



## SWAGED POLES

Swaged poles are commonly used in the construction sector as sturdy and lightweight support structures. These poles are created by tapering one end of a cylindrical metal tube and then connecting it to another tube using a swaging machine, which ensures a strong bond. Their strength and versatility make swaged poles ideal for overhead transmission lines.



# POWER POLE PRODUCT CATALOGUE



## OCTAGONAL MONOPOLES

Octagonal monopoles are specialized structures used in the electricity distribution industry to support power lines. These poles feature eight sides, providing increased stability and strength compared to traditional conical poles. They are designed to withstand harsh weather conditions and carry heavy loads, making them an efficient choice for transmitting electricity over long distances.

# OCTAGONAL TUBULAR POLES

## GENERAL SPECIFICATIONS

- Height : 9 - 30M
- Pole Sections : 1 - 3
- Surface Material : ASTM Standard Steel Grade (Q235B, Q345B, GR65)
- Pole Thickness : 4 - 16MM
- Maximum Load : Up to 1800 kg
- Connection Method : Direct Embedment
- Embedment Depth : Up to 2000MM

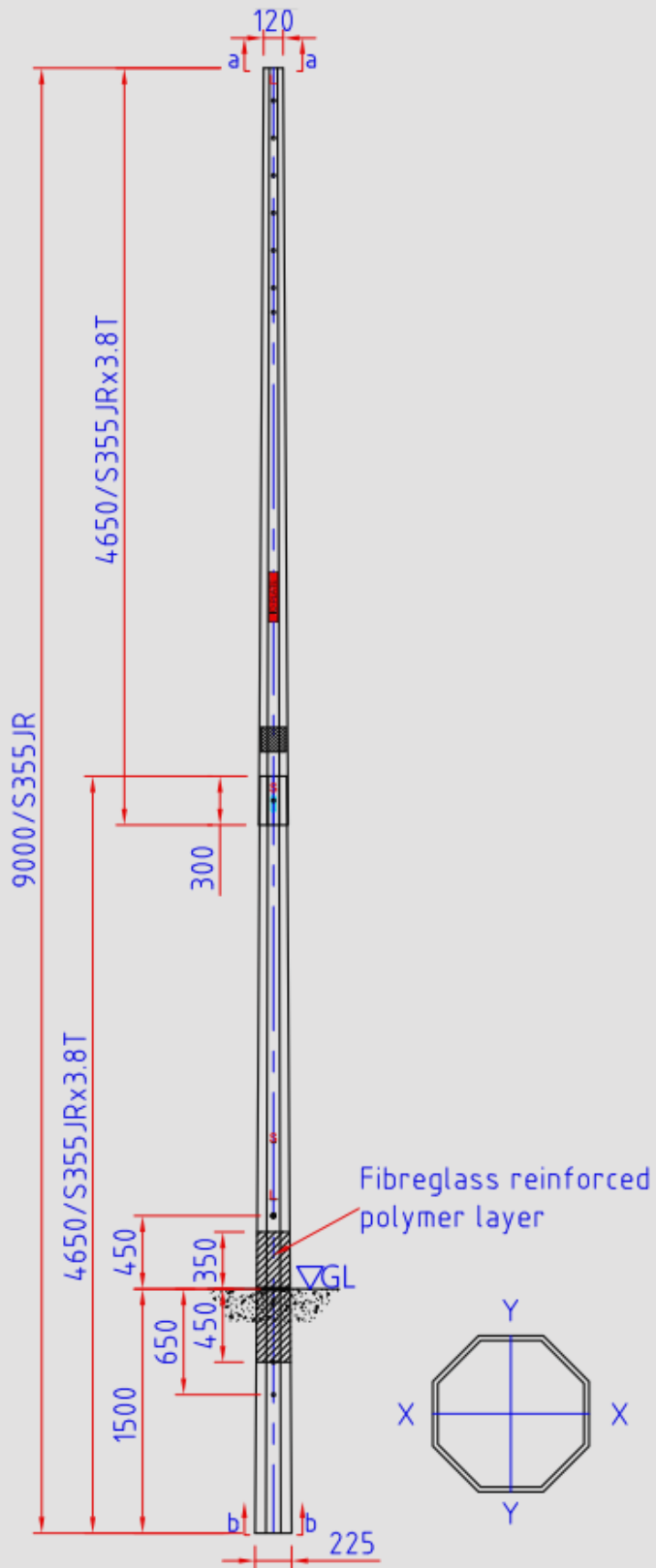
## ADVANTAGES

- All poles are designed and adhere to ASCE Manual 72 : Design of Steel Transmission Pole Structures.
