# LINDSEY



Emergency Restoration Systems

**SERIES-800 ERS** 

CARAN



The 800-series ERS is available with helicopter sighting and locking mechanisms, allowing for helicopter assembly as well as installation.

### 800-Series ERS

### For Very Heavy Loads and/or Helicopter Assembly

The Lindsey 800-Series ERS is designed to support the heaviest, most challenging conductor loads with ease. Initially designed for supporting long conductor spans through the French Alps, the 800-Series has three times the critical buckling load capacity of Lindsey's popular 600L-Series, and twice that of Lindsey's 1070-Series.

Transport friendly, the 800-series ERS easily fits into standard shipping containers.

### **Optional Helicopter Assembly**

While all Lindsey ERS structures can be installed by helicopter, the 800-series additionally allows for assembly by helicopter. A unique optional alignment and centering frame assists helicopter pilots in landing tower sections on top of foundations or installed tower sections. This ability to land partial tower sections is critical when high altitude installations result in reduced helicopter lifting capacities, precluding a full tower fly-in.

## The Lindsey ERS Heritage

Lindsey ERS structures have been the leading choice of utilities for decades to provide for unscheduled transmission tower restoration and scheduled construction at any voltage in any terrain. All series of Lindsey ERS can be erected in hours and are suitable for hand, crane and helicopter installation methods.

Though designed for temporary use, the robustness of their design is the reason why many utilities have left Lindsey ERS towers in continuous service for over two decades and counting.

The key indicators of performance for ERS structures, as for any guyed tower, are its buckling strength and the strength of tower attachment points. As a result all Lindsey ERS series have:

- Superior buckling capacity for better performance of tall structures under high loads
- At least twice the strength-to-weight ratio of other towers
- Three times stronger insulator and guy wire attachment points for maximum safety of other towers



**Reliability and Safety** All Lindsey ERS structures are designed and manufactured to the highest standards.

- Design and proof tested to IEEE Standard 1070-2006, the only world-wide accepted standard for ERS.
- **Testing performed in accordance with IEC-60652 "Loading Tests** 
  - on Overhead Line Structures."

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Lindsey is ISO 9001Compliant Certified for Design and Manufacture of ERS

Lindsey ERS Model Comparison Table	Standard*	Non-Standard ERS Systems			
	1070 series	600L- series	600H- series	800- series	Non- Lindsey
Standards Compliances					
Design and Testing Compliant to IEEE Std. 1070 and IEC-60652	Yes	Yes	Yes	Yes	Varies
Dimentionally Compliant to IEEE Std. 1070	Yes	No	No	No	No
Performance					
Relative buckling strength	150%	100%	130%	300%	75%
All extruded or plate aluminum construction	Yes	Yes	Yes	Yes	No
nstallation					
All system components, including columns, wiegh <100kgs	No	Yes	Yes	No	No
Manual, crane or helicopter installation	Yes	Yes	Yes	Yes	Yes
Helicopter assembly	No	No	No	Yes	No
Safety					
Accepts all commercially available fall arrests systems	Yes	Yes	Yes	Yes	No
Flat climbing surfaces (i.e., "boot friendly")	Yes	Yes	Yes	Yes	No
Packaging	12.34	1.1.1	-	1.	1.00
Column sections pack into 20' containers	No	Yes	Yes	Yes	Yes
Other system componentrs pack into 20' containers	Yes	Yes	Yes	Yes	Yes

\*"Standard" ERS are defined as those that are fully complaint to the design, testing AND dimensional requirements of IEEE Standard 1070-2006.

#### Weights of primary 800-series **ERS components**

**ERS Systems** 

Description	Weight kgs (lbs)			
2.8m Column Section	145(319)			
1.4m Column Section	95 (209)			
Foundation	75 (165)			
Gimbal	95 (209)			
Guy Plate	36 (79)			

### **ProSpot® ERS Design Software**

An emergency is no time to struggle with complex software. ProSpot<sup>®</sup> ERS design software is specifically for ERS systems and allows for rapid configuration and design of ERS towers in the field or in the office. ProSpot works with all series of Lindsey ERS structures.

#### **ProSpot advantages include:**

- FAIL SAFE output A Lindsey exclusive: If the design parameters selected will not result in a stable structure, no results are generated. No need for interpretation of pages of data. Only with ProSpot do you know that if you see it, you can build it.
- Fast selection of tower types; no complex set up. Design any tower, whether or not originally envisioned at the time of the original ERS system purchase.
- Limited input data requirements for fast design.
- One page output containing plan and elevation views and all critical loading parameters.
- No annual licensing fee, eliminating on-going software costs.
- May be freely copied within your organization, eliminating the need to purchase expensive software for casual users.



Example of ProSpot's one-page output





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ProSpot features fast ERS design, with no complex set-up requirements