

**TRANSPORTATION**

**Quality Manual**

**TSG Australia/NZ**

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# Background

TSG has operations and vehicles in all Australian states and throughout New Zealand. Fleet safety to TSG means providing our drivers with properly specified equipment capable of performing the task asked of it, maintaining that equipment to a safe standard and providing drivers and the people that influence them with the necessary knowledge, awareness and training to safely perform their duties and return home safely.

The TSG heavy vehicle fleet in Australia comprises some 4200 articulated heavy vehicles, 20 tankers and 300 vans. In New Zealand the fleet includes 278 articulated heavy vehicles 480 tippers and1180 agitators as well as a large fleet of 540 delivery vans and modified cars. The tipper fleet includes rigid trucks, truck and dog combinations, semi-trailers, B doubles and pocket road trains. The agitator fleet includes mini trucks, 3 axle rigid trucks, 15 axle rigid trucks and semi-trailers.

The TSG fleet includes 4560 company trucks and over 500 contracted owner drivers. This fleet is augmented by use of casual sub-contractors during peak demand.

TSG has 260 concrete plants and 56 quarries in New Zealand with operations on both Islands.

Concrete Deliveries are made to a wide range of sites ranging from private customers own yards, council work, road construction sites, high rise developments, farms, dam sites to mine sites – including underground mines.

Freight deliveries are made to B2B sites and retail locations around Australia and New Zealand as well as large numbers of B2C deliveries throughout Australia and New Zealand.

The TSG approach to heavy vehicle fleet safety is aligned to the Chain of Responsibility regulations (ref. TSG Fleet Safety: Practice Manual).

# Quality Manual Operation

This manual is prepared by the MR & approved by Director Quality.

The holder of the controlled copy shall not make further copies of the manual. If additional copies are required, a requisition is to be sent to MR. When the holder of controlled copy of the manual ceases to be an authorized copy holder, all the copies in his possession are to be returned to MR with due acknowledgement.

The MR will review this Manual periodically with the Departmental Heads to affirm its adequacy. Changes to the Manual are made by the Departmental Heads who revise the Manual. All the changes/amendments cancel and replace any previous copy of the Manual. Authorized copyholders shall maintain updated copy of the Manual. Departmental Heads maintain the amended version for reference and use.

Uncontrolled copies of this Manual (with no copy number) may be issued but these are not subject to updating procedure. Such copies are for information only. These copies may be identified as ‘Uncontrolled Copy’ on the contents page of the Manual.

The MR will retain copies of all previous issues / amendments of the Manual.

# Quality Management System

## GENERAL

The quality management system of the company is based on the ISO 9001-2015 and it demonstrates the company’s ability to consistently meet the customer requirements. It aims to enhance customer satisfaction through implementation of the system including process for continual improvement.

### General Requirement

The company has established, documented, implemented & maintained a quality management system and aims to continually improve its effectiveness in accordance with ISO 9001-2015 standard.

The company has:

1. Identified the processes for QMA,
2. Determined the interaction and sequences of the process,
3. Ensured the effective operation and control of these processes,
4. Ensured the availability of resources and information necessary to support the operation and monitoring of these processes,
5. Established methods to monitor, measure and analyse these processes,
6. Implemented actions necessary to achieve planned results and continual improvement of these processes,

The processes and their interactions are described in the Departmental Manuals.

### Documentation

The QMS maintained by the company is documented in the following documents.

Level – 1 QMS Manual: This addresses the requirements stated in the ISO9001-2015 Standards as applicable services provided by the company.

Level – 2 Quality system procedures.

1. As required by the standard and the company,
2. As required for smooth functioning of its processes.

These procedures describe the activities carried out by different departments to comply with requirements.

Level – 3 Work Instructions:

These are specific and complete instructions required for execution of specific tasks.

### Control of Documents

All documents required by the QMS are controlled and are available at relevant points of use via the company intranet. Adequate controls are:

1. To approve the document for adequacy,
2. To review and update the documents as necessary,
3. To ensure that relevant versions of applicable documents are available at points of use,
4. To ensure that documents remain legible and readily identifiable.