- Load testing done at factory site
- All poles are designed on specialised PLS-Pole software.
- Futao Metal is ISO 9001:2015 certified.
- Galvanizing procedures are in line with EN ISO 1461 standards while welding procedures are in accordance with AWS D1.1.

## CUSTOM DESIGNS

Our qualified engineers at Futao Metal can provide custom design options for power poles that are tailored to the specific needs and requirements of your project. Reach out to us now at [futaometal@gmail.com](mailto:futaometal@gmail.com) for more information.



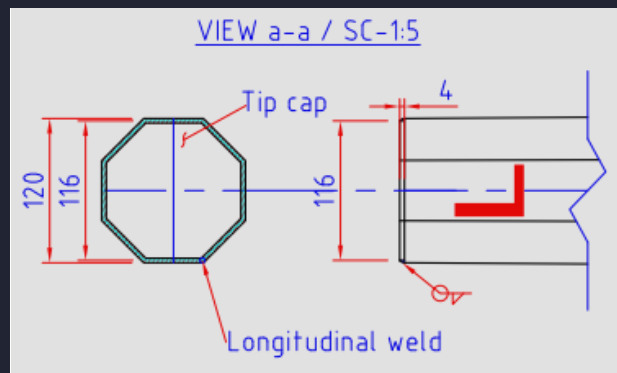


## 9M OCTAGONAL POWER POLE

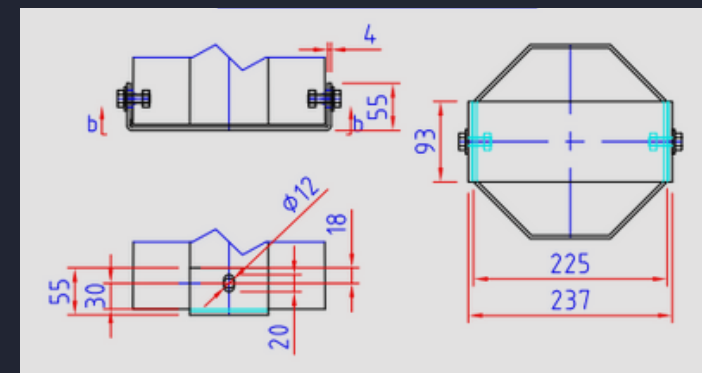
- Height : 9M
- Top Diameter : 120MM
- Bottom Diameter : 225MM
- Pole Shaft Material : S355JR
- Maximum Load : 1000kg
- Pole Sections : 2 Sections
  - Section 1 : 4650MM x 3.8MM thickness
  - Section 2 : 4650MM x 3.8MM thickness
- Installation Method : Direct Embedment
- Embedment Depth : 1500MM
- Welding : AWS D1.1
- Hot Dip Galvanization : BS EN ISO 1461

## CHEMICAL COMPOSITION OF S355JR

C	Si	Mn	P	S	N	Cu	Thickness	Minimum Yield Strength (MPa)	Tensile Strength (MPa)
≤ 0.24	≤ 0.55	≤ 1.60	≤ 0.035	≤ 0.035	≤ 0.012	≤ 0.55	≥3 ≤ 16	355	470 - 630



