

Rotec Hydraulics Limited

Procedures Manual

TAUNTON COPY

Rotec Hydraulics Limited

Procedures Manual

Copy Number: 1.

Issued to: Quality Systems Manager

This copy is *controlled*

and is issued and authorised by:



Paul Prouse
Quality Systems Managing Director

Date 30/04/2018
Next Review Date 30/04/2019

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Operating from the following locations:***

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Amendment Sheet			
Procedure	Description	Amend	Reason
Update organisational chart	new employees	18.09.17	New starters
update organisational chart	change of staff	16.08.17	Staff Changes
Issue date change	amendments following meeting	28.10.16	Review of Manual
update organisational chart	change of staff	24.08.16	Staff Changes
date added to manual	date inserted	30.11.15	insert date
update organisational chart	change of staff	30-11.15	Staff Changes
update organisational chart	change of staff	31.10.14	Staff Changes
update organisational chart	change of staff	22.09.14	Staff Changes
update organisational chart	change of staff	03.07.14	Staff Changes
Update organisational chart	change of staff	19.05.14	staff changes
Update distribution list	Removed controlled copies issued to AR,GC,AP	03.12.13	removed extra copies given out
Update organisational chart	Change of Staff Update organisational chart	11.11.13	Change os staff
Update organisational chart	Change of Staff Update organisational chart	15.10.13	change of staff
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Procedure 7.8 Item 3.1	Update to manufacture of Hose Assemblies	29.11.12	EN982 superseded by BS EN ISO 4413:2010
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Controlled Copy of procedures Iss 16	Controlled Copies issued to AR,GC,AP - depts	25.09.12	For review purposes following GWM meeting
Page 2	Plymouth address	22.02.11	Change of address
Page 2	Change of name from Richard Taylor to Paul Prouse	11.08.11	Richard Taylor left Company
Sheet 1	Procedures Index with Amendments	22.07.09	Changed to sheet no 2
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Quality Management System			
Procedure 4.1	Quality Management System	22.07.09	Responsibilities 2.2 QMS 3.4 re amendment sheet
Procedure 4.2	Administration, Document and Data Control	22.07.09	Doc & Data Control 4.1 change of wording in 1st para.
Procedure 4.3	Quality Records	17.11.11	Insert a new section 3.4 as per NQA audit findings.
Management Responsibility			
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Procedure 7.2	Design, change control	22.07.09	4.1 take out last sentence insert "S" Drive
Procedure 7.3	Purchasing	05.01.10	Change of wording for clauses 3.2 and 3.7
Procedure 7.4	Supplier Assessment	22.07.09	3.2 Take out 3rd bullet & 3.3 last sentence.
Procedure 7.5	Receiving and Stock control		
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Procedure 7.8	Manufacture of hose assemblies	22.07.09	3.5 add more text to this para, add Test label to Documentation
Procedure 7.9	Manufacture of assemblies and systems	22.07.09	As above
Measuring, Analysis, Improvement			
Procedure 8.1	Supplier and Customer Comments, Customer Satisfaction		
Procedure 8.2	Internal Quality Audits	22.07.09	Update of forms, 3.1 take out last sentence
Procedure 8.3	Analysis, Corrective and Preventative Action	22.07.09	Update of forms
Procedure 4.2	Administration, Document and Data Control	30.04.18	Version critical non compatible hose assemblies referenced
Prodecure 7.8	Low Pressure Hose assemblies 3.9	30.04.18	reference to appendix 1 for manufacturing guidelines
Procedure 7.14 Page 2 of 2	inclusion of EN1968 to documents, forms and records	30.04.18	added as a guiddlines to procedures for testing/inspecting
Procedures Manual	Uplifted from Issue 17 to 18	30.04.18	updates carried out 30.04.18

Procedures Manual Distribution List

Sheet 1

Controlled Copy Number 1	Quality Systems Manager, (Master Copy)
Controlled Copy Number 2	Taunton
Controlled Copy Number 3	Plymouth
Controlled Copy Number 4	Managing Director

Note: This Procedures Manual is also available on the system 'S' drive

Quality Management System

Procedure 4.1, Page 1 of 2

1 Purpose and Scope

- 1.1 To define the procedure to maintain and control the Procedures Manual as part of the Company's Quality Management System, (QMS).

2 Responsibilities

- 2.1 This Company is committed to providing customers with quality assured products and services. The Company's QMS is an important component in this process, and the intentions and processes have been documented in a Quality Manual and a Procedures Manual. The former manual details the management commitment, quality policy objectives and planning, functional responsibilities and interrelationships. An organisation chart is shown in the system 'S' drive.
- 2.2 The responsibility to manage, control and co-ordinate the QMS rests with the Managing Director and the Quality Systems Manager. He will ensure that the relevant and appropriate information and requirements are communicated to others within the Company.

3 Procedures

- 3.1 The Quality Systems Manager will ensure the relevant and appropriate information and requirements contained in our QMS are communicated to all employees within the Company. Roles and responsibilities in relation to this QMS are set out in Appendix A to this procedure. The Quality Systems Manager will co-ordinate the QMS across the Company and all locations with nominated representatives providing assistance as part of the Company Quality Team.
- 3.2 This Procedures Manual details the procedures, routines and instructions used by the Company for the defined scope within the Quality Management System. It is a supporting document to the Company Quality Manual.
- 3.3 The Procedures Manual will be controlled and maintained. A "master" copy will be held by the Quality Systems Manager, and also held on the computer system. Controlled paper copies will be printed and circulated, and recorded on the Procedures Manual Distribution List, held at the front of this manual. Each manual will be authorised and issued by the Quality Systems Manager, and endorsed on the front sheet by a signature.

Quality Management System

Procedure 4.1, Page 2 of 2

- 3.4 Any amendments to this manual will be undertaken by the Quality Systems Manager, and recorded on the Procedures Manual Index and Amendment Record, shown at the front of this manual. The changes will be dated on this record, and the amended page inserted into the Manual. The amended page(s) will be inserted into all controlled paper copies of the manual.. Amendments will be “uploaded” to the copy available to staff on the computer system.
- 3.5 A Dictionary of Terms is included in Appendix B to this procedure, to clarify the meaning of certain words and terminology used throughout this manual.

4 Documents, Forms, Records

Procedures Manual Distribution List
Procedures Manual Amendment Record

Quality Management System

Procedure 4.1, Appendix A, Page 1 of 1

Quality Roles and Responsibilities of the Quality Systems Manager

1 Objective

To ensure that the Company's QMS specified in the Quality Manual, Procedures Manual, and other supporting documents is understood and implemented, and improved on an ongoing basis.

2 Responsibilities

- 2.1 To ensure that all procedures and routines comply with the requirements of this Quality Management System, and are controlled and maintained, including internal auditing, corrective and preventive action, and Management Review Meetings.
- 2.2 Through ongoing review and continuous improvement, ensure the Quality Management System reflects the needs of the customer, the Company and the Certification Body.
- 2.3 Report to senior management on the performance of the QMS on a regular basis, including non-conformance, comments and complaints, corrective and/or preventive actions, results of internal audits, and any opportunities for continuous improvement.
- 2.4 To ensure that quality requirements specified in this manual, and in customer orders, are identified, understood and can be satisfied.
- 2.5 To ensure that quality requirements are communicated to all staff, appropriate to their role and job duties.
- 2.6 To ensure that any specified or necessary training is identified, and satisfactorily undertaken to support and/or maintain quality requirements, including appropriate level of support from Directors and Managers.
- 2.7 To ensure that all the necessary quality records are maintained in the required manner.

