



# TELECOMMUNICATIONS ELEVATION SOLUTIONS



**Watch**  
Product Video



**Visit**  
Corporate Website



**Download**  
Product Brochure



**Watch**  
Corporate Video

Will-Burt and Will-Burt Germany offer a wide variety of Portable Cellular, Broadcast and Mobile Elevation Solutions offering both short-term and long-term deployment options. Will-Burt masts and ITS towers assure optimal performance of transmission equipment by delivering elevation solutions with unsurpassed rigidity and stability.



Will-Burt's extensive line of pneumatic and mechanical telescoping masts and lattice towers offer the ability to accommodate your unique requirements; whether it is a heavy payload, extremely harsh environment, off-road travel, remote location or an extended deployment period. A commercial-off-the-shelf (COTS) or custom solution will be available to meet your specifications. We offer field, trailer and truck solutions; portable tower systems, COWS and COLTS, to fulfill your long-term and temporary communication requirements.

All of our masts and tower elevation solutions are designed and manufactured to meet or exceed rigorous safety and operational requirements. You can be assured that a Will-Burt, Will-Burt Germany, or ITS elevation solution will successfully meet your specifications and provide reliable and flawless service for years.

### WILL-BURT ELEVATION SOLUTION ADVANTAGES

Will-Burt's portable telescopic masts and lattice towers enable your transmission equipment to perform at their highest capability and feature:

- **Greater stability and rigidity**
- **Fast deployment and retraction time**
- **Easy one person deployment**
- **Large payload capacity**
- **Long-term deployment capability**

### INNOVATIVE CUSTOM SOLUTIONS

Will-Burt's specialized engineers can develop an elevation solution to meet your unique requirements.



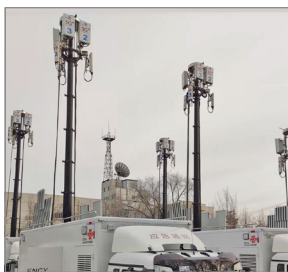
# CONTENTS



**PNEUMATIC NON-LOCKING  
TELESCOPING MASTS ..... 4-5**



**KVL AND KVR TELESCOPING  
CRANK MAST ..... 12**



**REMOTE LOCKING SYSTEM  
FOR PNEUMATIC MASTS ..... 6**



**INFLEXION™ ROOF-MOUNTED  
TELESCOPING MAST ..... 13**



**PNEUMATIC LOCKING  
TELESCOPING MASTS ..... 7-8**



**INTEGRATED  
TOWER SYSTEMS ..... 14-16**



**PNEUMATIC TELESCOPING  
YACHT MASTS ..... 9**



**POSITIONERS AND  
CONTROLLERS ..... 17**



**PNEUMATIC COMPRESSOR  
SYSTEMS & MAST  
ACCESSORIES ..... 10-11**



**PORTABLE MASTS ..... 18-19**

## PNEUMATIC NON-LOCKING LOW-PROFILE TELESCOPING MASTS

### Internal collars deliver lower nested height.

Today's ENG vehicles such as the Ford Transit and Nissan NV, require a high performance telescopic mast with a lower nested height in order to meet highway height restrictions. Will-Burt's Low-Profile mast with innovative internal collar design optimizes the nested to extended height ratio for a shorter retracted mast. Each collar is stored inside the next rather than stacking the collars one on top of the other - minimizing the stowed mast height.

An integrated locking payload top plate stabilizes the payload when stowed and in transit. Lastly, Will-Burt's mast design reduces extended mast twist for the best possible video feed.



### ESSENTIAL FEATURES

- **Low-Nested Height**
  - Internal collar design minimizes height of stowed mast
  - Design optimized for new, smaller ENG vehicles
- **Precise and Stable**
  - Design minimizes mast twist when extended
  - Integrated locking payload top plate stabilizes the payload when in transit
- **No Maintenance Required**
  - No routine maintenance required under normal operating conditions
  - 5 year manufacturer warranty

Internal Collar Design



Low Nested Height

Innovative Design



Reduced Mast Twist

Locking Payload Top Plate



Stabilizes in transit payload



### SPECIFICATIONS

Low Profile Models	7-27	6-29	5.3-32	7-42	6-42	7.3-50
Payload Capacity*	300 lb. / 136 kg	200 lb. / 91 kg	200 lb. / 91 kg	300 lb. / 136 kg	200 lb. / 91 kg	200 lb. / 91 kg
Extended Height	26.7' / 8.2 m	28.4' / 8.7 m	32' / 9.75 m	41.2' / 12.5 m	41.2' / 12.5 m	50' / 15.3 m
Nested Height	6.5' / 2 m	6' / 1.8 m	5.3' / 1.7 m	6.8' / 2.1 m	6.3' / 1.9 m	7.3' / 2.3 m
Approx. Mast Weight	118 lb. / 53 kg	119 lb. / 54 kg	197 lb. / 90 kg	230 lb. / 104 kg	223 lb. / 101 kg	257 lb. / 117 kg
Sections	5	6	8	8	9	9
Tube Diameter	6.75-3.75" / 17.15-9.53 cm	6.75-3" / 17.15-7.62 cm	9-3" / 22.86-7.62 cm	9-3.75" / 22.86-9.53 cm	9-3" / 22.86-7.62 cm	9-3" / 22.86-7.62 cm
Collars	Internal, Non-Locking	Internal, Non-Locking	Internal, Non-Locking	Internal, Non-Locking	Internal, Non-Locking	Internal, Non-Locking
Maximum Operating Pressure	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)

\*Capacity will be affected by wind sail area. Consult factory.

## PNEUMATIC NON-LOCKING TELESCOPING MASTS

The Will-Burt Pneumatic Heavy-Duty Non-Locking (HDNL) and Super Heavy-Duty Non-Locking (SHDNL) Masts offer a light-weight solution with a high payload lifting capacity. Our Pneumatic Non-Locking Masts also feature high pointing accuracy and long mast life for high performance and dependability. The pneumatic heavy-duty design makes it inherently safe. What's more, the Pneumatic Non-Locking Masts have controlled exhausting of air for smooth and safe retraction. Locking models are available for extended deployments.