Top Cap Overview



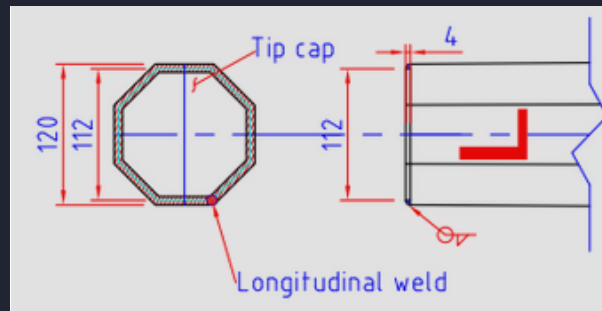
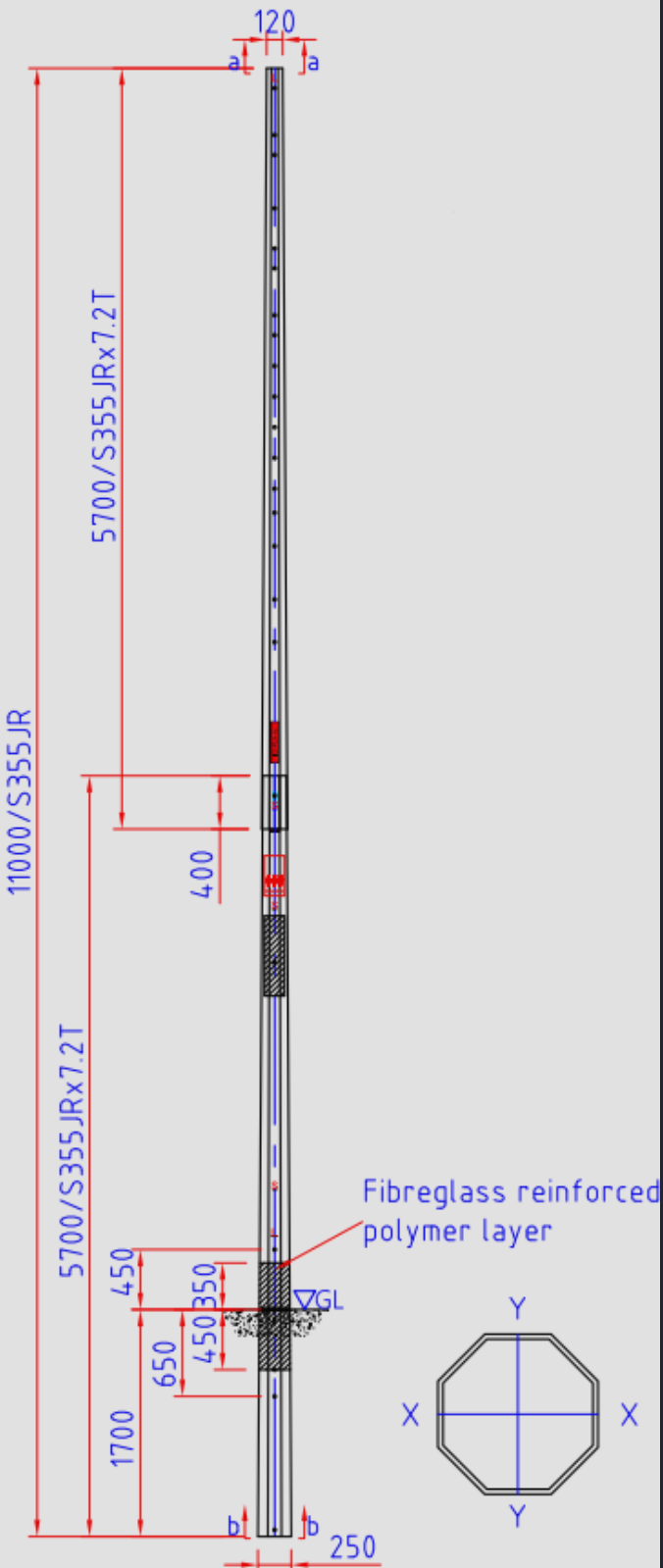
Detachable Base Overview