### Control of Records

A documented procedure is established to ensure that the records are controlled. Records are established to provide evidence of conformity and the effective operation of the QMS. Records are legible, readily identified and retrievable. The procedures for control of records (GEC/QSP/01) describe the identification and retrieval of records. The retention time of records is stated in the list of records maintained by individual departments.

# MANAGEMENT RESPONSIBILITY

1. The management of the company is committed to the development, implementation and continual improvement of the QMS. To this end, it has:
2. Communicated the importance of meeting customer requirements and statutory requirements within the organisation,
3. Established the quality policy,
4. Conducted periodic management review,
5. Ensured the availability of resources.
6. Quality Policy

The quality policy followed by the company is stated in this manual. It is ensured that the quality policy is communicated and understood within the organisation. The policy is communicated through the available channels of in-company communication and displays. The understanding of quality policy is verified during Internal Audits, Operation Reviews and shops floor briefings. Management Reviews consider the adequacy of the policy for its continuing suitability.

1. Quality Management System Planning

The QMS is planned to meet requirements of the standard ISO 9001-2015. It is ensured that the integrity of the QMS is maintained when any changes are planned and implemented.

1. Responsibility and Authority

The responsibility and authorities are known from the structure of the organisation chart as shown below. The individual departmental structure and their responsibilities are described in the departmental manuals

The functional responsibilities are:-

Managing Director: is responsible for coordinating all business and manufacturing activities of the company.

Engineering Director: Reports directly to the M.D and is responsible for overall

Managing Director

Director HRM

Director Finance & Administration

Director Logistics & Procurement mgt

Warehouse

Online Sales

Retail Outlets

(global)

General Manager

Director Operations

Director Sales & Marketing

QA - Final

QA – In Process

Calibration Lab

engineering design and development. This position has the authority to initiate and implement design changes at any time of manufacture, and is also responsible for preparation and development of standard designs and design modifications to meet customer’s requirement.

Director HR: This position is responsible for all legal matters in relation to the company’s legal and statutory matters and concerning Board of Directors. The position is also responsible for auditing of administrative functions including documents.

General Manager: This position has responsibility for all matters relating to product, process and systems. It reports directly to the MD. This role has responsibility for proper utilisation of employees, materials and machines in achieving targets. The role is also responsible for training and approving the training needs as recommended by individual departments and the HR Team.

Director Sales: This position is responsible for obtaining orders for supply of products as well as to quote, negotiate and finalise technical and commercial terms of contract, to carry out review of quotations, contract and amendments to orders and so on. It should also ensure timely delivery orders.

Director Quality: This position is responsible for all matters relating to the manufacturing standards. This includes the responsibility for preparing, maintaining and revising the quality manual in order to reflect changes in manufacturing methods, receipt and checking of incoming materials, identification, storage arrangements and issue of these materials to manufacturing departments, checking final test reports used for presentation to the Customer for acceptance prior to issue of materials to dispatch.

Director Materials: This position is responsible for procurement including the selection and approval of vendors and sub-contractors, the release of purchase orders, vendor evaluation and advice to vendors and sub-contractors, receiving and storage of raw materials and identification and issue of raw materials and engineering stores.

Director Finance: This position is responsible for all matters related to finance, accounting, wages, costing etc. The position also supports special projects and provides advice and support for new project/business case development.

**The Director Quality** is supported by the coordinators for Final inspection; In-process and in Laboratory. The Laboratory in-charge is designated as the Management Representative (MR).

1. Management Review

The Nominated Management Representative of the company carries out a review of QMS on a quarterly cycle. This review is conducted to ensure continuing, suitability, adequacy and effectiveness of the QMS. Opportunities for improvement and need for changes are also identified during these meetings. The meetings are attended by representatives from departments.

