



# Quad Plus™

## 2000 HP 12 Pulse DC Drive System Specs

<u>Motor</u>	<u>Transformer</u>	<u>Drive Enclosure</u>
<ul style="list-style-type: none"><li>• 2000 HP Shunt Wound DC</li><li>• 16,154 lbs./ft. Torque (constant torque from 0 RPM to 650 RPM)</li><li>• 700 VDC</li><li>• 2300 DC FLA Armature</li><li>• 40 DC FLA Field (site dependent setting)</li><li>• 650 RPM base speed</li><li>• Insulation Class F</li><li>• Originally manufactured by EMD as locomotive generator</li><li>• Re-engineered by Quad Plus to be used as a recycling duty DC motor</li></ul>	<ul style="list-style-type: none"><li>• 2500 KVA</li><li>• Medium voltage primary<ul style="list-style-type: none"><li>◇ Site dependent. Transformer is custom designed per site specs</li></ul></li><li>• Special Rectifier duty design</li><li>• Impedance as specified by Quad Plus</li><li>• Can be two single 1250 KVA (i.e. Delta/Delta &amp; Delta/Wye)</li><li>• Single 2500 KVA three winding transformer</li><li>• 600 VAC Secondaries</li></ul>	<ul style="list-style-type: none"><li>• 12 Pulse Design</li><li>• Two custom designed DC chokes (mounted external to drive enclosure)</li><li>• 600 VAC Input</li><li>• Designed for 150% maximum overload</li><li>• 72 ° Ambient Temp</li></ul>

### Operational Data

Note: Values are listed in DC Amps and AC KVA. Use KVA to calculate primary AC amps as required.

FLA:	2300 DC Amps (1866 KVA)
Empty Mill Starting Current:	690 DC Amps (560 KVA)
Average Running Current:	1955 DC Amps (1586 KVA)
Maximum Potential Overload:	3220 DC Amps (2612 KVA)*
Average Power Factor:	0.90**
Voltage Tolerance:	+/- 10%

\*Maximum overload allowed for 60 continuous seconds once every 15 minutes.

\*\*DC motor power factor is directly proportional to RPM of the machine. Power Factor is dependent on operation of the machine.

**System is available at 6 pulse, 12 pulse (as listed), 18 pulse, or 24 pulse designs. Design type is chosen with completion of power study.**

## About Quad Plus

Quad Plus provides industrial control systems, solutions, and services. We offer an uncompromising level of service and expertise to maintain our customers' productivity. Our extensive process knowledge spans from the utility pole to the motor shaft. With an on-going commitment to follow-up service, parts, and repairs, we are all you need for continued success.

We are recognized in the field as a leader in drive and motor control. Solutions are designed in-house through research and development tailored to meet each client's specific needs. Our design staff includes electrical, mechanical, civil/structural, chemical, and controls.



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- Bend, OR
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LARGE DRIVES - AUTO SHREDDING



INDUSTRIAL APPLICATIONS



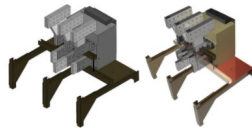
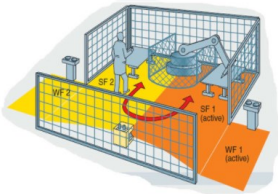
OIL, GAS and MARINE



POWER SERVICES



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**Quad Plus**™

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