

Bradken Standard

Bradken Quality Manual

If this document has been printed or downloaded it is immediately an Uncontrolled Copy and cannot be used or referenced in any operational requirement unless a validated copy control register or equivalent system is being used.

ABN 33 108 693 009 | ©2021 Bradken | Page: 1 of 24
C00476

© Bradken Pty Ltd 2021. Commercial in Confidence: This document contains sensitive commercial information and is not to be copied, distributed, reproduced or disclosed to any third parties without the written permission of Bradken. Any unauthorised use of this document or anything contained in it is expressly prohibited

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

Contents

Contents	2
1 Company Organisation	3
1.1 General.....	3
1.2 Board of Directors	3
1.3 Our Businesses.....	3
2 Current Quality Management System (QMS) Certificates	4
3 Scope of the Quality Manual	4
4 Quality Management System (QMS) Updates	6
5 Document Types in the QMS.....	6
5.1 Codes of Practice.....	6
5.2 Policies	6
5.3 Standards	6
5.4 Procedures.....	7
5.5 Work Instructions	7
6 The Structure of the Bradken Quality Manual (QM)	7
6.1 Process Modelling.....	7
7 Process Definitions	8
7.1 Customer Relationship Management	8
7.1.1 Supply Chain Management	9
7.1.2 Product Lifecycle Management.....	9
7.1.3 Sales Processes	10
7.1.4 Manufacture Processes	10
8 Related Documents	10
8.1 List of Related Standards	10
8.2 Other Related Standards	11
9 Documented Information	11
9.1 Documented Information Intergration	12
10 References (including any internal and external documents)	12
11 Supplier Information.....	14
11.1 Our suppliers.....	14
12 Responsibility, Authority and Accountability	14
12.1 General.....	14
12.2 Bradken Board of Directors	14
12.3 Executive Leadership Team	14
12.4 Organisational Authority	14
12.5 Responsibility and Delegation Through Line Management	14
12.6 Health, Safety and Environment.....	15
12.7 Verification and Improvement	15
12.8 Corporate Process / Quality Management	16
12.9 Global Quality Assurance Representatives.....	16

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

12.10	Quality Functional or Site Representatives	17
12.11	Safety and Sustainability Business Partners	18
13	Risk Management	18
13.1	Risk Based Thinking	19
14	Risk Management Principles	20
15	Interested Parties	20
16	Document Information (DI) System Management	22
16.1	BDIS Document Management System	22
16.2	Bradken Improvement Reporting (BIR) System	24
16.3	Customer Feedback Reporting (CFR) System	24
17	Revision Summary	24

1 Company Organisation

1.1 General

Bradken is a wholly owned subsidiary of Hitachi Construction Machinery Co Ltd. As such, our policies and frameworks align with the Hitachi Group. The Bradken Executive Leadership Team and Board of Directors are responsible for leading Bradken into the future and are accountable for its business operations.

1.2 Board of Directors

The Board of Directors and Chairman each have clearly defined responsibilities and accountabilities to direct and monitor the Bradken business.

1.3 Our Businesses

Bradken manufactures and distributes its products and services to its global markets via three main business units: Mineral Processing, Mining Mobile Plant and Specialty Products.



Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

2 Current Quality Management System (QMS) Certificates

The current Bradken certificates are available via Bradnet – The Source.



3 Scope of the Quality Manual

This Quality Manual outlines the direction and approach Bradken provides in order to maintain effective process control resulting in the high quality products and services to our customers.

Bradken operates a global Quality Management System which complies with the requirements of ISO:9001 for the following scope:

- The provision of design, manufacture (iron and steel casting; metal fabrication and machining; ceramic and rubber composite production; corrosion, erosion and wear resistant overlay production), repair, refurbishment, modification, construction, maintenance and supply of capital equipment and consumable parts for the mining, quarrying, construction, rail freight, transportation, oil sands, power generation, smelting, sugar and general engineering industries.
- The processing and recycling of steel waste materials for domestic and export trade purposes.

The Company's ISO9001 certification includes the following capabilities at each of its audited global facilities:

The provision of office services including Sales, Finance and Management Support:

Global Head Office

20 McIntosh Drive Mayfield West NSW 2304 AUSTRALIA

Regional Office

12200 NW Ambassador Drive Suite 647 Kansas City MO 64163 UNITED STATES

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

Regional Office

170 Railway Parade Bassendean WA 6054 AUSTRALIA

Regional Office

90 Richmond Street East Suite 400 Toronto Ontario M5C 1P1 CANADA

Regional Office

9-11 Viola Place Export Park Brisbane Airport QLD AUSTRALIA

The provision of Design and Development services:

Global Head Office

20 McIntosh Drive Mayfield West NSW 2304 AUSTRALIA

Regional Office

170 Railway Parade Bassendean WA 6054 AUSTRALIA

Regional Office

400 South Fourth Street Atchison KS 66002 UNITED STATES

Regional Office

90 Richmond Street East Suite 400 Toronto Ontario M5C 1P1 CANADA

Regional Office

6891 – 67th Street Edmonton Alberta T6B 3H3 CANADA

Foundry Facilities for the manufacture of steel and iron castings to customer specifications:

3021 South Wilkeson Street Tacoma WA 98409 UNITED STATES

400 South Fourth Street Atchison KS 66002 UNITED STATES

3040 Osler Street London Ontario N5Y 5R7 CANADA

25 Queen Street Wodonga VIC 3690 AUSTRALIA

52 Hawke Avenue Wundowie WA 6560 AUSTRALIA

105 rue de la Fonderie Mont-Joli Québec G5H 1W2 CANADA

Lot 19 & 20, Merlimau Industrial Estate, Merlimau Melaka, 77300 MALAYSIA

Palladam Road, Orathukuppai, Chettipalayam, Coimbatore - 641 201 INDIA

No.120, XuHai Road, Xuzhou Economic & Technological Development Zone, Jiangsu Pro., CHINA

Assembly and fabrication of transit trucks:

3811 South 48th Terrace St Joseph MO 64503 UNITED STATES

Metal Fabrication, Machinery Engineering and Assembly Workshops:

3811 South 48th Terrace St Joseph MO 64503 UNITED STATES

45 Enterprise Drive London Ontario N6N 1C1 CANADA

170 Railway Parade Bassendean WA 6054 AUSTRALIA

Karrabin-Rosewood Road Karrabin QLD 4306 AUSTRALIA

Boogan Road Boogan Innisfail QLD 4860 AUSTRALIA

No.120, XuHai Road, Xuzhou Economic & Technological Development Zone, Jiangsu Pro., CHINA

9624 – 35 Avenue Edmonton Alberta T6E 5S3 CANADA

5905 – 86 Street Edmonton Alberta T6E 2X4 CANADA

6891 – 67th Street Edmonton AB T6B 3H3 CANADA

8515 Davies Road Edmonton Alberta T6E 4N3 CANADA

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

4 Quality Management System (QMS) Updates

Responsibility for the updating, administration and ongoing development of this document is carried out by the Global Quality Assurance Manager who discharges these duties with the support of those responsible for the other functions in the Quality Assurance group, Head Office, regional offices and functional heads.