# 11M OCTAGONAL POWER POLE

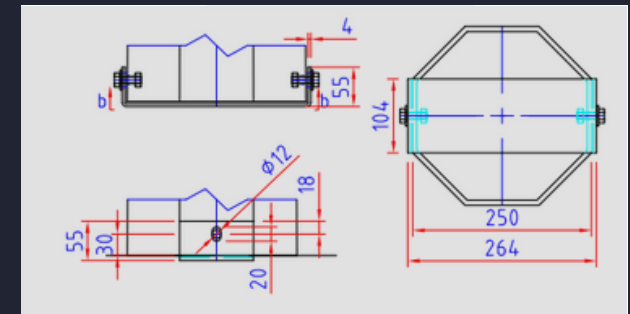
- Height : 11M
- Top Diameter : 120MM
- Bottom Diameter : 250MM
- Pole Shaft Material : S355JR
- Maximum Load : 1100kg
- Pole Sections : 2 Sections
  - Section 1 : 5700MM x 7.2MM thickness
  - Section 2 : 5700MM x 7.2MM thickness
- Installation Method : Direct Embedment
- Embedment Depth : 1700MM
- Welding : AWS D1.1
- Hot Dip Galvanization : BS EN ISO 1461

## CHEMICAL COMPOSITION OF S355JR

C	Si	Mn	P	S	N	Cu	Thickness	Minimum Yield Strength (MPa)	Tensile Strength (MPa)
≤ 0.24	≤ 0.55	≤ 1.60	≤ 0.035	≤ 0.035	≤ 0.012	≤ 0.55	≥3 ≤ 16	355	470 - 630



Top Cap Overview



Detachable Base Overview

# SWAGED POLES

## GENERAL SPECIFICATIONS

- Height : 9 - 12M
- Pole Sections : 1 - 3
- Surface Material : ASTM Standard Steel Grade (Q235B, Q345B, GR65)
- Pole Thickness : 4 - 16MM
- Maximum Load : Up to 1200 daN
- Connection Method : Direct Embedment
- Embedment Depth : Up to 2000MM