### ESSENTIAL FEATURES

- **Maintains Azimuth – Minimal Twist Deflection**
  - Reliable full-length external keyways
- **Reliable Operation**
  - Anodized aluminum with synthetic bearings
- **No maintenance required**
  - No routine maintenance required under normal operating conditions
  - 5 year manufacturer warranty



### SPECIFICATIONS

Super Heavy Duty Models	10-38	12-48
Payload Capacity*	1,200 lb. / 544 kg	1,200 lb. / 544 kg
Extended Height	38' / 11.6 m	48' / 14.6 m
Nested Height	10' / 3 m	12; / 3.6 m
Approximate Mast Weight	400 lb. / 181 kg	475 lb. / 215 kg
Number of Sections	5	5
Tube Diameter	11.25-7.5" / 286-191 mm	11.25-7.5" / 286-191 mm
Maximum Operating Pressure	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)

Heavy Duty Models	6-25	7-30	7-42	8.5-48	8.5-52	9.5-56	9-58
Payload Capacity*	200 lb. / 91 kg	200 lb. / 91 kg	200 lb. / 91 kg	300 lb. / 136 kg	200 lb. / 91 kg	300 lb. / 136 kg	200 lb. / 91 kg
Extended Height	25' / 7.6 m	29' / 8.9 m	41.2' / 12.5 m	48' / 14.6 m	52' / 15.8 m	56.2' / 17 m	58' / 17.7 m
Nested Height	5.8' / 1.8 m	6.7' / 2 m	7' / 2.1 m	8.5' / 2.6 m	8.3' / 2.5 m	9.5' / 2.9 m	9' / 2.7 m
Approx. Mast Weight	110 lb. / 50 kg	125 lb. / 57 kg	235 lb. / 107 kg	275 lb. / 125 kg	266 lb. / 121 kg	296 lb. / 135 kg	290 lb. / 132 kg
Number of Sections	6	6	9	8	9	8	9
Tube Diameter	6.75-3" / 171-76 mm	6.75-3" / 171-76 mm	9-3" / 229-76 mm	9-3.75" / 229-95 mm	9-3" / 229-76 mm	9-3.75" / 229-95 mm	9-3" / 229-76 mm
Maximum Operating Pressure	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)

Standard Duty Models**	5-20	6-27	7-34	8-30
Payload Capacity*	70 lb. / 32 kg	40 lb. / 18 kg	40 lb. / 18 kg	100 lb. / 45 kg
Extended Height	20' / 6.1 m	27' / 8.2 m	33.8' / 10.3 m	29.8' / 9.1 m
Nested Height	5.3' / 1.6 m	6' / 1.8 m	7' / 2.1 m	8' / 2.4 m
Approx. Mast Weight	45 lb. / 21 kg	54 lb. / 25 kg	67 lb. / 31 kg	64 lb. / 29 kg
Number of Sections	6	7	7	5
Tube Diameter	5-2.5" / 127-64 mm	5-2" / 127-51 mm	5-2" / 127-51 mm	5-3" / 127-76 mm
Maximum Operating Pressure	20 PSIG (1.4 bar)	20 PSIG (1.4 bar)	20 PSIG (1.4 bar)	20 PSIG (1.4 bar)

\*Capacity will be affected by wind sail area. Consult factory.

\*\*Internally wired versions available

## REMOTE LOCKING SYSTEM FOR PNEUMATIC MASTS

Will-Burt's patent pending Remote Locking System for pneumatic masts allows an operator to lock and unlock the mast from an assured distance. No manual interaction is required to raise or lower the mast. Operation of the system is intuitive, requiring less training and reducing the risk of operator error.

The Remote Locking System is available on any Heavy-Duty or Super Heavy-Duty pneumatic mast system up to 60' / 18m and any Ultra Heavy-Duty pneumatic mast system up to 80' / 24m.

### FEATURES AND SPECIFICATIONS

- Ability to stand clear from payload during deployment and retraction
- Easy to understand and operate control
- Super pins for longer lock life and increased wind survival speed in guyed applications
- Close azimuth design and two full-length keys on every mast section reduces mast movement and twist
- No routine maintenance required
- Pneumatic operation requires no fluids



Locks and Controls Included



Unlocked Pneumatic Actuator



Locked Pneumatic Actuator



Front

Control Box Included



Optional Handheld Controller

## PNEUMATIC LOCKING HD & SHD TELESCOPING MASTS

### Designed for extended deployment periods.

Available in both Heavy Duty and Super Heavy Duty models, these masts offer a light weight elevation solution with a high payload capacity. These vehicle or trailer mounted telescoping masts feature locking collars that allow the mast to remain extended indefinitely without air pressure. Full-length keyways maintain directional azimuth and provide precise pointing accuracy.

### ESSENTIAL FEATURES

- **Maintains Height Indefinitely**
  - Locking collars are easy to operate
- **Maintains Azimuth – Minimal Twist Deflection**
  - Full-length external keyways
- **No Maintenance Required**
  - No routine maintenance required under
  - Normal operating conditions
  - 5 year manufacturer warranty



### SPECIFICATIONS

Heavy Duty Models	6-25	7-30	7-32	7-42	10-60	14.5-80
Payload Capacity*	200 lb. / 90.7 kg	200 lb. / 91 kg	400 lb. / 181.4 kg	200 lb. / 91 kg	300 lb. / 136 kg	400 lb. / 181 kg
Extended Height	25' 1" / 7.62 m	29' 1" / 8.9 m	31' 6" / 9.45 m	41' 3" / 12.6 m	59' 9" / 18.3 m	79' 9" / 24.3 m
Nested Height	6' 1" / 1.9 m	7' / 2.1 m	7' 2" / 2.18 m	7' 9" / 2.3 m	10' 1" / 3m	14' 3" / 4.3 m
Approximate Mast Weight	119 lb. / 54 kg	125 lb. / 57 kg	235 lb. / 106.6 kg	235 lb. / 107 kg	330 lb. / 150 kg	416 lb. / 189 kg
Number of Sections	5	6	7	9	8	7
Tube Diameter	3-6.75" / 76-171 mm	6.75-3" / 171-76 mm	4.5-9" / 114-229 mm	9-3" / 229-76 mm	9-3.75" / 229-95 mm	9-4.5" / 229-114 mm
Collar Type	Locking T-Handles	Locking T-Handles	Locking T-Handles	Locking T-Handles	Locking T-Handles	Locking Trip Lines
Guying Required	Optional	Optional	Optional	Optional	Optional	4 way / 4 level
Max. Operating Pressure	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)