Quality Management System

Procedure 4.1, Appendix B, Page 1 of 1

Dictionary of Terms

Certification Body

An Assessment and Registration Body accredited by UKAS, (United Kingdom Accreditation Service), for the scope defined in this Quality System.

Company

Rotec Hydraulics Ltd.

Customer

The customer, company or organisation requesting product and/or service from the Company.

Procedure

A written procedure, defining methods of working and realisation processes, shown in the Procedures Manual.

QMS

Quality Management System

Product

This comprises the products supplied by the company, including hydraulic and pneumatic components and fittings, assemblies and power units.

Service

This comprises the services provided by the company, including technical advice, design, installation, commissioning, re-certification and repair.

Administration, Document and Data Control

Procedure 4.2, Page 1 of 2

1 Purpose and Scope

- 1.1 To define the procedure for administration routines, and the control of documents and data.

2 Responsibilities

- 2.1 Sales Director, Technical Director, Quality Systems Manager, Senior Engineers, Administration Staff.

3 Procedures – Sales, Administration, Technical

- 3.1 Details of company products, components and fittings will be maintained, in catalogues and on the system. Price Lists will be maintained, including specific customer discounts, and dated.
- 3.2 Version-critical documentation will be reviewed at Management Review Meetings at least annually. Currently documentation within this category is 'Parker Hose Manufacturing Specifications Cat 4400/uk/2016.06.
- 3.3 Version Critical Hose Assembly Procedures for low pressure (less than 40 bar) manufactured with separate hose and coupling manufacturers, procedure added to Procedure 7.8 Appendix 1 will be maintained for fabric and helix hose assemblies.
- 3.4 Details of customer and technical drawings and specifications will be controlled and maintained, along with current issue numbers.
- 3.5 Re-certification procedures determined by Parker Hannifin are maintained and controlled by Parker. Any amendments received will be used to modify the sets held by the Parker-certified persons, and the amendment pages retained on file.

4 Procedures – Document and Data Control

- 4.1 Documents and forms in use will carry a title, and in some cases a date. Master copies of forms will be held in a "Master File of Forms", and in folders on the system. Documents and forms can be introduced, amended and withdrawn. The Quality Systems Manager will authorise entries via the Master File. When a document or form is amended the document reference will be changed to show the revised status, or noted under the "properties" on Microsoft Word forms file. Withdrawn documents and forms may be held in an archive file for reference purposes.
- 4.2 Any documents or forms originated from outside the Company shall be identified and controlled, (e.g., carrier consignment notes).

Administration, Document and Data Control

Procedure 4.2, Page 2 of 2

- 4.3 Computer systems shall be maintained in a systematic manner, with appropriate security, passwords and backup disciplines. Backups are copied to tape each day, with copies also held in a remote location.
- 4.4 The Quality Manual and Procedures Manual will be maintained and controlled, (as shown in the Quality Management System Procedure).
- 4.5 The relevant National and International Standards, including ISO 9001, will be checked against the latest issue status each time this procedure is audited. A Master List of Standards will be maintained and held in the Quality File. The method of checking the issue status is shown on this list.

5 Documents, Forms, Records

- Price Lists and Catalogues
- Technical Drawings and Specifications
- Re-certification procedures
- Master File of Forms
- Computer System Backups
- Master List of Standards

Quality Records

Procedure 4.3, Page 1 of 3

1 Purpose and Scope

- 1.1 To list the records that constitute quality records, and define responsibility and retention periods.

2 Responsibilities

- 2.1 Directors, Managers, all Staff

3 Procedures

- 3.1 Quality Records shall be maintained as listed below. Retention periods shall be at least three years, unless noted otherwise. The records should be protected from deterioration where necessary, and be accessible, including archive records. Administration records are disposed of after approximately three years.

- 3.2 Records that constitute “quality records” include:

- Quotations, only for quotations subsequently converted to orders
- Customer Orders
- Site Work, Repair, Estimate Sheets, (1 year)
- Drawings, Register, Drawing Amendments
- Works Order Number, Customer order details, on computer system
- Purchase Orders, and any amendments
- Certificates of Conformity, (from suppliers)
- Supplier Delivery Notes
- Works Orders
- Hose Test Records, (10 years)
- Test Certificates, (6 years)
- Accumulator Re-certification Certificates
- Despatch Notes to Customers
- Certificates of Conformity, (to customers)
- Declaration of Incorporation
- Installation, Commissioning Check Lists
- Returns Notes “C”
- Goods Returns Note “S”

Quality Records

Procedure 4.3, Page 2 of 3

3.2 continued:

- Internal Quality Audit Questionnaire
- Internal Quality Audit Defect Reports
- Corrective Action Summary
- Management Review Minutes
- Appraisal and Development Plans
- Training Records

3.3 Other records shall also be retained, including:

- Master File of Forms
- Master List of Standards
- Computer System Back ups
- Register of Approved Suppliers
- Hose related calibration records, (6 years)

3.4 Addition

Quality Documents listed in 3.2 that are used to create or initiate the quotation and sales process with the 'customer' will be accessed and generated through the company CRM system (customer record management) 'Prospect' and electronically stored. Where enquiries or sales generate supporting data sheets, certificates, delivery notes or documents a copy can be printed and stored within the customer quotation file or customer files when an order has been received and processed. Documents relating to the process of manufacturing or build IE works orders will be printed and placed within the Works order files and will remain throughout the build or manufacture and filed in the works order cabinet.

Quality documents for drawings, register and drawing amendments will be accessed and generated through the company computer system, drawings are stored electronically and printed only for quotation, order confirmations/customer on site liaisons and works order files.

Quality documents relating to the procurement process, goods receipt will be processed in accordance with our manual – documents will be accessed and stored through the company computer system or filed. Supplier delivery notes once processed are stored in the 'Supplier delivery note file' stationed in the purchasing department.

Quality Records

Procedure 4.3, Page 3 of 3

Quality documents relating to the returning of goods from either the 'customer' or to the supplier are generated through our Returns Note 'C' and goods Return note 'S' as described within our manual. The documents are instigated by the 'event' and person responsible and accessed and filed within the accounts office in their individual files. Review of customer goods return notes C are reviewed and authorized by the Managing Director before agreement or actions are taken. Periodic review is carried out as detailed within our manual.

Quality documents relating to customer satisfaction or monitoring are assessed monthly and random customer survey questionnaires are deployed as and when required. Copies are retained within the accounts office and results distributed/reported within the management review meetings.

4 Documents, Forms, Records

As noted above

Management Responsibility Management Review

Procedure 5.1, Page 1 of 1

1 Purpose and Scope

- 1.1 To define the procedure to convene, hold and minute Management Review Meetings.

