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TRL

BS EN 12767:2007

Customer:
Valmont Stainton

Test Item:
10/ 12m Conical Steel Column

Test Date:
24 March 2010

Test Number:
B4248

Test speed:
100km/h

Author:
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21 April 2010

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Test Manager	G Foskett	21.04.10
Technical Referee	S J Savin	21/4/10

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Passive Safety Lighting Columns

THE “SALUS”

100 HE 2
10m & 12m POST TOP AND
0.5m TO 1.5m SINGLE ARM

100 HE 2

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Back in 1978, Valmont Stainton, commenced the manufacture of octagonal lighting columns and many of these columns are still gracing the motorways of the UK. From our humble origins as the Petitjean UK subsidiary, a successful MBO and subsequent aquisition by Valmont Industries - Valmont Stainton are now the UK's largest manufacturer of lighting columns.

Over the last 30 years we have continued to grow and diversify our product range and are now the UK's largest manufacturer of street lighting columns, high masts, tramway and mobile telephone structures, transmission and distribution poles.

Working in galvanised steel, aluminium and stainless steel with poles being produced in tubular, conical, octagonal, polygonal, square and even triangular at Valmont Stainton we cover every design and material currently used in the market place. We are pleased to be able to offer very specialist decorative products manufactured in these materials along with wooden poles from one of Valmont's sister companies.

Passively Safe lighting columns, designed, manufactured and tested in the UK are the latest product innovations and our 10m and 12m columns are approved to the highest standard 100HE:2, these are manufactured in steel which can be painted to seamlessly fit in with existing installations. Finally, our ranges of mid and base hinged poles are second to none and are available in all the materials we currently work with, a new range of mid hinged aluminium columns are now available.

Our success is based firmly on a simple business philosophy:-

"To respond to the needs of our customers with service and products that set new standards of performance and at the same time to continually strive to improve them to meet the needs of tomorrow"

Introducing our new Passive product range: The **"Salus"**.

"Salus" – Latin meaning health, safety, well-being.

Design Ethos

We at Valmont Stainton have considerable experience in manufacturing lighting structures for UK specific use, we have used this experience to create a range of passive products to seamlessly blend into existing road schemes and bring an inconspicuous solution to passive safety.

Product Specification

Available in 10m and 12m mounting heights with single bracket projections of up to 1.5m our conical galvanised structures are planted root as standard, our 100:HE:2 energy absorbing passive range is fully compliant to all relative EN specifications(EN40 and EN12767) and as the products are designed and manufactured solely in the UK are therefore produced in line with our BS EN ISO 9001:2000 and to National Highways Sector Scheme 6 accreditation.

Installation

Our Salus passive range is installed in exactly the same way as our existing planted root products, no special foundation required!

Door aperture and base compartments

We have design our passive range to be as close to our standard product offering as possible, with this in mind our doors are 500mm x 115mm and 1.0m above ground level to the bottom of the door, utilises a wrap around door cover fitted using a M8 tri door screw (door keys supplied free of charge), available with the vandal resistant Rei-lux anti-vandal screw on request.

Our base compartments are supplied complete with an earthing point and a non-hygroscopic baseboard (600mm x 100mm x 15mm) fixed by a M6 self threading countersink screw.

Bracket options

Brackets are available in single arm, up to 1.5m in projection and post top configurations. Spigot sizes of Ø60 and Ø76 for post top applications and Ø60 and Ø42 for side entry. All brackets are galvanised in accordance with BS EN ISO 1461.

Bracket arm fixing

Brackets are attached to the column by means of two rows of 4 no. M10 socket screws, with the top of the column being calibrated and formed to incorporate an anti-rotation device which is also included into the bracket enabling 4 No. 90 fixing points in line with the door opening.

Passive Safety

Valmont Stainton columns have been through rigorous design and manufacture and physical testing continuous improvement cumulating in our current passive product offer, with our 10m and 12m galvanised conical product tested at "The Transport Research Laboratory" in the UK, this family of products tested at both 100Km/h and 70Km/h, resulting in the 100:HE:2 performance class.

