

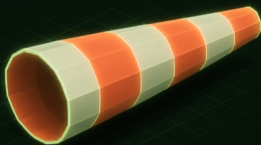
ILLUMINATED WIND CONES



An illuminated wind cone assembly pairs a fabric cone with a lighting source, a frangible support structure, and a mount that keeps the fabric free to swing with the wind. Each component has one job: read wind direction accurately in daylight, stay visible after dark, and fail safely if an aircraft ever strikes the mast.



Cone material class	UV-resistant fabric, orange and white segmented pattern
Illumination approach	Internal light source within translucent fabric, or external floodlighting onto an opaque cone
Power options	AC mains where grid power reaches the mount, or solar with battery backup where it does not
Control compatibility	Photocell or timer dusk-to-dawn control, standalone or on a constant current regulator circuit
Mounting	Frangible mast with swivel-mounted cone basket, sized to the applicable code reference
Operating environment	Outdoor airside exposure, engineered for high-UV and abrasive-sand conditions



01

CONE SLEEVE

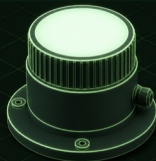
The orange and white segmented fabric body that catches the wind and shows its direction and relative strength by the angle it holds. It is the only part a pilot actually reads, so its fabric condition and sizing against the applicable code reference are what regulators inspect first.



02

SUPPORT BASKET

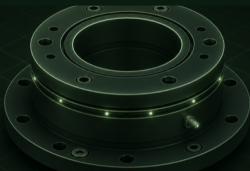
The open frame at the base of the cone that holds its mouth open and free to rotate on the mast head. It has to turn with minimal friction so the cone tracks true wind direction rather than lagging or sticking in gusty conditions.



03

ILLUMINATION UNIT

The light source, mounted internally within a translucent cone or externally as floodlighting onto an opaque cone, that keeps the indicator legible after dusk. This is the component that turns a daytime-only fixture into one that satisfies night-operation requirements.



04

SWIVEL BEARING

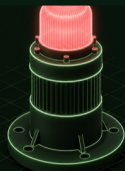
The rotating joint between the support basket and the mast head that lets the whole cone assembly weathervane freely into changing wind direction. A worn or seized bearing is a common cause of a wind cone lagging the true wind direction.



05

FRANGIBLE MAST

The support pole engineered to break away cleanly on impact rather than resist it, keeping the fixture within obstacle-limitation-surface requirements near runways, taxiways, and helipad approach paths. Its height and breakpoint design are set by the same siting rules that govern other frangible airfield fixtures.



06

OBSTACLE LIGHT UNIT

A low-intensity marker light fitted to the mast itself in some configurations, flagging the structure as an obstacle to other aircraft independently of the wind cone's own illumination. Included where site obstacle-marking requirements call for it alongside the wind indicator function.