2 Responsibilities

- 2.1 Managing Director, Directors, Quality Systems Manager,

3 Procedures

- 3.1 A Management Review Meeting will be scheduled at least annually, as shown on the Internal Quality Audit Time Table. The results of the meeting will be recorded as minutes of the meeting. The attendees at the meeting should include the Managing Director, Sales Director, Technical Director and Quality Systems Manager. Other Managers and Staff may also be present.
- 3.2 The agenda for the meeting will include some or all of the following topics:
- Quality System organisation for the company's scope of registration
 - Review of actions and improvements identified at the previous meeting
 - Review of the Corrective Action Summary, including information on non-conformance and internal quality audits
 - Review of Customer Satisfaction
 - Review of the Register of Approved Suppliers
 - Review of the development and training requirements for staff
 - Review of the Company's objectives, measurement, monitoring and feedback
 - Conclusions of the meeting, including any improvements and recommendations to be considered and implemented over the next period, specifically in relation to the QMS, Company products and resources.
- 3.3 A copy of the minutes will be held in the Quality File, for reference, and for review by the Certification Body.

4 Documents, Forms, Records

Management Review Meeting Minutes

Resource Management

Staff Competencies and Training

Procedure 6.1, Page 1 of 1

1 Purpose and Scope

- 1.1 To define the procedures for the review of staff competencies, development and training requirements, and recording any training undertaken.

2 Responsibilities

- 2.1 Directors, Department Heads

3 Procedures

- 3.1 Personnel files shall be maintained for each member of staff, including application forms, previous education and experience, training and qualifications and contracts of employment.
- 3.2 Functional responsibilities and interrelationships will be shown and summarised on the Company Organisation Chart.
- 3.3 The competencies of staff in relation to their respective duties and skills will be assessed at least annually. Part of this assessment will identify where competencies need to be developed with each member of staff, and the details will be recorded on the Appraisal form.
- 3.4 Training will be provided to satisfy identified needs, on an appropriate time scale. Records of training will be maintained, including an assessment of the training provided.
- 3.5 A personnel file will be established for all new employees, including temporary staff. An Induction Check List will be used for new people, endorsed by the new person and an existing employee on behalf of the Company. When completed satisfactorily, these will be held in the Personnel File.
- 3.6 Overall Company development and training requirements can be reviewed at the Management Review Meeting.

4 Documents, Forms, Records

Personnel Files
Company Organisation Chart
Appraisal and Development Plans
Training Records
New Employee Induction Check List
Management Review Meeting Minutes

Maintenance of Plant and Equipment

Procedure 6.2, Page 1 of 1

1 Purpose and Scope

- 1.1 To define the procedures for the maintenance and/or repair of plant and equipment within the Company.

2 Responsibilities

- 2.1 Managers, all Staff

3 Procedures

- 3.1 A list of any key or critical plant and equipment, used to support the supply of product or provision of service to customers, will be compiled and maintained, and details held on file.
- 3.2 A record of maintenance and/or repair and/or service undertaken will be recorded against each item. The record will include date, a brief description of the work or servicing done, and an indication of who completed the work satisfactorily.

4 Documents, Forms, Records

List of plant and equipment
Plant and Equipment Record

Process Management

Enquiries, Quotations and Orders

Procedure 7.1, Page 1 of 2

1 Purpose and Scope

- 1.1 To define the procedure for receiving and responding to enquiries, and receiving and processing orders.

2 Responsibilities

- 2.1 Directors, all Staff

3 Procedures – Enquiries, Quotations, Proposals

- 3.1 Enquiries are received for the range of products and services that the Company can supply. These are normally received by telephone, fax, post, e mail, and over the Trade Counter.
- 3.2 Some enquiries are for price and availability information, and a response will be given, by reference to details held on the Sales Order System. No record will be kept of these general enquiries.
- 3.3 More serious enquiries are made by customers, and prices can be indicated by reference to price lists, including discounts agreed with existing customers, held on the Sales System. Enquiries may be documented on a Customer Enquiry Form, or in the Day Book of respective staff.
- 3.4 Specific requests for product quotations will be investigated and a quotation prepared, making reference to relevant Company catalogues and price lists. Details will be entered on to the ProspectSoft system. Any agreed discounts will be applied and the quotation forwarded.
- 3.5 For more detailed enquiries, including elements of design, a Bill of Material and a Costing Sheet will be prepared. According to the nature and complexity of the enquiry, visits may be made to potential customers. Quotations/proposals will be finalised and submitted, and records held on file.
- 3.6 Estimates are also prepared for units received from customers for repair and re-certification. Details will be processed through the Sales Order System, and records retained.
- 3.7 All enquiries will be reviewed for any legal, regulatory or statutory requirements, stated or implied. Where applicable, normally in proposals, details will be recorded and addressed.

Enquiries, Quotations and Orders

Procedure 7.1, Page 2 of 2

4 Procedures - Orders

- 4.1 Orders are received by telephone, fax, post, e mail, and over the Trade Counter, and may be repeat orders or new orders. Any verbal orders will be documented.
- 4.2 Orders will be compared to customer specific price lists, or to recent quotations submitted to prospective customers. Where orders are received and a recent quotation is not on file, the price will be verified and agreed with the customer, and confirmed in writing if necessary.
- 4.3 Order processing varies slightly, dependent on the type of order:
TRADE COUNTER
Items will be located and confirmed as correct with the customer, then entered to the Sales Order System
SALES OFFICE
Details are entered to the Sales Order System, and Picking Lists generated and passed to Stores, referenced to the Sales Order Number.
SALES OFFICE, WORKS ORDERS
For assemblies and sub-assemblies, a Works Order will be generated through the Sales Order System, listing the parts needed and requesting labour to satisfy the assembly requirement. The Works Order is forwarded to the Workshop or Hose Assembly area and Stores.
TECHNICAL
For larger assemblies and power units, the Sales Order Number is allocated from the system, and the details passed over to the Technical Department to process.
- 4.4 The name of the person dealing with individual customers may have been communicated through the quotation or the proposal. Otherwise, all customer contact and queries will initially be routed to the Sales Office.
- 4.5 Amendments to orders can be received, and are actioned according to the status of the job. Where possible, action will be taken in accordance with the customer instruction, and the customer notified when this is not feasible.

5 Documents, Forms, Records

Sales Order Numbers
Quotations, proposals
Customer Orders
Works Orders

Design, Change Control

Procedure 7.2, Page 1 of 2

1 Purpose and Scope

- 1.1 To define the procedure for the design of assemblies and power units.

2 Responsibilities

- 2.1 Technical Director, Technical Staff

3 Procedures

- 3.1 Design activities are normally undertaken to satisfy customer needs. In all cases, an Enquiry File will be opened, and details and correspondence held in the file
- 3.2 The extent of the design will vary according to the requirement, but may include:
- Design overview
 - Specifications
 - Schematics, piping and wiring diagrams
 - Bills of Materials and Costing Sheets
 - Correspondence and e mails
 - Testing
 - Release schematics
 - Release drawings
 - Any Amendment Forms
 - Design may also reference any applicable legal, regulatory or statutory requirements, (or state “not applicable”)
- 3.3 When customer orders are received, the Enquiry Files are replaced by Project Files. The number of files and content will depend on the nature and complexity of the development and design exercise.
- 3.4 Records of any correspondence, both internally and externally, will be held electronically, or within the project file.
- 3.5 Company drawings generated may include sketches, drawings, general assemblies and parts lists. The amount of work and detail will depend upon complexity, and the status of the job. Drawing may be hand drawn or originated on CAD.