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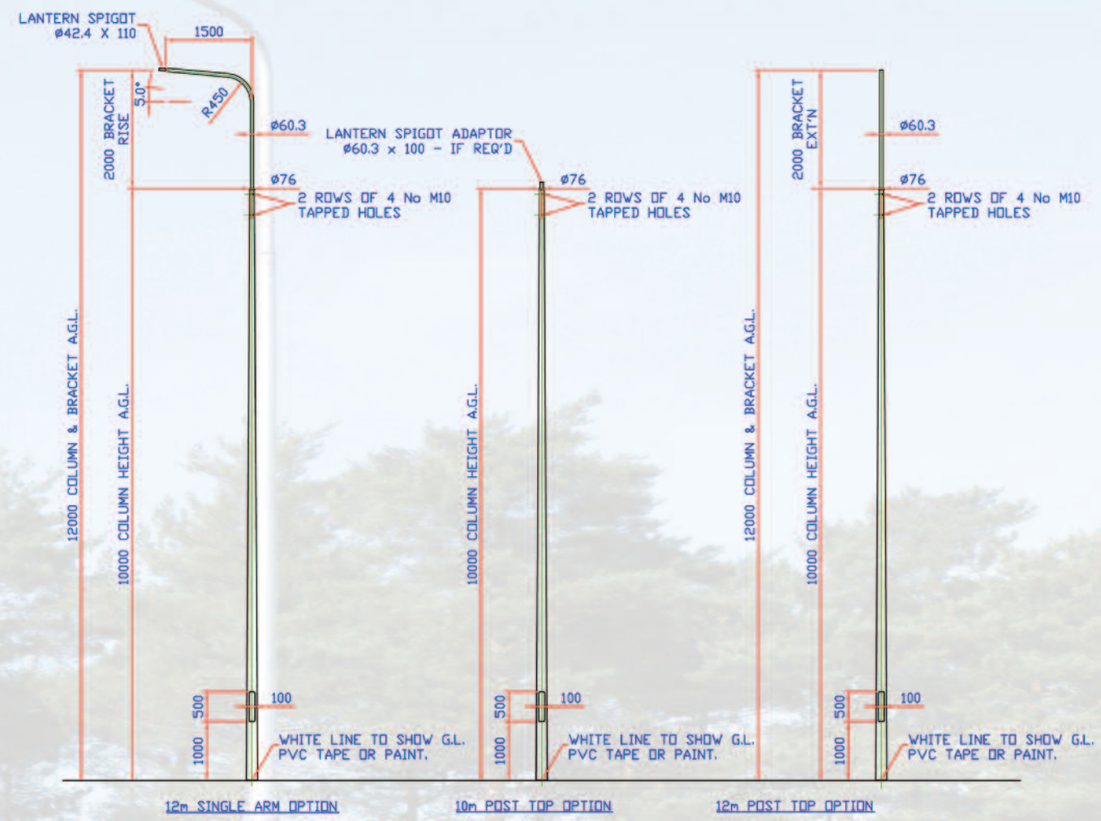

10m & 12m CONICAL STEEL PASSIVELY SAFE (100HE2): EN12767

Mast	Weight kg	E. Light (24.92m/s) - TCAT II (m2)	Light (26.5m/s) - TCAT II (m2)	Medium (27.58m/s) - TCAT II (m2)	Heavy (28.75m/s) - TCAT II (m2)	E.Heavy (31.95m/s) - TCAT II (m2)	E.Light (24.92m/s) - TCAT III (m2)	Light (26.5m/s) - TCAT III (m2)	Medium (27.58m/s) - TCAT III (m2)	Heavy (28.75m/s) - TCAT III (m2)	E.Heavy (31.95m/s) - TCAT III (m2)	MF (m.daN)	T (daN)	Concrete Side (m)	Concrete Height (m)
10M CONICAL - PASSIVE - POST TOP	32	0.686	0.583	0.525	0.47	0.352	0.984	0.836	0.752	0.673	0.506	1583	228	0.5	1
10M - CONICAL - PASSIVE - 1.5M S-ARM	16.5	0.336	0.269	0.231	0.195	0.12	0.53	0.433	0.378	0.328	0.22	1485	216	0.5	1
12M - CONICAL - PASSIVE - POST TOP	20	0.354	0.277	0.233	0.192	0.104	0.567	0.458	0.395	0.336	0.213	1600	223	0.5	1
12M - CONICAL - PASSIVE - 0.5M S-ARM	12	0.342	0.27	0.227	0.185	0.096	0.54	0.439	0.381	0.328	0.208	1587	220	0.5	1
12M - CONICAL - PASSIVE - 1M S-ARM	14	0.256	0.194	0.158	0.125	0.047	0.429	0.34	0.291	0.244	0.145	1582	222	0.5	1
12M - CONICAL - PASSIVE - 1M S-ARM	10	0.277	0.211	0.175	0.14	0.059	0.456	0.365	0.312	0.263	0.162	1579	220	0.5	1
12M - CONICAL - PASSIVE - 1.5M S-ARM	12	0.199	0.141	0.109	0.08	--	0.356	0.276	0.23	0.187	0.097	1579	222	0.5	1