MOBILE SUBSTATIONS

PLUG & PLAY SOLUTIONS

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Chapter 1
Mobile Substations
Introduction
Quick, Safe&Reliable Solutions For Your Needs

- Low Footprint (Minimal civil work needed)
- Protected Against Environmental Influences
- Minimal Maintenance Needs
- Plug & Play Design (Modular and easy installation)
- Low Commissionning Times (Minimal site work, factory tested system)
Plug & Play Solutions up to 400 kV – 100 MVA

Emergency Power Supply

• Emergency power restoration in case of natural disasters
• Grid capacity increase during peak load
• Backup existing system

Fast Grid Expansion

• Temporary solution during construction of a conventional S/S
• Providing distribution network on remote areas

Maintenance on Existing S/S

• Backup of an existing system during a planned or unplanned maintenance
• Reduce downtime during repair or replacements
Chapter 2
Mobile Substations
Solutions
Compact Solution

- Tailor-Made Solutions Based on Client Requirements
- All modules assembled and tested in factory
- Ready to be commissioned on site
Quick Mobilization

- Compact HGIS/GIS and Transformer Design
- Calculated number of axles according to Project Requirements
- Independent suspensions for each line
- All dimensions designed to meet the Requirements of National Transportation Regulations
Quick Installation

- All Modules Assembled and Tested in Factory
- Transformer filled with oil and tested in factory
- Compatible with both overhead lines or cable connection on HV Side
- Power-driven cable drum for MV Cables
- Plug&Play terminals for MV GIS
- Plug&Play terminals for power and signals for multiple trailer solutions
3D Error-Proof Design

Mobile Systems designed by industry-standard applications for eliminating errors.
Chapter 3
Mobile Substations
Applications
Mobile Substations
HV and Transformer Module

<table>
<thead>
<tr>
<th>Country</th>
<th>Turkey (TEIAS)</th>
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</thead>
<tbody>
<tr>
<td>Voltage Level</td>
<td>154 kV</td>
</tr>
<tr>
<td>Requirement</td>
<td>Grid Extension</td>
</tr>
<tr>
<td>Transformer Power</td>
<td>50 MVA</td>
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</tbody>
</table>

4 sets of 2 Trailer System were used during peak load times and extension work in urban areas.
Mobile Substations
HV and Transformer Module
Mobile Substations
HV and Transformer Module
Mobile Substations
HV and Transformer and LV Module

Country | Algeria (SPE)  
Voltage Level | 10-60/30 kV  
Requirement | Quick Delivery  
Transformer Power | 30 MVA  

28 sets of 1 combined Trailer System were delivered in a record five months.
Mobile Substations
HV and Transformer and LV Module
Mobile Substations
HV and Transformer and LV Module
Mobile Substations
High Voltage Module

Country | Algeria (CEEG)
Voltage Level | 60/30 kV
Requirement | Quick commissioning

10 sets of 3 Trailer System were used during peak load times and extension work in urban areas.
Mobile Substations
High Voltage Module
Mobile Substations
High Voltage Module
Mobile Substations
Transformer Module

Country: Algeria (CEEG)
Voltage Level: 60/30 kV
Requirement: Quick commissioning
Transformer Power: 20 MVA
Mobile Substations
Transformer Module
Mobile Substations
Transformer Module
Mobile Substations
Medium and Low Voltage Module

Country | Algeria (CEEG)
Voltage Level | 60/30 kV
Requirement | Quick commissioning
Mobile Substations
Medium and Low Voltage Module
Mobile Substations
Medium and Low Voltage Module
6 trailer solution was designed specifically for the Power Plant connection.

<table>
<thead>
<tr>
<th>Country</th>
<th>Algeria (Gama)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage Level</td>
<td>220 kV</td>
</tr>
<tr>
<td>Requirement</td>
<td>Fast Track Power Plant Project</td>
</tr>
</tbody>
</table>
Mobile Substations
High Voltage Module
Country: Algeria (Gama)  
Voltage Level: 220 kV  
Requirement: Fast Track Power Plant Project
Country: Algeria (Sonelgaz)

Voltage Level: 10-30 kV

Requirement: Minimal maintenance required

27 sets were used during planned maintenance works in harsh conditions.
Mobile Substations – Skids
Medium and Low Voltage Module
Thanks…

For more information:

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