The Bradken Quality Management System (QMS) is a management system which provides a set of principles and definitions for the overarching management of processes throughout the Company.

To ensure the successful application of this QMS, Quality Leads from each Business Unit, function and site location have the responsibilities to coordinate and control process optimisation and standardisation.

This QMS provides the foundation for the uniform and risk orientated design, implementation and control of all processes from the customer and to the customer, generating financial advantages for the company in a sustainable way.

Bradken's certified facilities are audited by an accredited organisation for compliance with ISO 9001, ISO 14001, ISO 45001 and ISO 55001 as appropriate, and in accordance with the agreed audit schedule prepared annually by Bradken and the contracted approved certifying organisations.

Bradken is progressing towards an integrated system for Quality, Safety, Environmental and Energy Management.

5 Document Types in the QMS

5.1 Codes of Practice

These establish minimum standard requirements and practical guidelines for the safe operation of an activity or function in Bradken. They are not facility specific and outline the minimum safety requirements for facilities and basic behaviours required for effective operations.

Examples include: Working at Heights; Melting; Working in Confined Spaces; Tagout and Isolation.

5.2 Policies

Are a brief statement setting the organisations strategic direction or guiding principle expectation for a particular concept or function that we are governed to. Bradken policies are typically statements to govern its actions.

The Management of Bradken has developed a range of Policies covering those disciplines having regulatory and legal obligations as well as potential business risk attached to them.

Design and development of Bradken's processes are predicated on the Policies derived from compliance criteria and legal requirements.

The Policies required for the effective management of Bradken's QMS and ISO 9001 certification is located in BDIS 'Policy & Procedures' tab (Management Systems & Key Policies).

5.3 Standards

The more commonly used Standards are the high level, strategic method of control, in effect a summary of objectives, specifications, and broad resources needed. A Procedure adds more specifics such as responsibilities, specific tools, instructions, methods, and measurement. A Work Instruction is a step-by-step guideline to implement the process and procedure, often segmented in some way to focus those who are doing the actual work.

Standards define minimum acceptable requirements and are not site or facility specific. Compliance to a Standard provides Bradken with consistent results or performance outcomes that meet Customers and

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

Bradken expectations. A Standard states why it is required and may involve several procedures, work instructions or other activities for compliance.

Examples include: Travel; Code of Conduct; Social Media; PPE; Quality Manual; Product Quality Generic Requirements; Manufacturing Methods; Material Specifications (Handling Procedures); Bradkens' Brand Guidelines.

5.4 Procedures

Procedures are a uniform method outlining how to perform a process. A procedure offers a general description of how Bradken meets a process requirement but doesn't include the specific details for execution. Bradken procedures are applicable across the business and any differences for departments are to be documented in appendices. A **Bradken Procedure** states how a process needs to be carried out or completed while a **Work Instruction** explains how to carry out the procedure.

Examples include: Gauging Requirements (GR); Quality Specifications (QS); Procurement Specifications; and Inspection and Test Requirements.

5.5 Work Instructions

Work instructions describe how to perform a task within a process, which is a more detailed portion of a procedure and would not normally be formatted using this template. A work instruction contains the step-by-step detail that is not advantageous to put into a procedure because it requires such a limited scope.

Examples include: How to: Equipment operation (Eg. Crane); Software operation, Product installation/assembly, Method Cards, Process Maps, Standard Operating Procedures (SOPs), Weld procedures, Repair procedures, Wear monitoring procedures.

6 The Structure of the Bradken Quality Manual (QM)

The Bradken Quality Manual provides a consistent approach in quality management across the Bradken group. There are clear benefits to procedural and process standardisation, including:

- providing the overview of the Bradken quality management system and the key aspects;
- common language and common understanding of processes;
- consistent approaches in compliance to policies, standards and procedures as well as a consistent approach to ensuring all facilities activity monitor QMS effectiveness;
- the realisation of synergies and cost savings through the rapid implementation of standardised processes; the consolidation of applications and the exploitation of synergies;
- the configuration and design of specific business processes from customer to customer; and
- overarching benchmarking and best practice sharing.

6.1 Process Modelling

The Bradken QM contains principles and definitions for:

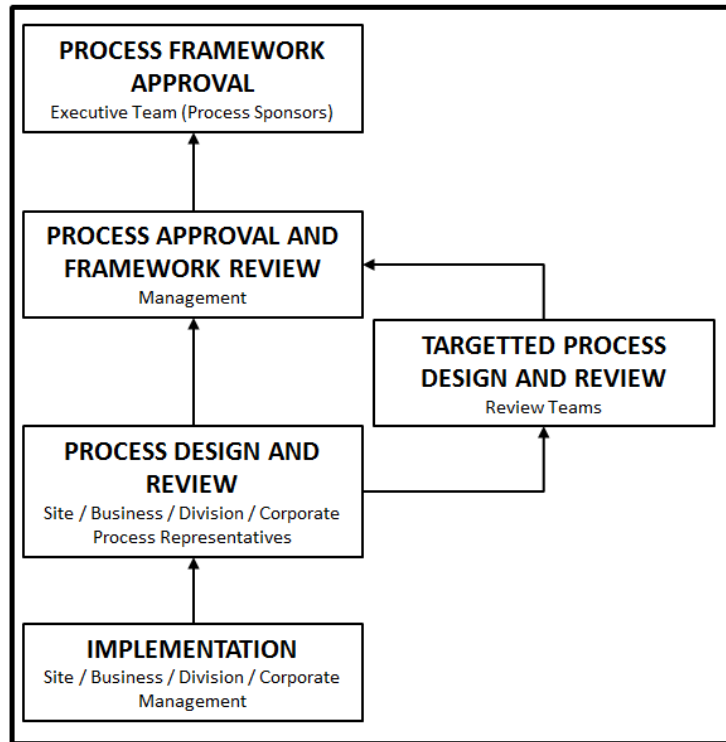
- process modelling methods;
- reference processes; and
- process management roles.

Process modelling methods define the structure and rules for uniform and consistent modelling and process documentation. The reference process describes the generic benchmarked standard for target processes. These benchmarked processes provide insight into how benchmark companies perform standard processes and as such provide an excellent guide in implementation of internal processes.

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

Figure 1. Process Relationships



The process management roles define the decision structure for the definition and implementation of standard processes.

The Bradken process framework are defined through three distinct process groupings as follows,

- **Supply** – Processes that define the future and external influences on the company including risks to the Company.
- **Sales** – Provide the processes to drive sales for Mineral Processing and Mobile Plant to consistently meet and surpass Bradken targets.
- **Manufacture** – Develop the processes to meet and exceed internal and external requirements.

