a manual crank-up winch and hoisting cables, and a rigid concrete base mount. The tower is designed to extend the tower telescoping sections uniformly. Tower engineering is no longer included in the price of tower. Stamped prints and calculations for building permits will need to be purchased separately.

This tower has a pulley frame on one face only. The lifting cable is 1/4 x 7 x 19 aircraft cable.

High strength tubing and solid rod bracing allow for an efficient tower design, yet save weight, resist torsional load and reduce wind resistance, allowing more useful load to be installed on the tower.

**ACCESSORIES:**

RCB-54 LT (#7 Wide Section)
CO-4 for MW-33
TA-54 Special
#4 rotator plates
Cable Kit for MW-33
Masts
MW-33 Manual, Drawings & Calculations
Replacement Pulleys
TB-2 Thrust Bearing
Manual Winch

**PART# 433-4000  $4,437.00 USD**
**Model No. WT-51**

**TYPE:** Self-supporting, extendable, manual crank-up tower.

**SPECIFICATIONS:**
- TOWER HEIGHT: Extended 51’. Retracted 21’-6”.
- TOWER SUPPORT: Self-supporting, no guys.

WIND LOADING: Engineering analysis indicates the tower will support an antenna with an equivalent effective projected area of 12-ft\(^2\) at a basic wind speed of 100 MPH, 3-second gust per ANSI/TIA-222-H.

DEAD LOAD: The maximum antenna dead load is 250 lbs.

WEIGHT: The tower with the base weighs 355 pounds.

SECTIONS: The tower is made from three each 20 foot sections, #4, #5, and #6 is the base

**DESCRIPTION:**
Tower is complete with a manual crank-up winch and hoisting cables, and a rigid concrete base mount. The tower is designed to extend the telescoping sections uniformly. Stamped prints and calculations for building permits will need to be purchased separately. Price of tower includes base, winch, and manual

This tower has pulley frame on one face only. The lifting cable is 1/4 x 7 x 19 aircraft cable.

High strength tubing and solid rod bracing allow for an efficient tower design, yet save weight, resist torsional load and reduce wind resistance, allowing more useful load to be installed on the tower.

**ACCESSORIES:**
- RCB-37LT (#6 Wide Section)
- WT-51 Drawings, Calculations
- TB-2 Thrust Bearing
- CO-3 for WT-51
- Masts
- TA-51
- #4 Rotator Plates
- Replacement Pulleys
- Cable Kit for WT-51
- Manual Winch

**PART# 451-4000 $3,621.00 USD**
Model No. WT-67

**TYPE:** Self-supporting, extendable, manual crank-up tower.

**SPECIFICATIONS:**

- **TOWER HEIGHT:** Extended 67’. Retracted 21’-6”.
- **TOWER SUPPORT:** Self-supporting, no guys.

**WIND LOADING:** Engineering analysis indicates the tower will support an antenna with an equivalent effective projected area of 11-ft$^2$ at a basic wind speed of 100 MPH, 3-second gust per ANSI/TIA-222-H.

**DEAD LOAD:** The maximum antenna dead load is 250 lbs.

**WEIGHT:** The tower with the base weighs 700 pounds.

**SECTIONS:** The tower is made from three each 20 foot sections, #4, #5, #6 and #7 is the base

**DESCRIPTION:**

Tower is complete with a manual crank-up winch and hoisting cables, and a rigid concrete base mount. The tower is designed to extend the telescoping sections uniformly. Stamped prints and calculations for building permits will need to be purchased separately. Price of tower includes base, winch, and manual

This tower has pulley frame on one face only. The lifting cable is 1/4 x 7 x 19 aircraft cable.

High strength tubing and solid rod bracing allow for an efficient tower design, yet save weight, resist torsional load and reduce wind resistance, allowing more useful load to be installed on the tower.

**ACCESSORIES:**

- RCB-54LT (#7 Wide Section)
- W-67 Manual, Drawings, & Calculations
- TB-2 Thrust Bearing
- CO-3 for WT-67
- Masts
- TA-54
- #4 Rotator Plates
- Replacement Pulleys
- Cable Kit for WT-67
- Manual Winch

**PART#** 467-4000  $5,916.00 USD
TYPE: Self-supporting, extendable, crank-up tower.

SPECIFICATIONS:
TOWER HEIGHT: Extended 37'. Retracted 20' - 6".

TOWER SUPPORT: Self-supporting, no guys.

WIND LOADING: Engineering analysis indicates the tower will support an antenna with an equivalent effective projected area of 20-ft² at a basic wind speed of 100 MPH, 3-second gust per ANSI/TIA-222-H.

DEAD LOAD: The maximum antenna dead load is 350 lbs.

WEIGHT: The tower with the base weighs 325 pounds.

SECTIONS: There are two each 20 foot sections #5 and #6.

DESCRIPTION:
Tower is complete with a manual crank-up winch and hoisting cables, and a rigid concrete base mount. Top drilled for TB2 bearing. Note: most rotators will fit inside top section. Stamped prints and calculations for building permits will need to be purchased separately. Price of tower includes base, winch, and manual. The hoisting cable system designed to extend the tower telescoping uniformly.

This tower has pulley frames on two faces. The lifting cable is 1/4 x 7 x 19 aircraft cable.

High strength tubing and solid rod bracing allow for an efficient tower design, yet save weight, resist torsional load and reduce wind resistance, allowing more useful load to be installed on the tower.

ACCESSORIES:
RCB-37LT (#6 Wide Section)
Cable Kit for LM-237
CO-3 for LM-237
TA-37
TB-2 Thrust Bearing
#5 Rotator Plates
Manual Winch

PART# 437-4000 $2,856.00 USD
**Model No. LM-354**

**TYPE:** Self-supporting, extendable, crank-up tower.

**SPECIFICATIONS:**

- **TOWER HEIGHT:** Extended 53'-9". Retracted 21'-6".
- **TOWER SUPPORT:** Self-supporting, no guys.

**WIND LOADING:** Engineering analysis indicates the tower will support an antenna with an equivalent effective projected area of 18-ft² at a basic wind speed of 100 MPH, 3-second gust per ANSI/TIA-222-H.

**DEAD LOAD:** The maximum antenna dead load is 350 lbs.

**WEIGHT:** The tower with the base weighs 660 pounds.

**SECTIONS:** The tower is made from three each 20 foot sections #5, #6 and #7.

**DESCRIPTION:**

Tower is complete with a manual crank-up winch and hoisting cables, and a rigid concrete base mount. Stamped prints and calculations for building permits will need to be purchased separately. Price of tower includes base, winch, and manual. Hoisting cable system designed to extend the telescoping sections uniformly.

This tower has a pulley frame on two faces. The lifting cable is 1/4 x 7 x 19 Aircraft cable.