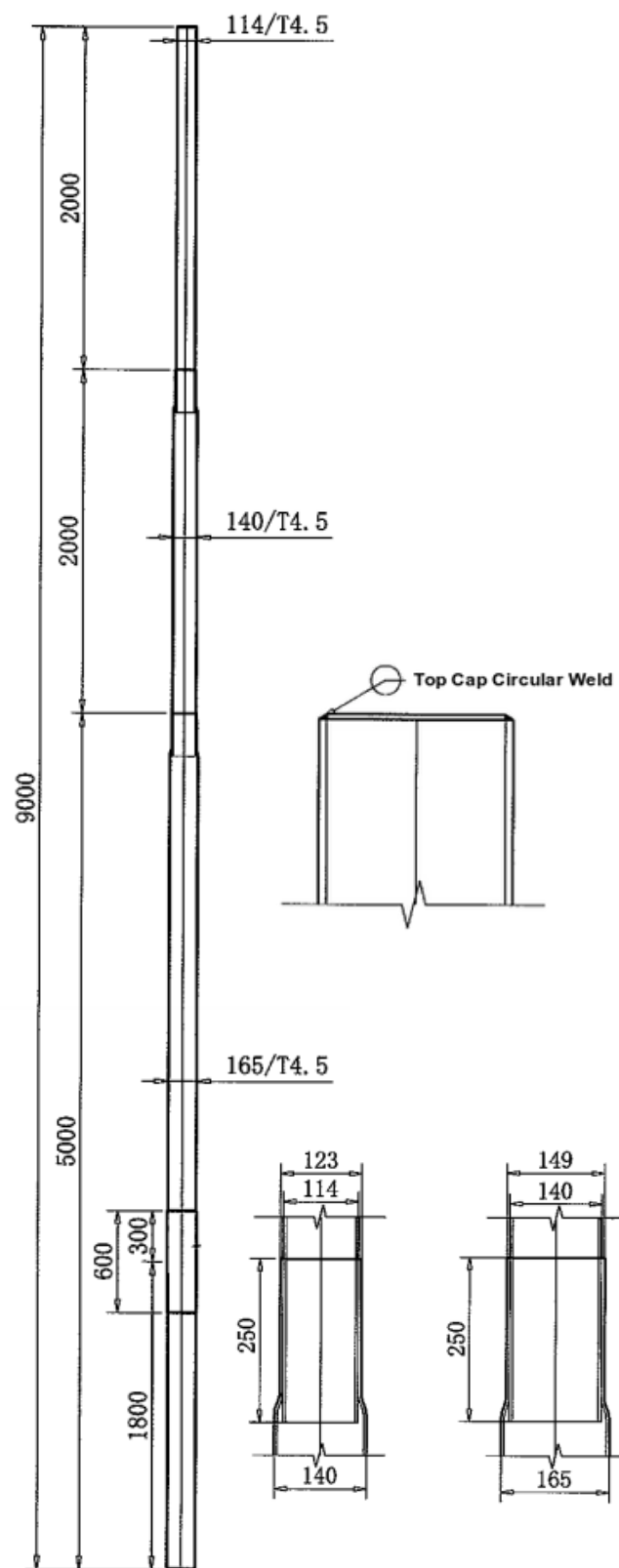
## ADVANTAGES

- High Quality Steel
- **Easy Installation and Maintenance**
- Highly Corrosion Resistant
- Durable
- **Better Resistance** against high wind conditions
- **Higher Load Strength** due to uniform distribution of metal in the cross-section
- **Custom Designs** available depending on various heights and loading forces required

## CUSTOM DESIGNS

Our qualified engineers at Futao Metal can provide custom design options for power poles that are tailored to the specific needs and requirements of your project. Reach out to us now at [futaometal@gmail.com](mailto:futaometal@gmail.com) for more information.