### SPECIFICATIONS

Super Heavy Duty Models	10-44.5	9-50	10.3-60	10.8-76	11.5-76	15.7-100	18-120
Payload Capacity*	980 lb. / 444 kg	530 lb. / 240 kg	530 lb. / 240 kg	300 lb. / 136 kg	400 lb. / 181 kg	530 lb. / 240 kg	530 lb. / 240 kg
Extended Height	44' 7" / 13.6 m	50' 5" / 15.3 m	60' 6" / 18.4 m	76' 2" / 23 m	76' 1" / 23.17 m	100' 5" / 30.3 m	120' / 36.5 m
Nested Height	10' / 3.05 m	9' 2" / 2.8 m	10' 5" / 3.18 m	10' 9" / 3.3 m	11' 6" / 3.5 m	15' 8" / 4.8 m	18' 2" / 5.6 m
Approximate Mast Weight	313 lb. / 142 kg	500 lb. / 227 kg	500 lb. / 227 kg	536 lb. / 245 kg	613 lb. / 278 kg	790 lb. / 361 kg	920 lb. / 417 kg
Number of Sections	6	8	8	10	9	8	8
Tube Diameter	11.25-6.75" / 286-172 mm	11.25-5.25" / 288-135 mm	11.25-5.25" / 288-135 mm	11.25-3.75" / 288-96 mm	11.25-4.5" / 286-108 mm	11.25-5.25" / 288-135 mm	11.25-5.25" / 288-135 mm
Collar Type	Locking T-Handles	Locking T-Handles	Locking T-Handles	Locking T-Handles and Trip Lines	Locking Trip Lines	Locking Trip Lines	Locking Trip Lines
Guying Required	Optional	Optional	Optional	Yes - 4 Way / 4 Level	Yes	Yes - 4 Way / 4 Level	Yes
Max. Operating Pressure	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)

\*Capacity will be affected by wind sail area. Consult factory.

## PNEUMATIC LOCKING ULTRA HEAVY-DUTY TELESCOPING MASTS

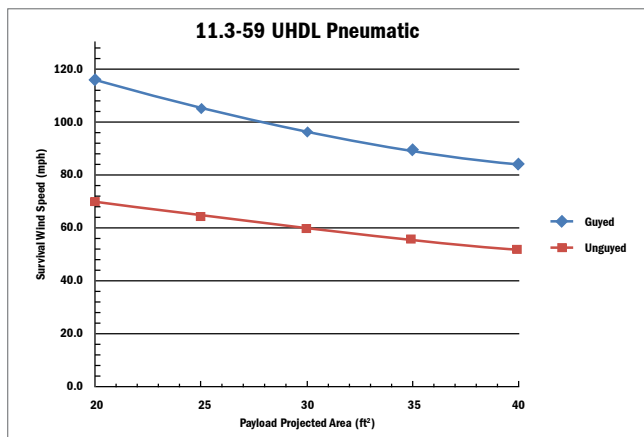
### Higher payload capacity with shorter nested height.

The Ultra Heavy-Duty Pneumatic Mast with Locking Collars delivers an unparalleled combination of strength and rigidity in a design that delivers the performance of a hydraulic mast at less weight and without the need for environmentally dangerous fluids.

The Ultra Heavy-Duty mast was specifically designed for mobile communications providing better unguyed performance at lower nested heights – eliminating the need for an expensive tilt system.

### ESSENTIAL FEATURES

- **Strong**
  - Elevates heavier loads with greater wind sail area
  - Greater unguyed performance
- **Fast & Efficient**
  - Lower nested height eliminates the need for costly and complicated tilt systems
  - Easier to deploy in urban areas
  - Safe long-term deployment with easy to operate positive locking pins
- **Reliable**
  - 5 year manufacturer warranty
  - No maintenance required
  - No hydraulic fluid concerns



## SPECIFICATIONS

Ultra Heavy-Duty Models	8-39	11.3-59	9.8-65.6	13-70	14.4-80
Payload Capacity*	980 lb. / 444 kg	1200 lb. / 544 kg	530 lb. / 240 kg	1200 lb. / 544 kg	1200 lb. / 544 kg
Extended Height	39.3' / 12 m	59' / 18 m	65.6' / 20 m	70' / 21.3 m	80' / 24.3 m
Nested Height	7.9' / 2.4 m	11.3' / 3.4 m	9.8' / 3 m	13' / 4 m	14.4' / 4.4 m
Approximate Weight	607 lb. / 275 kg	814 lb. / 369 kg	852 lb. / 387 kg	920 lb. / 417 kg	1078 lb. / 489 kg
Number of Sections	8	7	10	7	7
Tube Diameter	13.5-6.75" / 34.29-17.15 cm	13.5-7.5" / 34.29-19.05 cm	13.5-5.25" / 34.29-13.34 cm	13.5-7.5" / 34.29-19.05 cm	13.5-7.5" / 34.29-19.05 cm
Collar Type	Locking with Super Pins	Locking with Super Pins	Locking with Super Pins	Locking with Super Pins	Locking with Super Pins
Maximum Operating Pressure	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)	35 PSIG (2.4 bar)

\*Capacity will be affected by wind sail area. Consult factory.



## PNEUMATIC TELESCOPING YACHT MASTS

**Specially designed to withstand the harsh environment of the sea.** The Will-Burt Company has been designing and manufacturing mobile telescopic masts for over 40 years. These masts are designed to meet the uncompromising demands of the most demanding missions and expeditions.

Will-Burt's Yacht Masts are specifically designed to perform in harsh sea conditions.

