

Three-dimensional Automatic Drawing Software Brief Introduction



Pad-mounted Transformer

SOFTWARE INTRODUCTION SECTION



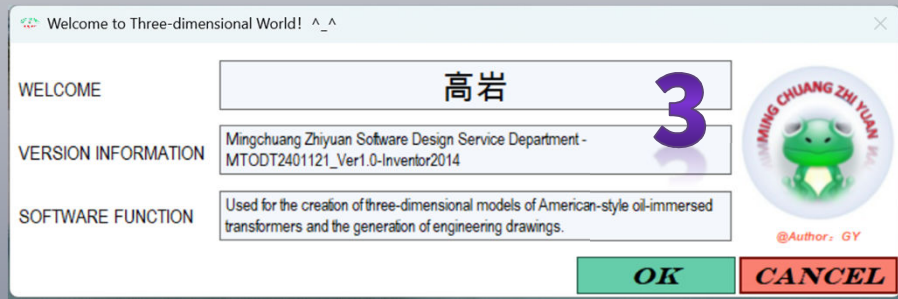
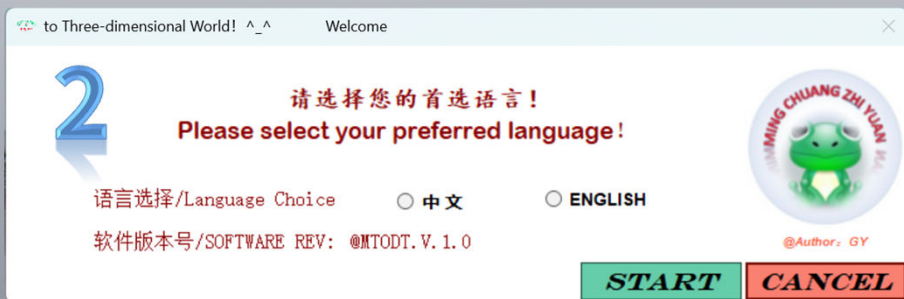
➤ Program Startup , Language Choice and Welcome Interface



1. Program Startup Interface

2. Language Choice Interface

3. Welcome Interface



➤ Main Interface Of the Software

The software consists of three modules

As the figure shows:

1. Project information and product data input module (Item 1,2);
2. Product data write-in module (Item 3);
3. Output of 3D models and engineering drawings module (Item 4,5,6,7).

Item 4,5,6 and 7 are divided into 4 modules based on the manufacturing process of the transformer. Based on the options, you can choose to run several modules at once or run all the modules.

Welcome to Three-dimensional World! ^_^

Project Number

Electrical Specification Number

Created By

Checked By

Company's Full Name

MING CHUANG ZHI YUAN

@Author: GY

INPUT

1 Project Info Input 2 Basic Data Input

☒ Operate One Component ☐ Operate Two Component ☐ Operate Three Component ☐ Operate All Component

SAVE

3 Data Import AND Save

KEY

The Data Is Empty

The Data Is Full

OUTPUT

4 Create Core Frame Structure 5 Create Coil Clamping Structure

6 Create Lead Bars Structure 7 Create Final Assembly Structure

CATALOGUE INDEX

CAD Tool Catalog Index D:\VBNET\油变\中英文切换\MT-ODT-W&F_Ver00

Project Directory Index

EXIT

Project information

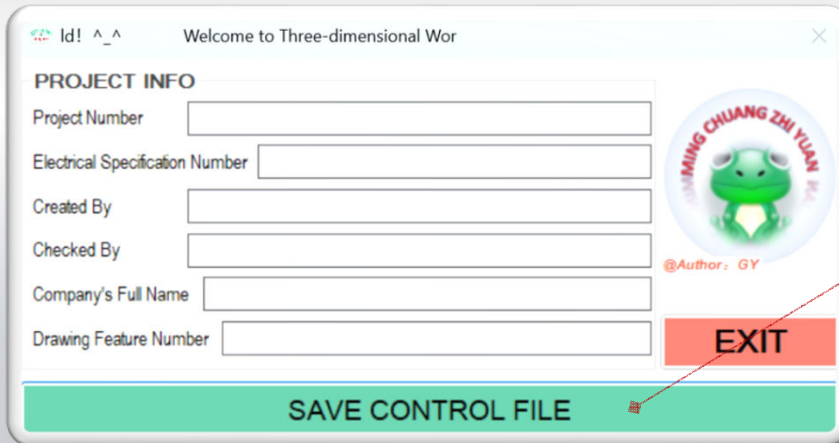
Module operation options

CATALOGUE INDEX INFORMATION

➤ Project Information Input Interface

As the figure shows:

The picture below is the input interface for project information. By clicking on item 1 in the main interface of the software, this interface will be displayed.



The screenshot shows a software window titled "Welcome to Three-dimensional Wor". Inside, there is a section labeled "PROJECT INFO" with several input fields: "Project Number", "Electrical Specification Number", "Created By", "Checked By", "Company's Full Name", and "Drawing Feature Number". To the right of these fields is a circular logo featuring a green frog and the text "MING CHUANG ZHI YUAN". Below the logo, it says "@Author: GY". At the bottom right of the form is a red "EXIT" button. At the bottom of the window is a large green button labeled "SAVE CONTROL FILE". A red arrow points from the "SAVE CONTROL FILE" button to the text box on the right.

After completing the project information filling, click this button to save the control file.

The storage directory needs to be created before running the software.

Entry Interface|数据输入界面
Basic Data Core Packets Tank Data Final Assembly Data Radial Feed Panel Front Compartment Transformer Basic Data 变压器基本数据

The Rated Capacity kVA
Standard Option) ☐ IEEE Standard ☒ CSA Standard
The Feed Type ☒ Radial Feed) ☐ Loop Feed)
LI Test Voltage ☐ 95kV ☐ 125kV
Panel Width ☐ 1280mm ☐ 1480mm
Connection Group Designation ☐ YNyn0 ☒ Dyn

Core Type II 铁芯型式


☐ Five Limb
 
☒ Three Limb

Core Data I 铁芯数据

Core Steps [M] -Selecting-
CoreCircle Diameter [DS] 0 mm
Phase Centres [ES] 0 mm
Outer Phase Centres [ESR] 0 mm
Leg Length [HF] 0 mm
Lift Weight Of Each Lifting Lag 500
Foot Wood Block Selection ☐ Steplessness ☒ SingleStep ☐ Multi-step
Whether to Use Foot Ribs ☒ YES

Active Part Data II 器身数据

Ciois offset distance	0	mm	LV winding terminal under end to winding under end's distance	15	mm
LV Winding's Internal Radius	0	mm	LV Winding's Internal radius	0	mm
Hv Winding's Internal Radius	0	mm	Hv Winding's Outer Radius	0	mm
Upper Yoke Clearance	0	mm	Lower Yoke Clearance	0	mm
The winding outer terminal's offset distance towards the LV coil's inner side				0	mm

Whether to use Big Wood Blocks ☐ NO If using insul board between phase-to-phase ☐ NO

Lead Data II 引线数据

LV Ciol Terminal Cooper Bar Width	0	mm	a Phase Copper Bar Width	0	mm
LV Ciol Terminal Cooper Bar Thickness	0	mm	a Phase Copper Bar Thickness	0	mm
abc Phase Connecting Cooper Bar Width	0	mm	a Phase Connect Cooper Bar Width	0	mm
abc Phase Connecting Cooper Bar Thickness	0	mm	a Phase Connect Cooper Bar Thickness	0	mm
abc Phase Connecting Cooper Sheet Width	0	mm	a Phase Connect Sheet Width)	0	mm
abc Phase Connecting Cooper Sheet Thickness	0	mm	a Phase Connect Sheet Thickness)	0	mm

High-voltage lead data input entry >>>>>>>>>>> Click to enter the interface for inputting HV lead data

Notes

RETURN DATA CHECK CALCULATE SAVE EXIT

High-voltage lead data

The number of tap connectors through the wire clamp	6	
The diameter of the jumper wires through the wire clips	8	mm
The deviation distance of the A phase tap connection from the center	30	mm
The deviation distance of the B phase tap connection from the center	30	mm
The deviation distance of the C phase tap connection from the center	30	mm

O K

Click this button to enter the independent input interface for the high-voltage lead.

Core Data Input Interface

As the figure shows:

The picture is the Core Data Input Interface.

Various options need to be selected manually.

The core data can be filled in manually, or it can be automatically read by clicking the **“READ DATA”** button.

Core Entry Interface|数据输入界面

Basic Data | Core Packets | Tank Data | Final Assembly Data | Radial Feed Panel | Front Compartment

Stacking Data | 叠片数据

Main Link Sheets Width | 芯柱片宽

Yoke And Relink Sheets Width | 集/边柱片宽

Width	mm	Width	mm
The 1st Step Width	0	The 1st Step Width	0
The 2nd Step Width	0	The 2nd Step Width	0
The 3rd Step Width	0	The 3rd Step Width	0
The 4th Step Width	0	The 4th Step Width	0
The 5th Step Width	0	The 5th Step Width	0
The 6th Step Width	0	The 6th Step Width	0
The 7th Step Width	0	The 7th Step Width	0
The 8th Step Width	0	The 8th Step Width	0
The 9th Step Width	0	The 9th Step Width	0
The 10th Step Width	0	The 10th Step Width	0
The 11th Step Width	0	The 11th Step Width	0
The 12th Step Width	0	The 12th Step Width	0
The 13th Step Width	0	The 13th Step Width	0
The 14th Step Width	0	The 14th Step Width	0

Stacking Depth | 各段叠厚

Depth	mm	Depth	mm
The 1st Step Depth	0	The 8th Step Depth	0
The 2nd Step Depth	0	The 9th Step Depth	0
The 3rd Step Depth	0	The 10th Step Depth	0
The 4th Step Depth	0	The 11th Step Depth	0
The 5th Step Depth	0	The 12th Step Depth	0
The 6th Step Depth	0	The 13th Step Depth	0
The 7th Step Depth	0	The 14th Step Depth	0

Others | 其他

The Yoke Stacking Type: ☒ Standard Yoke ☐ D Type Yoke Silicon Steel Sheet Grade: 0

Yoke Clamping Selecting: -Selecting- Foot Gauge: 0 mm

Ly side Cutting Depth: 0 mm Total Stacking Depth: 0 mm

Whether HV&LV side Yoke Clamp Symmetrical: ☒ YES

Whether Add Small Foot: ☒ YES

Active Part Offset Distance: 0 mm

READ DATA CHECK CALCULATE SAVE EXIT

Notes: ☐ Calculated value ☐ Standard Value

Tank Data Input Interface

As the figure shows:

The picture is the Tank Data Input Interface.

Various options need to be selected manually.

The tank data can be filled in manually, or it can be automatically read by clicking the “**READ DATA**” button.

The details of each option will be introduced separately below.

Horizontal Ribs option

Tank Wall Bulge option

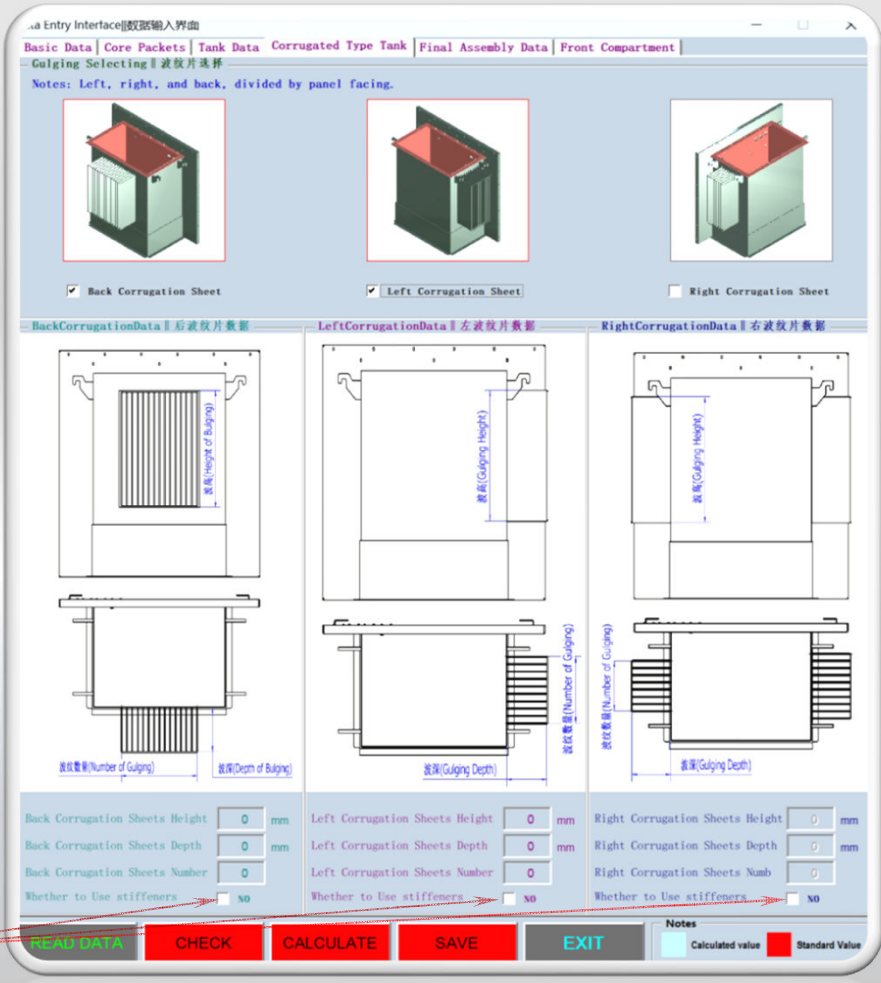
➤ Corrugated Sheets Heat Dissipation Structure Tank

As the figure shows:
The tank has three sides that can be welded with corrugated sheets.