High strength tubing and solid rod bracing allow for an efficient tower design, yet save weight, resist torsional load and reduce wind resistance, allowing more useful load to be installed on the tower.

**ACCESSORIES:**

- RCB-54LT (#7 Wide Section)
- Cable Kit for LM-354E
- CO-3 for LM-354E
- Manual Winch
- TA-54
- TB-2 Thrust Bearing
- #5 Rotator Plate

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PART# 454-4000  $5,151.00 USD

**TOWER CROSS SECTION**
Model No. LM-354HD and HDSP

**TYPE:** Self-supporting, extendable, crank-up tower.

**SPECIFICATIONS:**
- **TOWER HEIGHT:** Extended 54'. Retracted 21'-6".
- **TOWER SUPPORT:** Self-supporting, no guys.
- **WIND LOADING:** Engineering analysis indicates the tower will support an antenna with an equivalent effective projected area of 45-ft\(^2\) at a basic wind speed of 100 MPH, 3-second gust per ANSI/TIA-222-H.
- **DEAD LOAD:** The maximum antenna dead load is 450 lbs.
- **WEIGHT:** The tower with the base weighs 960 pounds.
- **SECTIONS:** The tower is made from three each 20 foot sections #6, #7 and #8.

**DESCRIPTION:**
Tower is complete with a gearbox, drum and hoisting cables, and a rigid concrete base mount. Stamped prints and calculations for building permits will need to be purchased separately. Price of tower includes base, winch, and manual. Hoisting cable system designed to extend the telescoping sections uniformly.

The LM-354HD uses a manual crank on the gearbox to extend and retract the tower. This tower does have a positive pull down.

The LM-354HD SP is a motorized version of the above tower, the 3/4 HP electric motor comes with an electric control box and two limit switches. This tower has a positive pull down and has the largest top section offered.

“Positive Control” worm gear winch permits the raising and lowering of LM towers without the aid of stops or locks. LM-354HD & 354HDSP uses a 50:1 ratio winch.

This tower has a pulley frame on two faces. The lifting cable for the LM -354HD is 1/4” 7 x 19 aircraft cable and 1/4” 6 x 36 for the 354HDSP.

**ACCESSORIES:**
- RCB-70LT (#8 Wide Section)
- Cable Kit for LM-354HD
- CO-3 for LM-354HD
- TA-70
- TB-2 Thrust Bearing
- Manual Winch
- #6 Rotator Plates

<table>
<thead>
<tr>
<th>PART#</th>
<th>DESCRIPTION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>455-4000 MANUAL</td>
<td>RCB-70LT (#8 Wide Section) Manual Winch</td>
<td>$7,191.00 USD</td>
</tr>
<tr>
<td>456-4000 MOTORIZED</td>
<td>Cable Kit for LM-354HD</td>
<td>$9,231.00 USD</td>
</tr>
</tbody>
</table>
Model No. LM-470

TYPE: Self-supporting, extendable, crank-up tower.

SPECIFICATIONS:
TOWER HEIGHT: Extended 69'-6". Retracted 25'-6".
TOWER SUPPORT: Self-supporting, no guys.
WIND LOADING: Engineering analysis indicates the tower will support an antenna with an equivalent effective projected area of 24-ft² at a basic wind speed of 100 MPH, 3-second gust per ANSI/TIA-222-H.
DEAD LOAD: The maximum antenna dead load is 450 lbs.
WEIGHT: The tower with the base weighs 1,200 pounds.
SECTIONS: The tower is made from 4 each 20 foot sections #5, #6, #7 and #8.

DESCRIPTION:
Tower is complete with a gearbox, drum hoisting cables, and a rigid concrete base mount. Hoisting cable system designed to extend the telescoping sections uniformly. Stamped prints and calculations for building permits will need to be purchased separately. Price of tower includes base, winch, and manual

The LM-470 is motorized, and includes 3/4 HP electric motor, electric control box and two limit switches wired for 110. This tower has a positive pull down.

“Positive Control” worm gear winch permits the raising and lowering of the tower sections without the aid of stops or locks. LM-470 uses a 50:1 ratio winch.

This tower has a pulley frame on two faces and uses 1/4” 7 x 19 aircraft cable.

ACCESSORIES
RCB-70LT (#8 Wide Section)
LM-470 Manual, Drawings, Calculations
CO-4 for LM-470
Replacement Pulleys
TA-70
20’ 10’ Masts
#5 Rotor Plates
TB-2 Thrust Bearing
Cable Kit for LM-470
RLT

PART# 470-4000 $10,404.00 USD
Model No. DX-70

**TYPE:** Self-supporting, extendable, crank-up tower.

**SPECIFICATIONS:**
- TOWER HEIGHT: Extended 70’. Retracted 24’-6”.
- TOWER SUPPORT: Self-supporting no guys.

**WIND LOADING:** Engineering analysis indicates the tower will support an antenna with an equivalent effective projected area of 45-ft² at a basic wind speed of 100 MPH, 3-second gust per ANSI/TIA-222-H.

**DEAD LOAD:** The maximum antenna dead load is 500 lbs.

**WEIGHT:** The tower with the base weighs 1975 pounds.

**SECTIONS:** The tower is made from 4 each 20 foot sections #6, #7, #8 and #9.

**DESCRIPTION:**
Tower is complete with a gearbox, drum, hoisting cables, and a rigid concrete base mount. Hoisting cable system designed to extend the telescoping sections uniformly. Stamped prints and calculations for building permits will need to be purchased separately. Price of tower includes base, winch, and manual.

The DX-70 is a motorized with a 1 HP electric motor, electric control box and two limit switches wired for 220 V. This tower has a positive pull down. “Positive Control” worm gear winch permits the raising and lowering of DX towers without the aid of stops or locks. DX-70 uses a 50:1 ratio winch.

This tower has a pulley frame on 3 faces and uses 5/16” x 7 x 19 aircraft cable.

**ACCESSORIES:**
- RCB-86 LT (#9 Wide Section)
- TB-2 Thrust Bearing
- CO-4 for DX-86 Masts, 10’ 20’
- TA-86 Replacement Pulleys
- #6 Rotator Plates
- DX-70 manual, Drawings & Calculations
- Cable Kit for DX-70
- RLT (Remote)

**PART NUMBER:** 480-4000 $15,606.00 USD
TYPE: Self-supporting, extendable, crank-up tower.

SPECIFICATIONS:
- TOWER HEIGHT: Extended 86’. Retracted 22’.
- TOWER SUPPORT: Self-supporting no guys.
- WIND LOADING: Engineering analysis indicates the tower will support an antenna with an equivalent effective projected area of 26-ft² at a basic wind speed of 100 MPH, 3-second gust per ANSI/TIA-222-H.
- DEAD LOAD: The maximum antenna dead load is 400 lbs.
- WEIGHT: The tower with the base weighs 2100 pounds.
- SECTIONS: The tower is made from 5 each 20 foot sections #5, #6, #7, #8 and #9.