The QM maps the totality of all current processes which are described as mandatory target processes and thus form the basis for the business specific processes. The processes are to be documented to the implementation level using a staged concept and observing applicable conventions.

7 Process Definitions

7.1 Customer Relationship Management

Customer relationship management is a customer driven business approach that focuses all business activities on achieving a lifelong win-win partnership with the customer. Customers are attracted, developed, retained and recovered in accordance with the customer lifecycle.

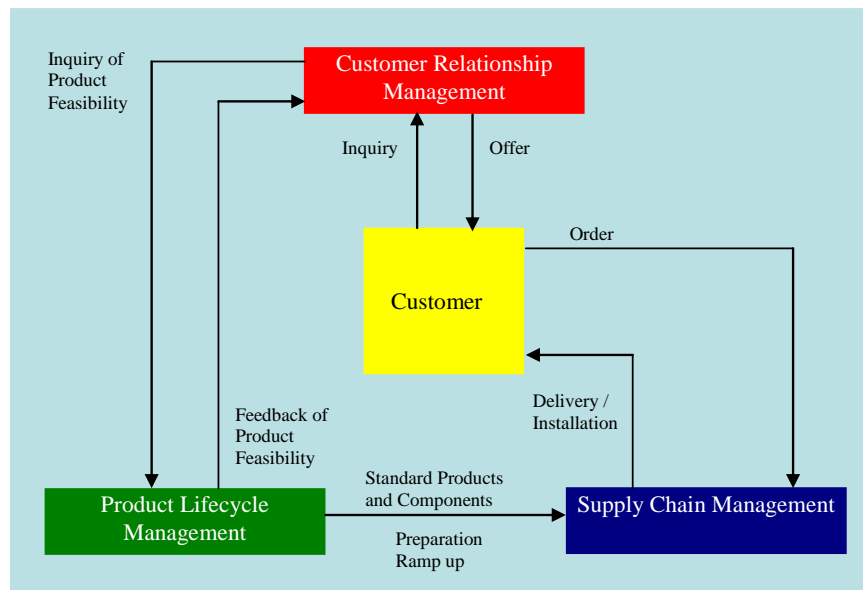
Key aspects of customer relations include understanding customer and market, selling the customer products, systems, projects, solutions and services and the provision of comprehensive customer care.

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

Figure 2. Interrelationship of Business Processes

Interrelationship of Business Processes



7.1.1 Supply Chain Management

Supply chain management is the customer orientated, value adding design, planning and controlling of the global supply chain network from the placement of the order to product delivery. It brings together responsibility for all of the material, information and value flows involved in customer order fulfillment. It aims to be holistic, process orientated, simple, transparent and time efficient.

The supply chain includes the source, make, deliver, inspect, approve and planning processes for products, systems, projects, solutions and services for the customer irrespective of whether the goods are manufactured in-house or outsourced, and includes materials.

The goal of supply chain management is short delivery lead times and high delivery capability, delivery reliability and delivery quality, and low supply chain costs i.e. process costs and inventory costs.

7.1.2 Product Lifecycle Management

The product lifecycle includes all of the processes in the products lifecycle from the initial idea, through to phase out. It includes overarching product portfolio management as well as define, realise, commercialise, and phase out processes for products, systems, projects, solutions and services.

Product lifecycle management includes the customer orientated planning, management, monitoring and controlling of the whole product lifecycle process. It also includes managing all of the information relevant to the product and process, and responsibility for the product over the entire lifecycle.

The goal of product lifecycle management is to increase product mix profitability throughout the product lifecycle by creating customer value added benefits and satisfaction.

The following systems have been implemented Company-wide to support the processes:

- Teamcenter PLM
- Customer Feedback Reporting (CFR) System
- Business Improvement Request (BIR) System
- Enterprise Risk Management (ERM) System
- Bradken Documented Information System (BDIS)

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

- SharePoint
- Salesforce system
- Myosh system
- Unibis system
- People Portal.

All business processes are customer oriented. Customer demand is fulfilled by specific end-to-end processes that depend on customer requirements. The processes employed to affect the delivery of customer value are dependent on the nature and type of the product or service offered.

7.1.3 Sales Processes

Sales processes are those which:

- develop customer relationships to drive sales of mineral processing, speciality products and mobile plant products;
- provide feedback to Bradken and customers to drive continuous improvement;
- set Key Performance Indicators ("KPI") and benchmark targets;
- focus on meeting the Company's strategic direction and expectations for measuring and reporting operational performance; and
- All customer management data is contained in Salesforce.

7.1.4 Manufacture Processes

Manufacture processes are defined as value adding procedures which;

- include all steps from specification to the finished product/service;
- all internal and external requirements comply;
- ensure an adequate return on investment for the company;
- focus on the benefits for customers; and
- utilising information and data analysis to drive improvements.

8 Related Documents

The overall Bradken QM satisfies the requirements of the international standards ISO9001, ISO/TS16949, AS9100, ISO14001, OHSAS18001 and ISO45001. The QM has been developed in accordance with the guidelines in standard ISO9004 and has been structured around the Company's business processes.

Individual operations within the Company may not address all the requirements of all the Standards, depending on the scope and nature of their business. However, collectively all requirements are addressed in the overall Process Management System.

8.1 List of Related Standards

ISO9001	Quality Management Systems – Requirements
ISO9004	Quality Management Systems – Guidelines for Performance Improvements
ISO14001	Environmental Management Systems – Requirements with Guidance for Use

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

ISO/TS16949	Quality Management Systems – Particular requirements for the application of ISO 9001:2008 for automotive production and relevant service part organisations
ISO 45001	Occupational health and safety management systems- Requirements with guidance for use
ISO 50001	Energy Management System
AS9100	Quality Management Systems - Requirements for Aviation, Space and Defense Organizations
ISO19011	Guidelines for Quality and/ or Environmental Management Systems Auditing
OHSAS18001	Occupational Health and Safety Management Systems
ISO 31000	Risk Management- Principles and Guidelines
AS3806	Compliance Programs
AS8000	Good Governance Principles
AS8100	Fraud and Corruption Control
AS8004	Whistleblower Protection Programs for Entities
HCM	HCM Group Quality Assurance Standard

8.2 Other Related Standards

Other documents used in the development of the integrated management system include:

HB90.3:	The construction industry guide to ISO9001
HB139:	Guidance on Integrating the Requirements of Quality, Environment and Health and Safety Management Systems Standards
HCM QA Standard	Hitachi Construction Machinery (HCM) QA Standard
D0065656	Getting Started (ISO 9001 guide)

9 Documented Information

In terms of the hierarchy of documentation and the components of the process, all QMS documentation shall be appropriately controlled in order to protect intellectual capital and Bradken operational success.

Documented information will follow the guidelines and relevant standards.

