

This Certificate is Awarded to:

Associated Rewinds Ltd Tallaght Business Park Whitestown Dublin 24

Under the

Freightliner Procedure:

MIE 0710 - T&RS Supplier Approval Policy

Scope of Supply:

Supplier/Services of:

The Re-Manufacture, Repair L Overhaul of Locomotive
Electro Mechanical Components
Including

Providing Technical Support
(Subject to Engineering Technical Approval)

This Certificate is Valid Until
9th October 2020
Subject to Audit by Exception where Required

Audit Dated: 10th October 2017

...John Hardyman

Engineering Standards & Audit Manager

Freightliner Group Ltd

MIE 0710/Iss 4/Rev A

FL.025.17



Section:

1	Company	Details
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- 2 Attendance Record
- 3 Criteria
- 4 Opening Comments
- 5 Conclusions
- 6 Overview
- 7 Sub-contractors
- 8 Quality systems
- 9 Competence
- 10 Maintenance Facilities
- 11 Health & Safety
- 12 Recommendations

Freightliner

Supplier Assessment Report

Associated Rewinds Ltd

Dublin

Report Compiled By:

John Hardyman Engineering Standards and Audit Manager

Freightliner Group Limited

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Supplier Assessment Report

1. Company Address

Associated Rewinds Ltd Tallaght Business Park Whitestown Dublin 24

Other Workshops/Depots:

Date of Assessment: 10th October 2017

2. Persons in Attendance

John Hardyman Graeme Allan Freightliner - Engineering Standards & Audit Manager

Associated Rewinds Ltd - Quality Consultant

3. Criteria

The assessment has been carried out with reference to the listed documents:

MIE 0710

T & RS Supplier Approval Policy

GM/RT 2450

Qualification of Suppliers of Safety Critical

EN ISO 9001

Engineering Products or Services
Quality Management Standard (2008)

Railways and Other Guided Systems (Safety) Regulations Act

Provision & Use of Work Regulations 1998

Transport & Works Act 1992

Management of Health & Safety at Work Regulations 1999

Audit No.: FL/025/17 Page 3 of 11 Date: October 2017

Freightliner

Supplier Assessment Report

4. Opening Comments:

Associated Rewinds Ltd was first established in 1986 by their Managing Director, Peter Geoghegan who is still very much the central and key figure in the success of the company which specialise in the Re-Manufacture, Repair and Overhaul of AC & DC Traction Motors for rail vehicles.

From their Dublin site in Ireland, where they have been based for over 30 years the business has grown and developed to become a highly recognised over-hauler of not just Traction Motors but has the ability to overhaul a variety of Electro Mechanical Machines.

Their client base has grown internationally where they now service rail companies not just in the UK but also Germany, Norway, Sweden, Poland, South Africa, Kingdom of Saudi Arabia and China.

Their workshops are well organised and they have invested in some specialist tooling to both speed up the overhaul process as well as to improve the quality of repair of traction motors.

In certain cases Associated Rewinds Ltd has suggested improvements to traction motors, which have been taken on board and used by their owners.

There were several types of traction motors in various states of repair and overhaul when the site was visited. One of the main types of traction motor under repair was the General Motors/EMD D43 type motor which was the main purpose of this supplier assessment as they are used in Freightliner's CL66 Locomotives for which they are the preferred supplier.

They have more recently have been asked by Freightliner Engineering to overhaul two CL66 Aux Generators as a trial which could lead onto them becoming a preferred over hauler for these as well.

Associated Rewinds Ltd business modal resolves 100% around offering high quality end services to the Rail Industry where rail companies like Freightliner, EMD, Alstom, Bomdardier, Porterbrook, Hitachi and Eurostar have come to rely on their expertise to deliver reliability in their products.

5. Conclusions:

Associated Rewinds Ltd has an excellent understanding of supplying safety critical and operational critical components where the risks of the consequence of failure as they supply too many rail companies in the UK & Europe.

They have a good Quality Management System in place and are compliant to ISO 9001, they are not RISAS or IRIS approved although they are currently undertaking a feasibility study to ascertain the benefits of being accredited and obviously the costs involved with the current thinking being that as their business not just covers the UK but also Europe and Internationally markets so IRIS could well be the preferred option.

This is the third supplier assessment that Freightliner Group have undertaken at Associated Rewinds Ltd, the first being in 2008 and again in 2011.