Design, Change Control

Procedure 7.2, Page 2 of 2

- 3.6 Drawings and other documents completed satisfactorily will include date or origination, and the initials of the originator. Revision status will be shown on each formal release.
- 3.7 A list or "Register" of formally issued drawings will be maintained on the system along with current issue numbers and origination date
- 3.8 Drawings may be issued to customers for review and discussion. Any significant reviews, internally, or with customers or suppliers, will be documented. Records will be held as meeting minutes or e mails, and copies held with customer/project records.
- 3.9 The Bill of Material will be used to prompt purchase of items against the Sales Order Number.

4 Procedures – Change Control

- 4.1 Drawings and documents may be amended. Changes will be noted on an Amendment Sheet, considered and reviewed. Brief details of the change will be recorded against the revision status on the drawing, with the initials of the person completing the change. The revision status will be shown in the drawing box. Amendments should also be recorded in the Drawing Register, on the 'S' drive.

5 Documents, Forms, Records

Product Catalogue
Bills of Materials/Parts Lists
Company Drawings
Enquiry, Project Files
List, Register of Drawings
Amendment Sheets

Purchasing

Procedure 7.3, Page 1 of 2

1 Purpose and Scope

- 1.1 To define the procedure for the raising, authorisation and placement of purchase orders.

2 Responsibilities

- 2.1 All staff

3 Procedures - Purchasing

3.1 Requirements for purchase include items, materials, products and services, whether customer related or for internal needs. Normally requirements are prompted by the customer order, Bill of Material, stock replenishment, and the requirements notified from the Workshop and the Stores.

3.2 The purchase of items for Works Orders/Schemes will be determined by the Purchasing Manager from the Bill of Materials and should normally be subject to discussion at a weekly meeting held between the Operations Director, Technical Director, Engineering Manager and Production Manager.

3.3 Sources of supply will be researched by reference to past orders, sales literature and suppliers' information, and by contact with alternative suppliers. Purchase Orders will be placed on suppliers listed in the Company's Register of Approved Suppliers.

3.4 Where a supplier is not listed in the "Register of Approved Suppliers", but is required on an urgent basis for customer related materials or services, a Purchase Order may be raised on that supplier. The procedure to include that supplier in the Register must be initiated at the same time, (see Supplier Assessment Procedure).

3.6 Where a supplier is not listed in the "Register of Approved Suppliers", but is required for a "one off" purchase only, a Purchase Order may be raised on that supplier. (The supplier will not be included in the "Register of Approved Suppliers" unless used again).

3.7 Requirements will be detailed on a purchase order, showing relevant details, specifications and compliance with Standards where appropriate. A Certificate of Conformity or Test Certificate will be requested where required.

3.8 The Purchase Order will be generated by the Purchasing Manager or one of his Deputies and forwarded to the supplier.

3.9 Any amendments to orders will quote the Purchase Order Number or appropriate reference.

- 4 Documents, Forms Records**
 - Purchase Orders
 - Bill of Material
 - Register of Approved Suppliers

Supplier Assessment

Procedure 7.4, Page 1 of 1

1 Purpose and Scope

- 1.1 To define the procedure for assessment and evaluation of acceptable suppliers to the Company for customer related items, materials, products and services.

2 Responsibilities

- 2.1 Directors, Quality Systems Manager, Logistics Coordinator

3 Procedures

- 3.1 The Logistics Coordinator will maintain a Register of Approved Suppliers, including any subcontractors. This Register should apply to suppliers of customer related items, materials, products and services.
- 3.2 The assessment and approval of existing and potential suppliers will be carried out by:
- The completion of a Supplier Assessment Questionnaire, or
 - Documented internal evidence of satisfactory supply.
- 3.3 The Questionnaire will be used to appraise the supplier or subcontractor.
- 3.4 The level of approval may vary according to the nature of the items or service being ordered, and the nature of product or service being provided to customers. Some customers may reserve the right to visit suppliers, and this will be made known to those respective suppliers.
- 3.5 Each Questionnaire will be approved, and held in a file, to constitute the Register.
- 3.6 The suppliers in the Register should be reviewed on an annual basis to ensure continued satisfactory supply performance. Any poor supply will be shown on Supplier Comment Forms or in the Corrective Action Report. Results of the review will be recorded and "signed off" at the bottom of the Questionnaire page. The review can be considered on a formal basis as part of the Management Review Meeting.

4 Documents, Forms, Records

- Register of Approved Suppliers, Supplier Assessment Questionnaires

Receiving and Stock Control

Procedure 7.5, Page 1 of 2

1 Purpose and Scope

- 1.1 To define the procedure for receipt of goods and items, and receipt and issue through the Stock Control system.

2 Responsibilities

- 2.1 MD, All Warehouse, Technical, Finance, Sales and Stores Staff

3 Procedures

- 3.1 Goods, materials and items are received, and signed for as required by the carrier.
- 3.2 Materials, items and components are unpacked and visually checked for any damage, and to ensure reconciliation to the requirements recorded on the Purchase Order. Some technically complex or machined items may be referenced to the drawing, or a member of the Technical Team to ensure compliance with the order.
- 3.3 Upon receipt of the Supplier Delivery Note, our Purchase Order must be viewed in order to obtain the Sales Order or Works Order number that the goods have been allocated to and these are the only documents that the parts should be set against. If there are no references on the Purchase Order, it will be assumed that the goods are for stock purposes only.
- 3.10 Where satisfactory, details will be entered into the Stock Control system. The Supplier Delivery Note will be stamped with the "Goods Received" stamp and will be signed by the person booking it in, dated, PDN number inserted and SOR/WOR number identified, or "stock" written on it. The Supplier Delivery Note will be filed in the Goods Received File.
- 3.11 Where appropriate, accompanying Certificates of Conformity will be checked and filed.
- 3.12 Components received for specific jobs will normally be identified to the Sales Order Number.
- 3.13 All materials and items will be stored carefully, with adequate identification, including any traceability details. Items in stock will be kept in any protective packaging, where necessary.

4 Procedures – Unsatisfactory Supplies

- 4.1 Any materials or items received that are damaged, faulty or incorrect, will be investigated. Where no immediate or obvious remedial action can be taken, the problem should be recorded on a Goods Returns Note "S".

Receiving and Stock Control

Procedure 7.5, Page 2 of 2

- 4.2 The problem will be progressed, and appropriate action taken, (return to the supplier, exchange, use as is, etc.). The Goods Returns Note "S" will be endorsed and "closed out" when corrective action has been completed.
- 4.3 An additional form may be used, "Notification of Shortage/Damage" to identify deficiencies in receipts. Details are documented, and a copy forwarded to the supplier. Once items are received, the actions are "closed out" on the file copy of the form.

5 Procedures – Stock Control

- 5.1 Items will be booked into stock on receipt from suppliers. Items will be booked out against:
- Picking Note
 - Bill of Material
 - Works Order
 - Stores Requisition
- 5.2 Items will be rotated on a "First in, First out" basis.
- 5.3 For Def Stan hose, where items reach the 'use-by' date, they will be physically moved to an alternative stock location and identified as "out of date stock".
- 5.4 A Stock Take will be undertaken at least once each year, and records verified. Where quantity adjustments are required, these will be noted on the stock take record sheet for authorisation by the MD prior to adjustment. At the same time parts will be checked for damage or deterioration, and any found should be treated as non-conforming.
- 5.5 Any item with a critical shelf life, (e.g. paint), will be checked at the stock take. Any items with dates expired or close to expiry, will be removed and remedial action taken.