DESCRIPTION:
The tower is complete with a gearbox, drum, hoisting cables, and a rigid concrete base mount. Hoisting cable system designed to extend the telescoping sections uniformly. Stamped prints and calculations for building permits will need to be purchased separately. Price of tower includes base, winch, and manual

The DX-86 is a motorized with an 1 HP electric motor, electric control box and two limit switches wired for 220 V. This tower has a positive pull down. "Positive Control" worm gear winch permits the raising and lowering of DX towers without the aid of stops or locks. DX-86 uses a 50:1 ratio winch.

This tower has a pulley frame on 3 faces and uses 5/16" 6 x 36 aircraft cable.

ACCESSORIES:
- RCB-86 LT (#9 Wide Section)
- TB-2 Thrust Bearing
- CO-6 for DX-86
- Masts
- TA-86
- Replacement Pulleys
- #5 Rotator Plates
- DX-86 manual, Drawings, Calculations
- Cable Kit for DX-86
- RLT (Remote)
Model No. DX-100

TYPE: Self-supporting, extendable, crank-up tower.

SPECIFICATIONS:

   TOWER HEIGHT: Extended 100’. Retracted 32’.

   TOWER SUPPORT: Self-supporting no guys.

   WIND LOADING: Engineering analysis indicates the tower will support an antenna with an equivalent effective projected area of 24-ft² at a basic wind speed of 100 MPH, 3-second gust per ANSI/TIA-222-H.

   DEAD LOAD: The maximum antenna dead load is 400 lbs.

   WEIGHT: The tower with the base weighs 2500 pounds.

   SECTIONS: The tower is made from 6 each 20 foot sections #4, #5, #6, #7, #8 and #9.

DESCRIPTION:

Tower is complete with a gearbox, drum, hoisting cables, and a rigid concrete base mount. Hoisting cable system designed to extend the telescoping sections uniformly. Stamped prints and calculations for building permits will need to be purchased separately. Price of tower includes base, winch, and manual

The DX-100 is a motorized tower, with a 1 1/2 HP electric motor and comes with an electric control box and two limit switches wired for 220 volts. This tower has a positive pull down. “Positive Control” worm gear winch permits the raising and lowering of DX towers without the aid of locks. DX-100 uses a 50:1 ratio winch.

This tower has a pulley frame on 3 faces and uses 5/16 x 5 x 36 aircraft cable.

ACCESSORIES:

RCB-86 LT (#9 Wide Section)
TB-2 Thrust Bearing
CO-6 for DX-100
Masts, 20’ 10’
TA-86
Replacement Pulleys
#4 Rotator Plates
DX-100 manual, Drawings & Calculations
Cable Kit for DX-100
RLT (Remote)

PART# 482-4000    $29,070.00 USD
**TYPE:** Self-supporting, extendable, motorized heavy duty crank-up tower.

**SPECIFICATIONS:**
- **TOWER HEIGHT:** Extended 70'. Retracted 25'.
- **TOWER SUPPORT:** Self-supporting no guys.
- **WIND LOADING:** Engineering analysis indicates the tower will support an antenna with an equivalent effective projected area of 80-ft² at a basic wind speed of 100 MPH, 3-second gust per ANSI/TIA-222-H. Exposure C, No Crest, Topo
  - This tower is suggested for high wind areas where heavy loading is required.
- **DEAD LOAD:** The maximum antenna dead load is 500 lbs.
- **WEIGHT:** The tower with the base weighs 2,700 pounds.
- **SECTIONS:** The tower is made from 4 each 20 foot sections #7, #8, #9 and #10.

**DESCRIPTION:**
- Tower is complete with a 100:1 gearbox, 1.5 hp electric motor, drum, dual 5/16 x 6 x 36 aircraft lift cables, positive pull down and a rigid concrete base mount, RCB #10. The tower is designed to extend the telescoping sections uniformly. Stamped prints and calculations for building permits will need to be purchased separately. Price of tower includes base, winch, and manual
  - The DX-70HD has pulley frames on all three sides.
- High strength tubing and solid rod bracing allow for an efficient tower design, yet saves weight, resists torsional load and reduces wind resistance, allowing more useful loads to be installed on the tower.

**ACCESSORIES:**
- DX-70HD manual,
- Drawings & Calculations
- RCB #10
- TB-2 Thrust Bearing
- CO-4 for DX-70HD Masts, 20' 10'
- TA #10
- Replacement Pulleys
- #7 Rotator Plates
- Cable Kit for DX-70HD
- RLT (Remote)

**PART# 483-4000  $22,899.00 USD**
Model No. DX-86HD

**TYPE:** Self-supporting, extendable, motorized heavy duty crank-up tower.

**SPECIFICATIONS:**
- **TOWER HEIGHT:** Extended 86’. Retracted 26’.
- **TOWER SUPPORT:** Self-supporting no guys.
- **WIND LOADING:** Engineering analysis indicates the tower will support an antenna with an equivalent effective projected area of 24-ft² at a basic wind speed of 100 MPH, 3-second gust per ANSI/TIA-222-H., Exposure C, No Crest, Topo
  This stronger tower is suggested for high wind areas where heavy loading is required.
- **DEAD LOAD:** The maximum antenna dead load is 500 lbs.
- **WEIGHT:** The tower with the base weighs 3,000 pounds.
- **SECTIONS:** The tower is made from 5 each 20 foot sections #6, #7, #8, #9 and #10.

**DESCRIPTION:**
Tower is complete with a 100:1 gearbox, 1.5 hp electric motor, drum, dual 5/16 x 6 x 36 aircraft lift cables, positive pull down and a rigid concrete base mount, RCB #10. The tower is designed to extend the telescoping sections uniformly. The DX-86HD has pulley frames on all three sides. Stamped prints and calculations for building permits will need to be purchased separately. Price of tower includes base, winch, and manual

High strength tubing and solid rod bracing allow for an efficient tower design, yet saves weight, resists torsional load and reduces wind resistance, allowing more antenna loads to be installed on the tower.

**ACCESSORIES:**
- DX-86HD manual, Drawings, Calculations
- RCB #10
- TB-2 Thrust Bearing
- CO-5 for DX-86HD
- Masts, 20’ 10’
- TA #10
- Replacement Pulleys
- #6 Rotator Plates
- Cable Kit for DX-86HD
- RLT (Remote)
**Model No. DX-100HD**

**TYPE:** Self-supporting, extendable, motorized heavy duty crank-up tower.

**SPECIFICATIONS:**
- **TOWER HEIGHT:** Extended 100’. Retracted 32’.
- **TOWER SUPPORT:** Self-supporting no guys.

**WIND LOADING:** Engineering analysis indicates the tower will support an antenna with an equivalent effective projected area of 40-ft² at a basic wind speed of 100 MPH, 3-second gust per ANSI/TIA-222-H. Exposure C, No Crest, Topo
  - This tower is suggested for high wind areas where heavy loading is required.

