

## Sigma Searchlights Ltd.

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## Specifications for 14(16) Meter Mobile Telescopic Tilting Type Tower with 'Green' Genset & Acoustic Cover (CPCB Approved)

Telescopic tilting type, Trolley mounted having pneumatic/ solid rubber tyres Type of Tower

Material of construction M.S.Plates formed into octagonal/polygonal shape. Regional basic Wind speed **a.** 33 m/sec (118 km/hr) **b.** 44 m/sec (158 km/hr)

c. 50 m/sec (180 km/hr)

**Gust Factor** 1.15

Topography configuration **a.** 1.0 **b.** 1.3 Mean probable design life 25 years

Height of the Towers 16 meter including the height of trolley & cradle

As per IS Code 875: 1987 (Part 3) Height Variation factor

Category 1 Class A as per IS 875: 1987 (Part 3) Terrain Category

Winches Motor operated / Manually operated

Number of Lights Cradles One / Two.

Number of Lights Four / Six / Eight / Nine. The Tower would be designed with a provision for at least 4

lights to be fitted on one side of the cradle if required.

Area of Cross Section of

the Luminaries As per design of the luminaries offered.

CONFIGURATIONS				
Mounting	Winches	No. of Lights	D.G.Set Capacity	Wheels
Trolley mounted	Manually operated	Four / Six	5 KVA / 7.5 KVA	Pneumatic tyres
Ground mounted	Motor operated	Eight / Nine	10 KVA / 15 KVA	Solid rubber tyres

**Hinging / Telescopic Arrangement**: The system would have an arrangement for installing and maintaining lights at ground level. The tilting arrangement of the Tower would be perfectly balanced and would not give any jerk or need a push/ pull to activate the operation.

Trolley Base: The trolley base would be fabricated from channel frame work. The base would be provided with suitable number of riggers of suitable extendable length to provide complete stability of towers when fully erected. The riggers after extension would be grounded with the help of screw jacks having suitable free base of steel / cast iron. The trolley would be fitted with a tow-eye, tail light reflectors etc.

Anti -rust Treatment and Painting: The total tower structure shall be given anti rust treatment by painting after sand blasting. Before painting two coats of primer shall be applied. During final painting of complete tower structure standard safety color code shall be complied with so as to provide clear visibility to the operation of dumpers, dozers, tippers etc. for safety against collision/damage during night time.

Mast Lighting Control Panel (MLCP): The MLCP shall be of outdoor type having IP 55 class of protection with incomer for power from mains / DG Set. 30 mA RCBO of adequate rating shall be provided as main incomer and MCBs shall protect the outgoing cables from short circuit. The cables from MLCP to the individual luminaries shall be prewired and so laid and protected that it does not infringe with raising and lowering of the segments of the tower. For motorized winches the interlocking arrangement should be provided to ensure that the tower tilting winch cannot be operated while the tower is in telescopic mode and vice versa. Suitable transformer can be incorporated into the system to meet the specific output requirements.

**Luminaries:** The long range, high intensity, energy saving LED flood light would be dust, moisture and vermin proof. The fitting would be complete with Die Cast Aluminum alloy Housing having high conductivity heat sinks, high performance PMMA lens, toughened front glass of 5 mm thickness, focusing arrangement. The fittings have type test Certificate including for photometry for all tests specified in type tests clause. The IP classification for the flood lights would be IP 66.

**Design:** We can supply complete design calculations for the towers selected. Most of our towers are type tested by a Govt. Test Laboratory.