6 Documents, Forms, Records

Supplier Delivery Note
Goods Returns Note "S"
Notification of Shortage/Damage
Picking Note
Bill of Material
Works Order
Stores Requisition
Stock Take Records

Customer Property

Procedure 7.6, Page 1 of 1

1 Purpose and Scope

- 1.1 To define the procedure for receipt, identification, verification and return of items and materials belonging to the customer.

2 Responsibilities

- 2.1 All Sales, Production and Stores Staff

3 Procedures

- 3.1 Goods, materials and items may be received from customers for processing as part of a customer order, normally for repair or re-certification. Some items may be received for assembly into a unit being built for a customer.
- 3.2 For materials and items received from customers, these will be signed for with the carrier. Contents are then unpacked, visually checked for any damage, and reconciled to the customer advice note. Any discrepancies will be documented.
- 3.3 Materials and items will be identified to a Sales Order number, or on a Works Order or on a Goods Returns Note "C". Items and materials are stored identified to the Sales Order Number or the Goods Returns Note "C" reference.
- 3.4 Customer property will be processed, normally as part of a Works Order. The despatch will be documented when delivered to the customer.

4 Documents, Forms, Records

Customer Advice Note
Sales Order Number
Works Order
Goods Returns Note "C"
Despatch Note

Stores Withdrawals

Procedure 7.7, Page 1 of 2

1 Purpose and Scope

- 1.1 To define the procedure for the withdrawal of items and components from the stores, and for the despatch of goods.

2 Responsibilities

- 2.1 All Sales, Production and Stores Staff

3 Procedures – Stores Withdrawals

- 3.1 Items, components and fittings to be withdrawn from stores will be shown on:
 - Picking Note
 - Bill of Material
 - Works Order
 - Stores Requisition
 - Or as requested by a customer at the Trade Counter
- 3.2 The item(s) will be located and withdrawn in the correct quantity. Any shortages will be noted on the documentation.
- 3.3 Goods should be adequately identified, and this must be checked. There may be a need to place items into packaging, and note the identification on the package.
- 3.4 The documentation must be signed or initialled to confirm satisfactory actions against the “picked by” and “checked by” boxes. The “assembled by” box is also endorsed when applicable
- 3.5 Items will be passed to the appropriate location: despatch, hose assembly, workshop, as required.

4 Procedures - Despatch

- 4.1 Items for despatch will be checked for reconciliation with the paperwork, and packed satisfactorily. Details will be entered to the Despatch system, and a Despatch Note raised.

Stores Withdrawals

Procedure 7.7, Page 2 of 2

- 4.2 The goods and the customer copy of the Despatch Note will be enclosed in the package, and arrangements made for despatch or collection. Where a carrier is used, the appropriate consignment notes will be completed.
- 4.3 Arrangements will be made to raise a Certificate of Conformity, cross-referenced to the Sales Order Number, where requested by the customer.
- 4.4 When items are collected by the customer, or their representative, they will be asked to sign the "Trade Counter Collection Sheet" as proof of collection.
- 4.5 Where items are delivered to customers, a Delivery sheet is completed, and the customer asked to sign the respective entry on the sheet for satisfactory receipt by them.

5 Documents, Forms, Records

Picking Note
Bill of Material
Works Order
Stores Requisition
Despatch Note
Certificate of Conformity
Carriers Consignment Note
Trade Counter Collection sheet

Manufacture of Hose Assemblies

Procedure 7.8, Page 1 of 2

1 Purpose and Scope

- 1.1 To define the procedure for the manufacture of Hose Assemblies

2 Responsibilities

- 2.1 All Sales, Production and Stores Staff
- 2.2 The Company undertakes to manufacture and supply hoses in compliance with the Parker Hose Manufacturing Specifications; Rotec's 'Hose Cleanliness Procedures'; and within the overall guidelines of BFPDA/D8 Issue 6 'Quality Control Procedures and Requirements for BFPDA Distributors for the Manufacture of Flexible Hose Assemblies for Hydraulic Fluid Power'.

3 Procedures

- 3.1 Details of the hose assembly(s) will be indicated on the Works Order, Bill of Material, Picking List, Stock Record, or as noted at the Trade Counter. The items needed will be withdrawn, as per the Stores Withdrawal Procedure. It should be noted that:
- Components in any assembly must be compatible by design, size and type. For high pressure hydraulic hoses compatible components from the same manufacturer must be used
 - Hose assembly practices must conform with the European Safety recommendations, EN 982 now superseded by BS EN ISO 4413:2010, Conformity and Standards are covered in the BFPDA guidelines BFPDA/D8 and recertification every 2 years.
 - Operatives should be aware of the contents of the Safety Data Sheets for Parker fittings and hose
 - Hose assembly equipment must be operated in accordance with the manufacturer's instructions and recommendations, and health and safety needs
 - Adequate training shall be provided for all operatives, and records maintained
 - The use of unbranded hose is forbidden
 - The reworking of used hose or the re-use of crimped end fittings is forbidden
 - Where rubber hose is used, it must be less than nine years old
 - Hoses and hose assemblies should be cleaned to the appropriate level in accordance with the 'Hose Cleanliness Procedures'.
- 3.2 The manufacture of the assembly will be processed in line with the drawing, documentation, sketch or sample as appropriate. Manufacturer's instructions and operative training will apply to good assembly practice, including coupling manufacturers' crimping swaging data

Manufacture of Hose Assemblies

Procedure 7.8, Page 2 of 2

- 3.3 The hose assembly will be inspected visually, and measured where appropriate, and the dimensions verified against acceptable standards and charts. Where satisfactory, the documentation should be signed or initialled and dated. Hoses for Workshop requirements, will be endorsed on the Works Order. Any shortages will be noted on the documentation.
- 3.4 Where requested by the customer, an identification label will be applied to hose assemblies, showing the date of manufacture, and any specified text. Hose inspection and testing must be undertaken in compliance with the BFPDA D8 Sampling Plan.
- 3.5 On occasions, the customer requests testing of hoses. Tests will be undertaken, and where satisfactory, the documentation will be endorsed. The test results will be recorded on a Hose Test Certificate, and details recorded in a Hose Test Register, a label marked "Tested" will be stuck onto the despatch medium with SOR/WOR number written on it plus date and initials of the person who carried out the test.
- 3.6 Any problems, at assembly or test stages, should be investigated. Where no immediate remedial action can be taken, the concerns need to be documented on a Reject Note, and progressed accordingly.
- 3.7 Hose assemblies will be fitted with protective caps where appropriate, or ends taped to prevent the ingress of dirt or contamination.
- 3.8 Hoses will be identified to the Sales Order Number, and customer as required. The assemblies will be moved to the despatch area, and booked out, (as described in the Stores Withdrawal procedure).
- 3.9 Low Pressure Hose Assemblies with pressures less than 40 Bar manufactured using fabric braid hose or combination of helix and fabric hose used in fuel, water or air applications shall be constructed in accordance with Procedure 7.8 appendix 1.