On each side, you can choose whether to weld the corrugated sheets.

For the side with corrugated sheets, if you want to weld additional strengthening ribs, then only vertical reinforcing ribs can be welded.

For the side without corrugated sheets, you can choose to weld vertical ribs or horizontal ribs, or you can do nothing at all.



Vertical Ribs Option
Can arrangement Multi-ribs

Radiators Heat Dissipation Structure Tank

As the figure shows:

The tank has three sides that can be welded with Radiators.

On each side, you can choose whether to weld the Radiators.

For the side with Radiators, if you want to weld additional strengthening ribs, You can weld vertical strengthening ribs or horizontal strengthening ribs or nothing at all

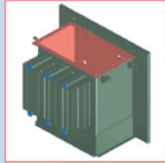
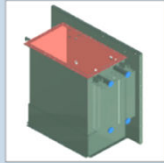
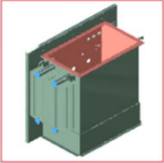
Vertical Ribs Option
Can arrangement Multi-ribs

Entry Interface 数据输入界面

Basic Data | Core Packets | Tank Data | Plate Radiator Tank | Final Assembly Data | Front Compartment

Radiators Selecting 散热器选择

Notes: Left, right, and back, divided by panel facing.

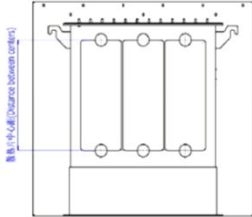
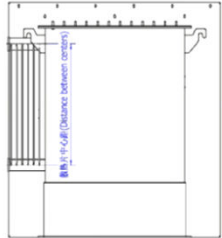
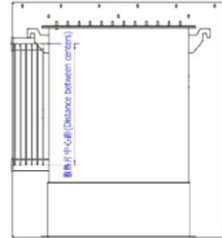




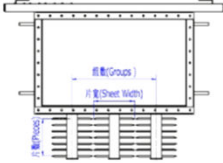
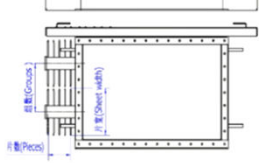
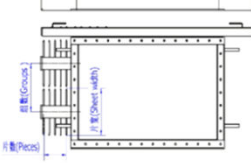
☒ With Back Radiators
 ☐ With Left Radiators
 ☒ With Right Radiators

Back Radiators Data 左散热器数据

Left Radiators Data 后散热器数据

Right Radiators Data 右散热器数据

Groups	0
Pieces	0
Radiator Sheet Width	0 mm
Center Lines Distance	0 mm
Distance Between Radiator Sheets	0 mm
Whether to Use stiffeners	☒ NO

Groups	0
Pieces	0
Radiator Sheet Width	0 mm
Center Lines Distance	0 mm
Distance Between Radiator Sheets	0 mm
Whether to Use stiffeners	☒ NO

Groups	0
Pieces	0
Radiator Sheet Width	0 mm
Center Lines Distance	0 mm
Distance Between Radiator Sheets	0 mm
Whether to Use stiffeners	☐ YES

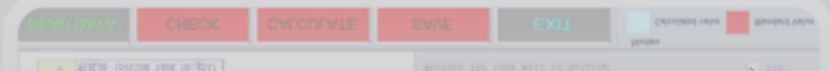
Notes

Calculated value Standard Value

READ DATA CHECK CALCULATE SAVE EXIT

As the figure shows:

As marked in the figure, if not need cooling device and any strengthening ribs, Please select this option.



➤ Transversal Stiffeners and Bulge Of the Tank Wall Input Interface

As the figure 1 shows:

This is bulge input interface on the side tank wall. If tank length is too small, then can weld the bulges.

Figure 1

As the figure 1 shows:

This is transversal stiffeners input interface on the each tank wall.

Figure 2

Final Assembly Input Interface

As the figure shows:

This is the final assembly input interface. The main focus is on the selection of various accessories for the transformer and the determination of their placement locations.

The screenshot displays the 'Final Assembly Input Interface' software. The interface is divided into several sections for configuring transformer accessories:

- Basic Data / Core Packets / Tank Data / Final Assembly Data / Radial Feed Panel / Front Compartment:** The 'Final Assembly Data' tab is active.
- Outer Line Selection:** Includes options for 'Out Line Selection' (set to '-Selecting-'), 'Out Line Height Adjustment' (0 mm), 'TheFront Enclosure Depth (mm Min Value)' (550 mm), and 'Prime valve Selection' (Common Valve selected).
- Actual Out Line Dimensions:** Shows 'The Actual Dimensions' as 0*622*0(mm).
- Hv Bushings Selection:** Includes 'Hv Bushings Type Selection' (set to '-Selecting-') and 'Installation Hole Diameter Of Hv 'O' Bushing' (set to '-Selecting-').
- Loadbreak, Dual Loadbreak, Deadbreak:** Three 3D models of these components are shown.
- Lv Bushings Selection:** Includes 'Lv Bushings Type Selection' (set to '-Selecting-') and 'The Hole Numbers Of Lv Bushing Terminal' (set to '-Selecting-').
- Attachment Selection:** Includes 'Tap-changer Selection' (Type Selection: '-Selecting-', Setting Position: Front) and 'The Fuses Selection' (Fuses Groups: 3, Fuses Space Between: 100 mm, Placement Location: Front).
- Load Switch Selection:** Includes 'Load Switch Type' (set to '-Selecting-') and 'Load Switch Number' (set to 1).
- Dimensions:** A diagram on the right shows the overall dimensions: Length (L), Width (W), and Height (H).
- Buttons:** At the bottom, there are buttons for 'LOAD DATA', 'CHECK', 'CALCULATE', 'SAVE', 'EXIT', and 'Notes'.

Final Assembly Input Interface

Attachment Placement

Three gauges and one valve placement location	Front	Whether to use the vent valve	☐ NO
Whether to use meter box	☐ NO	The vent valve placement location	Front
The oil drain valve placement location	Front	Whether to use stiffeners	☐ NO
Whether to use the oil drain valve	☐ NO	The type of stiffeners	Plate stiffen
The prime valve placement location	Front	Whether to use IFD	☐ IFD

Figure 1

As the figure 1 shows:

This is the attachments of the Radial Feed Type placement locations input interface.

As the figure 2 shows:

This is a portion of the attachments placement locations input interface. They can choose to place on the side of the Tank as needed.

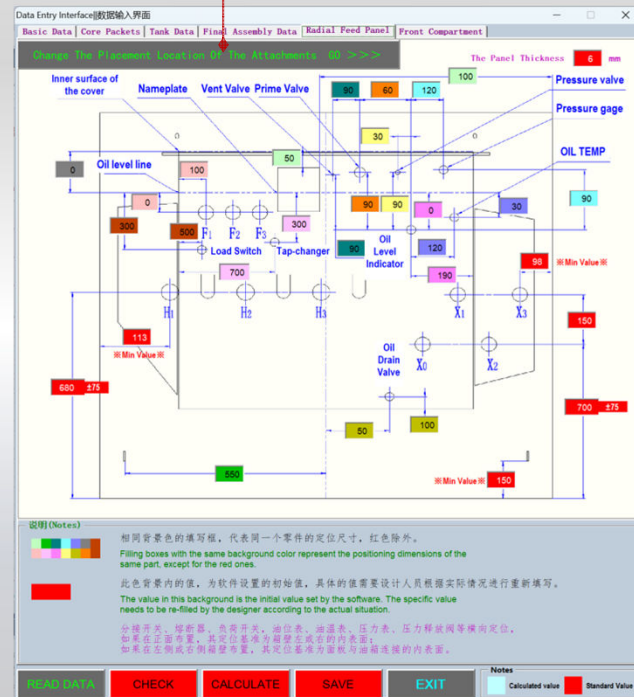


Figure 2

Final Assembly Input Interface

Attachment Placement

Three gauges and one valve placement location Whether to use the vent valve ☐ NO

Whether to use meter box ☐ NO The vent valve placement location

The oil drain valve placement location Whether to use stiffeners ☐ NO

Whether to use the oil drain valve ☐ NO The type of stiffeners

The prime valve placement location Whether to use IFD ☐ IFD

Figure 1

As the figure 1 shows:

This is the attachments of the Loop Feed Type placement locations input interface.

As the figure 2 shows:

This is a portion of the attachments placement locations input interface. They can choose to place on the side of the Tank as needed.

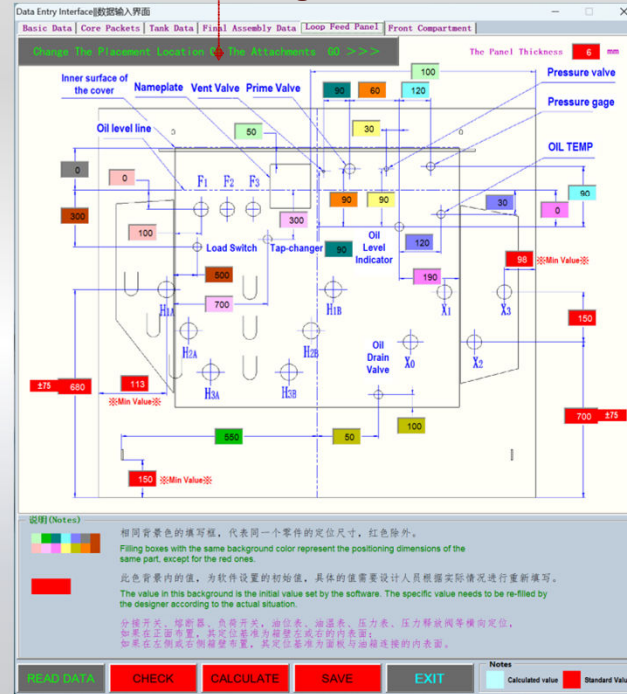
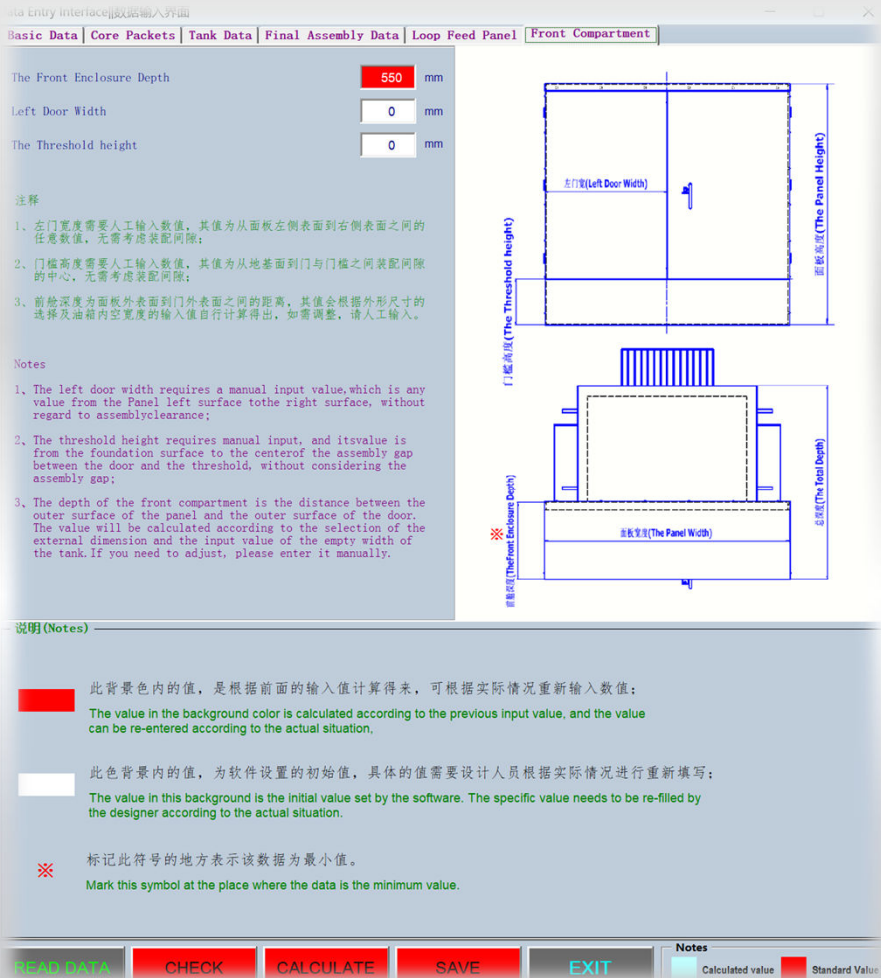