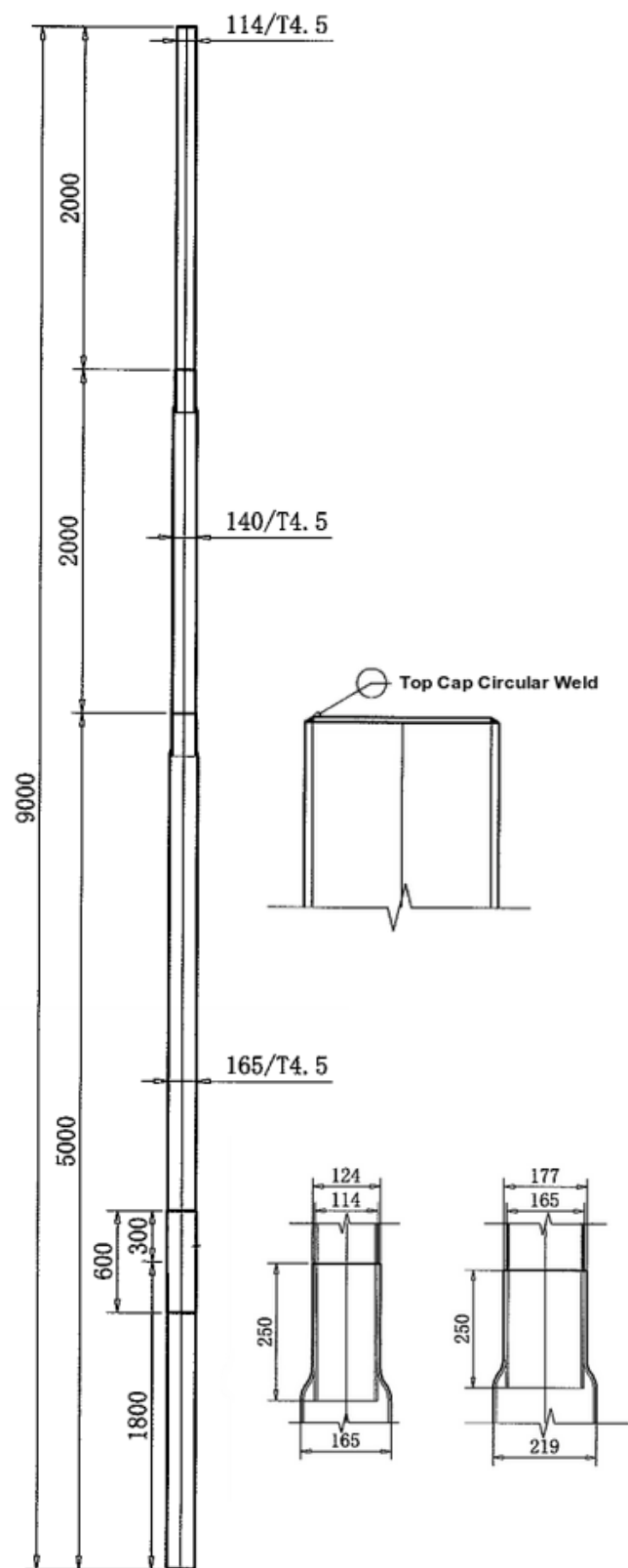


## 9M 156daN SWAGED POWER POLE

- Height : 9M
- Maximum Load : 156daN
- Pole Shaft Material : Q345B (A572 GR50)
- Pole Sections : 3 Sections
  - Section 1 (Bottom) : 5000MM x 4.5MM thickness
  - Section 2 (Middle) : 2000MM x 4.5MM thickness
  - Section 3 (Top) : 2000MM x 4.5MM thickness
- Pole Diameter :
  - Section 1 (Bottom) :  $\varnothing$  165
  - Section 2 (Middle):  $\varnothing$  140
  - Section 3 (Top):  $\varnothing$  114
- Installation Method : Direct Embedment
- Embedment Depth : 1800MM
- Hot Dip Galvanization : BS EN ISO 1461

## CHEMICAL COMPOSITION OF Q345B

C	Si	Mn	P	S	N	Cu	Thickness	Minimum Yield Strength (MPa)	Tensile Strength (MPa)
$\leq$ 0.20	$\leq$ 0.50	$\leq$ 1.70	$\leq$ 0.035	$\leq$ 0.035	$\leq$ 0.012	$\leq$ 0.30	$\geq 3 \leq 16$	345	470 - 630

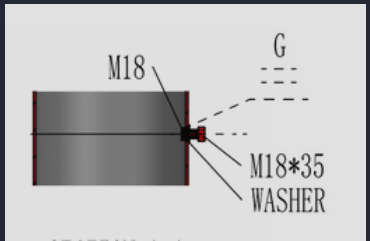
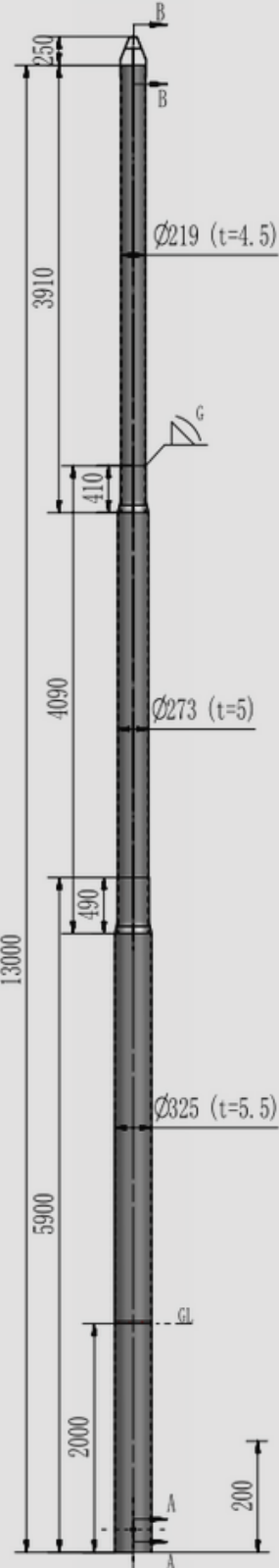


