

### **AC POWER SUPPLY / FREQUENCY CONVERTER**



At the turn of the [20th] Century, Electrical Power Generation and Distribution began at Niagara Falls, NY less than 10 miles from the US Drives' manufacturing facility. Much of the early power was generated at 25 Hz and believe it or not, there are still a few customers in the area who are connected to a functional 25 Hz Utility Grid. These same customers are also connected to the standard 60 Hz Power Grid for most of their electric needs. Understandably, the Electric Utility would like to discontinue this century old service. They recently established an ending date for the distribution of 25 Hz power and local Manufacturers and Building Owners are faced with the cost of replacing old, but very reliable equipment. US Drives has provided several of these 25 Hz customers with a less expensive alternative than the wholesale replacement of their existing motors and gear reducers or the expensive rework of Elevators and other Special Machinery.

A US Drives Inverter is used to convert 60 Hz Power to 25 Hz Power. A "Sine Wave" Output Filter and an Output Isolation Transformer are usually provided to filter the PWM Output Waveform and protect the existing equipment from High Voltage Spikes referenced to Ground. The 25 Hz Power we provide is very close to a pure Sine Wave so it does not harm existing Motors, Starters, and Control Relays.

These customers are the proud owners of their own 25 Hz Electric Power Plants:

- ❖ 7780 Stanley Ave, Niagara Falls, Ontario - Manufacturing Facility – 1,512 Ampere, 480 VAC, 25 HZ (1,260KVA)
- ❖ 1000 E., Tonawanda - Manufacturing Facility - 325 Ampere, 480 VAC, 25 Hz Power Supply (270 KVA)
- ❖ 67 Webster Street, Buffalo - Entertainment Facility - 525 Ampere, 120 VAC, 25 Hz (110 KVA)
- ❖ 260 Chandler Street, Buffalo - Manufacturing Facility - 40 Ampere, 480 VAC, 25 Hz (30 KVA)
- ❖ 3210 Watling St., Chicago - Manufacturing Facility - 35 Ampere, 480 VAC, 25 Hz (29 KVA)
- ❖ 144 Urban Street, Buffalo – Manufacturing Facility - 42 Ampere, 240 VAC, 25 Hz (17 KV)
- ❖ 3155 Broadway, Buffalo – Manufacturing Facility - 28 Ampere, 240 VAC, 25 Hz (12 KV)