

# MECHRON



## Relocatable Generator Sets For Department of National Defence

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As part of its preparations for Y2K, the Canadian Department of National Defence had an urgent requirement for high capacity relocatable generator sets. Relying on its fast design and manufacturing capabilities, Mechron was able to quickly supply packaged generator sets to meet the requirement.



Known as “Abacus” and “Kinetic”, the requirement was for 300 kW and 500 kW generator sets. The Abacus generator sets were intended for Y2K preparations, while the Kinetic generator sets were for support of military camps.

Some of the requirements for the generator sets were:

- Reconfigurable outputs for multi-voltage and frequency operation
- Auto-synchronization capability
- Load sharing during parallel operation

- Completely self-contained operation
- Reduced height (8') ISO container installation
- Operation in wide of environments including temperature ranges from -40°C to +40°C
- Design for resistance to humidity and fungus effects

In response to this requirement, Mechron designed and manufactured self-contained packaged generator sets, based on Caterpillar generator sets. The controls for the generator set were modified and integrated into the control system to allow for auto-synchronization and load sharing. The enclosures were equipped with an integrated fuel pump and automated ventilation system. The ISO containers were modified to allow for cooling airflow while maintaining protection from the elements.

After Y2K, Mechron was again asked to work on the Abacus generator sets, this time to retrofit them to Kinetic configurations.