### ESSENTIAL FEATURES

- Lightweight and reliable pneumatic elevation
- Stainless steel collars and fasteners
- Aluminum mast tubes are anodized and hard-coated with Teflon® for long life and optimal performance
- Keyed mast sections minimize twist
- Internal wiring is protected from the elements
- Locking models available for long-term deployment
- Base-plate and internal mounting hardware included



### SPECIFICATIONS

Non-Locking Models	710201840	710202940
Extended Height (ft. / m)	16 / 4.8	20.5 / 6.2
Nested Height (ft. / m)	7 / 2.1	8 / 2.4
Number of Sections	3	3
Base - Top Tube Diameter (in. / cm)	5 - 4 / 127 - 101	5 - 4 / 127 - 101
Collar Type	Non-Locking	Non-Locking

Locking Models	710201840	710202940	710203040	710203330	710203440	710203530	710203690	710204090
Extended Height (ft. / m)	18 / 5.4	29 / 8.8	30 / 9.1	32.2 / 9.8	33.6 / 10.2	34.8 / 10.6	36.3 / 11.1	40 / 12.2
Nested Height (ft. / m)	5.3 / 1.6	7 / 2.1	12 / 3.6	9 / 2.7	7.6 / 2.3	9 / 2.7	9 / 2.7	9 / 2.7
Number of Sections	6	6	3	6	6	6	6	6
Base - Top Tube Diameter (in. / cm)	5 - 2.5 / 127 - 63.5	5 - 2.5 / 127 - 63.5	5 - 4 / 127 - 101	5 - 2.5 / 127 - 63.5	5 - 2.5 / 127 - 63.5	5 - 2.5 / 127 - 63.5	5 - 2.5 / 127 - 63.5	5 - 2.5 / 127 - 63.5
Collar Type	Locking	Locking	Locking	Locking	Locking	Locking	Locking	Locking

## PNEUMATIC SYSTEMS

Will-Burt offers a variety of low-maintenance pneumatic systems and hand pumps, all specifically designed for optimal performance for use with Will-Burt Telescoping Masts.

Each system is shipped completely assembled, tested and factory preset.



Part Number	5766701	5857701	5802201 / 5766301	5802301	902404	903193	912361
AC Models	WB135	WB135	WB280	WB280			
Mast Application	Standard Duty	Standard Duty	Heavy / Super / Ultra Duty	Heavy / Super / Ultra Duty	Heavy / Super / Ultra Duty	Heavy / Super / Ultra Duty	Heavy / Super / Ultra Duty
Voltage	110VAC 60Hz	220VAC 50Hz	110VAC 60Hz	220VAC 50Hz	110VAC / 60Hz	220VAC 50Hz	220VAC 60Hz
CFM	4.7	4.7	9.8	9.8	4.4	2.01	4.4
Ltr / Min	135	135	280	280	125	57	101
Operating Temperature	14° to 131°F / -10° to 55°C	14° to 131°F / -10° to 55°C	14° to 131°F / -10° to 55°C	14° to 131°F / -10° to 55°C	50° to 104°F / 10° to 40°C	-4° to 131°F / -20° to 55°C	50° to 104°F / 10° to 40°C
Optional HandHeld Remote							
Protective Enclosure	x	x	x	x			
Cooling Fan					x	x	x
Air Hose with Fittings	x	x	x	x	x	x	x
Pressure Gauge	x	x	x	x	x	x	x
Pressure Switch	20 ±2 psi	20 ±2 psi	35 ±2 psi	35 ±2 psi	32 ±2 psi	32 ±2 psi	32 ±2 psi
Current Draw	7 amps	3.5 amps	14 amps	7 amps	10.6 amps	4.1 amps	5.3 amps
Weight	55.2 lb / 25 kg	55.2 lb / 25 kg	62 lb / 28 kg	62 lb / 28 kg	45 lb / 20.4 kg	55 lb / 24.95 kg	45 lb / 20.4 kg
Dimensions (L x W x H)	15.2" x 10.1" x 15.2" / 385mm x 255mm x 380mm	15.2" x 10.1" x 15.2" / 385mm x 255mm x 380mm	16.6" x 11.7" x 15.1" / 420mm x 295mm x 380mm	16.6" x 11.7" x 15.1" / 420mm x 295mm x 380mm	18.33" x 11.61" x 8.91" / 466mm x 295mm x 227mm	16.4" x 12.6 x 9.0 / 417mm x 320 x 229	18.33" x 11.61" x 8.91" / 466mm x 295mm x 227mm



Part Number	5857801	5857901	5766801	5766901
DC Models	WB135	WB135	WB135	WB135
Mast Application	Standard Duty	Standard Duty	Heavy / Super / Ultra Duty	Heavy / Super / Ultra Duty
Voltage	12VDC	24VDC	12VDC	24VDC
CFM	4.7	4.7	4.7	4.7
Ltr / Min	135	135	135	135
Operating Temperature	14° to 131°F / -10° to 55°C	14° to 131°F / -10° to 55°C	14° to 131°F / -10° to 55°C	14° to 131°F / -10° to 55°C
Optional HandHeld Remote				
Protective Enclosure	x	x	x	x
Cooling Fan				
Air Hose with Fittings	x	x	x	x
Pressure Gauge	x	x	x	x
Check Valve	20 ±2 psi	20 ±2 psi	35 ±2 psi	35 ±2 psi
Current Draw	65 amps	32 amps	65 amps	32 amps
Weight	55 lb / 25 kg	55 lb / 25 kg	55 lb / 25 kg	55 lb / 25 kg
Dimensions (L x W x H)	15.2" x 10.1" x 15.2" / 385mm x 255mm x 385mm	15.2" x 10.1" x 15.2" / 385mm x 255mm x 385mm	15.2" x 10.1" x 15.2" / 385mm x 255mm x 385mm	15.2" x 10.1" x 15.2" / 385mm x 255mm x 385mm

**MAST ACCESSORIES** .....

**DTEC® D-TEC® SAFETY SYSTEM**

The D-TEC® safety system provides overhead power line detection and above-the-mast illumination. The built-in high voltage, electromagnetic and electrostatic field detection system automatically stops mast extension, providing added protection for the operator and equipment. The D-TEC® safety system is available on vertical telescoping masts.