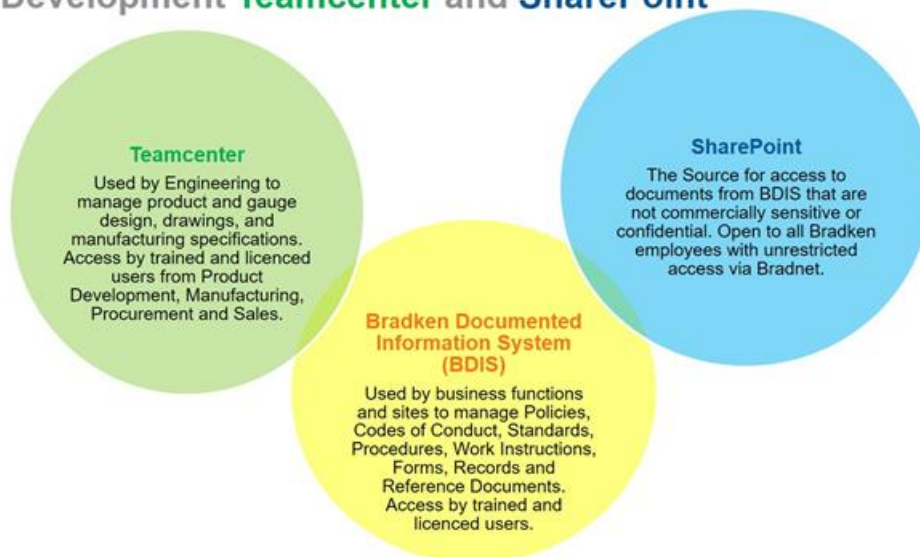
Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

9.1 Documented Information Intergration

Figure 3. BDIS and Teamcenter PLM

Documented Information Interactions with Product Development **Teamcenter** and **SharePoint**



10 References (including any internal and external documents)

The QM is one of a number of documents produced at Corporate, Divisional, Business, Site, Regional and Functional level which together provide the guidance for the Companies' operations.

The Company policies, standards and procedures include:

Table 1. References

BDIS Identification	Description
HCM QA Standard	HCM- Chapter 10 Group Quality Assurance Standard
HCM QA Standard	HCM- Chapter 11 Standard for Observing Quality Compliance
R00132 (D0072310)	Authority Matrix- Board Executive and Senior Managers
R03304 (D0076569)	Hitachi Code of Ethics and Compliance Conduct and Ethics
Bradken Human Resources Manual	Company personnel policy and procedures
UNIBIS Information Technology Platform	System used to control product manufacture and financial data
C00594 (D0046957)	Vendor Maintenance Manual
Chart of Accounts	Account codes, descriptions for budgeting purposes

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

General Contract Conditions Guidelines	Guidance on use and acceptability of contract conditions
Information Security Guidelines	Guidance on protection of proprietary information, security and backup, including virus protection for IT systems
C01784 (D0070953)	Emergency Planning
C00472 (D0050110)	Risk Management Guidelines Manual
Compliance Program Manual	Compliance Policies and Procedures
TBC	Bradken-Safety & Sustainability – Global – Standard Energy and Emissions
C01754 (D0071128)	Bradken Environmental Manual and Guide
Style guide	Use of Company logo, formats, styles, branding etc
Licences Manual	Company Land Titles and Licenses
Compliance Program Manual	Guide to Standards Compliance
C00024	Bradken IT Global Code of Practice
C00243 (D0070779)	Bradken Business Process
C00715 (D0071007)	Bradken Fabrication Process
C00714 (D0070787)	Bradken Casting Process
C05213 (D0071041)	Bradken Product Design and Development Process
C00004	Document Control within the Bradken Quality Management System
C00510 (D0052255)	Records Management
C00503 (D0048361)	Non-Conforming Products and Processes
C00480 (D0052315)	Continuous Improvement and Transformation (Corrective and Preventive Action)
C00497 (D0056427)	Auditing
C00090	External Customer Feedback Reporting (CFR) Management

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

11 Supplier Information

Bradken's sourcing team coordinates all procurement activities and is responsible for sourcing all spend categories for our Company, selecting suppliers and negotiating Sourcing Agreements.

Once a Sourcing Agreement is in place, Bradken's various businesses typically deal directly with the supplier. The sourcing team itself does not make any transactional purchases.

11.1 Our suppliers

Bradken strives to create partnerships with suppliers by developing mutually beneficial Sourcing Agreements. We offer our suppliers business opportunities with Bradken and expect them to ensure the best Total Cost of Ownership (TCO) for the products and services we purchase.

12 Responsibility, Authority and Accountability

12.1 General

To ensure that our products and services meet or exceed customer expectations, and that they are produced in a safe and environmentally friendly manner, it is important that each staff member understands his or her responsibilities, and has sufficient authority to carry out tasks for which they are accountable.

12.2 Bradken Board of Directors

The Board of Directors comprises the Chief Executive Officer and a prescribed number of representatives from Hitachi Construction Machinery Co. Ltd (HCM) who are responsible for ensuring the good corporate governance of the Company's business activities are implemented and maintained.

The signature authorities of the Board, as well as the Chief Executive Officer for signing of documents under seal and certain "formal" documents, are prescribed in the Company's Authority Limits guidelines.

12.3 Executive Leadership Team

This group comprises the Chief Executive Officer, Chief Operations Officer, Executive General Managers, General Managers – People & Culture and Safety and Sustainability, who have direct authority over setting the long term strategic direction and the daily business activities. The signature authorities for the Executive Leadership Team are given in the Company's Authority Limits guidelines.

12.4 Organisational Authority

The level of organisational authority for nominated employees is determined by the Authority Limits prescribed by the Corporate Function and roll down through the Divisions and Businesses, and is the responsibility of the Chief Financial Officer.

Where it is necessary, for specific projects, to define different signature authorities to those described in Corporate and Division authority limits, they are specified in the relevant project management plan once approved by the appropriate Commercial Manager or delegated authority.

If an authorised signatory is absent, the authority is automatically delegated upwards, unless specifically allocated in writing by the authorised signatory or higher level signatory.

12.5 Responsibility and Delegation Through Line Management

The Chief Executive Officer holds the overall responsibility for the business activities and success of the Company and thus also for the quality, safety and environmental impact of the goods and services produced by or on behalf of Bradken.

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

The responsibility for achievement of Company objectives and compliance with legislative requirements is delegated from the Chief Executive Officer through designated Executive Managers to the heads of department.

The management of each Business Unit, function or facility have the operational responsibility for product and service quality, profitability and for health, safety and environment protection within the operation of their Business Unit, function or facility.

Individual managers must ensure that their processes are planned, documented and implemented in accordance with the guidelines in this QM. They must also ensure that this approach is understood by, and adhered to by all levels of their business unit, function or facility.

