



# Graphite

## High Power Transformer Rectifier Systems for Graphite Applications

### **Added Benefits of Power Electronic Systems Supplied by Neeltran – Robust and Reliable Power to run your 24/7 processes.**

At Neeltran, we are uniquely positioned as one of the few companies in the world that designs and manufactures its own rectifier-transformers and rectifiers. This capability allows for combined Full Current and Full Voltage factory testing of the transformer and rectifier in their actual configuration prior to shipment. Neeltran can build a stationary unit or a unit that moves on a rail car.

An experienced client requires combined testing to eliminate integration problems at the site and to assure the shortest commissioning time, resulting in significant cost savings and the highest quality units.

Neeltran possesses multi-industry, engineering, and manufacturing experience that helps us to be flexible and design products that meet your specific technical and safety requirements.

### **Product Details:**

- Diode units available
- Latest safety features
- Design to all types of environments and contamination
- Remote monitoring via PLC modem
- State-of-the-art Neeltran fast response control boards with Microprocessor based controller available
- All types of PLC's available for easy interface to customer systems
- Semiconductor Plasma Arc protection available
- On Load Tap Changer available, in all cases including NLTC tap changer will have its own seaperate oil supply
- EMF, RFI and Magnetic studies available
- FEM analysis available
- Harmonic studies available
- E House style available



# Graphite

## General Specifications

Three-phase supply voltage main by customer	V	up to 69000
Maximum power	kVA	up to 70000
Three phase voltage on the secondary	V	up to 500
Frequency	Hz	50-60
NLTC or OLTC		No Load and On Load Tap Changers
DC Current	A	up to 200000
DC Voltage	V	up to 400
Rectifier Connection	ANSI - IEC	Bridge or Star
Pulses		6 / 12 / 18 / 24 / 36 and more
Control card type		Digital or Analog, hard wired or OPTO
Accuracy of the constant current control system		±0.5%
Transformer Cooling		Oil to Water / Oil to Air
Transformer Manufacturer		Neeltran
Transformer Oil Type		Mineral / FR3 / Silicon
Metering		Shunt / LEM / Primary CT
PLC		Allen Bradley or Siemens, others available. Dial in Modem or Cellular modem for diagnostics
Rectifier Cooling		Deionized Water to Water / Deionized Water to Air
Rectifier Enclosure Type		Compact / Semi-walk in / Walk in
Rectifier Manufacturer		Neeltran
Rectifier power section material		Aluminum or Copper
Rectifying elements		Thyristors / Diodes
Redundancy		N+X
Line Up Testing Available		Combined Test at Neeltran Factory

### American Superconductor

+1 860.350.5964 Phone | +1 860.350.5024 Fax | 71 Pickett District Road | New Milford, CT 06776, USA  
 Web: [Neeltran.com](http://Neeltran.com) | Email: [sales@Neeltran.com](mailto:sales@Neeltran.com)