4 Documents, Forms, Records

Works Order
Bill of Material
Stores Requisition
Hose Test Certificate
Hose Test Register
Hose Cleanliness Procedures
Despatch Note
Internal Comment Form
Tested Label

ASSEMBLY GUIDANCE NOTES FOR NON-COMPATIBILITY TESTED LOW PRESSURE HOSE ASSEMBLIES

Procedure 7.8, Appendix 1 Page 1 of 3

Scope of works

- 1 This is a brief guide to the assembly of hoses for low pressure applications only. For the purpose of this guide the maximum working pressure for these assemblies is not to exceed 40bar.
 - 1.1 Although we are all aware that the use of mismatched hose, ferrules and fittings in a hydraulic assembly is not tolerated, we will from time to time be expected to manufacture hose assemblies for very low and low pressure applications using a variety of components. Applications for these hose assemblies can vary from flexible air lines and wash down hoses, (non-critical systems), to refuelling, bunkering and cooling hoses, (critical systems). Regardless of the application the process for component selection, assembly, manufacture, cleaning and test will on the most part be the same.

2. Component selection.

- 2.1 In order to select the correct components for the hose assembly we need to ask the following questions.
 - A. What is the application?
 - B. What is the working pressure?
 - C. What is the internal size of the hose?
 - D. What is the fluid being conveyed?
 - E. What is the temperature?
 - F. What are the hose terminations?

- 2.2 By asking these questions we have built up a picture of what the end product is expected to do and we can select our components accordingly

3. Component assembly.

- 3.1 This guide is primarily for those assemblies that require a ferrule to be used instead of a manual clip or clamp such as a worm drive or a tension strap. (Jubilee , Bandit, twin ear etc). Low pressure hose and fittings vary in quality so we should always ensure that our fittings have a higher rating than the hose with which they are to be assembled.
- 3.2 When using a ferrule we should select the ferrule with an internal diameter that is closest to the external diameter of the hose we are

looking to use. This is primarily to avoid flaring the ferrule at the crimping stage.

- 3.3 Most low pressure fittings and ferrules will not have an “interlock” method of interaction. This means that there will be no shoulder on the fitting and no machined recess in the ferrule.
- 3.4 Depending on the internal size of the hose assembly, a small gap should be left between the ferrule and the “Hex” or flat of the hose fitting. This is to enable the hose to lengthen slightly under compression at the crimping stage.
- 3.5 If a suitable gap is not left there is a chance the lengthened hose will interfere with the fitting and especially in female assemblies stop rotation of the nut. An example of the approximate gap would be <5mm on a ½” rubber braided fuel hose.
- 3.6 Most light duty ferrules are a thin, single depth ferrule which will not cut into the hose in the way a conventional ferrule would. These ferrules operate in the same way a clip or clamp would by providing friction between the hose tail and the internal wall of the hose under compression. Your starting point for ascertaining a crimp diameter should be as follows. **HOSE O/D + FERRULE WALL THICKNESS = INITIAL CRIMP**. This will give an initial interference fit for the hose and ferrule.
- 3.7 At all stages a thorough visual inspection is required.
- 3.8 The light duty ferrule may have an indicator hole in the side. Once the rubber of the hose has breached the hole this is a good indication that you have a satisfactory crimp.
- 3.9 Once the specification for the hose assembly has been met, the next stage will be inspecting, cleaning and testing.

4. Visual inspection, Cleaning and Test.

- 4.1 hose assembly, the next stage is one final, thorough visual inspection before cleaning and test.
- 4.2 The assembly will pass visual inspection if the following is confirmed.
 - 4.2.1 Does the crimp look correct?
 - 4.2.2 Is the ferrule tight to the hose and unable to spin by hand?
 - 4.2.3 Is the fitting secure in the hose and unable to be pulled or twisted by hand?

- 4.3 Other indicators of a satisfactory crimp can include a slight whitening of the rubber at the rear of the ferrule and the ferrule being “level” to the O/D of the hose.
- 4.4 The assembly will fail inspection if any of the following apply.
- 4.4.1 Is the ferrule split or showing signs of stress?
 - 4.4.2 Has the ferrule cut into the outer cover of the hose?
 - 4.4.3 Is the ferrule pinched in one area or is it flared inwards / outwards?
 - 4.4.4 Is the ferrule over crimped?
 - 4.4.5 Can the nut on female fittings rotate freely?
- 4.5 Once the assembly has passed inspection and been cleaned, we will need to conduct a test on the hose to make sure it is fit for purpose. The standard for these assemblies is 2X working pressure of the hose. If a production run of assemblies is required a pattern should be agreed and tested to a 4-1 safety factor. Some uses will be exempt from this process but only where the assembly is under no pressure and / or effectively “open ended.”
- 4.6 Once the hose is cleaned and capped it is ready to be sold to the customer.
- 4.7 The customer should be made aware prior to the manufacture of the assembly that the components have not been conformity tested by the manufacture of the hose or couplings.
- 4.8 This process of manufacture is only to be implemented once all conforming options have been exhausted and the appropriate line manager has authorised construction.

Manufacture of Assemblies and Systems

Procedure 7.9, Page 1 of 2

1 Purpose and Scope

- 1.1 To define the procedure for the manufacture of assemblies and systems, testing and despatch.

2 Responsibilities

- 2.1 All Sales, Technical, Production and Stores Staff

3 Procedures

- 3.1 Assembly requirements can include small jobs, conversion of pumps, rotation change etc, and major assembly of power units and systems.

- 3.2 Details will be shown on one or more of the following:

- Drawing and specification
- Bill of Material
- Works Order
- Job Record

and referred to a Job or Works Order Number.

For major projects, a blue file is passed to the Workshop, including relevant documents along with an Amendment Sheet, Variation Sheet, Test Certificate and Works Order Check List, as appropriate. Small jobs will be detailed on a Workshop Request form.

- 3.3 Regular Engineering Planning meetings are held, to discuss progress and planned build dates.

- 3.4 The documentation is used to withdraw the items from stores, or the allocation area. Any shortages will be noted and progressed with suppliers. Trace codes will be recorded on the Bill of Material, where the customer has specified traceability.

- 3.5 The assembly will be undertaken in line with any manufacturers' instructions, and the drawings and specification. All work should be cross referred to the Job or Works Order Number.

- 3.6 Where any work or process is subcontracted, the requirements should be documented on a Purchase Order.

- 3.7 Any extra requirements will be noted on a Stores Requisition, and used to withdraw the extra items.

Manufacture of Assemblies and Systems

Procedure 7.9, Page 2 of 2

- 3.8 Any differences between the actual assembly and the relevant documentation will be summarised on the Amendment Sheet.
- 3.9 The assembly will be inspected, verified and tested as required. Documentation will be endorsed, signed or initialled, and dated. A Test Certificate will be raised for all HPU's and where requested by the customer. The Sales or Works Order Number will be marked onto the unit together with a "Tested" label indicating the SOR/WOR number, date and initials of person who carried out the test, prior to despatch.
- 3.10 When complete, the paperwork will be passed to the office, and a Despatch Note raised. A Certificate of Conformity or Declaration of Incorporation will be raised as requested by the customer. For every Power unit and system produced by Rotec Hydraulics Ltd a user's manual and technical construction file will be produced and stored by the company. The storage will be in both hard copy and electronic format and retained for a minimum of ten years.