**ESSENTIAL FEATURES:**

- **Dual threshold AC alert, E-Field (current) and H-Field (magnetic)**
- **3-axis field detection**
- **LED Look-Up Light**
- **Audible alerts**
- **Alphanumeric LED display**
- **Built-in Emergency Bypass**
- **Expanded self-testing features**
- **Factory pre-set siren and verbal warning in English and Spanish**

**SPECIFICATIONS**

D-TEC Models	
Detection Frequency Range	47Hz - 70 Hz
Detection	Electromagnetic & electrostatic field detection
Look-up Light	LED Look-up Light
Power Requirements	12 VDC 10 Amps / 24 VDC 5 Amps
Interconnecting Cable	2 twisted pair shielded (sensor to control unit)

D-TEC Models (cont.)	
Environmental Conditions	Sensor IP67, Control IP65
Operating Temperature	-40 to 160°F (-40 to +71°C)
Display Options (L x W x H)	8.661 x 4.784 x 4.173 in. (220 x 121.5 x 106 mm)
Sensor Housing (L x W x H)	5 x 3.6 x 5.6 in. (127 x 92 x 141 mm)
Rack Mount (L x W x H)	19 x 6.089 x 1.75 in. (483 x 154.7 x 44.5 mm)

**EXTERNAL CABLE MANAGEMENT**

NYCOIL® is a coiled conduit used to house wiring, antenna coax and positioner cable that is too large to fit inside the mast. NYCOIL® easily fits around the mast and extends neatly and compactly retracts when the mast is nested.

A variety of sizes is available from 0.5" / 1.27 cm to 1.25" / 3.2 cm in diameter with lengths available up to 100 ft. / 30 m.



**PNEUMATIC MAST FINISHES**

Will-Burt's Lukon 24 Mast finish is a patented process of hard anodizing aluminum surfaces and applying a permanent Teflon® lubricant. This provides improved service in all weather conditions and increases life expectancy. Field proven worldwide under all environmental conditions including military.



**WILL-BURT ALSO OFFERS STANDARD OFF THE SHELF AND CUSTOM MOUNTING AND INTEGRATION HARDWARE AND DESIGN SOLUTIONS.**

## KVL, KVK, & KVR TELESCOPIC CABLE DRIVE MASTS



The Family of light duty GEROH Telescopic Cable Drive Masts is characterized by lightweight construction in addition to superior stability, reliability and long life. The KVL, KVK, and KVR mast systems are in use in military and commercial applications such as communications testing, surveillance and lighting and are designed for vehicle, trailer, shelter or field deployment. The mast sections consist of close tolerance precision mast profiles which ensure precise pointing accuracy. Safe deployment and retraction is assured, even with ice or heavy wind conditions.

### ESSENTIAL FEATURES

- **Automatic locking system (KVR)**
  - Deploy at any height
- **Precision tube fit**
  - Maintains azimuth
- **Powerful cable drive system**
  - Deploy and retract in extreme weather conditions
- **Optional motor drive system**
- **Designed for trailer, shelter, vehicle or field mounting**
- **MIL-STD 810-F & G qualified**
- **Field Deployment Kit Optional**



### SPECIFICATIONS

KVL	120 - 2.5 KVL 3	120 - 4 KVL 4	120 - 6 KVL 5	120 - 8 KVL 5	145 - 8 KVL 6	145 - 10 KVL 6
Extended Height (ft. / m)	8.2 / 2.5	13.1 / 4	19.7 / 6	26.2 / 8	26.2 / 8	32.8 / 10
Nested Height (ft. / m)	3.5 / 1.1	4.3 / 1.3	5.1 / 1.5	6.4 / 2.0	5.75 / 1.75	6.9 / 2.1
Payload Capacity (lb / kg)	67 / 30	67 / 30	55 / 25	44 / 20	44 / 20	33 / 15
Approximate Mast Weight (lb / kg)	62 / 28	71 / 32	82 / 37	95 / 43	106 / 48	122 / 55
Number of Sections	3	4	5	5	6	6

KVK	120 - 2.5 KVK 3	120 - 4 KVK 4	145 - 6 KVK 4	145 - 8 KVK 5	170 - 10 KVK 5	170 - 12 KVK 6
Extended Height (ft. / m)	8.2 / 2.5	13.1 / 4	19.7 / 6	26.2 / 8	32.8 / 10	39.3 / 12
Nested Height (ft. / m)	3.5 / 1.14	4.3 / 1.34	6.3 / 1.9	6.9 / 2.1	8.2 / 2.5	8.2 / 2.5
Payload Capacity (lb / kg)	132 / 60	99 / 45	132 / 60	99 / 45	110 / 50	88 / 40
Approximate Mast Weight (lb / kg)	62 / 28	78 / 35	122 / 55	139 / 63	183 / 83	194 / 88
Number of Sections	3	4	4	5	5	6

KVR	145 - 8 KVR 5	145 - 10 KVR 5	145 - 12 KVR 5	170 - 8 KVR 5	170 - 10 KVR 5	170 - 12 KVR 5	170 - 14 KVR 5	170 - 8 KVR 6	170 - 10 KVR 6	170 - 12 KVR 6	170 - 14 KVR 6
Extended Height (ft. / m)	26 / 8	32 / 10	39 / 12	26 / 8	32 / 10	39 / 12	45 / 14	26 / 8	32 / 10	39 / 12	45 / 14
Nested Height (ft. / m)	7.2 / 2.2	8.5 / 2.6	9.9 / 3.0	7.2 / 2.2	8.5 / 2.6	9.9 / 3.0	11.2 / 3.4	6.6 / 2.0	7.6 / 2.3	8.9 / 2.7	9.9 / 3.0
Payload Capacity (lb / kg)	110 / 50	99 / 45	88 / 40	110 / 50	110 / 50	99 / 45	88 / 40	110 / 50	99 / 45	88 / 40	88 / 40
Approximate Mast Weight (lb / kg)	148 / 67	163 / 74	176 / 80	181 / 82	201 / 91	220 / 100	240 / 109	176 / 80	194 / 88	212 / 96	229 / 104
Number of Sections	5	5	5	5	5	5	5	6	6	6	6

Additional sizes available. Specifications are for reference only and are subject to change. Please contact Will-Burt for current and exact specifications.

In addition to its masts, Will-Burt Germany also engineers and manufactures its own line of specialty single and double-axle military trailers, designed for maximum mobility with high payload capability and low curb weight.

## INFLEXION™ ROOF-MOUNTED TELESCOPING MAST

The Will-Burt Company has partnered with the industry leaders in broadcast vehicle integration for over 30 years. This has allowed Will-Burt to identify advances and changes in broadcast technology early and design elevation solutions to optimize that technology.

Inflexion™ was designed to meet the elevation requirements of smaller, advanced broadcast devices. The roof-mounted, self-contained Inflexion™ can easily be integrated onto nearly any vehicle, from traditional broadcast vans to small, front-wheel drive vehicles. This allows you to take full advantage of fuel and vehicle cost savings.