Figure 2

The Front Compartment Input Interface

As the figure shows:

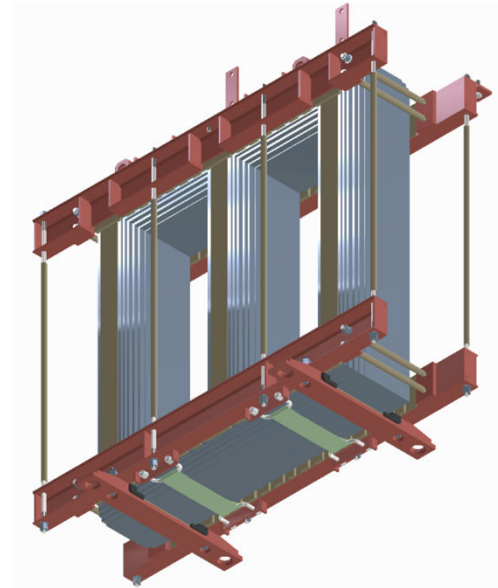
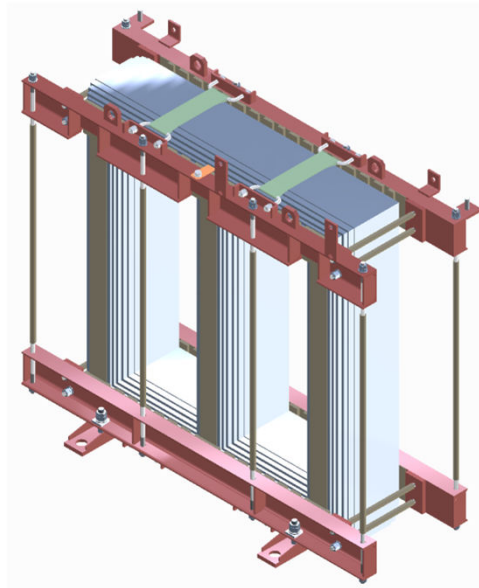
This is The Front Compartment Input Interface. Need to manual input the “Left Door Width” and “Threshold Height”.



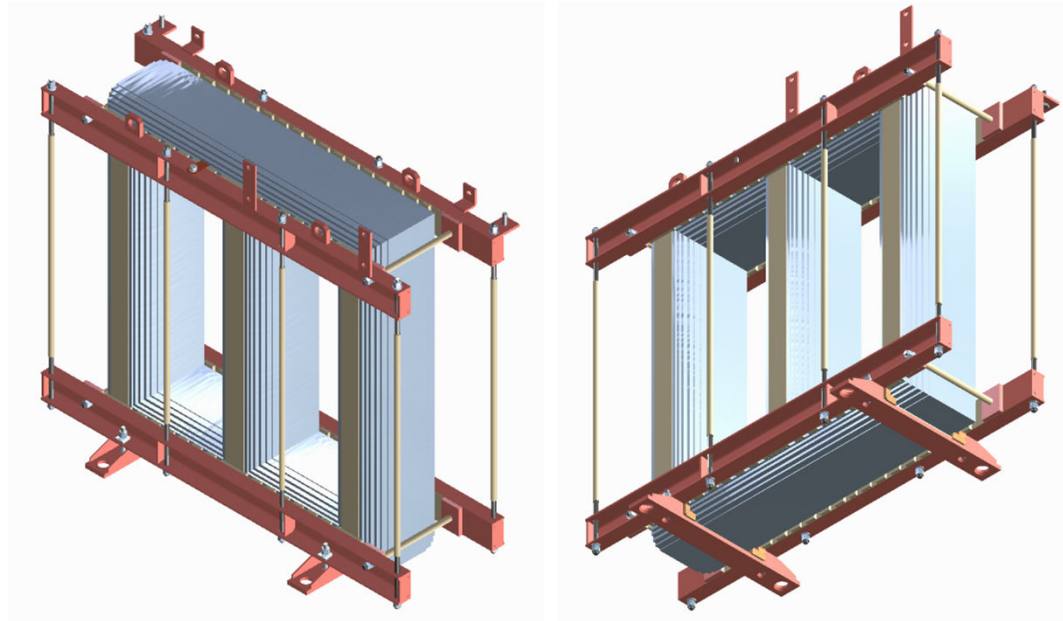
TRANSFORMER STRUCTURE SECTION



A RELATIVELY COMMON CORE STRUCTURE

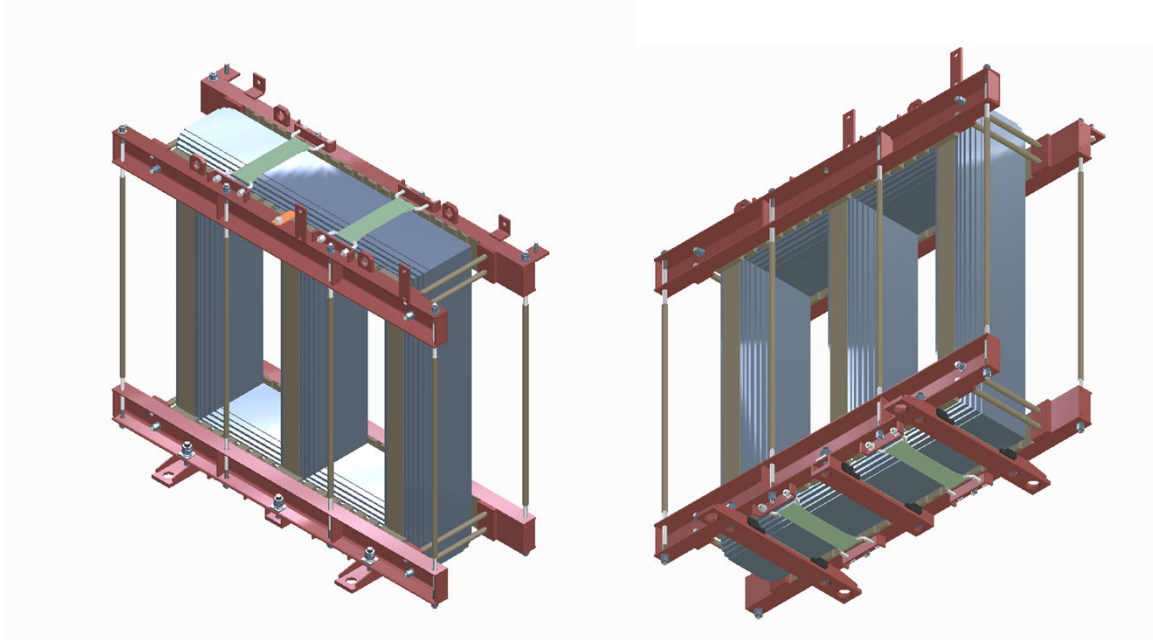


A COMMON CORE STRUCTURE FOR CAPACITIES BELOW 500kVA



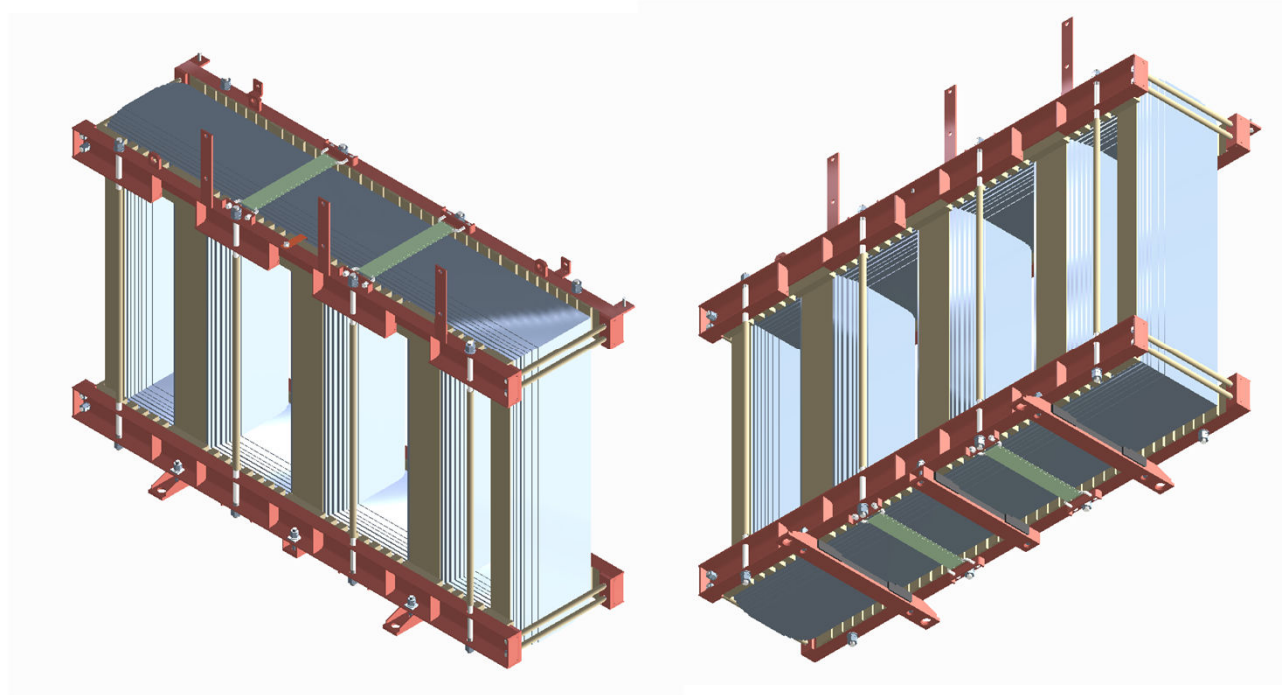
➤ Core Frame Structure - Three Limbs

A COMMON CORE STRUCTURE FOR HIGH CAPACITY



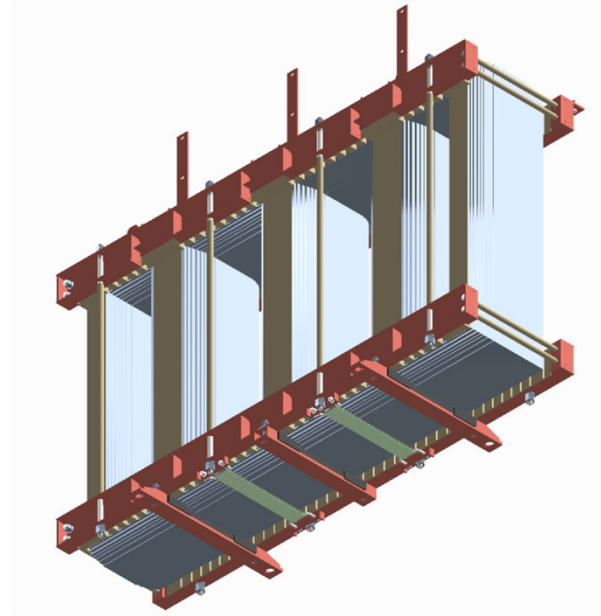
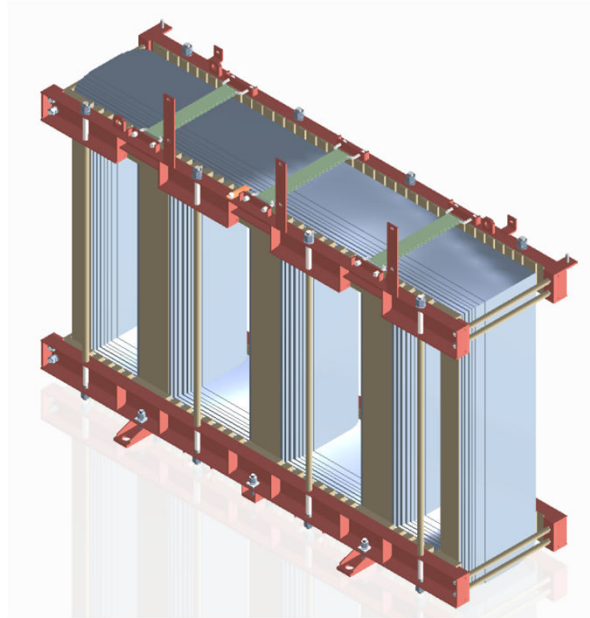
➤ Core Frame Structure - Five Limbs

