

Grid Solutions

ZF16-550

Gas-Insulated Switchgear 550kV

Leistung Energie is consistently making the most of 50+ years experiences in design, material selection, innovation, engineering, development, manufacturing and servicing of the state-of-the-art gas-insulated substations.

Leistung Energie's ZF16-550 GIS is capable of responding various challenges of networks up to 550kV for all applications such as power generation, transmission and heavy industries.

High Availability

- More than 50 years of manufacturing experience in HV electrical equipment
- More than 50,000 GIS bays in operation worldwide
- More than 90% of components manufactured and controlled by ourselves
- Proved safe operation cases in extreme environments, such as hot weather, high and cold area and earthquake-prone regions, etc.

High Flexibility

- Adaptable design and layout to meet the requirements of the user
- Customized design for specially need
- Smart solution for smart substations
- High compatibility to associated equipment

Short Site Work

- Compact structure and modular design require less installation work
- Qualified mechanisms and components demand less maintenance



Lowest Cost of Land and Civil Works

- Most compact GIS footprint

Smart Grid Features

- Digital monitoring, control and protection solution

Environment Friendliness

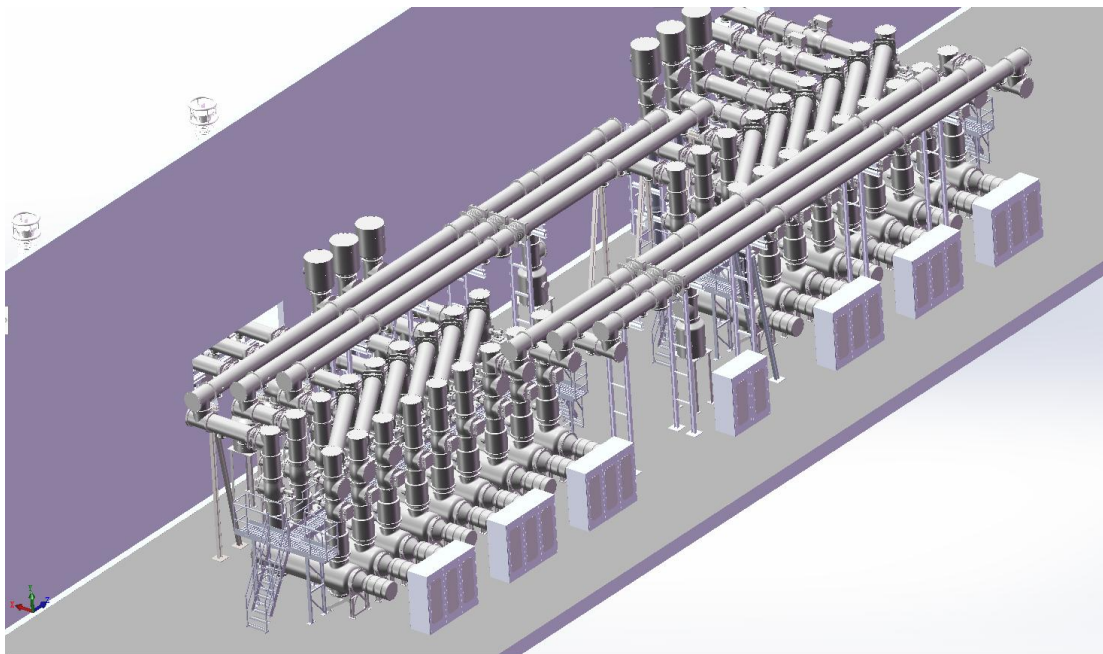
- Safe sealing system to keep 0.5% annual low gas leakage rate
- Complete and reliable gas handling equipment to tackle the SF6 gas