## 12M 219daN SWAGED POWER POLE

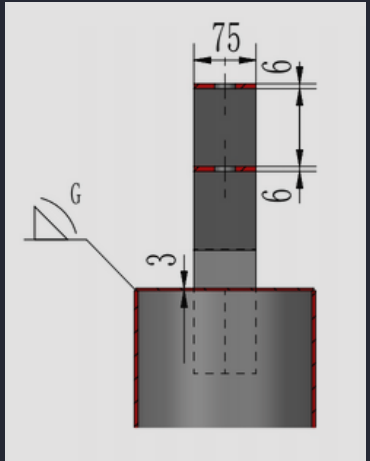
- Height : 12M
- Maximum Load : 219daN
- Pole Shaft Material : Q345B (A572 GR50)
- Pole Sections : 3 Sections
  - Section 1 (Bottom) : 6000MM x 6MM thickness
  - Section 2 (Middle) : 3000MM x 5MM thickness
  - Section 3 (Top) : 3000MM x 4.5MM thickness
- Pole Diameter :
  - Section 1 (Bottom) :  $\varnothing$  219
  - Section 2 (Middle):  $\varnothing$  165
  - Section 3 (Top):  $\varnothing$  114
- Installation Method : Direct Embedment
- Embedment Depth : 2000MM
- Hot Dip Galvanization : BS EN ISO 1461

## CHEMICAL COMPOSITION OF Q345B

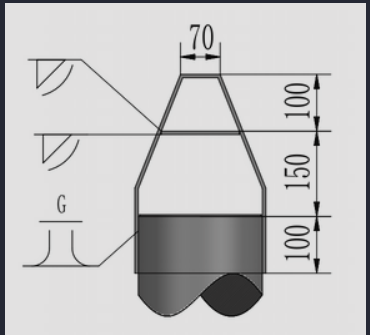
C	Si	Mn	P	S	N	Cu	Thickness	Minimum Yield Strength (MPa)	Tensile Strength (MPa)
$\leq$ 0.20	$\leq$ 0.50	$\leq$ 1.70	$\leq$ 0.035	$\leq$ 0.035	$\leq$ 0.012	$\leq$ 0.30	$\geq 3 \leq 16$	345	470 - 630



**SECTION A-A**



**SECTION B-B**



**POLE TOP BRACKET**

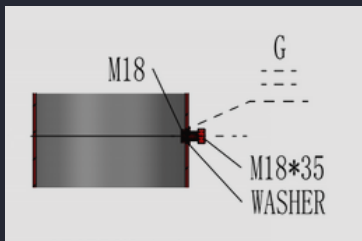
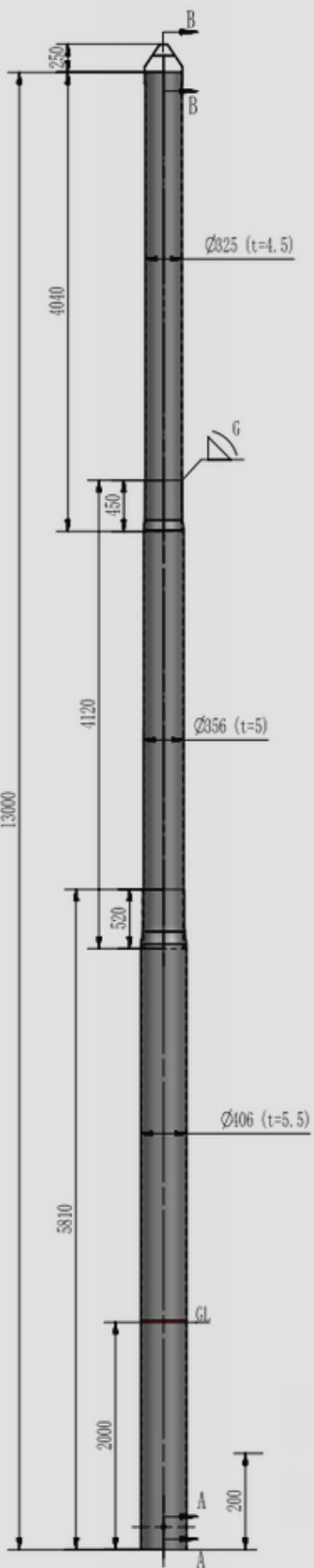
## 13M 750daN SWAGED POWER POLE