During the audit no corrective actions were issued as their QMS Procedures & Processes demonstrated a high level of robustness, the company are fully aware and can demonstrate

Audit No.: FL/025/17 Page 4 of 11 Date: October 2017



Supplier Assessment Report

their obligations to Freightliner Group and the wider railway communities in providing and maintaining a safety critical culture.

Freightliner therefore accepts Associated Rewinds Ltd as an approved supplier for the Re-Manufacture, Repair & Overhaul of Locomotive Electro Mechanical Components, including Providing Technical Support.

This approval is for three years, and can be subject to out of course audits by Freightliner.

General Report: (broken down into key areas)

6. Overview:

Associated Rewinds Ltd now operate out of three industrial workshops which demonstrates the steady growth from when Freightliner originally conducted their first "Supplier Assessment" in 2008 when there was just the one factory with some 56 employees and then in 2011 when the second assessment was undertaken this had grown to two factories with the workforce increasing to 80.

Now in 2017 they have three factories with the workforce expanding to some 150 employees with all the factories based on the same Industrial Park and all sited quite close together but each specialising in different aspects in the production processes of overhauling "Traction Motors" or similar "Electro Mechanical Machines".

Management	3
Production	130
Engineering (Including R&D)	4
Training	1
Quality Assurance/Control	4
Administration/Finance	4
Sales	6

An organisation chart was supplied detailing more clearly the breakdown of staff and their roles, with many off their staff (some 90%) coming from outside of Ireland mainly from Poland but also Slovakia & Bulgaria with the remaining 10% being highly skilled local labour who tend to have been with the company for many years or more recently from the Aircraft Engine Service Centre that closed down.

It has to be noted that within the original factory many of their Polish Staff live onsite above the workshop where the upstairs offices have been converted into flats, Polish TV is screened in for them with the director establishing a small well stocked supermarket to the side of the factory which includes a Deli and soon additions to include a Butcher, Chemist and Italian Restaurant which will also be open to the residents from the nearby housing estate.

The idea behind this is to offer suitable accommodation, minimum travel times as local traffic can be very heavy at peak times but also assists in ensuring staff are available to support additional shifts to meet work demands as Associated Rewinds offer a 24 hours emergency repair service on request.

Associated Rewinds Ltd three factory sites now occupy a combined foot print of some 24,000M² for production activities and over 1000M² for storage and offices.

Audit No.: FL/025/17 Page 5 of 11 Date: October 2017



Supplier Assessment Report

There is a wide range of plant and machinery to cover the re-manufacture or overhaul of traction motors and associated parts from cleaning plant, drying ovens, coil making equipment, Resin Vacuum Tanks, CNC Machines, Armature Under Cutters, Balancing M/c and Testing Equipment.

The company do carry out some Research and Development work but normally this at a customer's specific request should they be experiencing equipment failings or un-reliability issues then Associated Rewinds will undertake a detailed analysis of this and come up with innovate solutions or a possible redesign but would always require customer or industry approval before implementing.

The process would start with the completion of QF-44 - Engineering Change Proposal Form which would instigate the investigation into the failings with any outcomes or recommendations being captured via PM-24 Engineering Change Procedure with QF-44A being utilised to demonstrate all proposed engineering changes have been correctly Risk Assessed.

They have the ability to reverse engineer components but for confirming material grade they would send a sample away for analysing to confirm material specification or recommend the closest match, but again would seek customer approval for both Drawings and Material Grade before starting production.

They prefer to collect and deliver Traction Motors etc directly without using third party transport thus ensuring more efficient delivers and the motors are not compromised.

7. Sub-Contractors:

Associated Rewinds Ltd purchases a lot of raw materials like drums of copper bar for making armature coil windings and steel bar for the manufacture of armature shafts and associate parts so although cost is focal to them it is more important that they have full traceability where the material is being sourced from, with supporting documentation like Certificates of Conformity and Mill Certs when required.

Consequently not many new suppliers are added to the Approved Suppliers List and so prefer to remain with established suppliers where continuity of reliability and performance that has been built up over time being very much an overriding factor, so the "Approved Supplier List" does not see many fluctuations and remains stable.

When there is a requirement for a new supplier a "Vendor Questionnaire" will be sent out and like many companies will initially contact three companies and on return will be reviewed for selection, supplier visits will be conducted depending on the requirements of the scoring process from the completed questionnaire, the material/part or services being acquired.

Vendors will be re-assessed on a yearly basis using QF-27 – Suppler Performance Evaluation Procedure normally categorised with a scoring system 1 – 10 where they prefer all suppliers to fall in Category 1, anything less than that the supplier will be re-assessed and should they fall below 10 they will then be removed from the approved supplier list.