### STANDARD FEATURES

- **Compact, roof-mount design**
  - No interior space needed
- **Self-contained elevation system**
  - No compressor or generator required
- **Years of reliable service**
  - Field proven design with over 25 years of service - 2 year manufacturer warranty
- **High payload capacity and height options**
  - From 3 ft. / 1.0 m to 25 ft. / 7.5 m
- **Accommodates a variety of payloads**
  - Antennas, satellite dish, radar, lighting and cameras
- **12 VDC operation**
- **Color**
  - White
- **Analog Handheld controller**
  - Includes mast up/down function

### OPTIONAL FEATURES

- **PositionIt**
  - Integrated pan and tilt positioner
- **InflexionPlus**
  - Accommodates full function handheld controller (sold separately)
- **Color**
  - Black
- **Internal wiring or Nycoil**
  - Consult factory for specific application
- **24 VDC operation**

### SPECIFICATIONS

Inflexion Models	1.0	1.8	2.3	3.0	4.5	6.0	7.5
Extended Height (in. / cm)	39 / 99	60 / 152	79 / 200	108 / 274	168 / 427	228 / 579	287 / 729
Maximum Payload Capacity (lb. / kg)*	60 / 27	60 / 27	60 / 27	100 / 45	100 / 45	70 / 31	57 / 25
Approximate Stowed Dimensions (L x W x H) (in. / cm)	41.5 x 15 x 10 / 104 x 38 x 25	37 x 15 x 10 / 94 x 38 x 25	43 x 16 x 11 / 110 x 38 x 23	51 x 16 x 12 / 130 x 41 x 31	63 x 16 x 12 / 159 x 40 x 29	80 x 16 x 11 / 202 x 40 x 28	91 x 16 x 11 / 223 x 40 x 28
Approximate System Weight (lb. / kg)	60 / 27	63 / 29	66 / 30	105 / 48	110 / 50	123 / 56	134 / 61
Operating Temperature Range (°F / °C)	-22 to +149 / -30 to +65						

\*The added weight of a positioner or D-TEC II will reduce maximum payload capacity. Capacity will be affected by wind sail area. Consult factory.



## INTEGRATED TOWER SYSTEMS

Integrated Tower Systems-ITS, a Will-Burt Company, is a global leader in the manufacture, sales and rental of an extensive and affordable line of rapid-deployment Mobile Tower & Mast Systems; Tower & Mast Integrated Trailers, Trucks, Communication-Site-on-Wheels (COWs), and Mast-, Satellite- and Tower-Integrated Mobile Command and Communication Centers. This state-of-the-art equipment is designed specifically to support a global contingent of ITS clientele representing the following industries:



- Telecommunications, Infrastructure Development/Restoration; Tower Owners/Operators Multi-media, Broadcasting
- First Responder, Public Safety and Emergency Management; Law Enforcement, Incident Command, Search & Rescue
- Homeland Defense/National Security, Domestic and Foreign Military Initiatives; Tactical and Support Functions
- Immigration and Customs Enforcement, Border Security; Disaster Preparedness/Emergency Response
- Geophysical, Oil & Gas and Alternative Energy; Meteorological, Frequency and Weapon Systems Testing
- Transportation, Aviation, Aerospace & Construction; Entertainment, Logistics, Engineering, Municipal and Corporate Programs
- Global Support of Special Events; Political, Commercial, Industrial, Sporting, Civic and Numerous other Industries

In an ongoing effort to support National Security, Public Safety, Emergency Response and Military Initiatives world-wide, ITS' affordable and innovative rapid response systems are manufactured to both civilian and military specifications and built to withstand many of the world's most demanding environments. Whether designed for the seamless installation of common or client-specific technologies, or pre-integrated with an ITS or client-furnished Communications or Surveillance Solution, ITS' rapidly deployed equipment are proven key components in establishing the flow of vital information from remote and urban areas of need. **For additional information, please visit our website at [www.itstowers.com](http://www.itstowers.com) or contact an ITS Representative Toll Free at 1-(800)-850-8535.**



## SPECIFICATIONS

	Mobile Tower Solutions	Mobile Mast Solutions
Self-Support & Guyed Heights (ft. / m)	±38, 55, 72, 89, 106, 120 & 130 (11.6, 16.8, 21.9, 27.1, 32.3, 36.6 & 39.6)	30 - 120 / 9 - 36
Tower Capacity (lb / kg)	<b>Standard Payloads:</b> Up to: ±550 / 250   <b>Upgraded Payloads:</b> Up to: ±625 / 284	Payloads Up To: 1,200 / 544
Power	120-220 VAC / 60-50 Hz Configurations	
Common Use	Border Security • Broadcasting • Disaster Recovery / Emergency Response • Lighting • Remote Communications Site Security • Surveillance • Energy Exploration / Production Sites • Sensor Applications • Systems Testing • Telecommunications • Temporary Cell Site	

## MOBILE TOWER SOLUTIONS



### SC SERIES – COMMUNICATION-SITE-ON-WHEELS (COW)



### TMT SERIES – TRUCK MOUNTED TOWER SYSTEM



## MOBILE MAST SOLUTIONS

### COW SERIES – TRAILER MOUNTED MAST (Vertical Mast Installation)



### RD-S / RD-T SERIES – TRAILER MOUNTED MAST (Multiterrain Configuration)



## RENTAL AND FLEXI-FLEET CONFIGURATIONS – PORTABLE TOWER SYSTEMS



ITS Rental Programs offer a wide variety of innovative, efficient and flexible options to meet customer's temporary, long-term, and emergency communications needs. Whether originating from ITS manufacturing headquarters or a Domestic or International Fleet Depot, we offer customers both in-house and field services including; training, equipment integration, deployment and decommissioning coordination, customs and transportation logistics, and other necessary services to assist with temporary use requirements.