- Height : 13M
- Maximum Load : 750daN
- Pole Shaft Material : ST-37-2
- Pole Sections : 3 Sections
  - Section 1 (Bottom) : 5900MM x 5.5MM thickness
  - Section 2 (Middle) : 4090MM x 5MM thickness
  - Section 3 (Top) : 3910MM x 4.5MM thickness
- Pole Diameter :
  - Section 1 : Ø 325
  - Section 2 : Ø 273
  - Section 3 : Ø 219
- Installation Method : Direct Embedment
- Embedment Depth : 2000MM
- Hot Dip Galvanization : BS EN ISO 1461

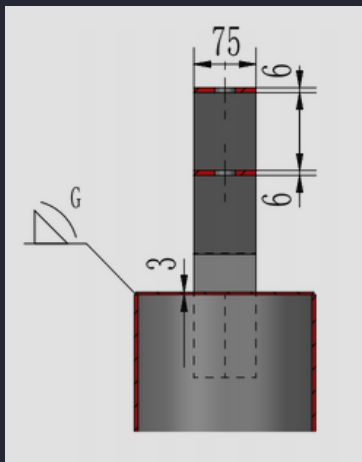
## CHEMICAL COMPOSITION OF ST-37-2

C	Mn	P	S	N	Minimum Yield Strength (MPa)	Tensile Strength (MPa)
≤ 0.20	≤ 1.40	≤ 0.045	≤ 0.045	≤ 0.011	≥ 225	340-470

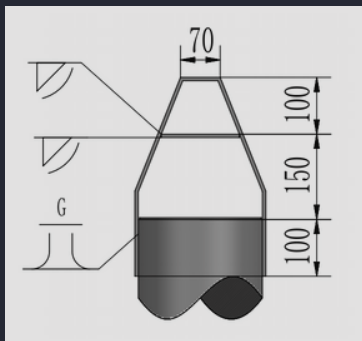




**SECTION A-A**



**SECTION B-B**



**POLE TOP BRACKET**

## 13M 1200daN SWAGED POWER POLE

- Height : 13M
- Maximum Load : 1200daN
- Pole Shaft Material : ST-37-2
- Pole Sections : 3 Sections
  - Section 1 (Bottom) : 5810MM x 5.5MM thickness
  - Section 2 (Middle) : 4120MM x 5MM thickness
  - Section 3 (Top) : 4040MM x 4.5MM thickness
- Pole Diameter :
  - Section 1 : Ø 406
  - Section 2 : Ø 356
  - Section 3 : Ø 325
- Installation Method : Direct Embedment
- Embedment Depth : 2000MM
- Hot Dip Galvanization : BS EN ISO 1461

## CHEMICAL COMPOSITION OF ST-37-2

C	Mn	P	S	N	Minimum Yield Strength (MPa)	Tensile Strength (MPa)
≤ 0.20	≤ 1.40	≤ 0.045	≤ 0.045	≤ 0.011	≥ 225	340-470