A COMMON CORE STRUCTURE APPROPRIATE FOR $BIL \leq 95kV$



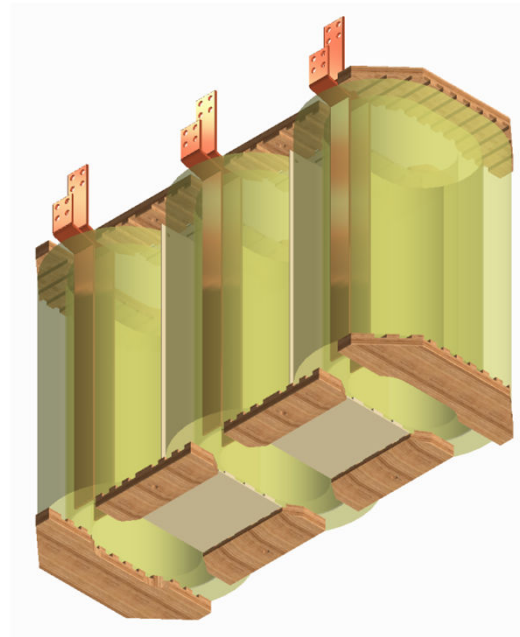
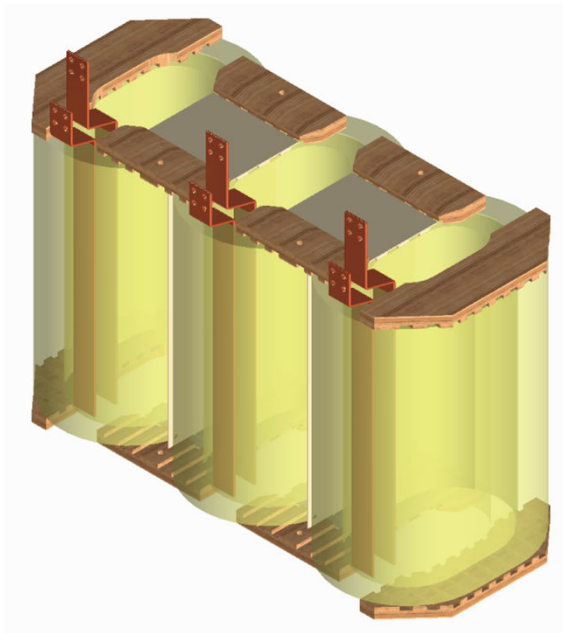
➤ Core Frame Structure - Five Limbs

A COMMON CORE STRUCTURE APPROPRIATE FOR BIL > 95kV



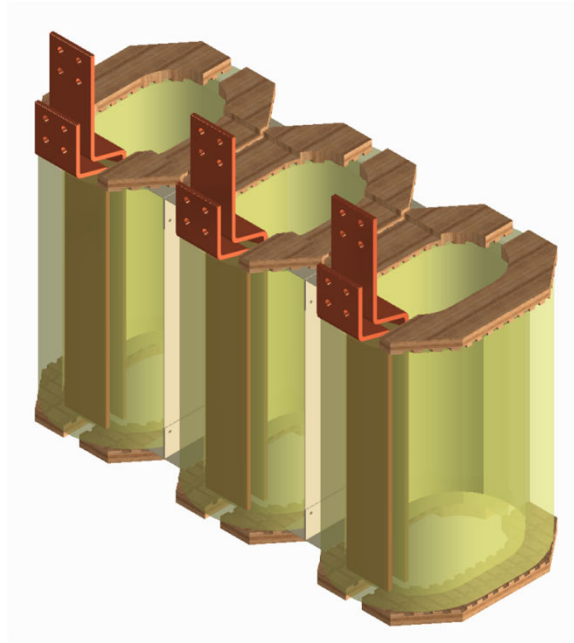
➤ Coil Clamping Structure - Three Limbs

A COMMON COIL CLAMPING STRUCTURE APPROPRIATE FOR $BIL \leq 95kV$



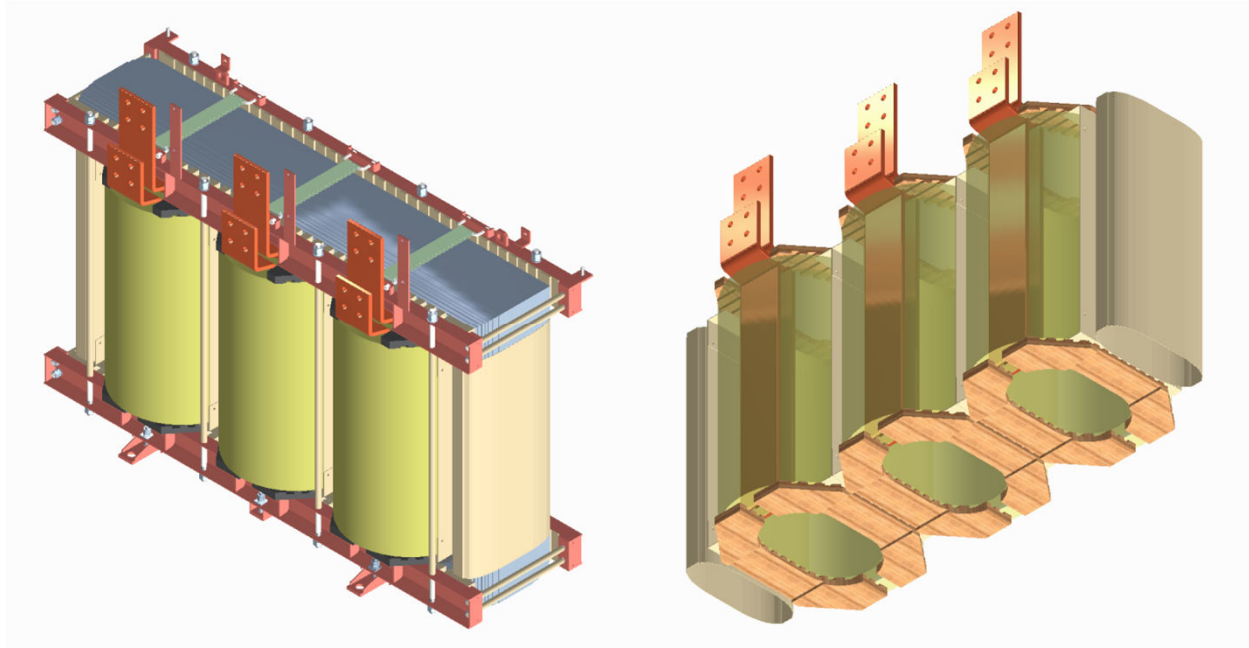
➤ Coil Clamping Structure - Three Limbs

A COMMON COIL CLAMPING STRUCTURE APPROPRIATE FOR BIL > 95kV



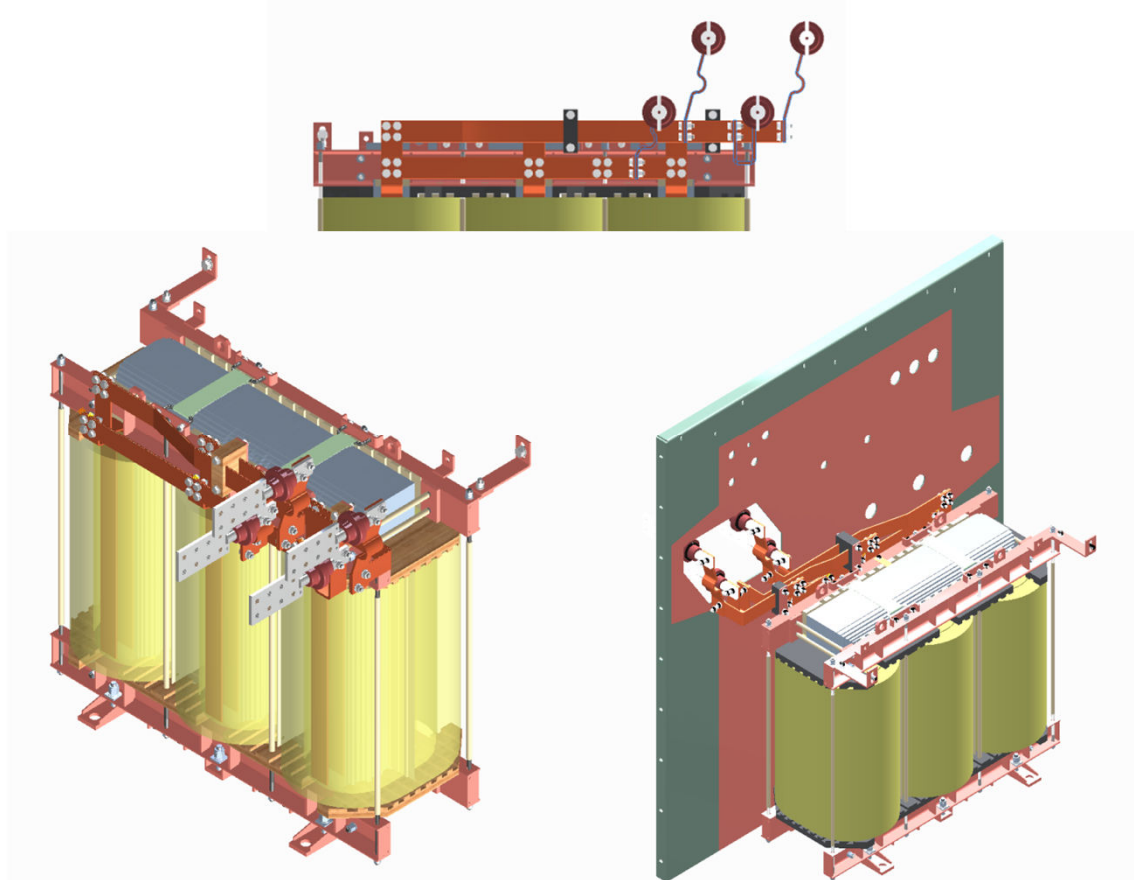
➤ Coil Clamping Structure - Five Limbs

A COMMON COIL CLAMPING STRUCTURE APPROPRIATE FOR BIL > 95kV



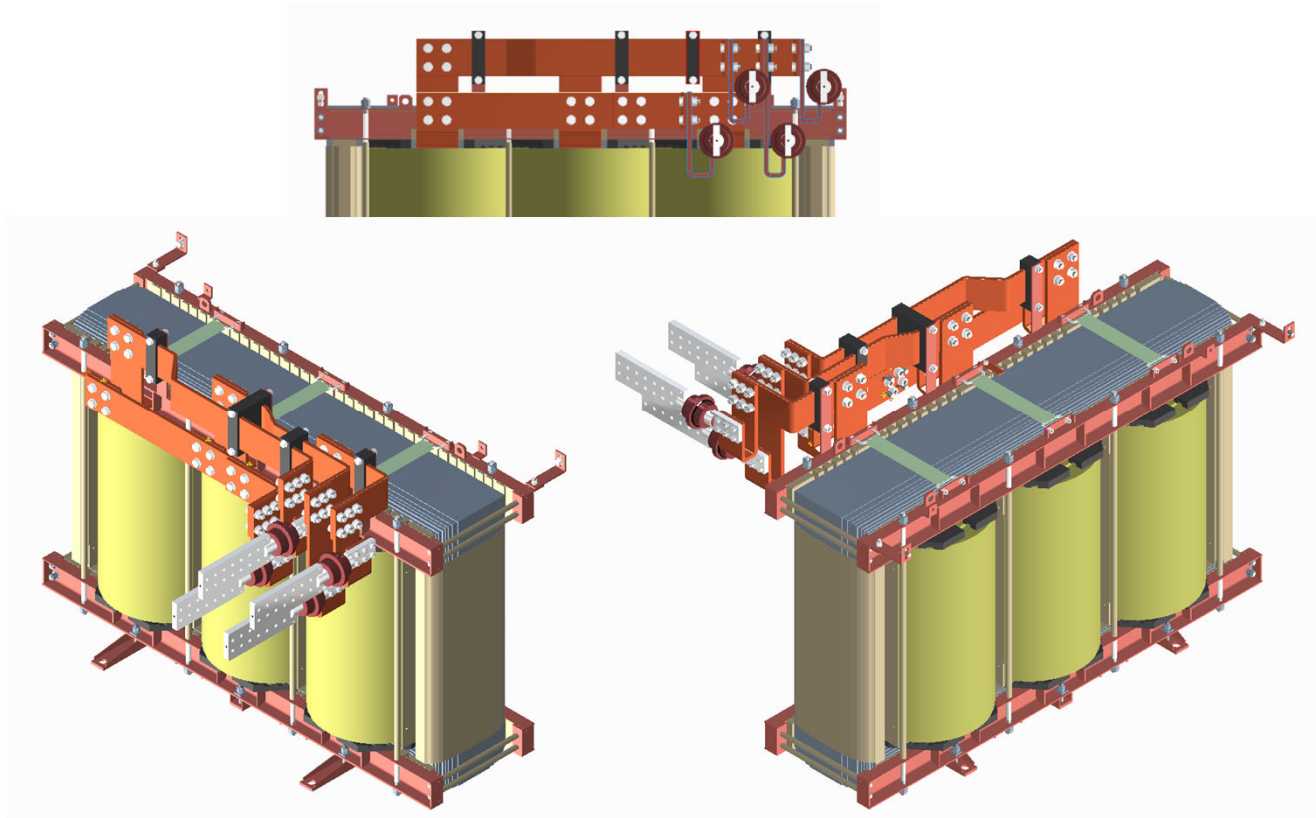
➤ L.V. Lead Bars Structure - Three Limbs

A star-connected L.V. LEAD STRUCTURE



➤ L.V. Lead Bars Structure - Five Limbs

A star-connected L.V. LEAD STRUCTURE



➤ Final Assembly Structure – IEEE Standard

STANDARD: IEEE Standard

The Feed Type: Loop Feed

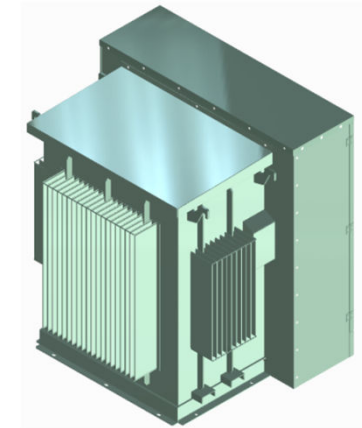
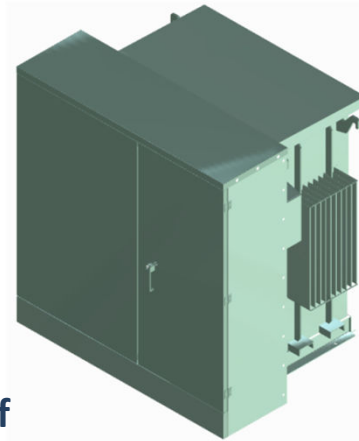
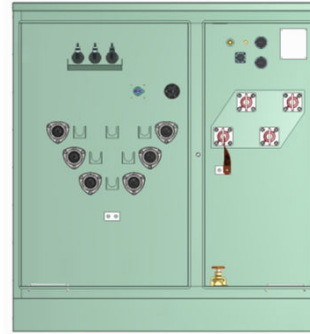
H.V. BUSHING: Loadbreak Bushing Insert

TANK STRUCTURE:

CORRUGATED SHEETS TYPE or RADIATOR TYPE

As the figure shows, the tank in the picture adopts a heat dissipation structure with corrugated sheets and welds vertical strengthening ribs on three sides.