As designed, each trailer's skeletal frame is engineered with a minimum factor of safety of 2:1, with 4:1 in critical load areas. A multi-section ~ 21'0" / 6.4m each, lattice steel telescopic structure is designed to transport horizontally over the trailer's equipment platform and automatically tilt by means of a heavy-duty, chrome plated hydraulic cylinder. The tower system is raised to its full extension utilizing a direct drive, minimum 1HP, totally enclosed fan cooled (TEFC), wash-down rated electric winch motor and gearbox assembly. Each Portable Tower System model is capable of being deployed, elevated to its full-extended height, and secured by a mechanical tower lock mechanism by one person in under 30 minutes. For added security and stability during poor weather conditions, excessive loading, long-term deployment, or to minimize structure deflection for critical applications, the tower may be further protected by the use of an included guy cable and ground anchor system.

### ITS Telescopic Tower Systems

- ±106' / 33m and ±125' / 38m Self-Supporting and Guy Capable Tower Elevations
- Fully Automated, Direct Drive Tower Operating System; No Belts, No Chains, No Guy Wires Required
- ±550 lb / 250 kg Standard Tower Load Capacity; 120-220VAC Electrical Configuration
- Greatest Self-Supporting and Guyed Wind / Payload Capacity of Any Comparable Tower System
- Multi-Terrain, Custom Drawbar Trailers with Outrigger Stabilization; Electric Brakes and LED Lighting
- 15,000 lb / 6,803 kg - 22,000 lb. / 9,977 kg Capacity GVWR; 4,000 lb / 1,814 kg to 6,000 lb / 2,721 kg Equipment Capacity





# POSITIONIT®

Introducing the new PositionIt range of positioners with improved, next-generation control electronics and software while retaining the rugged reliability of the original PositionIt range. The new PositionIt series is dimensionally and electrically identical to the first generation with fully backwards compatible electronics and software. Improved motor control is assured with higher resolution speed control, slower minimum speeds, and user adjustable minimum speeds and speed ramps. The new GUI for configuring and commissioning allows users to set and adjust many features that were originally factory set only. It also boasts many new features such as the ability to receive positional feedback, set home position and limit stops and fault diagnostics.



## ESSENTIAL FEATURES

- **Designed, Manufactured, and Tested to excel in Mobile Applications**
  - Hardened metal gears
  - MIL-STD 810 certified by independent laboratory
- **Strong, lightweight construction**
  - Die-cast aluminum housing
  - Stainless steel fasteners
- **New Graphical User Interface (GUI)**
  - Greater level of control with user set features
  - Faster set-up
  - Positional feedback
- **More precise than ever**
  - Higher level of motor control
  - Greater positional accuracy
- **Regenerative Braking**
  - On motor shaft
- **Flexible Connection**
  - Bottom or side
- **Universal mounting plate**
  - Suitable for most common payloads
- **Pelco-D over RS-485 Communications**
- **Weather-proof**
  - IP 68 Rated
- **Long Operational Life**
  - 2-year warranty
- **Backwards compatible**

## SPECIFICATIONS

Model	PI-150	PI-75	PI-35
Payload Capacity* (ft lb / Nm)	150 / 202	75 ft / 101	35 / 47
Height (in. / mm)	11.32 / 287.7	11.32 / 287.7	9.7 / 246
Width (in. / mm)	12.4 / 314	9.21 / 234	10.8 / 273
Depth (in. / mm)	6.8 / 171	6.8 / 171	5.7 / 144
Weight (lb / kg)	37 / 16.8	35 / 16	19.5 / 8.9
Operating Temperature	-40°C to 60°C / -40°F to 140°F		
IP Rating	IP68 - Waterproof (immersion) and Dustproof		
Pan Axis	400° (± 200°)		
Pan Speed (proportional)	0.02 to 6.5° / second	1° to 12° / second	
Tilt Axis	180° (± 90°)		
Tilt Speed (proportional)	0.02 to 5.5° / second	1° to 12° / second	
Backlash	≤ 0.15°		
Repeatability	≤ 0.3°		
Maximum Continuous Power	44 W		
Maximum Running Current	1.85 amps		
Input Voltage	24 VDC - Converters available for 12 VDC and AC power sources		

\*Capacity measured at 12 inches or less from the tilt axis. Dimensions and weights are for reference only and are subject to change. Contact Will-Burt for current engineering specifications.

## POSITIONER CONTROLLERS

The latest positioner controller from Will-Burt is loaded with new features. You will always know the status of the positioner with real-time positional, speed, and status feedback. Control multiple positioners and third-party equipment with a single controller. This controller is optimized for positioners with stow and deploy buttons located on the front panel.

The new Positioner Controller from Will-Burt will simplify deployment and operation of communications and video equipment.

The Pelco-D compatible handheld controller with LCD screen has all of the features necessary to optimize the performance of the PositionIt positioner. Precision joystick controller flawlessly controls the pan and tilt functions. Includes LCD screen, keyboard and programmable presets that simplify operation. The positioner handheld controller can also be optionally used in conjunction with the pan and tilt positioner controller.



## HURRY-UP PORTABLE PUSH UP TELESCOPING MAST

The Hurry-Up manual push-up mast, can be extended to a full height of 30 feet (9 m) in one minute or less. The Hurry-Up mast features quick lock/release collars. Extend the mast manually by pushing up the sections and fixing them in position. This mast is ideal for fast deployment of light-weight antennas and instruments.

### ESSENTIAL FEATURES

- **Rigid Azimuth Locking Collars**
  - Quick direction adjustments
- **Black anodized finish**
  - Corrosion resistant
- **Simple design and operation**
  - Manual push-up deployment, retraction, and locking of mast



### ACCESSORIES

(MOUNTING OPTION REQUIRED):

- **Drive-on plate mounting**
  - No guylines required
- **Removable payload extension stub**
  - Easy payload mounting
- **External support brackets**
  - Permanent vehicle mounting
- **Hitch Mount**
  - 2" Hitch - Removable