After the review, the management representative prepares the minutes and copies are distributed to the department heads. The MR keeps track of implementation and the follow up activities. Records of management review are maintained by all concerned.

Review inputs: - The following issues are considered to form the inputs.

1. Results of internal and external quality audits,
2. Customer feedback and complaints,
3. Corrective and preventive actions,
4. Follow up actions from previous review,
5. Performance evaluation of suppliers and subcontractors,
6. Resources and training needs (annual),
7. Changes and recommendations for improvements in QMS.

Review output: The management review outputs are documented in the form of minutes and issued to the Departmental Heads.

# ANNEXURE 1

## Company Level Quality Objectives

The Quality Policy reflects the following Company level Quality Objectives:

1. Improvement in customer satisfaction index,
2. Reduction in number of customer complaints / repeat complaints,
3. Improvement in delivery schedule adherence,
4. Reduction in rejects and reworks,
5. Cost reduction / value improvements.

# RESOURCE MANAGEMENT

The Management of the Company has determined and provides resources needed

1. To implement, maintain and continually improve the QMS,
2. To enhance customer satisfaction.

## Human Resources

It is ensured that all the personnel engaged in performing work affecting the products are competent on the basis of appropriate education, training, skills and experience.

Competence, Awareness and Training

The company has the following activities to ensure competence, awareness and Training

1. Determination of competence levels for different positions,
2. Provision of Training to ensure that competence levels are achieved.

These activities are coordinated through the Director, HR.

## Infrastructure

The company is equipped with facilities such as well-designed and well furnished rooms, dining area, transportation etc. which are maintained in good condition at all times.

The company is also equipped with facilities and equipment to provide amenities such as central air conditioning to the offices, stand by power and communication, through a team of experienced and competent personnel.

Head of Engineering is responsible for identifying and providing the resource requirements.

The TSG heavy vehicle fleet in Australia comprises some 4200 articulated heavy vehicles, 20 tankers and 300 vans. In New Zealand the fleet includes 278 articulated heavy vehicles 480 tippers and1180 agitators as well as a large fleet of 540 delivery vans and modified cars. The tipper fleet includes rigid trucks, truck and dog combinations, semi-trailers, B doubles and pocket road trains. The agitator fleet includes mini trucks, 3 axle rigid trucks, 15 axle rigid trucks and semi-trailers.

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The TSG approach to heavy vehicle fleet safety is aligned to the Chain of Responsibility regulations.

# PRODUCT REALISATION

## Planning for Product Realisation

The company plans and develops processes, which are consistent with the other processes of the QMS. In planning for product realisation, the quality objectives and customer requirements are considered. Monthly and weekly product plans are prepared and issued by Director Materials. These plans are based on the availability and procurement of materials.

## Customer related processes

The company makes efforts to determine the specified and implied needs of the customer which are necessary for customer satisfaction. The statutory and regulatory requirements related to the products are compiled by the company. The Sales office has the responsibility of identifying the needs of the customer. The department heads are responsible for the compliance of the statutory & regulatory requirements applicable to the products.

The customers of the company can be corporate bodies, distribution agents or general consumers. The requirements for the product are clearly specified and agreed upon. This is based upon the company brochure and existing/ agreed specifications. In all cases the requirements are reviewed, to ensure that the requirements are clearly defined, and the company has the ability to meet the specified requirements. If any differences exist in the specified requirements and the proposal, these are resolved at the time of preparation of contract. The record of review is maintained by Sales office.

The company has implemented effective arrangements for communicating with the customers in relation to product information, periodic updates, enquires, contracts or direct orders and customer feedback including customer complaints.

## Design and Development

The products provided by the company are standardized and as such there is no requirement of designing the products. The Engineering Director sometimes makes changes to the specifications and has authority to develop new products. We have not included the design and development in the QMS.

## Purchasing

The company ensures that purchased product and services conform to specification requirements. This is carried out through the Materials department.