As the figure shows, The tank length is too small, so it is placed two bulges on two sides of the tank.



➤ Final Assembly Structure – IEEE Standard

STANDARD: IEEE Standard

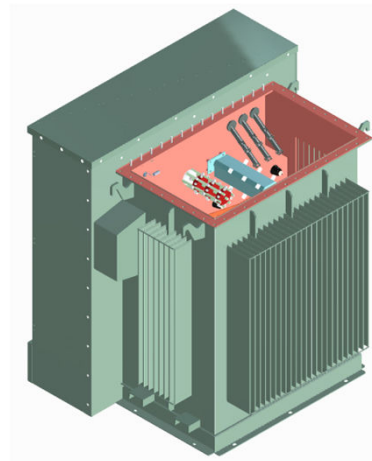
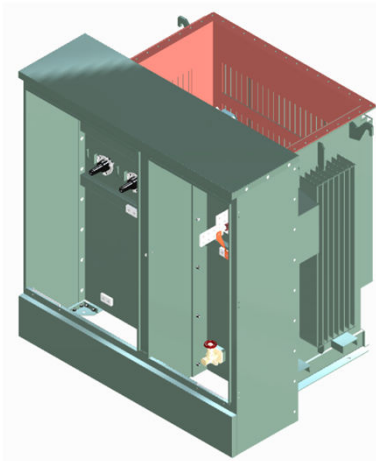
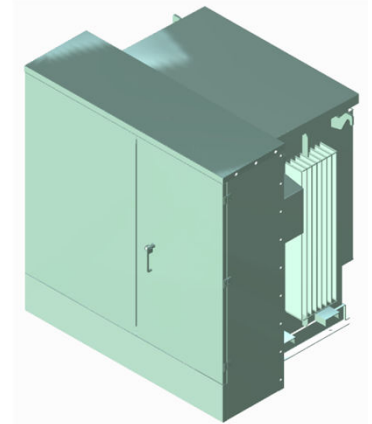
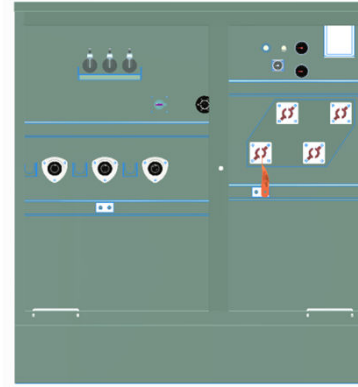
The Feed Type: Radial Feed

H.V. BUSHING: Loadbreak Bushing Insert

TANK STRUCTURE:

CORRUGATED SHEETS TYPE or **RADIATOR TYPE**

As the figure shows, the tank in the picture adopts a heat dissipation structure with corrugated sheets and welds vertical strengthening ribs on three sides.



➤ Final Assembly Structure – IEEE Standard

STANDARD: IEEE Standard

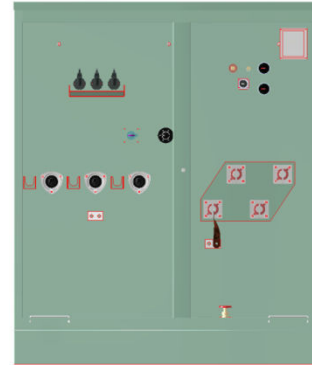
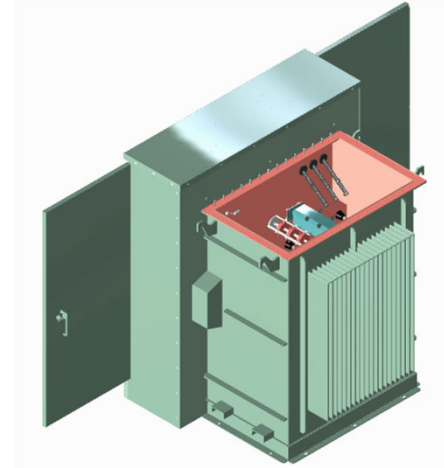
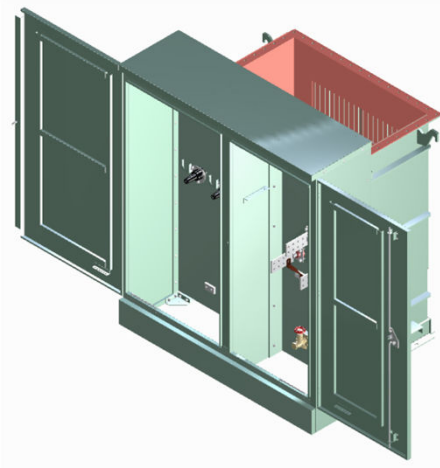
The Feed Type: Radial Feed

H.V. BUSHING: Loadbreak Bushing Insert

TANK STRUCTURE:

CORRUGATED SHEETS TYPE or RADIATOR TYPE

As the figure shows, The tank length is too small, so it is placed two bulges on two sides of the tank.



➤ Final Assembly Structure – IEEE Standard

STANDARD: IEEE Standard

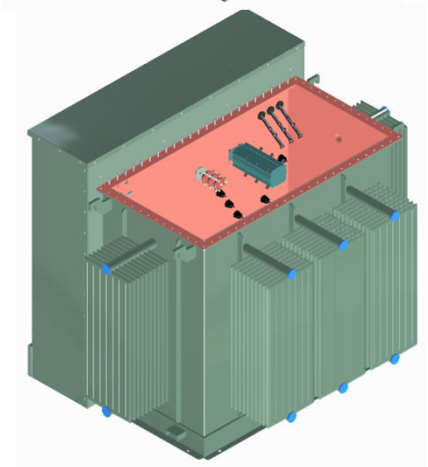
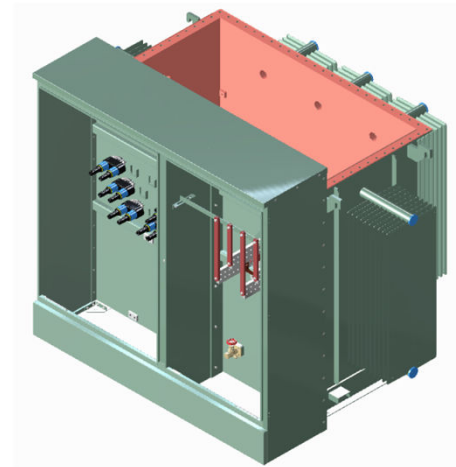
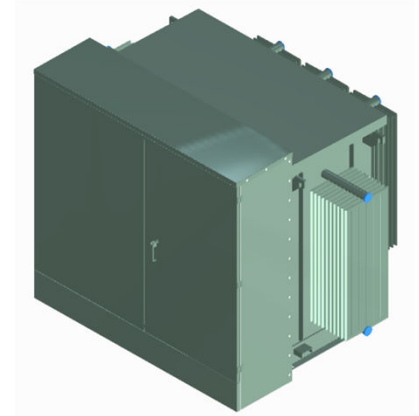
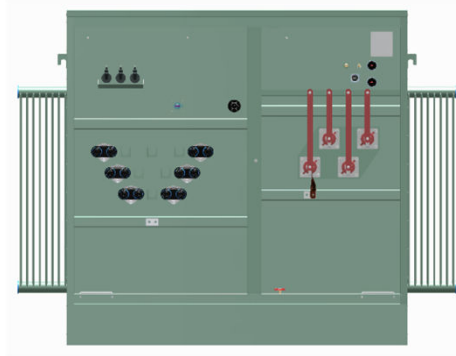
The Feed Type: Loop Feed

H.V. BUSHING: Dual Loadbreak Bushing Insert

TANK STRUCTURE:

CORRUGATED SHEETS TYPE or **RADIATOR TYPE**

As the figure shows, the tank in the picture adopts a heat dissipation structure with radiator and welds vertical strengthening ribs on three sides.



➤ Final Assembly Structure – IEEE Standard

STANDARD: IEEE Standard

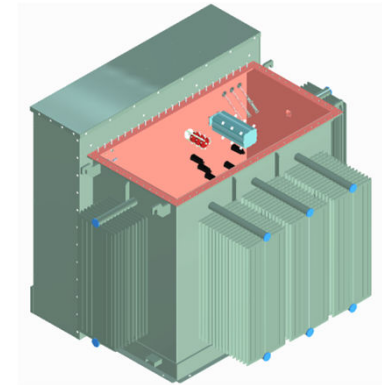
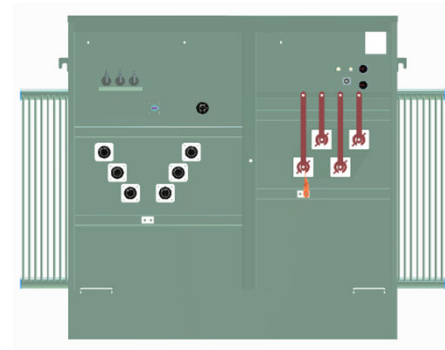
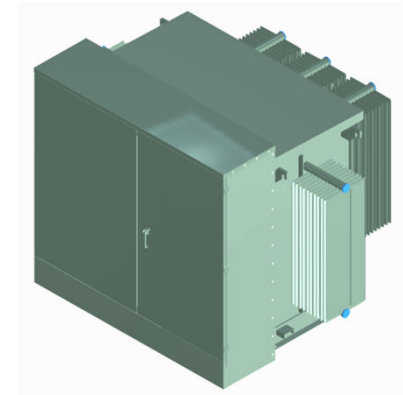
The Feed Type: Loop Feed

H.V. BUSHING: Deadbreak Apparatus Bushing

TANK STRUCTURE:

CORRUGATED SHEETS TYPE or RADIATOR TYPE

As the figure shows, the tank in the picture adopts a heat dissipation structure with radiator and welds vertical strengthening ribs on three sides.