It is the responsibility of Managers and Supervisors to define in a suitable manner, the responsibility and authority of all those persons in their charge who perform tasks which may have a direct or indirect impact on the quality of goods and services, the health or safety of themselves or others, and those which may affect the environment.

This shall include the responsibility and authority to:

- identify and prevent potential risks or nonconformities in products, services, systems, practices or processes;
- document existing or potential problems or risks with products, practices, processes or services and initiate, recommend or provide appropriate solutions;
- verify the effective implementation of solutions;
- control the use or further processing of nonconforming products or services until the nonconformity has been rectified;
- stop the continuation of practices or processes which may cause injury, endanger health and/or adversely impact on the environment; and
- take emergency action to treat injuries or control environment impact situations.

Managers and Supervisors shall ensure that persons allocated with the above responsibilities and authorities have the necessary level of competence, experience, formal qualifications and training to carry out these responsibilities.

12.6 Health, Safety and Environment

The responsibility for compliance with health, safety, and environment legislation is specifically applied to "the employer".

As the employer, Bradken delegates that responsibility (but not accountability) to each of the corporate, division, business, and site managers. In turn that delegation flows down the management line to the relevant supervisory staff. Each of these levels of management is responsible for ensuring compliance with all relevant legislation, regulations, codes of practice, and international standards as applicable.

The General Manager – Safety and Sustainability is responsible for the provision of support to all management levels for all health and safety matters. Businesses are also supported through a network of Safety Sustainability Business Partners.

12.7 Verification and Improvement

All personnel are actively encouraged to identify and record problems, and initiate, recommend or provide solutions through designated channels including the CFR, BIR, Myosh, SSO and BDIS

As with all other processes, it is assured that verification activities are defined, and trained personnel carry out these activities.

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

12.8 Corporate Process / Quality Management

The manager of each business unit, function or site is guided and assisted by the Global Quality Assurance Manager in fulfilling their responsibilities for quality assurance.

The Global Quality Assurance Manager reports to the CEO Bradken. The incumbent is the Bradken representative and member of the HCM Global Quality Assurance Leaders group and of the HCM Global Quality Assurance Committee and assumes the duties and responsibilities associated with being a Global QA Leader in HCM.

This position leads the Global Quality Assurance team and is responsible for the design, development, implementation and execution of the Quality Management System (QMS), certifications, standards and procedures across the global organisation and manufacturing outsourcing locations. It is focused on product quality assurance standards, HCM QA compliance, continuous improvement and customer satisfaction in line with the strategic priorities and commercial growth objectives.

This role also holds the responsibility for the company wide Risk Management framework, procedures and processes, the Bradken global Customer Feedback Reporting (CFR) processes and the company wide management and execution of warranty cost management and reporting to HCM the company.

Within the This position manages the Bradken Risk Management framework, procedures and the corporate risk register. This includes the management of an effective overview of risk mitigation plans within the Risk Registers and provide the Bradken Board and Bradken Risk Committee with regular governance reports and updates. Duties include monitoring the corporate Risk Register for actions due and formal six monthly ELT RM workshops.

This position will have scope to shape and grow the Global QA team to ensure effective and efficient resourcing to the QA activities, initiatives and projects include the activities involving Non-Destructive Testing (NDT). This position has the authority to manage the QA functions and produce the outputs required under the operational plan in accordance with its allocated budget, resources and delegations.

This role will provide council, guidance and direction to all manufacturing sites QC functions to ensure applicable standards, skills, methods and compliance measures are being utilised in the execution of all Quality and Non-destructive testing activities in Bradken globally.

The incumbent will coordinate the global ISO9001, ISO14001, ISO45001 certification schedule and compliance activities while monitoring non-conformance report actions are addressed in a timely and appropriate manner. This position also holds accountability for the scheduling, execution and management of the Bradken internal auditing program that must be undertaken by all functions and sites.

12.9 Global Quality Assurance Representatives

The Quality Assurance Representatives contribute to the development and approval of all product specific Quality Assurance specifications, attributes, processes and test/inspection methods including those involving any non-destructive (NDT), globally.

Responsibilities of the Global Quality Assurance Manager and through the global Quality Assurance Representatives, include:

- In conjunction with the Global Quality Assurance Manager, Global QA Auditors, Product Sourcing, Product Development, Manufacturing and manufacturing facilities, develop and issue product quality specifications that ensure effective product quality that match both Bradken and customers' expectations.

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

- Contribute to the development of the company's Global Quality Management System (QMS) based on Quality Assurance best practices, NDT Methods and standards, related metrics and processes for product design and manufacture.
- Approve QC and NDT applications, methods and specifications for products and processes.
- Monitor QA performance matrix data and trends for product effectiveness and efficiency improvement.
- Support the global outsourcing, QA and QA development, Documentation Control functions.
- Be the subject matter expert or prime point of contact for the escalation of product QA /NDT issues, track and facilitate Customer Feedback Reporting (CFR) activity, major problem-solving activities, report on non-conformances, and provide recommendations for strategic improvement plans, operating and work methods improvement that directly impact Product Quality.
- Provide leadership and structure to the site QA teams to accomplish product quality objectives and to ensure specifications match the sites capability in compliance to applicable laws / regulations, company policies and procedures.
- Participate in the Bradken QA Steering Committee that will help drive quality assurance improvement initiatives, engage internal teams in quality programs and assist with product improvement.
- Maintain QA product documentation accuracy.
- Drive activities and accountabilities that ensures product compliance to specification from all sites.
- Review and manage performance at each site, against the Global QA KPI's relating to product quality testing and results.
- Be the subject matter expert or prime point of contact for the escalation of product QA /NDT issues, allocate, track and facilitate Customer Feedback Reporting (CFR) activity, report on any inventory or WIP consequences from CFRs, major problem-solving activities, report on non-conformances, and provide recommendations for strategic improvement plans, operating and work methods improvement that directly impact Product Quality.
- Provide guidance to the site QA teams to accomplish product quality objectives and to ensure specifications match the sites capability in compliance to applicable laws / regulations, company policies and procedures.
- Conduct QMS audits and QA/QC (NDT) specific auditing for compliance with coaching as required.
- Champion the Quality Assurance culture and support QA capabilities through targeted training, coaching and mentoring of lean manufacturing principles, quality assurance standards, methods, behaviours and tools.

12.10 Quality Functional or Site Representatives

The role of these Quality Representative is to assist the leadership of each business unit, function or site in maintaining effective processes so that they retain compliance to the Bradken QM.

The Quality Representatives have the authority to stop the use of goods or services for which the required assurance activities have not been carried out, or which are identified as not conforming to specification.

The responsibility, however, lies with the business unit, function or site management, who should themselves stop such use of goods and services, such that the Quality Representative need not use this authority.