**DEAD LOAD:** The maximum antenna dead load is 500 lbs.

**WEIGHT:** The tower with the base weighs 3,400 pounds.

**SECTIONS:** The tower is made from 6 each 20 foot sections #5, #6, #7, #8, #9 and #10.

**DESCRIPTION:**
Tower is complete with a 100:1 gearbox, 1.5 hp electric motor, drum, dual 5/16 x 6 x 36 aircraft lift cables, positive pull down and a rigid concrete base mount, RCB #10. The tower is designed to extend the telescoping sections uniformly. The DX-86HD has pulley frames on all three sides. Stamped prints and calculations for building permits will need to be purchased separately. Price of tower includes base, winch, and manual.

High strength tubing and solid rod bracing allow for an efficient tower design, yet saves weight, resists torsional load and reduces wind resistance, allowing more antenna loads to be installed on the tower.

**ACCESSORIES:**
- DX-100HD manual
- Drawings & Calculations
- RCB #10
- TB-2 Thrust Bearing
- CO-6 for DX-100HD Masts, 20’ 10’
- TA #10
- Replacement Pulleys
- #5 Rotator Plates
- Cable Kit for DX-100HD
- RLT (Remote)
Model No. TM-358

**TYPE:** Self-supporting, extendable, motorized tubular mast. Designed for light weight antenna loads.

**SPECIFICATIONS:**
- **TUBULAR MAST HEIGHT:** Extended 58’. Retracted 23’.

  WIND LOADING: Engineering analysis indicates the tower will support an antenna with an equivalent effective projected area of 10-ft\(^2\) at a basic wind speed of 100 MPH, 3-second gust per ANSI/TIA-222-H., Exposure C, No Crest, Topo 1.

  DEAD LOAD: The maximum antenna dead load is 500 lbs.

  WEIGHT: The mast with the base weighs 1,750 pounds.

  SECTIONS: The mast is made from 6", 4", and 2 1/2” pipe, Fy = 50 ksi

**DESCRIPTION:**
- Tubular mast is complete with a 40:1 gearbox, 3/4 hp, 110V electric motor, 1/4” x 6 x 36 aircraft lift cable lift system and a hinged concrete base mount. The mast is designed to extend the tubular telescoping sections uniformly. Stamped prints and calculations for building permits will need to be purchased separately. Price of tower includes base, winch, and manual.

  Tubular mast include a hinged base mount that is installed in concrete. This base mount allows the tower to be hinged at ground level and tilted into a vertical position.

  The TM towers are hot-dipped galvanized after fabrication for maintenance free finish.

  The top section of the mast is adapted to accept an accessory rotator cage assembly. If a rotator assembly is not used, the mast adapter can be ordered as an accessory item. All standard mast adapters accommodate a two (2) inch O.D. mast size.

**ACCESSORIES:**
- TM-358 manual, Drawings, Calculations
- TM-358 Concrete Base
- CO-3 for TM
- Work Platform
- Tilting Gin Pole
- Rotator Cage Assembly
- Cable Kit
- Motor Control Assembly
- TB-2 Thrust Bearing
- Remote Control Kit

**PART#** 525-4000 $8,109.00 USD
**Model No. TM-370HD**

**TYPE:** Self-supporting, extendable, motorized tubular mast. Designed for light weight antenna load.

**SPECIFICATIONS:**

**TUBULAR MAST HEIGHT:** Extended 68'-6". Retracted 27'-6".

**WIND LOADING:** Engineering analysis indicates the tower will support an antenna with an equivalent effective projected area of 28-ft² at a basic wind speed of 100 MPH, 3-second gust per ANSI/TIA-222-H. Exposure C, No Crest, Topo 1.

**DEAD LOAD:** The maximum antenna dead load is 600 lbs.

**WEIGHT:** The mast with the base weighs 3,050 pounds.

**SECTIONS:** The mast is made from 10", 8", and 6" pipe, Fy= 50 ksi

**DESCRIPTION:**

Tubular mast is complete with a 50:1 gearbox, 1 hp, 220V electric motor, 1/4" x 6 x 36 aircraft lift cable lift system and a hinged concrete base mount. The mast is designed to extend the tubular telescoping sections uniformly. Stamped prints and calculations for building permits will need to be purchased separately. Price of tower includes base, winch, and manual.

Tubular mast include a hinged base mount that is installed in concrete. This base mount allows the tower to be hinged at ground level and tilted into a vertical position.

The TM towers are hot-dipped galvanized after fabrication for maintenance free finish.

The top section of the mast is adapted to accept an accessory rotator cage assembly. If a rotator assembly is not used, the mast adapter can be ordered as an accessory item. All standard mast adapters accommodate a two (2) inch O.D. mast size.

**ACCESSORIES:**

- TM-370HD manual, Drawings, Calculations
- TM-370HD Concrete Base
- CO-3 for TM
- Work Platform
- Tilting Gin Pole
- Rotator Cage Assembly
- Cable Kit
- TB-2 Thrust Bearing
- Remote Control Kit

**PART# 526-4000 $12,597.00 USD**
**Model No. TM-490HD**

**TYPE:** Self-supporting, extendable, motorized tubular mast. Designed for lightweight antenna load.

**SPECIFICATIONS:**
- **TUBULAR MAST HEIGHT:** Extended 89'-8". Retracted 28'-0".
- **WIND LOADING:** Engineering analysis indicates the tower will support an antenna with an equivalent effective projected area of 42-ft² at a basic wind speed of 100 MPH, 3-second gust per ANSI/TIA-222-H., Exposure C, No Crest, Topo 1.
- **DEAD LOAD:** The maximum antenna dead load is 650 lbs.
- **WEIGHT:** The mast with the base weighs 3,975 pounds.
- **SECTIONS:** The mast is made from 12", 10", 8" and 6" pipe, Fy = 50 ksi

**DESCRIPTION:**
- Tubular mast is complete with a 50:1 gearbox, 1 1/2 hp, 220V electric motor, 5/16" x 6 x 36 aircraft lift cable lift system and a hinged concrete base mount. The mast is designed to extend the tubular telescoping sections uniformly.
- Tubular mast include a hinged base mount that is installed in concrete. This base mount allows the tower to be hinged at ground level and tilted into a vertical position. Stamped prints and calculations for building permits will need to be purchased separately. Price of tower includes base, winch, and manual.