➤ Final Assembly Structure – IEEE Standard

STANDARD: IEEE Standard

H.V. BUSHING: Loadbreak Bushing Insert

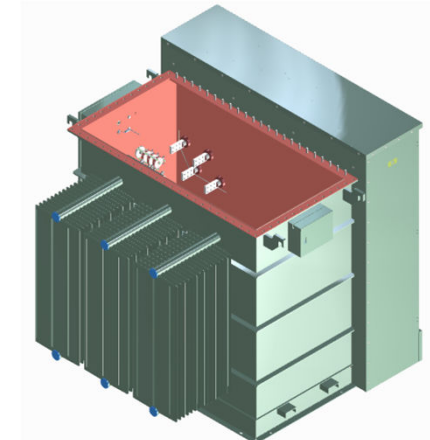
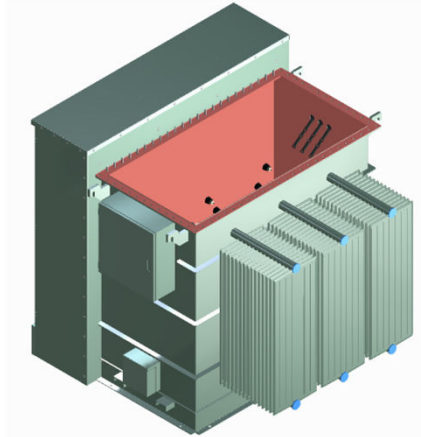
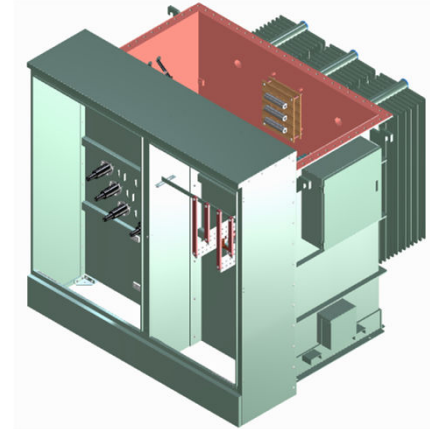
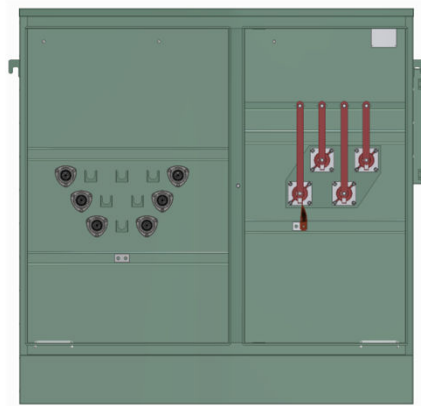
The Feed Type: Loop Feed

TANK STRUCTURE:

CORRUGATED SHEETS TYPE or **RADIATOR TYPE**

As the figure shows, the tank in the picture adopts a heat dissipation structure with radiator and welds horizontal strengthening ribs on three sides.

A portion of the attachments in the picture are placed on the two sides of Tank, and they are configured boxes.



➤ Final Assembly Structure – IEEE Standard

STANDARD: CSA Standard

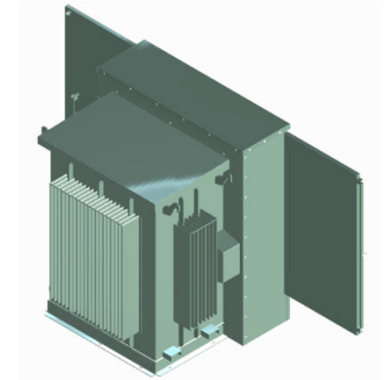
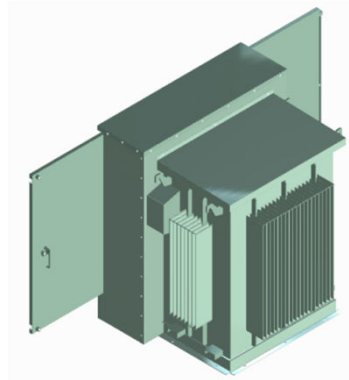
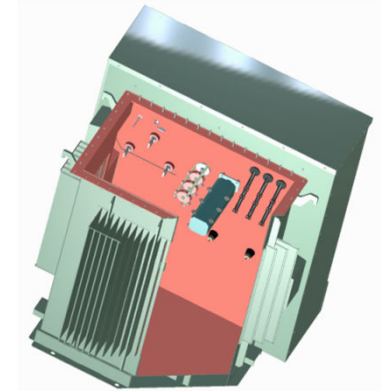
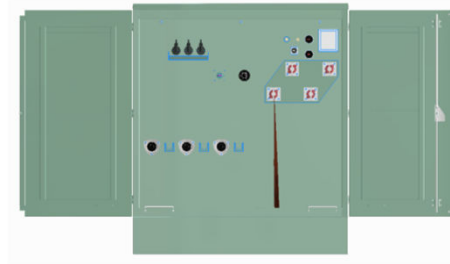
H.V. BUSHING: Loadbreak Bushing Insert

The Feed Type: Radial Feed

TANK STRUCTURE:

CORRUGATED SHEETS TYPE or RADIATOR TYPE

As the figure shows, the tank in the picture adopts a heat dissipation structure with corrugated sheets and welds vertical strengthening ribs on three sides.



➤ Final Assembly Structure – IEEE Standard

STANDARD: CSA Standard

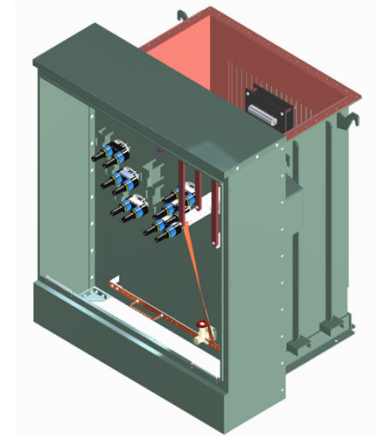
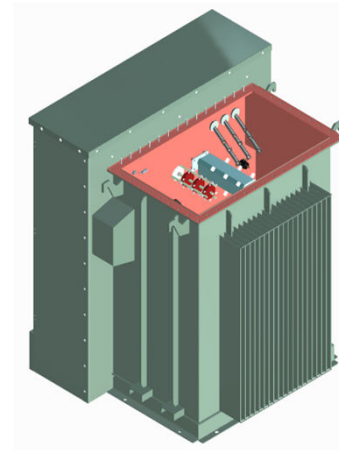
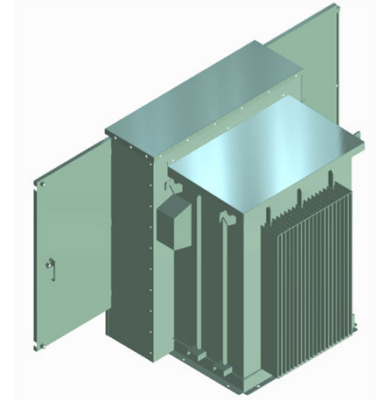
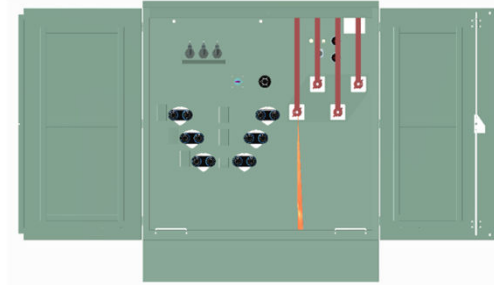
H.V. BUSHING: Dual Loadbreak Bushing Insert

The Feed Type: Loop Feed

TANK STRUCTURE:

CORRUGATED SHEETS TYPE or RADIATOR TYPE

As the figure shows, the tank in the picture adopts a heat dissipation structure with corrugated sheets and welds vertical strengthening ribs on three sides.



➤ Final Assembly Structure – IEEE Standard

STANDARD: CSA Standard

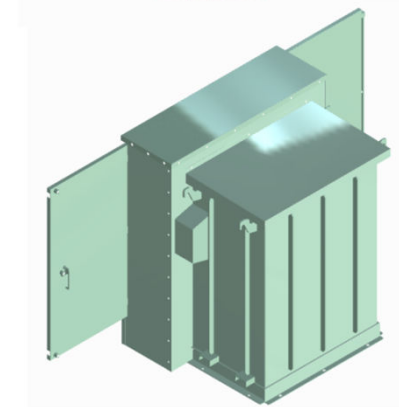
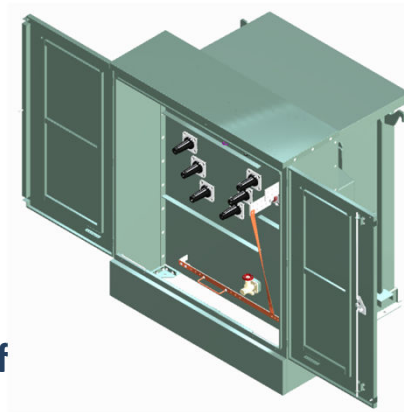
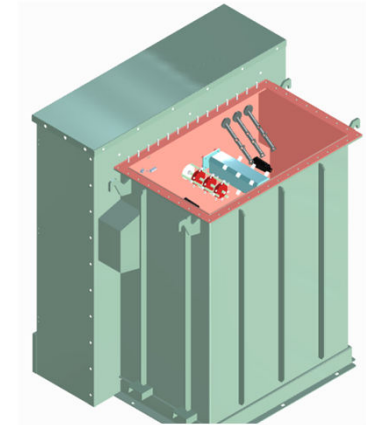
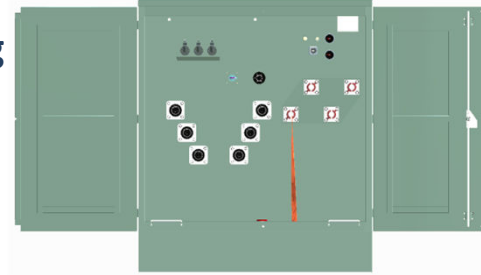
H.V. BUSHING: Deadbreak Apparatus Bushing

The Feed Type: Loop Feed

TANK STRUCTURE: NO

As the figure shows, the tank in the picture adopts a heat dissipation structure with corrugated sheets and welds vertical strengthening ribs on three sides.

As the figure shows, The tank length is too small, so it is placed two bulges on two sides of the tank.



➤ Final Assembly Structure – IEEE Standard

STANDARD: CSA Standard

H.V. BUSHING: Loadbreak Bushing Insert

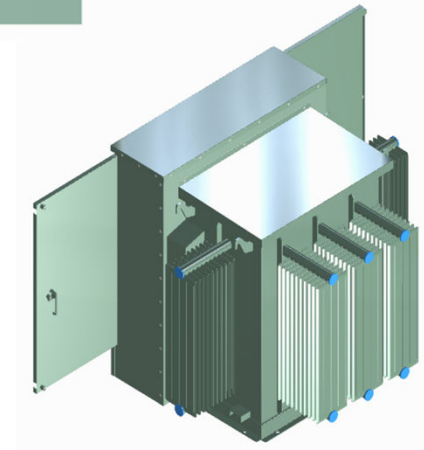
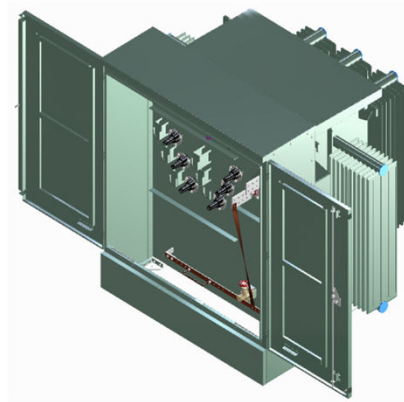
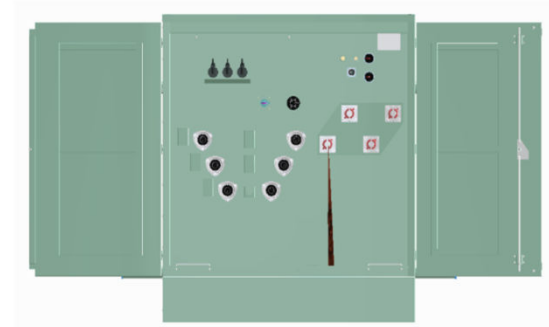
The Feed Type: Loop Feed

TANK STRUCTURE:

CORRUGATED SHEETS TYPE or **RADIATOR TYPE**

As the figure shows, the tank in the picture adopts a heat dissipation structure with corrugated sheets and welds vertical strengthening ribs on three sides.

As the figure shows, The tank length is too small, so it is placed two bulges on two sides of the tank.



➤ Final Assembly Structure – IEEE Standard

STANDARD: CSA Standard

H.V. BUSHING: Loadbreak Bushing Insert

The Feed Type: Loop Feed

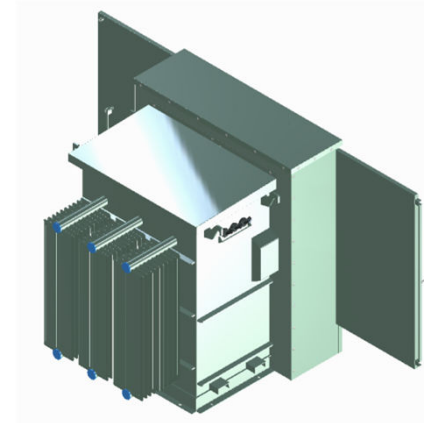
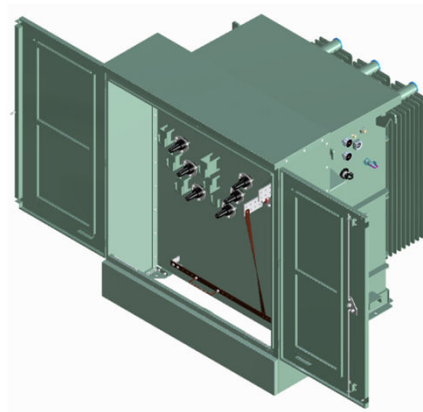
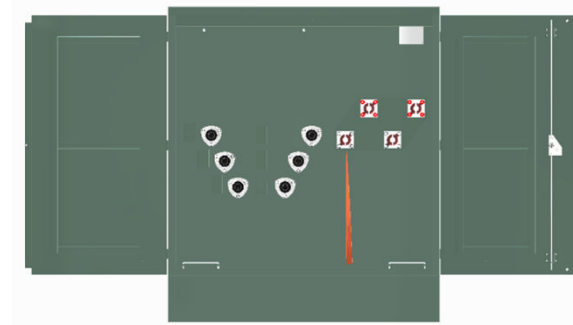
TANK STRUCTURE:

CORRUGATED SHEETS TYPE or **RADIATOR TYPE**

As the figure shows, the tank in the picture adopts a heat dissipation structure with corrugated sheets and welds horizontal strengthening ribs on three sides.