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

Responsibilities of the Quality Representatives include:

- gaining up-to-date knowledge in the techniques of process management;
- acting as the business consultant on process matters to assist the business in fulfilling their functions;
- coordinating quality process documentation;
- coordinating business process improvement plans;
- coordinating quality training for all staff;
- coordinating internal and external quality process system audits; and
- promoting the QMS documentation system as widely as possible, and act as the business interface on quality matters.

12.11 Safety and Sustainability Business Partners

The role of the Safety and Sustainability Business Partners is to assist the head of each business unit to maintain effective processes in line with the Bradken's Process Framework.

Alongside other workers, Safety and Sustainability Business Partners have the authority to stop any process or work activity they believe may be detrimental to safety of personnel, may cause damage the environment, or may cause damage to plant or equipment.

However, the ultimate responsibility lays with management, who should themselves stop activities, such that the Safety and Sustainability Business Partners need not use this authority.

Responsibilities of the Safety and Sustainability Business Partners include:

- Acquiring and maintaining relevant knowledge in the techniques of hazard identification, risk assessment, risk mitigation and control, and process management to ensure Bradken's operations are safe;
- Acting as the business consultant on safety and environmental matters to assist the division and business groups in fulfilling their duties;
- Applying the Bradken-wide safety and environmental processes and coordination of division and business specific documentation;
- Coordination of business process improvement plans;
- Cooperation with the General Manager – Human Resources, OHS and Systems and Environmental Manager in ensuring a consistent, company-wide, integrated management system direction;
- Coordinating safety and environmental process training for all staff;
- Coordination of internal and external process system audits as required; and
- Ensuring that they are up to date with legislative changes in order to maintain legal compliance.

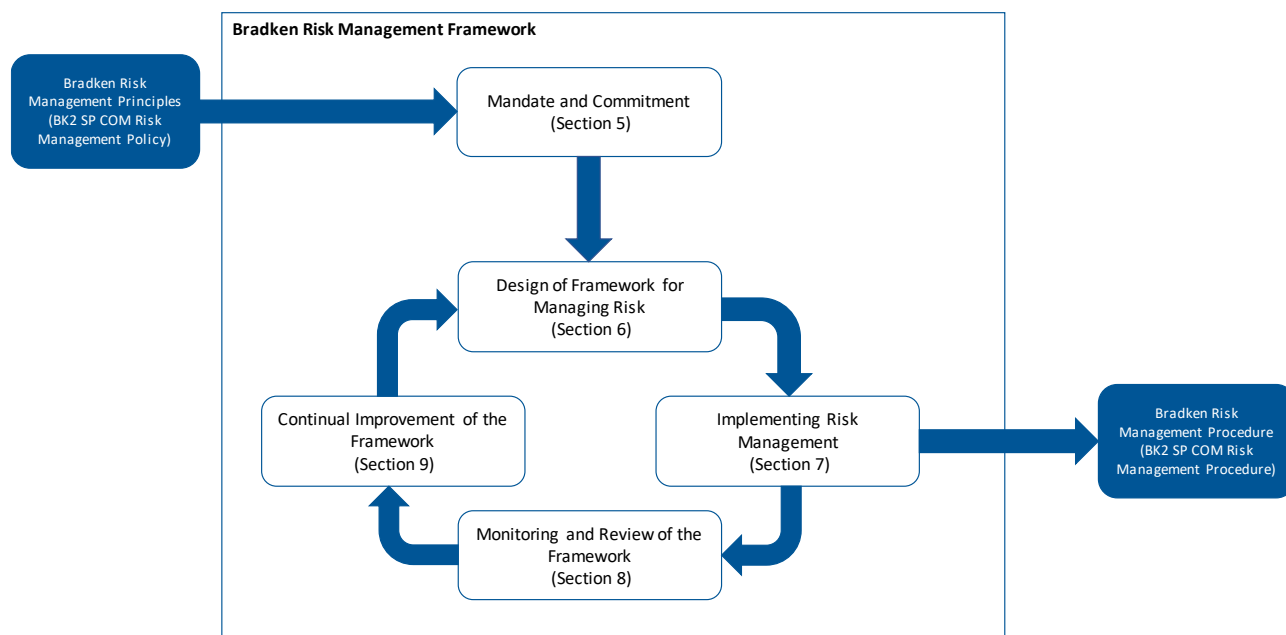
13 Risk Management

Bradken manufactures and supplies a range of cast and fabricated items that support mining and other industries. The process of manufacture and fabrication has the potential to impact employees, the community and the environment. If our products do not perform as designed, there is also potential for impact to our customers and their employees. In addition, the internal and external environment in which Bradken operates is subject to constant change that can impact profitability and other aspects of business performance.

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

Figure 4. Risk Management Framework

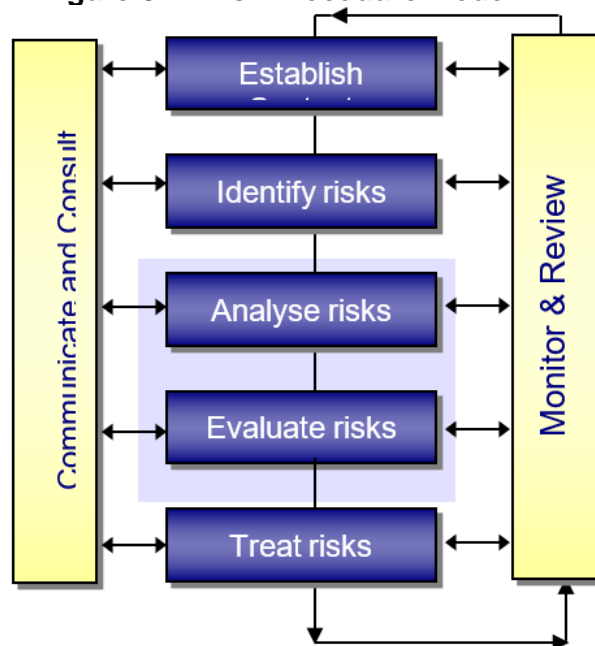


13.1 Risk Based Thinking

Risk based thinking while taking and managing risk, is a fundamental part of being in business and growing shareholder value. Consequently, Bradken is responsible for and committed to the effective management of Risk.

Bradken's approach is to effectively and efficiently manage Risk by identifying, analysing, evaluating, treating, controlling, monitoring, reviewing and communicating Risks that can materially affect its business. This approach will also ensure that Risk is appropriately balanced against rewards.