Customer Benefits

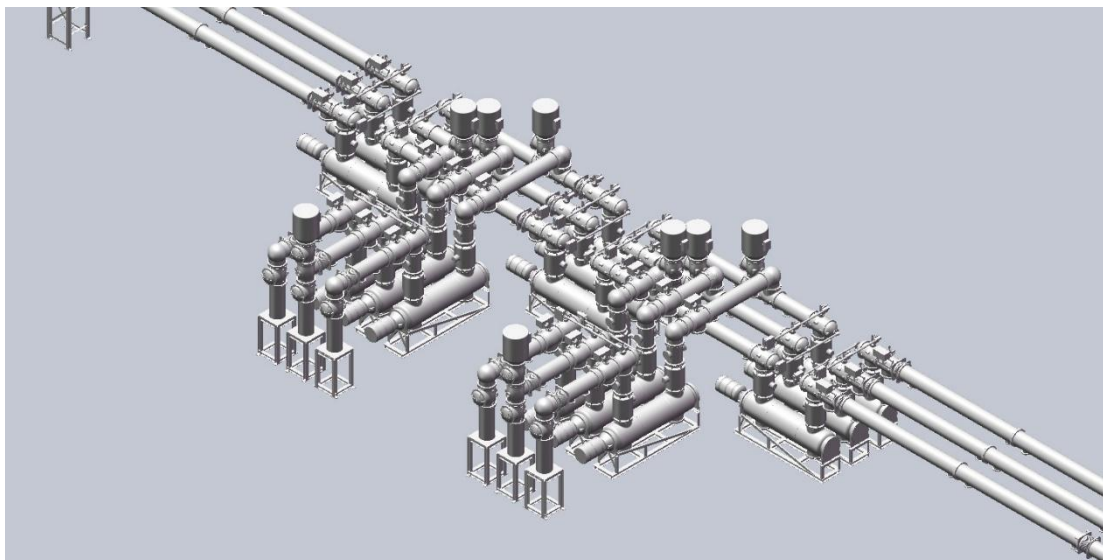
- Type Tested & Field-proven Reliability
- Maximum Safety
- Compact but Accessible
- Smart Solution Ready
- Low Environmental Impact
- Competitive Cost
- Short Lead Time
- Fast Response to Your Need
- Fully Technical Support and Service

ZF16-550 Configuration

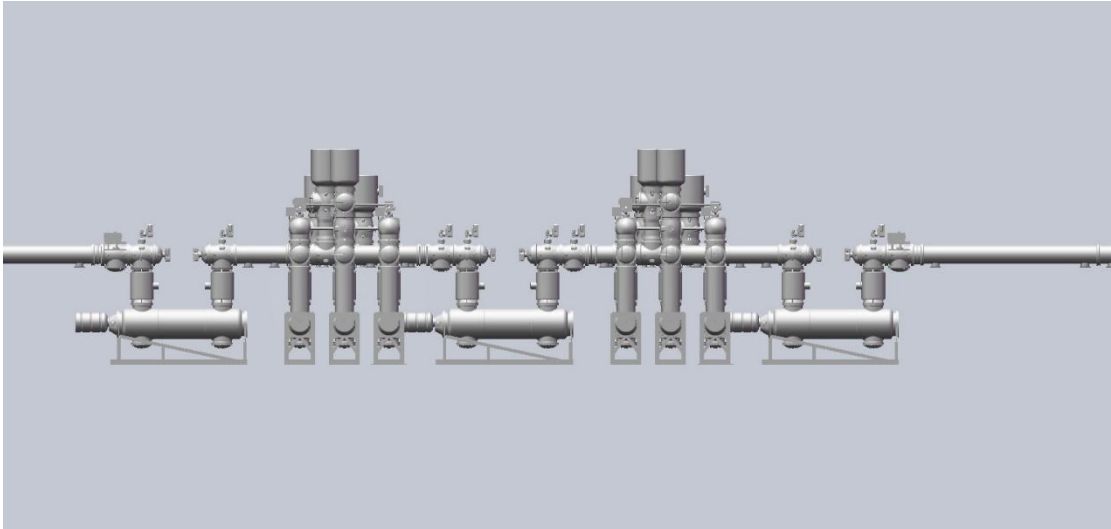
Applicable for single busbar, double busbar and one and a half arrangement;