The structure of the file shall be generally as detailed in the BFPDA Guidelines BFPDA/D10, Issue 6 and shall include details of the system supplied, a certificate of incorporation, a test certificate and the operation and maintenance information.

In the event that a system can and is to be run as a stand alone installation then a Declaration of conformity shall be issued in place of the Certificate of Incorporation and a CE mark affixed to the system.

Arrangement will be made to despatch the assembly, and any installation and/or commissioning arranged. An invoice will be raised from the system and forwarded to the customer.

4 Documents, Forms, Records

Drawing and specification
Bill of Material
Works Order
Purchase Order
Stores Requisition
Amendment Sheet
Variation Sheet
Test Certificate
Certificate of Conformity
Declaration of Incorporation
Declaration of Conformity
Despatch Note
Workshop Request Form
Tested Label

Installation and Commissioning

Procedure 7.10, Page 1 of 1

1 Purpose and Scope

- 1.1 To define the procedure for the installation and/or commissioning of assemblies and power units.

2 Responsibilities

- 2.1 All Sales, Technical, Production and Stores Staff

3 Procedures

- 3.1 Some orders for assemblies and power units include installation and/or commissioning. A separate Works Order will be raised to cover the work, in addition to the Works Order for the internal assembly.
- 3.2 When available for installation and/or commissioning, arrangements will be made with the customer. If any subcontractors are required, separate Purchase Orders will be raised to cover their work.
- 3.3 Assemblies will be installed and/or commissioned, in line with the drawings and specification. Systems will be checked for operation, leaks, performance, etc. Tests will be undertaken where included in the specification.
- 3.4 The Works order will be endorsed, as well as the Installation/Commissioning Check List. An Amendment Sheet will be completed for any variances. The customer will be asked to counter-sign the documentation on completion.
- 3.5 The Engineer(s) will complete an Engineers Report or Service Visit Report.
- 3.6 The documentation will be passed back to the office for processing, and raising of an invoice. Where requested by the customer, a Certificate of conformity will be raised and forwarded after satisfactory completion.
- 3.7 Method statements where relevant to be completed for all site related projects. Point of work Risk Assessments for onsite work. Use of Company Risk Assessments where required for relevant work.

4 Documents, Forms, Records

Drawing and specification
Works Order
Purchase Order
Amendment Sheet
Test Certificate
Installation & Commissioning Check List
Certificate of conformity

Repairs

Procedure 7.12, Page 1 of 2

1 Purpose and Scope

- 1.1 To define the procedure for the inspection and repair of customer units.

2 Responsibilities

- 2.1 All Sales, Technical, Production and Stores Staff

3 Procedures

- 3.1 Units are returned to the company for inspection, estimate, repair and testing. The units may be notified to the Sales Team, and a Works Order raised to cover the work, Normally, units arrive at Goods Receiving, and a Goods Returns Note "C" is raised to identify the unit, and an outline of the customer requirements.
- 3.2 The unit will be stripped, examined and tested as necessary, and the results noted on the documentation. The information will be used to generate an estimate where requested by the customer. This will be forwarded to the customer, and repair held until approved, or otherwise.
- 3.3 The information will also be used to repair the unit, when released into work. The documentation will be used to withdraw the items from stores. Any shortages will be noted and progressed with suppliers. Trace codes will be recorded where the customer has specified traceability.
- 3.4 The repair will be undertaken in the Workshop, in line with any manufacturers' instructions, and any applicable drawings or manufacturers' instructions. All work should be cross referred to the Job or Works Order Number.
- 3.5 Where any work or process is subcontracted, the requirements should be documented on a Purchase Order.
- 3.6 Any extra requirements will be noted on a Stores Requisition, and used to withdraw the extra items.
- 3.7 The assembly will be inspected, verified and tested as required. Documentation will be endorsed, signed or initialled, and dated. A Test Certificate will be raised where requested by the customer. The Sales or Works Order Number will be marked onto the unit.

Repairs

Procedure 7.12, Page 2 of 2

- 3.8 When complete, the paperwork will be passed to the office, and a Despatch Note raised. A Certificate of Conformity will be raised as requested by the customer. Arrangements will be made to despatch the assembly, or arrange collection by the customer. An invoice will be raised from the system and forwarded to the customer.
- 3.9 If any units are found to be “beyond economical repair”, (BER), the customer will be asked if the unit should be disposed or returned. Any expended time will be charged as agreed with the customer.

4 Documents, Forms, Records

- Goods Returns Note “C”
- Works Order
- Purchase Order
- Stores Requisition
- Test Certificate
- Certificate of conformity
- Despatch Note

Returns

Procedure 7.13, Page 1 of 1

1 Purpose and Scope

- 1.1 To define the procedure for the return of items and units to the Company.

2 Responsibilities

- 2.1 All Sales, Technical, Production and Stores Staff

3 Procedures

- 3.1 On occasions, items and units may be returned to the Company for a variety of reasons, including surplus to supply, warranty, return and replacement.
- 3.2 Goods returned will be reconciled to any documentation. A Goods Returns Note "C" will be raised, and a copy affixed to the unit, or the unit identified in some appropriate manner.
- 3.3 The return will be investigated, and the actions determined. These may include:
 - Return to good stock
 - Warranty, return to supplier
 - Faulty, rectify
 - Replace
 - Other

The corresponding actions will be taken, and the Goods Returns Note "C" endorsed. Other actions will be undertaken, including adjustment to stock records, application of handling charges, warranty, completion of Goods Returns Note "S", Customer Comment Forms.

4 Documents, Forms, Records

Goods Returns Note "C"
Goods Returns Note "S"
Customer Comment Form

Re-certification

Procedure 7.14, Page 1 of 2

1 Purpose and Scope

- 1.1 To define the procedure for the re-certification of units and accumulators.

2 Responsibilities

- 2.1 All Sales, Technical, Production and Stores Staff

3 Procedures

- 3.1 Units are returned to the company for inspection, estimate, re-certification and testing. The units may be notified to the Sales Team, and a Sales Order / Job Number raised to cover the work, Normally, units arrive at Goods Receiving, and a Goods Returns Note "C" is raised to identify the unit, and an outline of the customer requirements. Sales Office Staff maintain diary notes of retest dates from previous jobs, and may prompt the customer for returns.
- 3.2 The unit will be stripped, examined and tested as necessary, and the results noted on the documentation. A volumetric expansion test record will be completed and recorded, (see Re-certification Documents). Reference will be made to the Parker procedures and specifications. The information will be used to generate a Service Repair Report where requested by the customer. This will be forwarded to the customer, and re-certification held until approved, or otherwise.
- 3.3 The information will also be used to re-certify the unit, when released into work. The documentation will be used to withdraw the items from stores. Any shortages will be noted and progressed with suppliers. Trace codes will be recorded where the customer has specified traceability.
- 3.4 The repair will be undertaken in the Workshop, in line with any manufacturers' instructions, and any applicable drawings or manufacturers' instructions. The work should be undertaken or supervised by a Parker qualified "competent person". All work should be cross referred to the Sales Order Number.
- 3.5 Any extra requirements will be noted on a Stores Requisition, and used to withdraw the extra items.
- 3.6 The unit will be pre-charged with nitrogen as required.