The TM towers are hot-dipped galvanized after fabrication for maintenance free finish.

The top section of the mast is adapted to accept an accessory rotator cage assembly. If a rotator assembly is not used, the mast adapter can be ordered as an accessory item. All standard mast adapters accommodate a two (2) inch O.D. mast size.

**ACCESSORIES:**
- TM-490HD manual, Drawings, Calculations
- TM-490HD Concrete Base
- CO-4 for TM
- Work Platform
- Tilting Gin Pole
- Rotator Cage Assembly
- Cable Kit
- TB-2 Thrust Bearing
- Remote Control Kit

**PART#** 527-4000 $16,932.00 USD
Model No. TM-5100R HD

**TYPE:** Self-supporting, extendable, motorized tubular mast. Designed for light weight antenna load.

**SPECIFICATIONS:**

**TUBULAR MAST HEIGHT:** Extended 100'-1". Retracted 29'-0".

**WIND LOADING:** Engineering analysis indicates the tower will support an antenna with an equivalent effective projected area of 32-ft² at a basic wind speed of 100 MPH, 3-second gust per ANSI/TIA-222-H., Exposure C, No Crest, Topo 1.

**DEAD LOAD:** The maximum antenna dead load is 650 lbs.

**WEIGHT:** The mast with the base weighs 4,350 pounds.

**SECTIONS:** The mast is made from 12", 10", 8", 6" and 4" pipe, Fy = 50 ksi

**DESCRIPTION:**

Tubular mast is complete with a 50:1 gearbox, 1 1/2 hp, 220V electric motor, 1/4" x 6 x 36 aircraft lift cable lift system and a hinged concrete base mount. The mast is designed to extend the tubular telescoping sections uniformly. A user’s manual is included.

Tubular mast include a hinged base mount that is installed in concrete. This base mount allows the tower to be hinged at ground level and tilted into a vertical position. Stamped prints and calculations for building permits will need to be purchased separately. Price of tower includes base, winch, and manual.

The TM towers are hot-dipped galvanized after fabrication for maintenance free finish.

The top (2) sections of the mast rotate and a standard mast adapter fits into the top section to accommodate a two (2) inch O.D. mast size.

**ACCESSORIES:**

- TM-490HD manual, Drawings, Calculations
- TM-490HD Concrete Base
- CO-4 for TM
- Work Platform
- Tilting Gin Pole
- Rotator Cage Assembly
- Cable Kit
- Motor Control Assembly
- TB-2 Thrust Bearing

**PART# 528-4000** $27,285.00 USD
Telescoping Tower Accessories

Coax Standoff Kits
- CO-2 for 2 for LM-237: 441-00406
- CO-3 for 3 for WT-51: 441-00404
- CO-3 for 3 for LM-354E: 441-00407
- CO-3 for 3 for LM-354HD: 441-00409
- CO-4 for 4 for LM-470: 441-00408
- CO-4 for 4 for DX-70: 441-00413
- CO-5 for 5 for DX-86: 441-00411

Rigid Concrete Base
- RCB-37/51LT for LM-237 & WT-51: 400-0040
- RCB-54LT for LM-354E: 400-00401
- RCB-86LT for DX-86 & DX-70: 481-00300
- RCB-36 for W-36: 400-0136
- RCB-86HD for DX-86HD & DX-70HD: 486-00300

Tilt-Over Accessory
- TA-37 for LM-237: 412-00401
- TA-51L for WT-51: 412-00402
- TA-54L for LM-354E: 415-00401
- TA_86L for DX-86 & DX-70: 481-00301
- TA_86HD for DX-86HD & DX-70HD: 486-00301
Telescoping Tower Accessories

CDR Rotator Plate
- 480-00004 CDR Rotator Plate for WT-51, MW-33 & W-67
- 115-00308 CDR Rotator Plate for LM-237, LM-354E, LM-470, DX-86 & DX-100HD
- 454-00104 CDR Rotator Plate for LM-354HD, DX-70 & DX-86HD
- 460-00129 T2R Rotator Plate for WT-51, MW-33 & W-67
- 460-00128 T2R Rotator Plate for LM-237, LM-354E, LM-470, DX-86 & DX-100HD
- 454-00117 T2R Rotator Plate for LM-354HD, DX-70 & DX-86HD

Mast Anchor Plate
- 480-00102 Mast Anchor Plate for WT-51, MW-33 & W-67
- 454-00103 Mast Anchor Plate for LM-354HD, DX-70 & DX-86HD

TB2 Bearing
- For 2" Mast  400-00089

Pulley Assembly
- Pulley Assembly, 4A/K8 Bearing  045-0125
- Pulley Assembly, 5A/K8 Bearing  045-0150
**Tilt-Over Accessory**

Erection of Tower with Tilt-Over Accessory

Position #1: Installation
Attach tower in horizontal position, with the Tilt-Over Accessory installed on the Rigid Concrete Base.

Position #2: Operation
Tilt tower to vertical to operate tower

Position #3: Antenna Adjustment
Tilt Tower over to install or adjust antenna

Note: Tower must be nested to use Tilt-Over Accessory

Tilt Accessory Installed on Rigid Concrete Base
Telescoping Mast Accessories

Coax Standoff Kits
- CO-2 Stand-off for TM Series 525-00404
- CO-3 Stand-off for TM Series 525-00405
- CO-4 Stand-off for TM Series 525-00406

Concrete Base
- 390-00309 CB-490 for TM-490, TM-5100, TM370HD
- 370-00308 CB-370 for TM-370

TM Rotator Cage Assembly - 525-9490

TM Platform Assembly - 525-0101

Coax Arm Weldment
- Size: Ø 1 1/4"
- Length "A": 12""
## 2020 Tower Price List

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Weight (lb)</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>MW-33 33ft Manual Crank-Up Tower</td>
<td>433-4000</td>
<td>340</td>
<td>$4,437</td>
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<tr>
<td>WT-51 51ft Manual Crank-Up Tower</td>
<td>451-4000</td>
<td>360</td>
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<tr>
<td>WT-67 67ft Manual Crank-Up Tower</td>
<td>467-4000</td>
<td>385</td>
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### LM Series

