

30, 40 & 50m WindMast



Nexgen is Europe's leading designer, manufacturer and supplier of wind monitoring masts.

Innovative Design

The superior design of the WindMast class guarantees ease of assembly on site. Minimal effort is required to erect, thanks to a straightforward tilt-up system.

Specifically designed with remote monitoring in mind, our Windmasts have survived simulated wind tests of up to 200mph.

Lightweight components mean the masts can be transported in sections, making them easy to carry and avoiding the need for heavy vehicles.

Fast installation times prove a great advantage in adverse conditions and with delivery right to your door anywhere in Europe we make your job as easy as possible.

Leaves Only Footprints

Once installed, our WindMast enables accurate wind monitoring at the required height with minimal visual impact.

No concrete is needed for installation, and our WindMasts can be easily lowered and removed without trace, leaving only footprints at the end of the project.

Down-to-earth

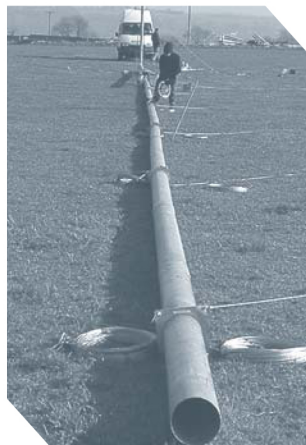
Our WindMast is assembled at ground level, so there's no need for specialist equipment for working at heights. All the instruments you need can be fitted and tested prior to erecting the mast.

And it's just as easy to install. Only a hand winch is required to tilt the WindMast skywards. The main mast is pulled vertical using a ginpole, hinged at the baseplate by a heavily reinforced pivot.

With competing systems, erecting and lowering the main ginpole can often be difficult and hazardous. Our WindMast employs a "mini" ginpole to lift the main ginpole off the ground, ensuring safety and ease of handling for everyone on site.

It's this ease of assembly allied with superior quality that's made our WindMast class the preferred choice of many engineers around the world.

To complete the picture, check out our full range of ancillary equipment available for the WindMast - from booms, sensors and loggers to lightning protection.



ALL WINDMASTS ARE DESIGNED FOR EASY TRANSPORTATION AND INSTALLATION. THEY ARE LIGHTWEIGHT AND SIMPLE TO ERECT AND REMOVE.

30, 40 & 50m WindMast Design Specification

TECHNICAL SPECIFICATIONS			
	30 m	40 m	50 m
Mast			
Mast Height:	30.8m nominal +0.2/-0.2m	40.5m nominal +0.2/-0.2m	50.2m nominal +0.1/-0.2m
Guy Wire:	4 guy sets, each with 4 guys. 7/19 5mm RHRL galvanised wire. Ultimate load is 1660kg (test certified)	5 guy sets, each with 4 guys. 7/19 5mm RHRL galvanised wire. Ultimate load is 1660kg (test certified)	6 guy sets, each with 4 guys. 7/19 5mm RHRL galvanised wire. Ultimate load is 1660kg (test certified)
Grips:	DIN 1142, tightening torque of 2Nm	DIN 1142, tightening torque of 2Nm	DIN 1142, tightening torque of 2Nm
Tubing Standards:	150mm tubing to EN 10219-2	150mm tubing to EN 10219-2	150mm tubing to EN 10219-2
Galvanising Standards:	Hot-dip BS EN1461:1999	Hot-dip BS EN1461:1999	Hot-dip BS EN1461:1999
Tube Lengths:	3000mm (28kg) and 1500mm (14kg)	3000mm (28kg) and 1500mm (14kg)	3000mm (28kg) and 1500mm (14kg)
Tube OD:	Approx 155mm	Approx 155mm	Approx 155mm
Ginpole			
The mast is erected using a pivotal ginpole, which is itself erected by a fixed mini-ginpole. The main ginpole is fitted with restraining wires which enable the winching point to be sited at a convenient location.			
Ginpole Length:	7.3m +0/-0.1m	10.3m +0/-0.1m	13.1m +0/-0.1m
Mini Ginpole:	3m (114mm diameter)	3m (114mm diameter)	3m (114mm diameter)
WIND LOADING CAPABILITIES			
	30 m	40 m	50 m
Designed to meet the structural integrity standard BS5950:1990 for IEC Wind Class One site conditions			
Mast Base (10m):	10m: 81m/sec (181mph)	10m: 65m/sec (145mph)	10m: 53.6m/sec (120mph)
Mast Top:	30m: 95m/sec (213mph)	40m: 79m/sec (175mph)	50m: 67.4m/sec (150mph)
ICING CONDITIONS			
	30 m	40 m	50 m
The 30, 40 and 50m Class One WindMasts meet BS5950 standards in the following wind and ice conditions; 6.35mm ice cover evenly over the mast and guys.			
Mast Base (10m):	10m: 52m/sec (116mph)	10m: 40m/sec (89mph)	10m: 38.9m/sec (87mph)
Mast Top:	30m: 61m/sec (136mph)	40m: 48.9m/sec (109mph)	50m: 48.9m/sec (109mph)
Base Load:	30m: 4599kg	40m: 9000kg	50m: 9100kg
During no wind these masts can withstand up to 30mm all-over ice. Ask for FAQ sheet for full icing and guy load information.			
ANCHOR LOADS & POSITIONING			
	30 m	40 m	50 m
There could be problems when trying to accurately position the anchors if the site has not been visited and assessed before installation. We supply sufficient guy wire for the anchorage of our WindMasts: 30 and 40m WindMasts: Guy sets anchored at the specified 25m radius or any intermediate to 33m if the site conditions require it. 50m WindMast: The two lower guy sets anchored at the specified 20m radius or any intermediate to 35m if the site conditions require it. A reasonably level site is assumed when determining guy wire length. Ask for FAQ sheet if mounting on slopes. Loads without ice.			
Inner Anchor Load:	Sets 1 & 2 at 25m, 1247kg	Sets 1, 2 & 3 at 25m, 1885kg	Sets 1 & 2 at 18m, 750kg
Inner Anchor Radius:	25m to 33m	25m to 33m	18m to 35m
Outer Anchor Load:	Sets 3 & 4 at 25m, 1574kg	Sets 4 & 5 at 25m, 2030kg	Sets 3, 4, 5 & 6 at 33.5m, 3400kg
Outer Anchor Radius:	25m to 33m	25m to 33m	33m to 35m
Lifting Anchor Load:	2000kg	2000kg	2100kg
CRATE DIMENSIONS & WEIGHTS			
	30 m	40 m	50 m
Mast Crate:	311cm x 105cm x 60cm, 550kg	311cm x 105cm x 86cm, 750kg	311cm x 105cm x 86cm, 850kg
Erection Kit Crate:	311cm x 75cm x 50cm, 225kg	311cm x 75cm x 50cm, 225kg	311cm x 75cm x 50cm, 250kg
Baseplate load:			7180kg



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