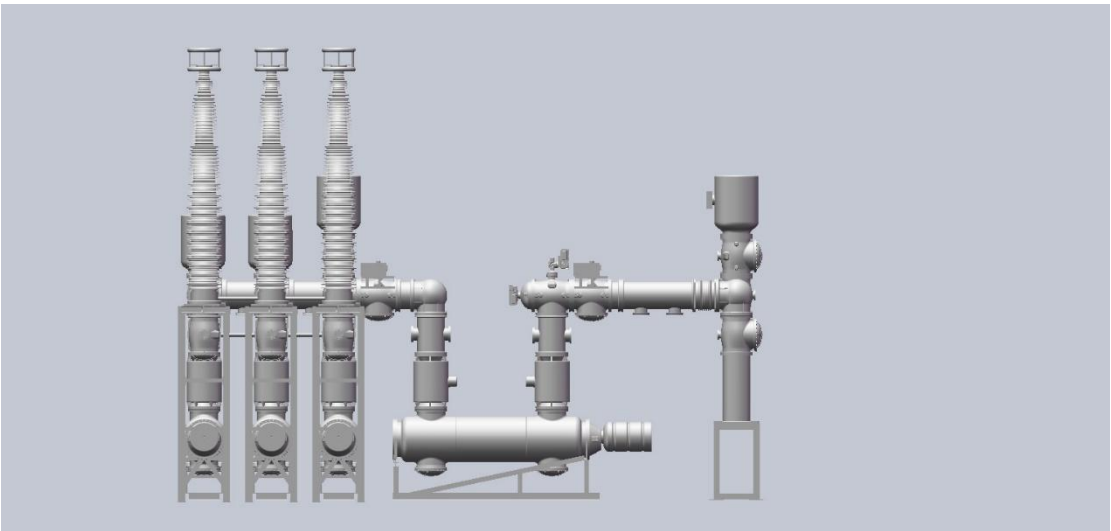
Z type arrangement



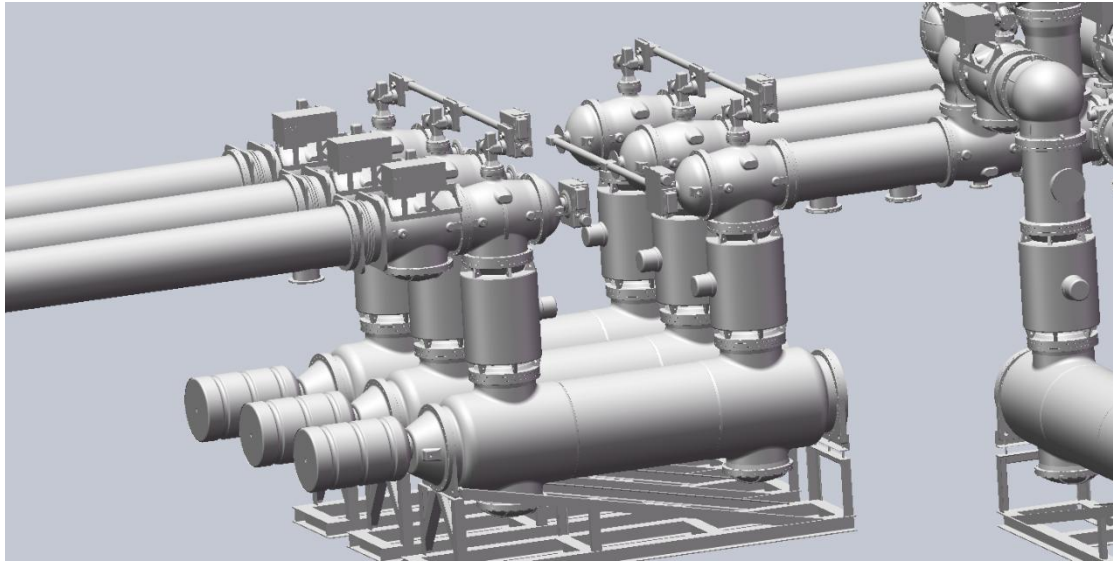
Typical arrangement



Typical 3/2 bay



Typical line bay



Circuit breaker bay

Ratings

General		
Design standard		IEC
Rated voltage	kV	550
Rated current	A	5000/6300
Rated frequency	Hz	50
Rated 1 min power frequency withstand voltage (rms)	kV	Phase to earth: 740 Across open switching device: 740 (+315)
Rated lightning impulse withstand voltage	kV	Phase to earth: 1675 Across open switching device: 1675 (+450)
Rated switching impulse withstand voltage	kV	Phase to earth: 1300 Across isolating distance: 1175 (+450)
Rated short circuit breaking current	kA	63
Rated peak withstand current	kA	171
Annual SF6 gas leakage rate	%	≤0.5%
Installation		Indoor/outdoor
Ambient temperature range	°C	-50 to 50
Circuit Breaker		
Short circuit breaking current		63
Rated short circuit making current	kA	171
Rated short circuit duration	s	3
First pole to clear factor		1.3
Rated operation sequence		O-0.3s-CO-180s-CO
Breaking time	ms	≤50
Closing time	ms	≤80
Electrical endurance	Class	E2
Mechanical endurance	Class	M2
Capacitive switching	Class	C2
Operating mechanism		Hydraulic spring
Disconnecter and earthing switch		
Short-time withstand current	kA	63
Bush-transfer current switching capability	A/V	1600 (40)
Mechanical endurance		M2
High-speed earthing switch		
Short-time withstand current	kA	63
Electromagnetic current	A/kV	160/20
Electrostatic current	A/kV	25/25
Mechanical endurance	Class	M2



**United Kingdom | Australia | China | Chile | Germany |
Hongkong | Indonesia | Malaysia | Russia | Singapore |
South Africa | Thailand | Vietnam**

info@leistung-energie.com | www.leistung-energie.com

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