<table>
<thead>
<tr>
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<th>Part No.</th>
<th>Weight (lb)</th>
<th>Price</th>
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<tbody>
<tr>
<td>LM-237 37ft Manual Crank-up</td>
<td>437-4000</td>
<td>330</td>
<td>$2,856</td>
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<tr>
<td>LM-354E 54ft Manual Crank up</td>
<td>454-4000</td>
<td>875</td>
<td>$7,191</td>
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<tr>
<td>LM-354 HD 54ft Manual Crank up with gear box</td>
<td>455-4000</td>
<td>950</td>
<td>$9,231</td>
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<tr>
<td>LM-470 70ft Motorized Crank up with tower</td>
<td>470-4000</td>
<td>1,100</td>
<td>$10,404</td>
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<tr>
<td>LM-584 84ft Motorized Crank up with tower</td>
<td>480-4000</td>
<td>1,500</td>
<td>$11,169</td>
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<tr>
<td>DX-70 70ft Motorized Crank up</td>
<td>480-4000</td>
<td>2,050</td>
<td>$22,899</td>
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<tr>
<td>DX-86 86ft Motorized Crank up</td>
<td>481-4000</td>
<td>2,300</td>
<td>$16,932</td>
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<tr>
<td>DX-100 100ft Motorized Crank up</td>
<td>482-4000</td>
<td>2,750</td>
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<td>DX-100 HD Motorized Crank up</td>
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### TM Series

<table>
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<tr>
<td>TM-358</td>
<td>525-4000</td>
<td>1,750</td>
<td>$8,109</td>
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<td>TM-370HD</td>
<td>526-4000</td>
<td>3,050</td>
<td>$12,597</td>
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<tr>
<td>TM-490 HD</td>
<td>527-4000</td>
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<tr>
<td>TM-5100R HD</td>
<td>528-4000</td>
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### Heavy Antenna Mast (2.0” OD x .188” Wall)

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Weight (lb)</th>
<th>Price</th>
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<tbody>
<tr>
<td>AD-100H (10’ long)</td>
<td>300-00049</td>
<td>37</td>
<td>$158</td>
</tr>
<tr>
<td>AD-150H (15’ long)</td>
<td>300-00050</td>
<td>55</td>
<td>$240</td>
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<tr>
<td>AD-200H (20’ long)</td>
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<td>73</td>
<td>$301</td>
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### Extra Heavy Antenna Mast (2.0” OD x .250”)

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Weight (lb)</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD-100EH (10’ long)</td>
<td>300-00053</td>
<td>47</td>
<td>$184</td>
</tr>
<tr>
<td>AD-150EH (15’ long)</td>
<td>300-00054</td>
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<td>$301</td>
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<tr>
<td>AD-200EH (20’ long)</td>
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<td>$383</td>
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### Mast and Rotator Mounting Plates

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Weight (lb)</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDR Rotator Plate (WT-51)</td>
<td>480-00004</td>
<td>7</td>
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<tr>
<td>CDR Rotator Plate (LM-237, LM 354, LM 470)</td>
<td>115-00308</td>
<td>8</td>
<td>$92</td>
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<tr>
<td>CDR Rotator Plate (LM354HD)</td>
<td>454-00104</td>
<td>9</td>
<td>$123</td>
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<tr>
<td>T2R Rotator Plate (LM-237, LM354, LM470)</td>
<td>460-00128</td>
<td>8</td>
<td>$102</td>
</tr>
<tr>
<td>T2R Rotator Plate (LM354HD)</td>
<td>454-00117</td>
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<td>$133</td>
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<tr>
<td>TM Rotator cage assembly</td>
<td>525-9490</td>
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<td>$679</td>
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<tr>
<td>Mast Anchor Plate WT-51</td>
<td>480-00102</td>
<td>11</td>
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<tr>
<td>Mast Anchor Plate (LM-237, LM 354, LM 470)</td>
<td>115-00307</td>
<td>11</td>
<td>$102</td>
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### Coax Standoff Kits

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Weight (lb)</th>
<th>Price</th>
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</thead>
<tbody>
<tr>
<td>CO-2 Standoff (LM-237)</td>
<td>441-00406</td>
<td>8</td>
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<tr>
<td>CO-3 Standoff (WT-51, LM-354E, LM-354HD)</td>
<td>441-00404</td>
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<td>$122.00</td>
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<tr>
<td>CO-4 Standoff (LM-470)</td>
<td>441-00408</td>
<td>16</td>
<td>$163.00</td>
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<tr>
<td>CO-5 Standoff (DX-86)</td>
<td>441-00411</td>
<td>20</td>
<td>$204.00</td>
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</table>

### Tilt Over Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Weight (lb)</th>
<th>Price</th>
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</thead>
<tbody>
<tr>
<td>TA-37 (LM-237)</td>
<td>412-00401</td>
<td>120</td>
<td>$791.00</td>
</tr>
<tr>
<td>TA-51L (WT-51)</td>
<td>412-00402</td>
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<td>$791.00</td>
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<tr>
<td>TA-54L (LM354E)</td>
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<tr>
<td>TA-70L (LM354HD &amp; LM470E)</td>
<td>417-00401</td>
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<td>$867.00</td>
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</table>
# Tower Price List

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Weight (lb)</th>
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</thead>
<tbody>
<tr>
<td><strong>Manual Winch</strong></td>
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<tr>
<td>2500 Winch</td>
<td>041-0345</td>
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<tr>
<td><strong>Thrust Bearing (W &amp; LM Series)</strong></td>
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<tr>
<td>TB-2 Bearing</td>
<td>400-00089</td>
<td>10</td>
<td>$122</td>
</tr>
<tr>
<td><strong>Replacement Concrete Bases</strong></td>
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</tr>
<tr>
<td>RCB-37/51LT (WT51 and LM237)</td>
<td>400-00400</td>
<td>80</td>
<td>$403</td>
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<tr>
<td>RCB-40LT (LM354E)</td>
<td>400-00401</td>
<td>86</td>
<td>$423</td>
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<td>RCB-70LT (LM354HD and LM470E)</td>
<td>460-00170X</td>
<td>129</td>
<td>$454</td>
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<td>RCB-86LT (DX86)</td>
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<td>180</td>
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<tr>
<td>CB-490 (TM490, TM5100R, TM370HD)</td>
<td>390-00309X</td>
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<tr>
<td>CB-370 (TM370)</td>
<td>370-00308X</td>
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<td>RCB-36 (W36)</td>
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<tr>
<td><strong>Remote Control Kit - Less Motor</strong></td>
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<tr>
<td>RLT</td>
<td>370-003328</td>
<td>30</td>
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<tr>
<td><strong>Replacement Cable Kits (with cable diagrams)</strong></td>
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<tr>
<td>Cable Kit, MW-33</td>
<td>051-0021</td>
<td>25</td>
<td>$148</td>
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<tr>
<td>Cable Kit, MW-33 - S.S Version 1/4&quot;</td>
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<td>Cable Kit, WT-51</td>
<td>051-0025</td>
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<td>Cable Kit, LM 237</td>
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<td>Cable Kit, LM237 - S.S Version 1/4&quot;</td>
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<td>Cable Kit, LM354E</td>
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<tr>
<td>Cable Kit, LM354HD</td>
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<td>Cable Kit, LM354HD - S.S Version 1/4&quot;</td>
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<tr>
<td>Cable Kit for LM-470</td>
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<tr>
<td>Cable Kit for LM-470 1/4 inch S.S</td>
<td>051-0090</td>
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<td>$847</td>
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<td>Cable Kit, DX86</td>
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<td>Cable Kit, DX100</td>
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<tr>
<td>Cable Kit, TM370C</td>
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<tr>
<td>Cable Kit, TM370C - S.S Version</td>
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<td><strong>Motor Control Kits (Towers having 40:1 winch ratio)</strong> Includes Motor &amp; Control Box</td>
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<tr>
<td>MC-50 (1/2HP)</td>
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<tr>
<td>MC-75 (3/4 HP)</td>
<td>060-2935</td>
<td>60</td>
<td>$938</td>
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<tr>
<td>MC-100 (1 HP)</td>
<td>060-2936</td>
<td>60</td>
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<tr>
<td><strong>Replacement Motors Only</strong></td>
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<tr>
<td>1/2 HP Motor (washdown)</td>
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<td>$469</td>
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<tr>
<td>3/4 HP Motor (washdown)</td>
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<td>1 HP Motor (washdown)</td>
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<td>30</td>
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<tr>
<td><strong>Manual Control Motor Kits with Top and Bottom Limit Switch (Towers having 40:1 ratio)</strong> Includes Motor, Control box, &amp; 2 Limit Switches</td>
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<td>MC-50 LL (1/2 HP)</td>
<td>060-50000</td>
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<td>MC-100LL (1 HP)</td>
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<td>Pulley Assembly, 5A/K8 Bearing</td>
<td>045-0150</td>
<td>1</td>
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</tbody>
</table>
TERMS AND CONDITIONS OF SALE