The suppliers, sub-contractors are selected on the basis of their past performance and the rapport/relationship with the management. Purchasing orders are communicated to supplier and subcontractors wherein the requirements for the products and services are clearly defined. The products are varied upon receipt and the services are accessed during the process. This is made known to the suppliers and sub-contractors well in advance. Normally, purchase orders are issued based on requirements indicated by users through indents. The Director Materials decides on when and on whom the purchase orders are released. The purchase orders are reviewed by the Director Materials.

The company has established inspections and other activities to ensure that the purchased product meets the specified requirement. The Quality department carries out these inspections and related activities, which are product specific, whereas the user departments perform these, are non-product related purchases. These inspections and checks are mentioned in their respective procedure. Neither the company nor its customers perform verification at the supplier premises.

## Production process

1. The company plans and carries out production operation under controlled conditions. The applicable controlled conditions include:
2. The availability of information at appropriate places. This includes foundry, heat treatment section, assembly, machine shop etc.,
3. Availability of work instructions whenever necessary. Work instructions are available for all product related activities,
4. The use of suitable equipment in production areas,
5. Use of monitoring and measuring devices in areas related to product preparation and engineering services.

The above controls are exercised by the respective department heads.

## Validation of process

There are no processes in the company where the resulting output cannot be verified. Hence the clause on validation of processes is not applicable.

## Identification and Traceability

It is ensured that all products and services are identified throughout the process. The products are identified by appropriate label at the time of manufacturing. The services are identified at different stages such as customer contact, sales, purchasing, after sales etc. These are related to different departmental activities. Each department has its own procedures and work instructions wherein the services and products get identified.

The status of product monitoring/measurement is indicated wherever appropriate such as receipt, heat – treated items, assembly in progress, engineering job completion, etc.

## Customer property

The company exercises utmost care with the customer’s property when the customer provides any product or information for incorporation into the products supplied. Utmost care is taken to ensure that the customer does not lose or suffer damage to his belongings. The overall responsibility rests with the Manager Personnel and Administration who ensures the security of customer belongings through a well – organized security force.

## Preservation of product

The products provided by the company are handled, packed, stored and preserved as appropriate. Electronic items and small sized products are packed properly, whereas bigger items are not packed. It is the customer responsibility for such products.

## Control of monitoring and measuring devices

The monitoring and measurement devices are provided where appropriate such as engineering services, machine shop, calibration laboratory etc. The measuring equipment includes:-

1. Calibrated at specified intervals against measurement standards traceable to National standards.
2. Safeguarded from adjustments.
3. Protected from damage and deterioration during handling and maintenance.

The engineering department maintains a list of measuring and monitoring devices identified for calibration. The calibrations are carried as per procedures in that department.

# MESUREMENT, ANALYSIS and IMPROVEMENT

* 1. The company has planned and implemented measurement, analysis and improvement processes needed to:

1. Demonstrate conformity of the product,
2. Ensure conformity of QMS, and
3. Continually improve the effectiveness of the QMS.

## Customer Satisfaction

The management of the company lays a great stress on importance on satisfying customer needs. This includes customer complaints and evaluation of customer complaints redressals.

## Internal Audit

Internal audits are carried out at planned intervals to determine the effectiveness of the QMS and to verify whether the QMS meets the planned arrangements, which are in line with the ISO 9001-2015. The management representative has overall responsibility for organizing internal audit and the reporting on the findings to the management team. The internal audits are generally carried out on a quarterly basis to ensure that all activities are audited in each cycle.

Selected executives of the company are trained to carry out audits and the selections of auditors for specific audits are made such that the auditors do not audit their own work. Efforts are made to obtain objectivity & impartiality of the audit process. The management representative follows a documented procedure for implementing internal audits.

## Monitoring and Measurement of process

The respective department heads monitor the processes under their control on a day-to-day basis. When the results are below the planned level, immediate corrections are taken.

The TSG approach to heavy vehicle fleet safety is aligned to the Chain of Responsibility regulations.