Figure 5. Risk Procedure Model



By implementing this approach, Bradken:

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

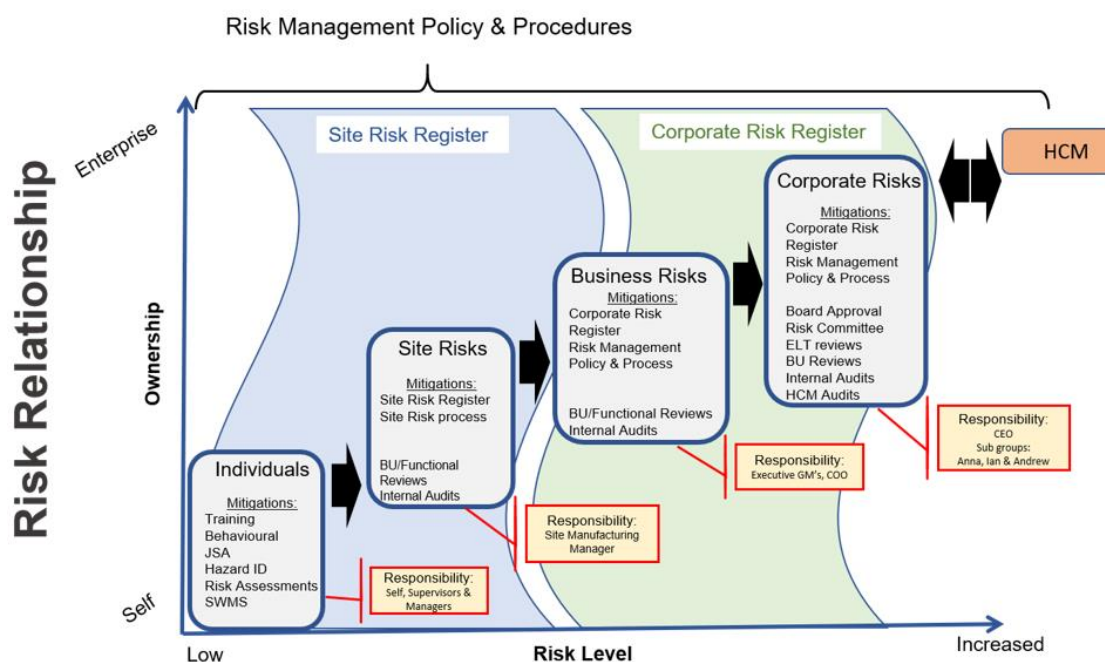
- Provides a safe and healthy working environment;
- Maintains the highest level of integrity for the products and services it provides;
- Safeguards its reputation and assets;
- Creates an environment where all employees assume responsibility for identifying and managing the potential impacts of risk;
- Preserves and improves its ability to meet its short and long term profitability targets, funding requirements and operational capacity; and
- Can withstand Material Risk events.

14 Risk Management Principles

For Risk Management to be effective Bradken will at all levels comply with the following principles:

- Risk Management creates and protects value;
- Risk Management is an integral part of all organisational processes;
- Risk Management is part of decision making;
- Risk Management explicitly addresses uncertainty;
- Risk Management is systematic, structured and timely;
- Risk Management is based on the best available information;
- Risk Management is tailored;
- Risk Management takes human and cultural factors into account;
- Risk Management is transparent and inclusive;
- Risk Management is dynamic, iterative and responsive to change; and
- Risk Management facilitates continual improvement of the organisation.

Figure 6. Risk Relationships



15 Interested Parties

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

Bradkens' Interested Parties include stakeholders and any person or organisation that can affect or be affected by, any decision or output from Bradken. The table of Interested Parties includes those that provide significant risk to Bradkens success if their expectations are not met. The breadth of Customers' expectations has been determined to include:

- Actual Customers – quality, price, delivery, safety, product characteristics, prototyping, conformity, dependability, availability, environmental impact etc;
- Bradken's owners – profitability, delivery.
- Employees – safe work environment, recognition and reward.
- Suppliers – mutual benefits and continuity.
- Society – environmental responsibility, compliance with statutory and regulatory requirements.

Interested Parties	Requirements of the Parties	Monitor & Measure Information	Process Map
Customers (External)	Provide products and services that are innovative, effective and value adding. They are predictive in quality; delivery and we are proactive in providing support and future proofing their business.	Customer feedback. Market Share. % market growth by customer. Sales \$. Warranty Costs. Surveys. Risk Register.	C00243 (D0070779) Bradken Business Process C00714 (D0070787) Bradken Casting Process C05213 (D0064092) Bradken Product Design and Development Process C00715 (D0071007) Bradken Fabrication Process
Suppliers	Provide Bradken with products and services that are innovative, effective and value adding. They see us as a business partner. They are predictive in quality; delivery and we are both providing support and future proofing our businesses.	Contract reviews. Supplier Scorecards. BIR system. CFR system feedback. Product costs verses externally supplied costs. Risk Register.	C00243 (D0070779) Bradken Business Process C00714 (D0070787) Bradken Casting Process C05213 (D0064092) Bradken Product Design and Development Process C00715 (D0071007) Bradken Fabrication Process
Hitachi Construction Machinery	Bradken will be compliant in all requirements. Hitachi will provide Bradken with the strategic direction.	Yearly Hitachi Audit SAI Global Audits ISO 9001 Myosh BIR system. CFR system. Board Meetings and committee reports Risk Register.	Not mentioned directly but as a supplier or customer is.
Contractors	Provide Bradken with products and services that meet the requirements for quality, safety, cost and delivery. Bradken to supply a safe work environment, detailed job requirements and prompt payment for services.	Contract reviews Supplier Scorecards. BIR system. CFR system. Cost. Safety. Risk Register.	Bradken Business Process C00715 (D0071007) Bradken Fabrication Process C00714 (D0070787) Bradken Casting Process C05213 (D0064092) Bradken Product Design and Development Process
Employees	Bradken will provide an environment that allows employees to meet their potential and drive self-improvement in their personal and professional lives.	P&C department. Wages, Training & Qualifications Risk Register. Myosh Safety. People Portal. Communication.	C005213 (D0064092) Bradken Product Design and Development Process C00715 (D0071007) Bradken Fabrication Process

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

	They make Bradken success possible in all aspects. This will be accomplished by work/life balance, health & safety systems, training and prompt payment of wages. Employees will conduct their roles safely, environmentally friendly, utilise their skills and knowledge to produce quality work.		C00243 (D0070779) Bradken Business Process C00714 (D0070787) Bradken Casting Process
Statutory & Regulatory Authorities	Bradken will meet all Local, State and International & Local Government requirements including- Health & safety Environmental Laws Taxes Transport Permits / Licenses	Contract T&C. Myosh. CFR & BIR system Risk registers. Site Registers.	C05213 (D0064092) Bradken Product Design and Development Process C00715 (D0071007) Bradken Fabrication Process C00243 (D0070779) Bradken Business Process C00714 (D0070787) Bradken Casting Process
Competitors	We will be ethical in our dealings and comply with our Code of Conduct	Whistle-blower policy Code of Conduct	Code of Conduct
Communities & Neighbours		Local committees, employee feedback,	

16 Document Information (DI) System Management

16.1 BDIS Document Management System

The BDIS establishes a uniform recording process for all critical and confidential Company process and business documentation.