As the figure shows, The tank length is too small, so it is placed two bulges on two sides of the tank.

A portion of the attachments in the picture are placed on the two sides of Tank.

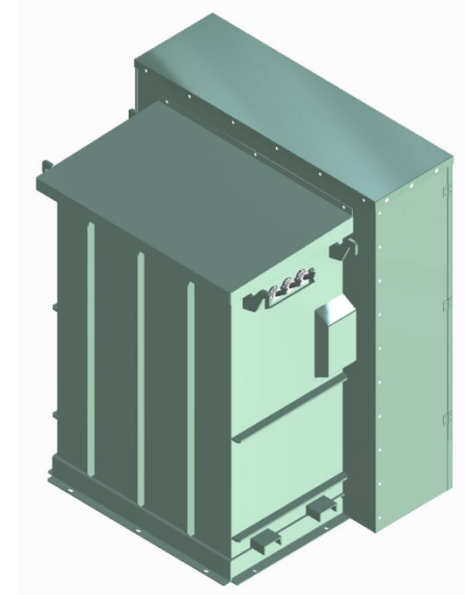
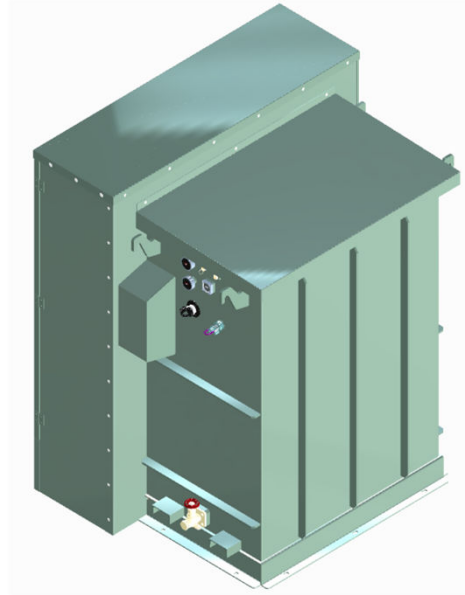


➤ Final Assembly Structure – IEEE Standard

As the figure shows, the tank in the picture do not adopt heat dissipation structure, but it be placed horizontal & vertical strengthening ribs on three sides.

As the figure shows, The tank length is too small, so it is placed two bulges on two sides of the tank.

A portion of the attachments in the picture are placed on the two sides of Tank.

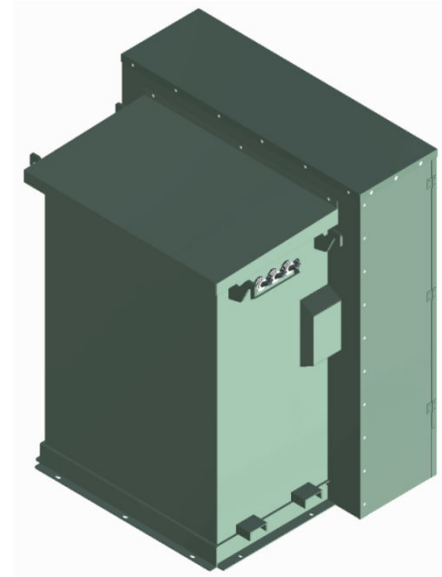
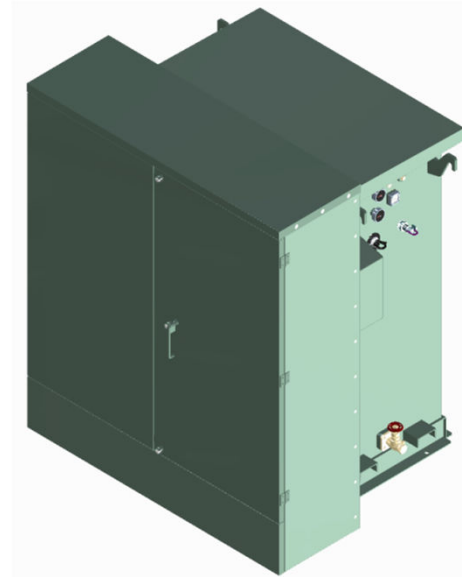


➤ Final Assembly Structure – IEEE Standard

As the figure shows, the tank in the picture do not adopt heat dissipation structure, and it is not be placed horizontal & vertical strengthening ribs on each side too.

As the figure shows, The tank length is too small, so it is placed two bulges on two sides of the tank.

A portion of the attachments in the picture are placed on the two sides of Tank.



➤ Manual adjustment module

The manual adjustment module cover the commonly used adjustment items in all components of the transformer , as well as the less commonly used but potentially adjustable items. This increases the flexibility and diversity of the items to meet the different needs and special requirements of various customers.

Manually Adjust The Main Directory



Core & Coil Clamping & Lead Bars Adjustment Module

低电压|线调节

内外出排高度调节

内排折弯平面到外排距离

10.00000000 mm

外排折弯平面到器身距离

10.00000000 mm

内排到夹件距离(器身外部部分)

15.00000000 mm

外排到内排距离(器身外部部分)

40.00000000 mm

内排高度调节(到器身距离)

100.00000000 mm

外排高度调节(到器身距离)

80.00000000 mm

内排偏斜角度

15.00000000 deg

外排偏斜角度

15.00000000 deg

外排纵向调节(线圈内部部分)

4.00000000 mm

a相连铜排调节

开始折弯距端部距离

195.00000000 mm

折弯长度

100.00000000 mm

a排距离b排距离调节

4.00000000 mm

b相连铜排调节

折弯型式切换

0 u1

1

“0”型折弯调节

开始折弯距离端部距离

200.00000000 mm

折弯长度

100.00000000 mm

距c连接排距离

20.00000000 mm

“1”型折弯调节

开始折弯距离端部距离

290.00000000 mm

铜排距离套管接线掌距离

20.00000000 mm

o相连铜排安装位置调节

o相连铜排安装位置调节

120.00000000 mm

接线片调节

接线片距离铜排或接线掌距离调节

60.00000000 mm

a接线片折弯后之间距离调节

60.00000000 mm

b接线片折弯后之间距离调节

60.00000000 mm

c接线片折弯后之间距离调节

60.00000000 mm

o接线片折弯后之间距离调节

60.00000000 mm

低压导线夹调节

a相导线夹调节

80.00000000 mm

b相导线夹调节

80.00000000 mm

c相导线夹调节

80.00000000 mm

ab导线夹调节

20.00000000 mm

完毕

Manual adjustment module

Tank Data & Corrugated Sheets & Radiators Adjustment Module

油箱数据

油箱本体

油箱本体尺寸调节

油箱内空长(左右壁内表面间)

1240.00000000 mm

油箱内空宽(前后壁内表面间)

800.00000000 mm

油箱内空高(箱底箱盖内表面间)

1660.00000000 mm

箱底高度

128.00000000 mm

后部熔断器调节

安装孔横向间距

310.00000000 mm

安装孔纵向间距

390.00000000 mm

横向定位调节

-155.00000000 mm

纵向定位调节

20.00000000 mm

组间距调节

400.00000000 mm

箱壁背面横条宽度

40.00000000 mm

油箱左壁筋节调节

上部横筋定位调节

0 mm

横筋纵向间距

100.00000000 mm

横筋数量

1.00000000 ul

油箱右壁筋节调节

上部横筋定位调节

0 mm

横筋纵向间距

100.00000000 mm

横筋数量

1.00000000 ul

油箱后壁筋节调节

上部横筋定位调节

0.00000000 mm

横筋纵向间距

100.00000000 mm

横筋数量

1.00000000 ul

散热中心调节

波紋片散热高度调节

190.00000000 mm

散热片散热高度调节

0.00000000 mm

左右散热横向调节

0.00000000 mm

背面散热横向调节

0.00000000 mm

左右鼓包数据

左鼓包尺寸

左鼓包开口定位

800.00000000 mm

左鼓包开口高

400.00000000 mm

左鼓包开口宽

200.00000000 mm

左鼓包宽

94.00000000 mm

左鼓包上部偏移角度

118.00917671 deg

左鼓包下部偏移角度

118.00917671 deg

右鼓包尺寸

右鼓包开口定位

930.00000000 mm

右鼓包开口高

450.00000000 mm

右鼓包开口宽

200.00000000 mm

右鼓包宽

194.00000000 mm

右鼓包上部偏移角度

104.45242825 deg

右鼓包下部偏移角度

104.45242825 deg

吊攀、器身定位底座及千斤顶底座调节

吊攀及千斤顶座

吊攀横向定位调节

90.00000000 mm

吊攀高度定位调节

66.00000000 mm

吊攀间距调节

620.00000000 mm

千斤顶座定位调节

-135 mm

千斤顶座间距调节

270.00000000 mm

器身定位底座

器身底座横向定位(到器身中心)

585.00000000 mm

器身底座纵向定位(到器身中心)

467.50000000 mm

器身底座间距

1170.00000000 mm

完毕

波紋片数据

左側波紋片(面向面板)

波高

800.00000000 mm

波深

200.00000000 mm

片数

10.00000000 ul

波紋片横向定位调节

80.00000000 mm

波紋片高度定位调节

200 mm

筋筋定位调节

135.00000000 mm

筋筋数量调节

2.00000000 ul

筋筋总间距调节

270.00000000 mm

右側波紋片(面向面板)

波高

800.00000000 mm

波深

200.00000000 mm

片数

10.00000000 ul

波紋片横向定位调节

80.00000000 mm

波紋片高度定位调节

200 mm

筋筋定位调节

135.00000000 mm

筋筋数量调节

2.00000000 ul

筋筋总间距调节

270.00000000 mm

后側波紋片(面向面板)

波高

1200.00000000 mm

波深

200.00000000 mm

片数

20.00000000 ul

波紋片高度定位调节

0 mm

加强筋数量

3.00000000 ul

多加强筋间距调节

360.00000000 mm

散热片高度调节

190.00000000 mm

千斤顶座定位调节

-135 mm

千斤顶座间距调节

270.00000000 mm

完毕

片数数据

左側面片数

中心数

700.00000000 mm

组数

2.00000000 ul

组间距

350.00000000 mm

片宽

300.00000000 mm

片数

5.00000000 ul

片数横向定位调节

80.00000000 mm

片数高度定位调节

0 mm

右側面片数

中心数

600.00000000 mm

组数

2.00000000 ul

组间距

310.00000000 mm

片宽

300.00000000 mm

片数

5.00000000 ul

片数横向定位调节

80.00000000 mm

片数高度定位调节

0 mm

左側面片数

中心数

800.00000000 mm

组数

3.00000000 ul

组间距

360.00000000 mm

片宽

310.00000000 mm

片数

8.00000000 ul

片数高度定位调节

0 mm

多加强筋间距调节

360.00000000 mm

左側筋筋调节

左側筋筋定位调节

135.00000000 mm

左側筋筋数量调节

2.00000000 ul

左側筋筋总间距调节

270.00000000 mm

散热片高度调节

190.00000000 mm

千斤顶座定位调节

-135 mm

千斤顶座间距调节

270.00000000 mm

右側筋筋调节

右側筋筋定位调节

135.00000000 mm

右側筋筋数量调节

2.00000000 ul

右側筋筋总间距调节

270.00000000 mm

完毕

- 40 -

Manual adjustment module

面板数据

各附件定位尺寸

高压零接管定位

横向往位 (H1到面板边缘)

261.00000000 mm

横向往位 (H1/H1A到箱底)

1190.00000000 mm

关板环螺栓到接管距离

~127.00000000 mm

终端高压接管间距

95.00000000 mm

终端挂壁距离H1接管距离

127.00000000 mm

低压零接管定位

横向往位 (X3到面板边缘)

164.00000000 mm

横向往位 (X2/X0到箱底)

1160.00000000 mm

横向往位 (X2、X3之间)

203.00000000 mm

X1/X2/X3到横向往位

135.00000000 mm

X0/X1到横向往位

135.00000000 mm

分接开关

横向往位 (到左箱壁)

650.00000000 mm

横向往位 (到油位线)

200.00000000 mm

负载开关

横向往位 (到左箱壁)

450.00000000 mm

横向往位 (到油位线)

200.00000000 mm

负载开关间距

150.00000000 mm

负载开关组数

1.00000000 u1

熔断器

横向往位 (F1到左箱壁)

100.00000000 mm

横向往位 (F1到油位线)

0.00000000 mm

熔断器组数

3.00000000 u1

油温表

横向往位 (到油位表)

120.00000000 mm

横向往位 (到油位线)

30.00000000 mm

压力表

横向往位 (到油位表)

120.00000000 mm

横向往位 (到油位线)

