

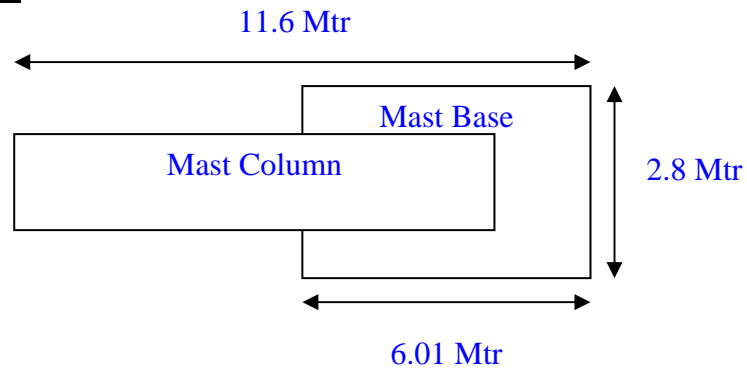


## **Mast Specification**

### **Zone Power 90-ft Logging Mast TWS-397 (ZP-12)**



**Mast Dimensions:**



**Mast Height:**

Mast height in transport position = 3.7 Mtr

Mast Working Heights = 30ft, 60ft & 90ft

**Weight:**

Gross weight = 12 T

**Operating Power:**

Mast runs on either Air or Hydraulics but still requires air for the Man Rider when using the Hydraulics.

**Air:** Minimum of 350 SCFM at 100-psi.

**Hydraulics:** Open Centre Hydraulics (240 Ltrs per minute at a Maximum 2000-psi).

**Winch SWL:**

Main Winch = 4.6-tonne

Man Rider = 150-kgs

Utility Winch = 2.1-tonne

**Column:**

Safe working Load = 15.9 T

**Counter Balance Weight:**

The Mast comes with its own counter balance weight, which is shipped separate.

**Dimensions:** 1260mm x 1670mm

**Weight:** 2.8 T

**Stand Off:**

Minimum 4 ft & Maximum 9 ft from index point on "A" frame.

**Hair Pin Pad-eye on horses head Maximum Capacities for Stand Off Dimensions (Working at 90ft) c/w Counter Balance weight, 2 x Back Stays at 90ft, 4 x Guy wires at 60ft & 4 x guy wires at 30 ft:**

| <u>Stand Off Distance</u> | <u>SWL Tonnes</u> |
|---------------------------|-------------------|
| 4-ft                      | 8.0               |
| 5-ft                      | 7.5               |
| 6-ft                      | 7.0               |
| 7-ft                      | 6.6               |
| 8-ft                      | 6.3               |
| 9-ft                      | 6.0               |

**Wind Speed:**

Maximum wind speed when rigging mast up is 30Knots.

**Wind Chart for Operating when mast is in working position:**

| DRAWING No.  |                                       | IF IN DOUBT - ASK REMOVE ALL BURRS & SHARP EDGES   |                         | REVISION                  | CLAMP | APP.                  |     |                                       |     |                    |     |
|--|---------------------------------------|--|-------------------------|---------------------------|-------|-----------------------|-----|---------------------------------------|-----|--------------------|-----|
|  | <b>GUYING SETUP AT EACH CORNER</b>    |  | <b>DISTANCE 'X' (M)</b> |                           |       |                       |     |                                       |     |                    |     |
|  |                                       |  | 5                       | 7                         | 9     | 11                    | 13  | 15                                    | 17  | 19                 | 21  |
|  | <b>AT 90' HEIGHT</b><br><b>CASE ①</b> | <b>MAX. WIND SPEED WITH 1 off 11.3# GUY WIRE/SIDE (M.P.H.)</b>   | 45                      | 53                        | 59    | 64                    | 68  | 71                                    | 74  | 77                 | 79  |
|  |                                       | <b>MAX. WIND SPEED WITH 2 off 11.3# GUY WIRES/SIDE (M.P.H.)</b>  | 63                      | 76                        | 84    | 93                    | 97  | 101                                   | 105 | 108                | 111 |
|  | <b>AT 60' HEIGHT</b><br><b>CASE ②</b> | <b>MAX. WIND SPEED WITH 1 off 11.3# GUY WIRE/SIDE (M.P.H.)</b>   | 55                      | 64                        | 72    | 78                    | 82  | 86                                    | 90  | 93                 | 95  |
|  |                                       | <b>MAX. WIND SPEED WITH 2 off 11.3# GUY WIRES/SIDE (M.P.H.)</b>  | 65                      | 75                        | 83    | 87                    | 90  | 93                                    | 95  | 97                 | 98  |
|  |                                       | 92   | 105                     | 117                       | 123   | 127                   | 130 | 133                                   | 136 | 138                |     |
| <b>WIRE ROPE SPECIFICATION. B.S.302</b>                    |                                       | <b>MAXIFLEX 11.3# 6x25 (12/6+6F/1)</b>   |                         |                           |       |                       |     |                                       |     |                    |     |
| <b>MIN. BREAKING LOAD = 8 TONS.</b>                        |                                       | <b>MAX. WORKING LOAD = 1.6 TONS.</b>   |                         |                           |       |                       |     |                                       |     |                    |     |
| <b>FACTOR OF SAFETY = 5:1</b>                              |                                       |  |                         |                           |       |                       |     |                                       |     |                    |     |
| <b>DO NOT SCALE</b>  |                                       | <b>UNSPECIFIED TOLERANCES</b>  |                         | <b>REFERENCE 90' MAST</b> |       |                       |     | <b>ZONE POWER LTD.</b>                |     |                    |     |
| <b>3rd ANGLE PROJECTION</b>                                |                                       | NO DECIMAL PLACES : 1mm<br>ONE DECIMAL PLACE : 3mm<br>TWO DECIMAL PLACES : 25mm<br>THREE DECIMAL PLACES : 3mm<br>ANGULAR DIMENSIONS : 1/2° |                         | <b>SCALE</b>              |       | <b>NET AMT.</b>       |     | BRESSINGHAM, DSS, NORFOLK, ENGLAND.   |     |                    |     |
| MACHINED SURFACE INDICATED THIS SURFACE TEXTURE TO BS. 138 |                                       |  |                         | <b>90/14135/100</b>       |       | TEL. No. 01379 827794 |     | FAX No. 01379 827437                  |     |                    |     |
| <b>DRAWING STANDARDS TO BE 305</b>                         |                                       | <b>THIS DESIGN IS STRICTLY PRIVATE AND CONFIDENTIAL AND MUST NOT BE COPIED OR REPRODUCED WITHOUT WRITTEN PERMISSION.</b>                   |                         | <b>DATE</b>               |       | <b>DESCRIPTION</b>    |     | <b>90' MAST GUY WIRE REQUIREMENTS</b> |     |                    |     |
| <b>WELDING SYMBOLS TO BS. 499 PT. 1</b>                    |                                       |  |                         | <b>DATE</b>               |       | <b>MATERIAL</b>       |     | <b>SPECIFICATION</b>                  |     | <b>DRAWING No.</b> |     |
|  |                                       |  |                         |                           |       |                       |     | <b>98/14135/901</b>                   |     |                    |     |