Where such documentation needs to be displayed in other forms e.g. several intranet sites, the BDIS document shall be used as the reference document ensuring a single source for all documentation.

The Bradnet intranet site shall be maintained in accordance with the requirements of this document and support the understanding and implementation of the QM. The processes shall be displayed as per the process and build on the hierarchy of documentation and therefore show how company policy is rendered a reality at the division or business field level.

Access to the documentation shall be controlled based on a needs-to-know basis. This is managed within the BDIS through designated access and password controls. Only trained individuals are permitted to have change rights to the system process documentation.

The Chief Information Officer or his delegated representative has the responsibility for ensuring the development and integrity of the computer system and the protection of company process data through routine backups.

The BDIS Document Hierarchy Pyramid table in figure 8 provides give an overview of Bradken's documentation requirements.

Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcow ley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

Figure 7. BDIS comparison with Product Development Teamcentre PLM

BDIS



Interface with Teamcenter and SharePoint

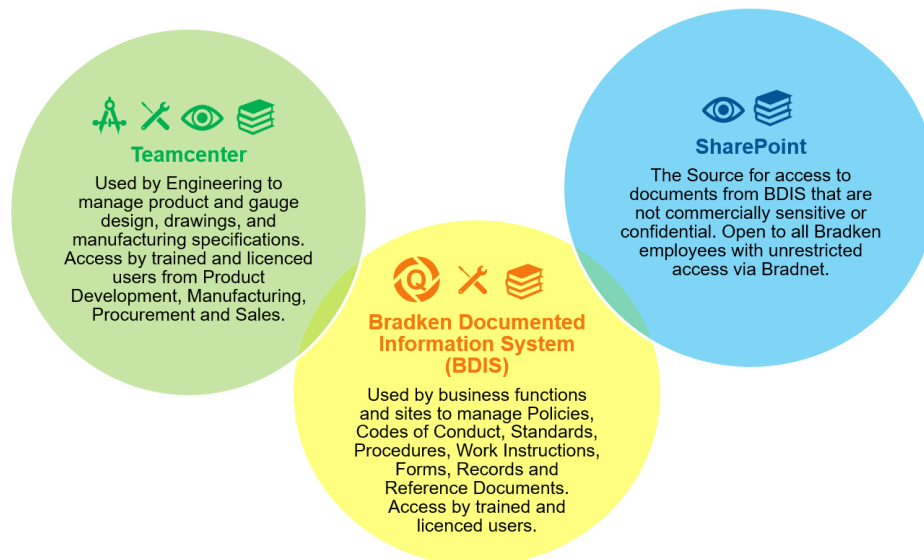
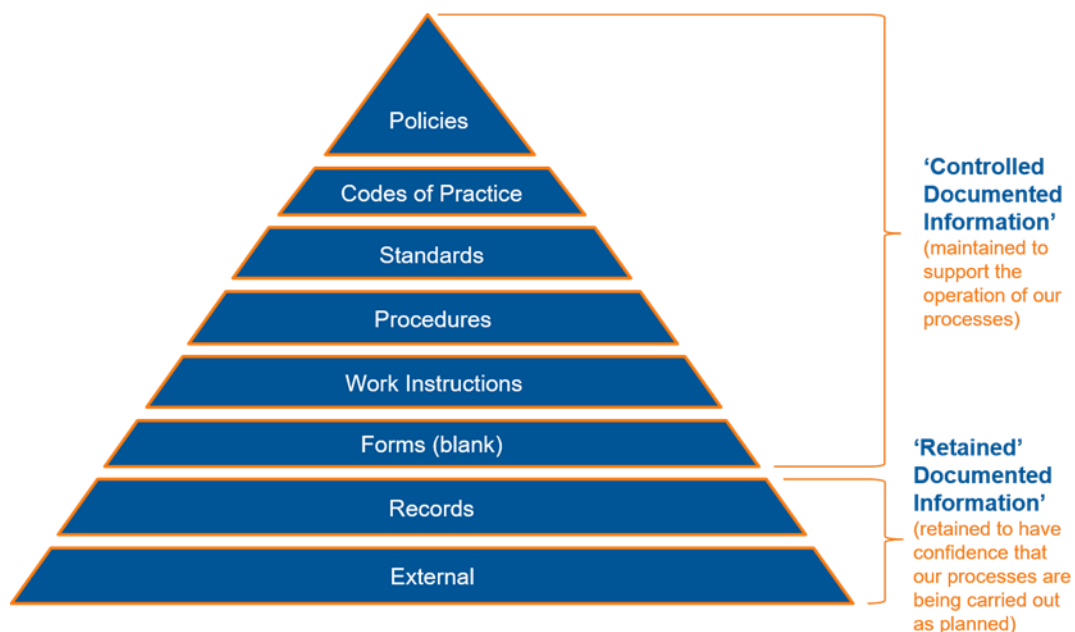


Figure 8. BDIS Document Hierarchy Pyramid



Owning Organisation: Bradken	Process: Quality	Region: Global	Document Type: Standard
Document Title: Bradken Quality Manual			
BKN Doc & Revision: C00476/3	Date: 15-Dec-21	Revision By: mcowley	Approved By:

Uncontrolled Copy if it has been printed or downloaded outside a validated copy control register

16.2 Bradken Improvement Reporting (BIR) System

The BIR System establishes a uniform approach for initiating, investigating, monitoring, measuring, resolving and analysing all types of internal Company issues identified by Bradken employees and to ensure timely resolution and feedback to the initiator.

The BIR System is a purpose-built online record management system developed to capture and administer corrective and preventive actions from a variety of sources including:

- Non-conformances (both internal & supplier).
- Concession requests.
- Process or documentation issues.
- Poorly performing or defective products identified internally.
- Improvement Opportunities for Safety, Quality or Environment.
- First article/trial reporting.
- Audit action items.

16.3 Customer Feedback Reporting (CFR) System

The CFR System establishes a uniform approach for initiating, investigating, monitoring, measuring and resolving Customer Feedback Reports received by Bradken representatives.

The CFR System is a purpose-built online record management system developed to capture and administer external issues related to goods and services that have been, or are in the process of being supplied to a customer including:

- Goods received that do not meet agreed standards and/or specifications.
- Sale of products having prematurely failed in service, found to be defective or claimed not to have achieved the agreed or expected service life.
- Non-conformances of a commercial nature, including incorrect invoicing details, late or inaccurate deliveries, incorrect part counts, etc.
- General feedback, both positive and negative, relating to products and services provided by Bradken.

17 Revision Summary

Table 2. Revision Summary

Revision	Date Released	Clause/Section Revised	List of Changes	Revision By:	Approved By:
1.18	27-May-20	Original Release			
2	25-May-21	Full Document	Full document review and revised.	mcowley	mcowley
3	15-Dec-21	Facilities listed on page 5	Added Coimbatore.	mcowley	mcowley