1. All quotations are for immediate acceptance and subject to change without notice.

2. This quotation is based upon the assumption that the materials required for the items quoted can be obtained from the Steel Mills and/or Seller’s other suppliers within days after approval by Seller. In the event Seller’s suppliers are unable to make deliveries within the period specified, then such delay shall be considered to be a delay in the completion of the work due to causes beyond the control and without the fault or negligence of Seller. Furthermore, the following “force majeure” definition applies: The term “force majeure” as used in this proposal shall mean and include any cause, act or event beyond the control and without the fault or negligence of Seller, including but not restricted to: acts of God; weather; floods; storms; explosion; fires; labor trouble; strikes; insurrection; riots;
freight embargoes; acts of the public enemy; items quoted from Seller’s customary suppliers;
scarcity of or inability to obtain or use labor or equipment; Federal, State or Local law or orders, rules or regulations of governmental authority, or default of Seller’s subcontractors due to any cause. If by reason of “force majeure” Seller is prevented, hindered or delayed in satisfying or meeting any condition of this Quotation or is prevented, hindered or delayed in its performance under this Quotation, Seller shall be excused from such performance to the extent that it is prevented, hindered or delayed thereby, and during the continuous of any such happening or event then this quotation shall be deemed suspended so long as and to the extent that any such cause prevents, hinders or delays the performance, and the time while Seller is so prevented shall not be counted against Seller, anything in this Quotation to the contrary notwithstanding; and Seller shall not be liable for any claims or damages in any form or of an kind of nature for excess costs, if any, for any failure to perform arising out of or any reason of “force majeure”.

Seller shall give written notice to Buyer within a reasonable time after the happening thereof of the nature, and, so far as possible, the extent of any “force majeure” condition referred to in the preceding paragraph hereof, in order that said party may be fully advised as to the nature and extent of said condition. In the event that it appears to Seller that Seller’s performance shall be delayed, Seller shall so state in said written notice in which the Buyer of any price revision applicable and obtain written agreement thereto.

(a) Suspend performance on the undeliverable items quoted pending removal of the causes of delay, under which circumstances the Buyer agrees to immediately pay an equitable proportion of the price of the items if such items are not separately priced;

(b) Cancel the undeliverable portion of the items quoted at any time as long as the causes of delay continue.

3. If performance is suspended in accordance with (2) (a), the price of the suspended portion of the items quoted shall be subject to revision as follows:

(a) Prior to proceeding with the performance of the items quoted Seller shall notify the Buyer of any price revision applicable and obtain written agreement thereto.

(b) In the event of failure to agree upon such revised price or prices within the time to be specified in the notice described in Paragraph (3) (a), and Seller does not desire to proceed with performance on the basis of the price of the original items, Seller or Buyer may cancel upon delivery of written notice to the other party, without liability except that of the Buyer for costs and expenses and a reasonable profit, allocable to work done prior to the suspension of performance.

4. Seller shall not be liable for damages in any manner resulting from cancellation or suspension of performance in accordance with the terms of this condition.

3. If construction by others and charges to a designated point are included in the prices herein quoted, we shall not be responsible for switching, spotting, handling storage, demurrage or any charges incurred therefore.

4. Where installation is not included, our responsibility ceases upon delivery of shipments to carrier when sales are f.o.b. point of shipment. Buyers are warned against receiving them until careful inspection has been made.

5. No Federal, State, or local taxes are included in price unless specifically stated in the proposal. All quotations and sales are subject to increase without notice for all present and future Federal, State, and local taxes, including sales, use and excise tax that may be assessed, charged or levied by any governmental action, which taxes are to be added to the quoted price and paid by the Buyer.
6. Manufacturer’s guarantee: For a period of one (1) year after shipment, we warrant the article to be reasonably fit for the purpose for which it is manufactured and sold, and shall be free from defects in material and workmanship. No other warranty to material or workmanship is expressed or implied, and no other claim for damage or charge for labor will be allowed. We reserve the sole right to determine whether or not any part to be replaced is to be furnished free of charge or to be supplied at our regular sales price.

7. Commodities not manufactured by us are warranty and guaranteed only to extent and in the manner warranted and guaranteed to us by the manufacturer and then only to the extent we are able to enforce such warranty or guaranteed.

8. Orders cannot be canceled by Buyer under any circumstances without the Buyer first, reaching an agreement in writing with the Seller covering all damages. In ever event, written permission must be secured prior to returning goods for credit.

9. We reserve the right to change or modify our design and construction and to substitute material equal to or superior to that originally specified.

10. Every effort will be made to maintain shipping schedules shown. However, we shall not be liable for delays or default in filling this order caused by strikes or other disputes, floods, fires, accidents, contingencies or transportation and other causes of like or different character beyond the control of the Seller.

11. No terms or conditions, other than those stated herein and no agreement or understanding, oral or written in any way purporting to modify these terms or conditions whether contained in Buyer’s purchase or shipping release forms or elsewhere shall be binding on Seller, unless hereafter made in writing and signed by Seller’s authorized representative. All proposals, negotiations and representations, if any made prior and with reference hereto are merged herein.