90.00000000 mm

压力释放阀

横向往位 (到油位表)

30.00000000 mm

横向往位 (到油位线)

90.00000000 mm

放油阀

横向往位 (到油箱中心)

300.00000000 mm

横向往位 (到箱底)

150.00000000 mm

注油孔

横向往位 (到油位表)

60.00000000 mm

横向往位 (到油位线)

90.00000000 mm

放气孔

横向往位 (到注油孔)

90.00000000 mm

横向往位 (到油位表)

90.00000000 mm

铭牌盖板

横向往位 (到面板右面)

80.00000000 mm

横向往位 (到面板上表面)

150.00000000 mm

加标接地支架

横向往位 (到油箱中心)

690.00000000 mm

横向往位 (到箱底)

150.00000000 mm

油位线及中隔板

油位线调节 (到箱盖内表面)

160.00000000 mm

中隔板横向往位调节

1047.50000000 mm

中隔板安装孔个数

6.00000000 u1

IPD调节

横向往位 (到注油孔)

180.00000000 mm

横向往位 (到油位表)

90.00000000 mm

高压含横筋调节

高压含上部横筋高度

130.00000000 mm

高压含下部横筋高度

60.00000000 mm

高压含横筋长度调节

0 mm

面板横筋切换

1

2

低压含横筋调节

低压含上部横筋高度

140.00000000 mm

低压含下部横筋高度

60.00000000 mm

低压含横筋长度调节

0 mm

1-为板筋, 2-为U型筋

完

前舱数据

面板宽度

左门宽度

下门框高度

面板高度

左门高度

前舱数据

面板宽度

1796.00000000 mm

面板高度

1950.00000000 mm

下门框高度

198.50000000 mm

前舱深度

550.00000000 mm

左门宽度

1047.50000000 mm

低压零接管支架数据

低压零接管支架固定板长度调节

200.0

低压零接管支架高度调节

330.0

完

IEEE标准接地端子及高压零相接管位置调节

高压零相接管位置

横向往位 (到油箱中心)

150.00000000 mm

纵向往位 (到油位线)

200.00000000 mm

高压零相接管接地端子位置

横向往位 (到高压零相接管)

100.00000000 mm

纵向往位 (到高压零相接管)

20.00000000 mm

高压插拔头接地端子位置

横向往位 (到面板左侧面)

578.00000000 mm

纵向往位 (到地表面)

686.00000000 mm

低压零相接管接地端子位置

横向往位 (到低压零相接管)

0.00000000 mm

纵向往位 (到低压零相接管)

200.00000000 mm

客户用接地端子位置

横向往位 (到油箱中心)

600.00000000 mm

纵向往位 (到地表面)

50.00000000 mm

完

Panel & Corrugated Sheets & Radiators Adjustment Module

- 4 1 -

FINAL ASSEMBLY SUMMARY SECTION



As the figure shows
After the project running,
all the engineering drawings
of the project are collected
in the engineering drawing
files. The number of
engineering drawings
ranges from 80 to 100 for
different projects.

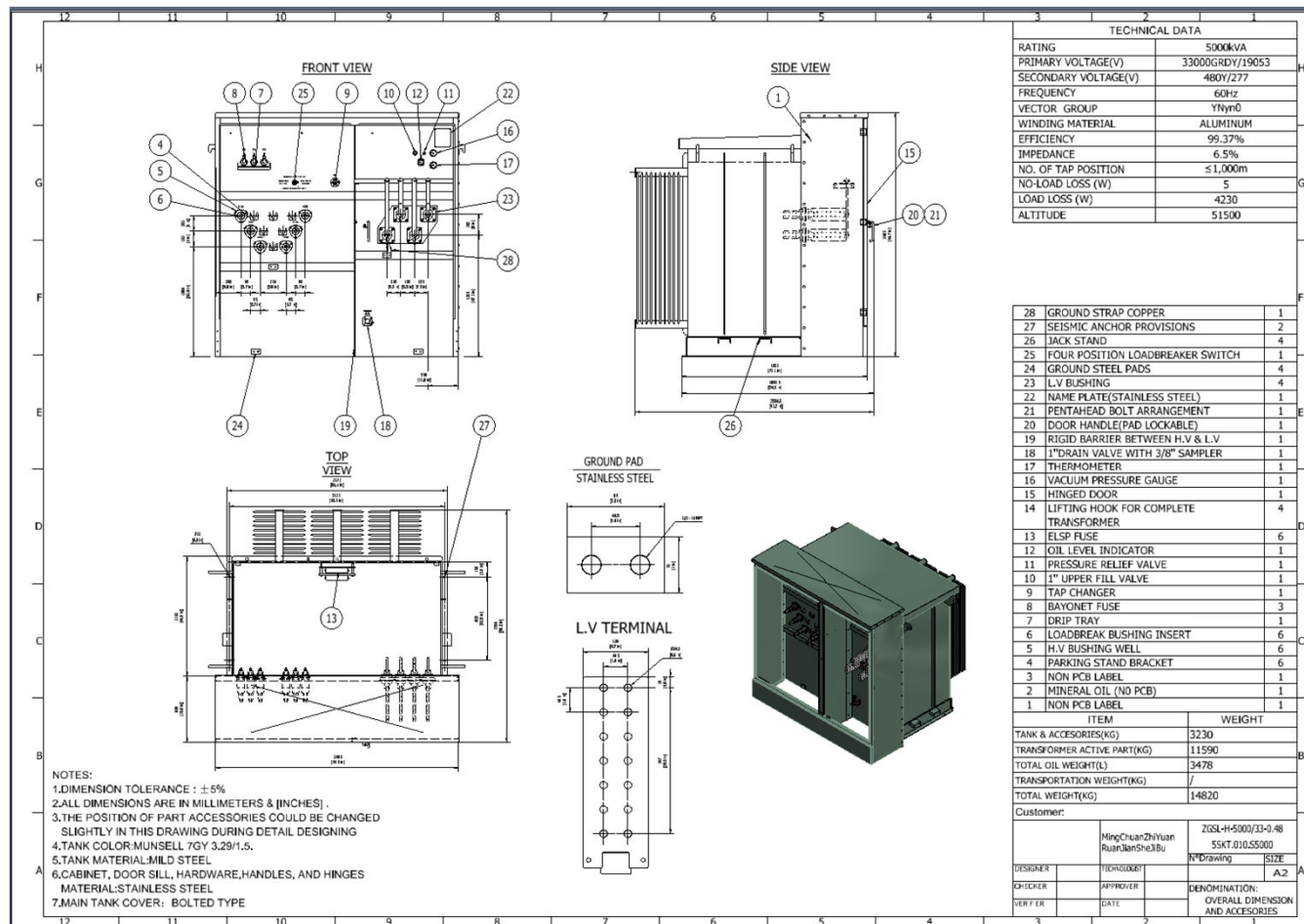
 5MC.000. S1000 Corrugate dStructu...	 5MC.003. S1000 GroundCo nnection...	 5MC.010. S1000 Corrugate dCusto...	 5MC.100. S1000 FrontEncl doureAss...	 5MC.102. S1000 LeftPlate Welded.i...	 5MC.104. S1000 RightPlate Welded.i...	 5MC.106. S1000 LeftDoor Welded.i...	 5MC.110. S1000 RightDoor Welded.i...	 5MC.114. S1000 UpperDoo rsilWeld...	 5MC.116. S1000 LowerDoo rsilWeld...	 5MC.118. S1000 MiddleUp rightWel...	 5MC.120. S1000 LaminaTec tiWelded...	 5MC.201. S1000 Corrugate dTankKW...	 5MC.202. S1000 PanelWel ded.iwd	 5MC.204. S1000 TankUnde rBassWel...	 5MC.206. S1000 TankWall Welded.i...	 5MC.209. S1000 TankFram eWelde...	 5MC.210. S1000 BackCorru gatedSh...
 5MC.213. S1000 LeftBulge BoxWel...	 5MC.215. S1000 RightBulge BoxWel...	 5MC.301. S1000 CoreFram eAssem...	 5MC.303. S1000 HvUpperY okeClam...	 5MC.304. S1000 LvUpperY okeClam...	 5MC.305. S1000 Hv&LvLow erYokeCL...	 5MC.306. S1000 MainFoot Welded.i...	 5MC.307. S1000 SecondFo otWelded...	 5MC.308. S1000 YokeInsul ationAss...	 5MC.312. S1000 LvYokeIns ulAssy.iwd	 5MC.313. S1000 ActivePart FixedPal...	 5MC.401. S1000 CoilClamp ingStruc...	 5MC.423. S1000 SticksCurt ainBetw...	 5MC.700. S1000 Hv Lead Assy.iwd	 5MC.710. S1000 HLvWiring ClipAssy...	 5MC.801. S1000 LvLeadAss y.iwd	 8MC.001. S1000 Cover.iwd	 8MC.002. S1000 TankGuar dCover.i...
 8MC.101. S1000 LaminaTec ti.iwd	 8MC.103. S1000 LeftSidePI late.iwd	 8MC.105. S1000 RightSide Plate.iwd	 8MC.107. S1000 LeftDoor.i dw	 8MC.108. S1000 LeftDoorT RANSsti...	 8MC.109. S1000 LeftDoorV ERTstiffe...	 8MC.111. S1000 RightDoor .iwd	 8MC.112. S1000 RightDoor TRANSst...	 8MC.113. S1000 RightDoor VERTstiff...	 8MC.115. S1000 UpperDoo rsil.iwd	 8MC.117. S1000 LowerDoo rsil.iwd	 8MC.119. S1000 UprightW elded.iwd	 8MC.203. S1000 Panel.iwd	 8MC.205. S1000 TankUnde rBass.iwd	 8MC.207. S1000 TankWall.i dw	 8MC.213. S1000 BackTank WallRib.i...	 8MC.214. S1000 LeftBulge Box.iwd	 8MC.216. S1000 RightBulge Box.iwd
 8MC.218. S1000 TankUnde rBassSid...	 8MC.219. S1000 TankUnde rBassSid...	 8MC.220. S1000 TankUnde rBassRib...	 8MC.225. S1000 LeftTankW allRib.iwd	 8MC.225. S1000 Non-Mag neticSte...	 8MC.226. S1000 PanelTRA NS-Rib.i...	 8MC.227. S1000 PanelVERT -Rib.iwd	 8MC.227. S1000 RightTank WallRib.i...	 8MC.302. S1000 CoreLami nationST...	 8MC.309. S1000 FootInsula tion.iwd	 8MC.310. S1000 HvFootWo odBlock.i...	 8MC.311. S1000 LvFootWo odBlock.i...	 8MC.314. S1000 ActivePart Connecti...	 8MC.315. S1000 LvMainFo otRib.iwd	 8MC.316. S1000 HvMainFo otRib.iwd	 8MC.317. S1000 HvSecond FootRib.i...	 8MC.425. S1000 YokeBlock _Le.iwd	 8MC.426. S1000 YokeBlock _Ri.iwd
 8MC.427. S1000 LowerYok eBlock_L...	 8MC.428. S1000 LowerYok eBlock_R...	 8MC.429. S1000 YokeBlock _Le.iwd	 8MC.430. S1000 YokeBlock _Ri.iwd	 8MC.431. S1000 LowerYok eBlock_L...	 8MC.432. S1000 LowerYok eBlock_R...	 8MC.802. S1000 a_phaseC onnecti...	 8MC.803. S1000 b_phaseC onnecti...	 8MC.804. S1000 c_phaseC onnecti...	 8MC.805. S1000 d_phaseC onnecti...	 8MC.806. S1000 e_phaseC onnecti...	 8MC.807. S1000 f_phaseC onnecti...	 8MC.808. S1000 g_phaseC onnecti...	 8MC.809. S1000 h_phaseC onnecti...	 8MC.810. S1000 i_phaseC onnecti...	 8MC.811. S1000 j_phaseC onnecti...	 8MC.812. S1000 k_phaseC onnecti...	 S1000-WeledPlate.iwd

CUSTOMER REVIEW OF THE DRAWINGS

As the figure shows

After the project running,

the customer review of the drawing has been adjusted and organized simply, It can then be sent to the customer for review after about 20 minutes.



➤ SUMMARY

- The transformer structure shown in the above pictures is just one part of the numerous structures.
- Each side of the tank wall can be independently selected whether to install reinforcing ribs. The reinforcing ribs can be arranged horizontally, vertically, or not at all.
- The panel can choose whether to weld reinforcing ribs. It can be plate strengthening ribs , U-shaped strengthening ribs or not at all.
- Except for the four-piece set of accessories for the American transformer, all other accessories can be optionally installed. All the accessories can also be chosen to be placed on the panel, or on the left and right side walls of the tank.
- According to the data and options filled in by the user ,The entire structure will automatically generate a 3D model and engineering drawings. The process takes approximately 20 to 30 minutes, depending on the computer configuration.
- The generated project allows each component to be flexibly adjusted according to actual circumstances. The adjustment can be completed simply by inputting the adjustment distance or changing the options. There is no need to manually modify the 3D model.



T H A N K Y O U

Thank you for your reading.