## Monitoring and Measurement of products

For the products provided by the company, there is an elaborate system of inspection and tests. At all relevant stages of manufacture and additionally, where specified by the customer, the products are inspected or tested as per quality plans. Final tests are recorded and the records are maintained by the respective quality department. Intermediate test records may or may not be available as many of these tests/inspections are carried out by the production personnel.

## Control of nonconforming products

The company takes care to ensure that nonconformities in the products are reduced or eliminated. It is realised by the company, that the nonconformities in the products are very much related to human interaction. Hence it is difficult to identify a non-conformance at the time of occurrence. The management of the company has formulated a “Corrective Action Group” (CAG). The membership of the CAG is decided by the Quality Director and is on a rotating basis. The role of the CAG is to monitor the process independently and determine the non-conformances, if any. Product non-conformances, if any, are identified by the QA department during final testing and informed to the concerned department for rectification through a defect note. A documented procedure is established for control of non-conforming products and services.

## Analysis of data

The individual departmental heads collect appropriate data on issues described earlier for example customer complaints, process and product conformance, non-conformance, internal audits etc.

This data is analysed in the respective sections to verify and confirm the suitability of the QMS and to evaluate areas for continual improvement of the QMS.

## Continual improvement

The company strives to continually improve the effectiveness of the QMS primarily during the management review meetings and other means such as achievement of quality objectives, audit results, analysis of data, corrective & preventive actions.

## Corrective action

The CAG identifies the nonconformities during the processing of product and delivery. Other opportunities such as internal quality audit, monitoring of service process etc. are used to identify areas for improvement.

A documented procedure is established to determine the corrective actions to eliminate causes of nonconformities by:

1. Reviewing non conformities,
2. Determining causes of nonconformities,
3. Evaluating the action to prevent the recurrence of nonconformities,
4. Determining & implementing corrective actions,
5. Record the results of actions taken and reviewing the action taken.

## Preventive action

The documented procedure covers the action taken to eliminate causes of potential non-conformities or potential problems.

The procedure includes the requirements for:-

* 1. Determining potential non conformities and their probable causes,
  2. Evaluating the action needed to prevent non-conformities.

**MATERIALS DEPARTMENT**

**OBJECTIVES**

**PROCESS MEASURERS**

**GEC-MAT-P3**

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# OBJECTIVES FOR MATERIALS DEPARTMENT

* 1. Reduction in Lead Time for Procurement,
  2. Reduction of Rejections of Incoming Materials due to Improper Communication of Specifications to Suppliers,
  3. Improvement in Delivery Adherence by Suppliers,
  4. Reduction in Lead Time of Payment to Suppliers,
  5. Reduction in Inventory Turns Over time at Receipt Stores,
  6. Increase in Suppliers with “Preferred Supplier” Status,
  7. Cost Reduction / Value Improvement by Key Suppliers.

# PROCESS AND PRODUCT MEASURES

**(LINKED TO OBJECTIVES)**

|  |  |  |
| --- | --- | --- |
| No. | Process/Product Measure | Relation to Objective |
| 01. | Reduction of Time from Receipt of indent/purchase Request to issue of PO | 1 |
| 02. | Reduction of Production Lead Time of Key Suppliers | 1,3,7 |
| 03. | Reduction of Changeover/Setup Time in Production Area of Key Suppliers | 1,3,7 |
| 04. | Reduction of Specification Mismatch between indent / Request and Purchasing Data found during Audit | 2 |
| 05. | Reduction of “Store Receipt / Inspection Clearance” Time | 1,4,5 |
| 06. | Improvement in Straight Pass Ratio (OK Material / Received material) of Key Suppliers | 2,6 |
| 07. | Monitoring of Item Wise days of Inventory (based on Item wise closing stock and shop consumption pattern) | 1,5 |
| 08. | Monitoring of Lead Time of Procurement, Supplier wise | 1,3 |
| 09. | Reduction of Time of Preparing, Payment Instruction after Material is ok | 4 |
| 10. | Reduction in Repeat Nature of Rejection at Receipt Stage | 2,6 |