

Traction Converter Upgrade and Overhaul

With a typical lifespan of 40 years, the rolling stock industry are facing an increasing demand for mid-life upgrades for dated traction power and control electronic equipment, due to continuous developments in technology.

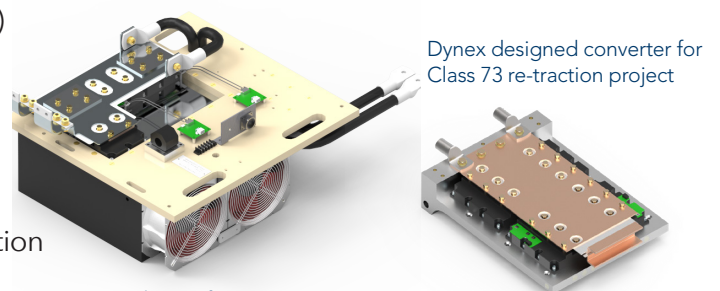
As part of our heritage, Dynex (MEDL, GEC) have worked with a number of railway drive and locomotive manufacturers .

In a constant pursuit to provide solutions to the rail industry, Dynex Traction Refurbishment team, as part of the Power Assemblies Business Unit, offer the following services to meet this demand:

- Retraction of propulsion systems (e.g. GTO to IGBT)
- Converter mid-life upgrade/overhaul
- Reliability improvements
- Propulsion modernisation and upgrade
- Replacement semiconductor devices
- Support for track side applications such as rectification circuits

Mid-life upgrades offer a number of benefits including;

- ✓ Improved reliability and maintainability resulting in reduced life cycle cost
- ✓ Availability through lower downtime and higher reliability
- ✓ Efficiency savings, approximately 5% improvement
- ✓ Space efficient, modular design resulting in improved maintainability
- ✓ Obsolescence management - full collaborative agreement with Dynex ensures long-term UK support for spares and maintenance
- ✓ Improved traction adhesion with axle control redundancy
- ✓ Activation of regenerative braking is expected to produce a saving in electricity costs in excess of 20%



Dynex designed converter for Class 73 re-traction project

Concept converter design for GTO to IGBT conversion