Re-certification

Procedure 7.14, Page 2 of 2

- 3.7 The assembly will be inspected, verified and tested as required. Documentation will be endorsed, signed or initialled, and dated. A Test Certificate will be raised where requested by the customer. The Sales Order Number will be marked onto the unit.
- 3.8 When complete, the paperwork will be passed to the office, and a Despatch Note raised. A Certificate of Conformity will be raised as requested by the customer. Arrangements will be made to despatch the assembly, or arrange collection by the customer. An invoice will be raised from the system and forwarded to the customer.

4 Documents, Forms, Records

Goods Returns Note "C"
Works Order
Re-certification Documents
EN1968:2002 guidelines for testing seamless steel gas cylinders
Stores Requisition
Test Certificate
Certificate of Conformity
Despatch Note

Control of Inspection, Measuring & Test Equipment

Procedure 7.15, Page 1 of 2

1 Purpose and Scope

- 1.1 To define the procedures for control, calibration and/or checking of inspection, measuring and test equipment.

2 Responsibilities

- 2.1 Technical Director, Warehouse Manager

3 Procedures

- 3.1 A list of equipment will be held on file, including test rigs and test gauges. All such equipment will be marked with an identification number, or separately described. A Calibration Record or Checking Record will be originated for each item.
- 3.2 Some non-critical equipment may be held and not calibrated. Such items will be marked as 'For reference only'.
- 3.3 Quality-critical items will be calibrated or checked according to the Audit Time Table or frequency shown on the respective records
- 3.4 If for any reason any quality-critical items pass their 'test-by' date, they will be marked as 'To be calibrated – use for reference only', until re-tested.
- 3.5 Calibration or checking will be undertaken. Records will be maintained to show description, identification, calibration or checking frequency, calibration or checking methods, accuracy required, the results of calibration, the results of checks, any calibration certificates, and any action taken when results are not satisfactory.
- 3.6 Where equipment is found to be unacceptable, adjustments will be made where possible, and the equipment re-calibrated. The new readings will be recorded, and where satisfactory, processed as noted above. Where unsatisfactory, the item will be calibrated and separately investigated.
- 3.7 Where a National Standard exists for any equipment requiring calibration, such calibration shall be traceable to that standard.
- 3.8 Any equipment calibrated externally will be documented on the appropriate record, including any certificates obtained.

Control of Inspection, Measuring & Test Equipment

Procedure 7.15, Page 2 of 2

- 3.9 All employee-owned and customer supplied equipment that is kept on site, shall be subject to this procedure.
- 3.10 Equipment shall be handled, preserved and stored such that the accuracy and fitness for use is maintained. Where any storage or protective cases are provided, equipment must be stored in these cases when not in use.

4 Documents, Forms, Records

List of inspection, measuring and test equipment
Calibration and Checking records
Calibration Certificates, (internal and external)

Measurement, Analysis, Improvement **Supplier and Customer Comments, Customer Satisfaction**

Procedure 8.1, Page 1 of 2

1 Purpose and Scope

- 1.1 To define the procedures for recording any comments or non-conformance, and subsequent rectification and/or corrective action. Comments and/or non-conformance may apply to suppliers, internal processes and customers. Resulting customer satisfaction and/or dissatisfaction shall be measured.

2 Responsibilities

- 2.1 Directors, Managers, all staff

3 Procedures – Supplier, Internal Comments

- 3.1 Any materials, items, products or service not meeting the specification or requirement will be designated non-conforming, and following review, may be rectified, released subject to concession, replaced or scrapped.
- 3.2 Any additional comments, including concerns, queries, (or even praise), should be recorded.
- 3.3 Where any supplier non-conformance has been identified, or comments made, details will be recorded on a Goods Returns Note “S”. These will be raised and numbered sequentially. All subsequent action will be detailed on these forms, during process or at the end of process as appropriate.

4 Procedures – Customer Comments and Returns

- 4.1 On occasions, customers may comment, complain or return items. The appropriate procedures will be followed, with any comments recorded on a Goods Returns Note “C”, and a copy forwarded to the Quality Systems Manager for analysis.

5 Procedures – Customer Satisfaction

- 5.1 The recording of customer comments and complaints will provide some indication of customer dissatisfaction.
- 5.2 Product returns will also be monitored and controlled, as shown above. The number of instances will be recorded.

Supplier and Customer Comments, Customer Satisfaction

Procedure 8.1, Page 2 of 2

- 5.3 Further surveys may be undertaken from time to time with customers, to establish product feedback, market research and customer satisfaction. The results of the survey will be documented on a Customer Service Review Form, and reviewed as part of the Company Management Review Meeting.

6 Documents, Forms, Records

Goods Returns Note "S"
Goods Returns Note "C"
Customer Service Review Forms
Management Review Meeting Minutes

Internal Quality Audits

Procedure 8.2, Page 1 of 1

1 Purpose and Scope

- 1.1 To define the procedures for conducting internal quality audits of the Quality Management System within the Company.

2 Responsibilities

- 2.1 Quality Systems Manager

3 Procedures

- 3.1 The Quality Systems Manager will be responsible for coordinating internal quality audits, or assigning these to other persons capable of undertaking audits.
- 3.2 Complete audits of the Quality Management System will be scheduled, as shown on the Internal Quality Audit Time table, available on the "S" drive Quality Management Folder.
- 3.3 An Audit Questionnaire will be used to report the results of the audit, any objective evidence, and any observations made, (see appendix A to this procedure).
- 3.4 Where an audit deficiency is identified, details will be recorded on an Audit Defect Report, (see Appendix B to this procedure). The Audit Defect Report will be used to progress the corrective and/or preventive actions necessary, and "close out" the Audit Defect Report, verifying actions have been completed.

4 Documents, Forms, Records

Internal Quality Audit Time table
Internal Quality Audit Questionnaire
Internal Quality Audit Defect Report

Analysis, Corrective and Preventive Action

Procedure 8.3, Page 1 of 1

1 Purpose and Scope

- 1.1 To define the procedures for the review, analysis, reporting and recommendation of any corrective and/or preventive action, and ongoing continuous improvement.

2 Responsibilities

- 2.1 Quality Systems Manager

3 Procedures

- 3.1 There are a number of procedures in place to record, control and measure comments, issues and complaints. These include:
- Supplier and Customer Comments
 - Internal Quality Audits
 - Customer Service Review Forms
 - Customer Surveys
- 3.2 On a regular basis, at least annually, the Quality Systems Manager will review, summarise and report the issues noted above for the previous period. This “Corrective Actions Summary” will be circulated internally, and shall be discussed as part of the Management Review Meeting.
- 3.3 The Corrective Actions Summary should contain:
- A summary of comments and non-conformance by suppliers
 - A summary of internal problems
 - A summary of returns and complaints by customers
 - A summary of internal quality audits, and any defect reports raised
 - Comments and measurement of customer satisfaction and/or dissatisfaction
 - Explanation of any adverse trends
 - Any comments on related issues, such as processes, suppliers, customers, products, etc.
- 3.4 Any opportunities for continuous improvement should also be identified in the Summary, specifically for the Quality Management System, and for other issues as appropriate.

4 Documents, Forms, Records

Corrective Actions Summary
Goods Returns Note “S”
Goods Returns Note “C”
Customer Service Review Forms
Internal Quality Audit Defect Reports