

FAQSHEET1 Snaking

Although each steel tube seems stiff when separately handled, once they are all plugged together they become a very flexible “drinking straw”. Once the mast is loaded by pulling on the lifting guys it will deflect sideways between the lifting points, a phenomenon known as “snaking”

Once the mast is vertical and the guys adjusted it is a very stiff structure, capable of resisting amazingly high loads.

Between horizontal and vertical it is the objective of the erection crew to maintain the mast in-line and straight by judicious adjustment of the side guys. Communicate – two side guy people both pulling against each other is not effective. The mast will easily move provided there is slack on the side to be lengthened.

Correct guy tension is important during all lifting or lowering operations with the mast, as well as the performance of the finished installation. The cables must have visible “belly” in them at all times.

If a guy wire becomes straight it will be imposing high levels of force on the mast, the anchors, and on the guy wires. Do not allow guy wires to become straight! If they do, immediately relieve the situation by letting cable out and therefore slack in.

A deflection of 100mm (4 inches) between guy collars should be the objective; more is acceptable over a longer span. This is best judged by viewing up the mast from the baseplate.

With careful side guy adjustment the snake can be minimised, but never totally eliminated.



Snaking with insufficient side guy tension at initial lift



Snaking minimised during lift