Audit No.: FL/025/17 Page 6 of 11 Date: October 2017



Supplier Assessment Report

8, Quality Systems:

Associated Rewinds Ltd has a good QMS in place which is managed by Graeme Allan an independent Quality Consultant that has been retained by Associated Rewinds for many years working between 2-3 days a week reviewing & updating the quality system ensuring the company are fully compliant with ISO 9001 accreditation which they have held since July 2002, including having achieved ISO 14001 & 18001.

Associated Rewinds Ltd use EQA (European Quality Assurance) as their external auditor including carrying out yearly surveillance audits and have recently undertook the ISO 9001:2015 transition process successfully achieving this in July this year.

ISO 9001:2015 - Certificate number Q2914 - Expires 08/07/2019 Scope of Approval:

"Traction Motor Re-Manufacturers, Repair & Overhaul of Traction Motors".

ISO 14001:2015 - Certificate number E2914 - Expires 08/07/2019 Scope of Approval:

"Traction Motor Re-Manufacturers, Repair & Overhaul of Traction Motors".

ISO 18001:2007 - Certificate number OHS2914 - Expires 08/07/2019 Scope of Approval:

"Traction Motor Re-Manufacturers, Repair & Overhaul of Traction Motors".

Under the new ISO 9001 standard there is a requirement for companies to be able to demonstrate how they are managing Risks & Opportunities to ensure the business is not over stressing itself.

This was able to be demonstrated via the "Risk Register" where it has captured what parts of the business this could impact on and also the customer. Regular Monthly "Management Review" meeting take place where this would be discussed and actions placed on individuals.

Associated Rewinds Ltd has been audited by other rail operating companies including Unipart Rail, Angel Trains, GBRf & Eurostar.

They have a few staff that can carry out internal audits but again the majority of these will be undertaken by the Quality Consultant with a yearly plan being shown to the assessor which was mostly on track.

Audit reports will be written to capture these internal audits with any NCR's raised being recorded and improvements made.

There is good document control in place including a "Document Registry" with yearly reviews and any updates would be fed through to the shop floor at the daily morning meetings before production starts, although hard copies of drawings and test Paperwork will come out with the Job Card most company Procedures & Standards are kept on the company Intranet System which has been stated is where the all the latest documents should be sourced from.

Job Record Cards are maintained which captures and follows the Job round the many work stations where artisans are expected to sign of once the task has been completed.

Freightliner

Supplier Assessment Report

At various stages of the job, especially if damage or faults are found photographs will be taken and stored against the specific job file as all jobs (ie; Traction Motors) have a bespoke ID Number which supports Serialised Tracking where the full past work history can be accessed which can be very important should are warranty disputes materialise with their customers.

Any failures or warranty issues can therefore be easily traced where the company will use a failure mode investigating procedure.

Goods Inwards all raw materials, parts are received, recorded and stored in racking ready for use ensuring the materials are stock rotated.

The instrumentation, measuring and testing equipment are maintained within calibration with an excel matrix being used to record and demonstrate compliance, some IMTE will go off site for calibration whilst others are checked in house usually every 12 months.

For specialist equipment or machinery then the contracted company will come onsite to carry out calibration or testing requirements which again is carried out on a yearly cycle.

Documents supplied by Associated Rewinds Ltd in support of this assessment:

ISO 9001:2015 Certificate
ISO 14001:2015 Certificate
ISO 18001:2007 Certificate
RISQS Certificate
Organisation Chart
Interaction & Quality Process Map

Policies Document PO24 Design Change Control Engineering Change Control Overhaul of Traction Motor Process Map D43 Traction Motor Overhaul Spec

Safety Critical Work Risk Assessment

9, Competence:

Associated Rewinds Ltd ensure that all employees in their company are provided with the training necessary to enable employees to perform their specific tasks and also includes all safety and environmental requirements, as well as quality awareness.

The individual section team leaders are responsible for identifying training needs along with the Management & Engineering Teams, with all training records being stored on the companies IT data base which also includes identifying safety critical jobs although within the business every job is viewed with equal high requirements.

Mainly in-house training is undertaken but if required then there is no issue with staff attending external training courses. During on the job training the employee will not be left alone but will be supervised or monitored at all times. Depending on the area of work this could take up to six months or until deemed ready for assessing by their supervisor who would then request for them to be "Competency Assessed".

Audit No.: FL/025/17 Page 7 of 11 Date: October 2017 Audit No.: FL/025/17 Page 8 of 11 Date: October 2017