12. Any controversy or claim arising out of or relating to this agreement or the breach thereof shall be settled by arbitration in accordance with the rules of the American Arbitration Association. All hearings shall be oral and shall be held in Tulare County, California. Judgment upon the award rendered by the arbitrator may be entered in any court having jurisdiction thereof and shall be final both as law and fact.

13. If Buyer requires Seller to delay delivery of material, payment for material or services shall not thereby be postponed or extended. Material held in storage for Buyer shall be at the risk and expense of the Buyer and at a price agreed upon by Buyer and Seller at the time of request for storage by buyer, If Buyer removes has order from Seller’s production schedule, then the Buyer automatically relinquishes his position in Seller’s production schedule. At time buyer instructs Seller to proceed with order, it must at that time take its position in Seller’s production schedule existing at time order is reentered.

14. This quotation includes unloading tower material from carrier and hauling to maximum of 20 miles to the construction site. Cost of unloading anchor assemblies to be the expense of the Buyer.

15. Where roof top installations are required, tower material and services are furnished to base of tower only, and all roof modifications, waterproofing steel reinforcements to the roof are not included in this quotation unless specifically noted.

16. Shipments and deliveries shall be subject to approval of Seller’s Credit Department. If Buyer fails to fulfill the terms of payment, Seller may defer further shipments, or may at its option, cancel the unshipped balance. Seller reserves the right, previous to making any shipments, to require from Buyer satisfactory security for performance of Buyer’s obligations. No failure of Seller to exercise any right accruing from any default of Buyer shall impair Seller’s rights in case of any subsequent default of Buyer.

17. When export license is required, the acceptance of this quotation is subject to export license being granted and supplied by the Buyer unless otherwise specified.

18. The price and delivery of the tower, and the cost and time of the tower, antenna and transmission lines are based upon furnishing and erecting the exact size and type material shown, and at the location indicated. Modification, if any, of these details must be agreed to by both parties in writing, and it is understood that any such modification will require a revision of both price and delivery.

19. Acceptance of all orders must be approved by the home office of this Company.

20. The above provision set for the sole and only obligation or liability of and warranty made by Tashjian Towers Corporation in connection with the items covered by this agreement, and any provisions in any proposals, specifications or in any other provisions hereof, are merely descriptive and are not to be construed as either obligations or warranties made by Tashjian Towers Corporation.
1. This quotation is based on work being carried out in one continuous operation without interruption or delays due to missing materials such as coax lines, transmission line hangers, antenna, reflectors, or electrical power. All material necessary for completing installation to be furnished by Buyer must be on the tower site prior to starting of erection or scheduled in such a manner as to avoid delaying erection crew.

2. Antenna, transmission lines and transmission line clamps must be available when construction work on tower is under way. Drawing showing transmission line installation is to be furnished by customer.

3. Tower site shall be accessible to workmen and erection equipment, using two wheel drive vehicles.

4. This quotation on labor to erect tower and antenna is based upon weather suitable for outdoor construction between the dates of April 15 and November 15. In the event the customer desires the work done under the handicap of snow, ice or severe cold, or between the dates of November 15 and April 15, the cost of erection shall be increased to include the additional cost incurred because of adverse weather conditions, unless otherwise specified in the proposal.

5. Should any conditions exist such that the use of union trades for installation of the tower, accessories and/or foundations are necessary, the prices quoted are subject to adjustment, unless the union stipulation has been specifically noted in the inquiry.

6. Unless provided by Tashjian Towers Corporation, the foundations must be completed so as to permit continuous work from time Seller’s crew reports on the job, and must be finished in accordance with Seller’s specifications.

7. Installation of all wiring and all transmission lines shall be on the tower to the base of the tower only unless otherwise specified.

8. Seller to carry or cause to be carried Workmen’s Compensation, Public Liability and Property Damage Insurance and all Risk Insurance, which is included as part of this quotation and shall be terminated in accordance with the following paragraph.

   “Upon notice of the date of completion, the customer shall have seven (7) days from such date of completion to accept or reject the structure. If no notice or rejection is received within such time, the structure shall be considered the customer’s property and our Property Damage Insurance and All Risk Insurance on such structure shall be canceled, or should the Buyer commence broadcast operations from the tower before it is accepted, all Seller’s insurance will terminate after the first day of such broadcast operations.”

9. All fees, service charges, cost of and expense to obtain permits and/or contractor’s licenses to be for the account of the Buyer.

10. This quotation can be changed or varied only by the duty authorized officers of the parties hereto in writing.

11. Whenever regulations require or conditions necessitate working more than an eight (8) hours day and or five (5) day week, all overtime will be charged for in addition to quoted prices.

12. It is also Buyer’s responsibility to:
   (a) Provide (1) tagline (25 t. wide and equal in length to the height of the tower), cleared of all obstruction in order to permit a truck to be driven thereon.
   (b) Clear a fire lane down each guy radial 25 ft. wide on each side of the guy line, and extend this lane 50 ft. beyond the outer guy anchor; a 10 ft. width of this 150 ft. lane must be cleared of all obstructions in order to permit a truck to be driven thereon.
   (c) So grade the area immediately surrounding the tower so as to permit the moving of trucks, crane and/or other equipment required to handle and erect the tower.
   (d) Clear an area 250 ft x 250 ft. adjacent to the center of the tower to permit unloading, sorting, assembling and working space.
   (e) Provide the necessary wooden horses to support the antenna during construction.
   (f) Provide necessary fittings and gas required in pressure checking all of the transmission lines.
   (g) Provide electrical power to the base of the tower.
   (h) Provide the necessary building and construction permit.
   (i) Provide the necessary police service to direct traffic if in the event the guy lines should cross a public or private road.
   (j) Provide toilet facilities if required by regulations.

13. Seller shall not be responsible for delays arising from causes beyond its reasonable control.
CONDITIONS OF SALE – FOUNDATION

1. When the foundations are specified as part of this quotation, it is assumed that this work will be done under normal ground conditions with a soil bearing capacity of at least 4,000 lb. per sq. ft. in accordance with E.I.A. specifications. It shall be the responsibility of the Buyer to supply soil bearing capacity and Seller shall have an absolute right to rely on written test reports furnished by Buyer in the preparation of foundation drawings and in the installation of foundations. Blasting, cribbing, fill, removal of obstruction planking, snow, road building, and clearance for easy access to the site. Existence of swamp, sand, mud, water and frozen ground are not considered normal. If any of the above conditions are encountered, the foundations price shall be increased to include the additional cost incurred, plus a reasonable profit allocable to the work performed.

2. The foundation price does not include clearing a grading of tower site, profiles, or grounding system.