Hitch Mount



2" Removable Hitch

Drive-On Plate



No Guylines Required

External Mount



Shelf and Support Brackets

### SPECIFICATIONS

Hurry-Up Models	710103010	903614	719901610	719900790
Payload Capacity	20 lb. / 9.1 kg	20 lb. / 9.1 kg	20 lb. / 9.1 kg	20 lb. / 9.1 kg
Extended Height	30' / 9 m	24.3' / 7.6 m	16.4' / 5.3 m	7' / 2.1 m
Nested Height	6' 9" / 2 m	5' 9" / 1.8 m	5' 4" / 1.6 m	3' 5" / .9 m
Approximate Weight	36 lb. / 16 kg	29 lb. / 13 kg	19 lb. / 9 kg	15 lb. / 7 kg
Number of Sections	6	6	4	3
Tube Diameter	3.5-1.5" / 89-38 mm	3.5-1.5" / 89-38 mm	3.5-2.25" / 89-57 mm	3.5-2.625" / 89-67 mm
Collar Type	Friction Locking	Friction Locking	Friction Locking	Friction Locking
Finish	Black Anodize, MIL-A-8625, Type II, Class 2	Black Anodize, MIL-A-8625, Type II, Class 2	Black Anodize, MIL-A-8625, Type II, Class 2	Black Anodize, MIL-A-8625, Type II, Class 2

## HURRY-UP PORTABLE PUMP UP TELESCOPING MAST

### Quick deploy, portable pneumatic mast for communications, video, and surveillance

The Hurry-Up Portable Pump Up Telescoping Mast by Will-Burt is a pneumatic mast with attached, manual pump that includes a carry bag and is easily transported and deployed by a single person. Available in heights up to 39 ft. / 12 meters with payload capability up to 55 lbs. / 25 kg this lightweight and compact telescoping mast is perfect for deploying antennas, cameras, and other sensors.

The Hurry-Up Portable Telescoping Pump Mast is highly flexible and versatile. Optional accessories are available that allow it to be deployed in a variety of settings. A tripod with built-in level and four large base plates provide a secure foundation for securing the mast. A compact Drive-On Stand allows for the weight of a vehicle to be used to provide stable support for the mast. A 2" trailer Hitch-Mount provides a third mounting option for the mast. The mounting accessories are designed so they can be integrated with one another. The tripod does not need to be removed to be used with the Drive-On Stand or the Hitch-Mount.

The Hurry-Up Pump Mast delivers fast deployment, portability, flexibility, value, and robust performance.



### OPTIONAL MOUNTING HARDWARE



Tripod with Bubble Level



2" Hitch Mount



Drive-On Stand

### OPTIONAL ACCESSORIES



Interchangeable Payload Adaptors  
Stub and Stub Plate Shown



Cable Management

### SPECIFICATIONS

Hurry-Up Pump Up Mast	5896701	5896801	5896901	5897001	5897101
Extended Height (ft. / m)	13.1 / 4	19.6 / 6	26.2 / 8	32.8 / 10	39.3 / 12
Nested Height (ft. / m)	4.2 / 1.25	5.3 / 1.60	6.7 / 2.0	8.6 / 2.60	9.9 / 3.0
Payload Capacity (lbs. / kg)	55.1 / 25	55.1 / 25	48.5 / 22	44.1 / 20	44.1 / 20
Approximate Weight (lbs. / kg)	24.3 / 11	28.6 / 13	37.5 / 17	44.1 / 20	50.7 / 23
Number of Sections	5	5	5	5	5
Tube Diameter (in. / cm)	3.54 - 1.97 / 90 - 50	3.54 - 1.97 / 90 - 50	3.54 - 1.97 / 90 - 50	3.54 - 1.97 / 90 - 50	3.54 - 1.97 / 90 - 50
Collar Type	Friction Locking	Friction Locking	Friction Locking	Friction Locking	Friction Locking
Finish	Black paint and Clear anodize				

# CONTACT YOUR SALES REPRESENTATIVE TODAY



## JOE SCHANDA

Sales Manager, North America

Mobile: 330.347.9388

[jschanda@willburt.com](mailto:jschanda@willburt.com)

### WILL-BURT NORTH AMERICA WORLD HEADQUARTERS

401 Collins Boulevard, Orrville, OH USA 44667  
Telephone: +1 330 682 7015  
Mast Customer Service: +1 330 684 4000  
Fax: +1 330 684 1190  
Email: [info@willburt.com](mailto:info@willburt.com)

### WILL-BURT ASIA SINGAPORE SALES OFFICE

1 Fullerton Road, #02-01 One Fullerton,  
Singapore 049213  
Telephone: +65 6832 5689  
Fax: +65 6722 0664 / Email: [info@willburt.com](mailto:info@willburt.com)

### INTEGRATED TOWER SYSTEMS A WILL-BURT COMPANY

2703 Dawson Road  
Tulsa, OK 74110  
Telephone: +1 800 850 8535  
Fax: +1 918 749 8537  
Email: [programs@itstowers.com](mailto:programs@itstowers.com)

### WILL-BURT GERMANY

Fischergasse 25  
D-91344 Waischenfeld, Germany  
Telephone: +49 9202 180  
Fax: +49 9202 1811  
Email: [info@willburt.com](mailto:info@willburt.com)

### WILL-BURT TÜRKİYE

Ahi Evran OSB Mahallesi,  
Nahcivan Caddesi, No: 8/2, Sincan, Ankara 06935  
Telephone: +90 535 662 9060 / Fax: +90 312 502 6970  
Email: [info@willburt.com](mailto:info@willburt.com)

### WILL-BURT UNITED KINGDOM

Unit 5b, Station Approach  
Four Marks, Alton Hampshire, GU34 5HN,  
United Kingdom  
Telephone: +44 (0) 1403 265532  
Fax: +44 (0) 1403 259072 / Email: [info@willburt.com](mailto:info@willburt.com)

### CLARK MASTS A WILL-BURT COMPANY

18-20 Ringwood Road, Binstead, Isle of Wight, PO33 3PA, England  
Telephone: +44 (0) 1983 563691/567090  
Fax: +44 (0) 1983 566643/811157  
E-mail: [sales@clarkmasts.com](mailto:sales@clarkmasts.com)

The Will-Burt Company, headquartered in Orrville, Ohio, USA, is the world's premier manufacturer of mobile telescoping masts, towers and pan and tilt positioners. We offer virtually every mobile payload elevation and integration solution for defense, government, first responders, cellular and mobile, broadcast, energy production and other markets. Will-Burt also offers contract manufacturing, metal fabrication, powder-coating, and rapid prototyping services. Will-Burt is an international company with offices and manufacturing in the USA, England, and Germany along with offices in Singapore and a joint venture in Turkey. All Will-Burt Company manufacturing locations are backed by a certified ISO 9001:2015 Quality Management System. Incorporated in 1918, Will-Burt is 100% employee-owned and is classified as a small business.