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Guidelines for interpretation of ISO 9000 series for application within the iron ore industry

*Lignes directrices pour l'interprétation de la série ISO 9000 dans son
application à l'industrie des minerais de fer*

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International Organization for Standardization
Case postale 56 • CH-1211 Genève 20 • Switzerland
Internet central@iso.ch
X.400 c=ch; a=400net; p=iso; o=isocs; s=central
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardisation.

The main task of technical committees is to prepare International Standards, but in exceptional circumstances a technical committee may propose the publication of a Technical Report of one of the following types:

- type 1, when the required support cannot be obtained for the publication of an International Standard, despite repeated efforts;
- type 2, when the subject is still under technical development or where for any other reason there is the future but not immediate possibility of an agreement on an International Standard;
- type 3, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example).

Technical Reports of types 1 and 2 are subject to review within three years of publication, to decide whether they can be transformed into International Standards. Technical Reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

ISO/TR 13352, which is a Technical Report of type 3, was prepared by Technical Committee ISO/TC 102, *Iron ores*.

Introduction

There is a keen interest both in iron ore producers and their customers for the adoption of quality management and assurance systems on the basis of the ISO 9000 series. In considering the relative advantage of third party audit based on the ISO 9000 series against internal quality audit however there is some concern regarding the lack of consistency amongst quality auditors in third party and the emphasis of formal certification on "the systems" rather than method and performance in third party audit. In consequence it was strongly felt that these difficulties can best be addressed by preparing guidelines for application of the ISO 9000 series that are tailored specifically to the iron ore industry. This Technical Report has been thus prepared.

The principle of the ISO 9000 series is to make a product or process **"RIGHT THE FIRST TIME"**. The standard's whole purpose is to help organizations achieve this objective and to reduce nonconformities in the quality of products to the minimum. The result is increased customer satisfaction, but most organizations also reduce operating costs and create a better working environment.

To achieve this objective ISO has provided a quality system checklist in the form of the ISO 9000 standards. A quality system therefore should be as comprehensive as needed to meet the following quality objectives:

- to achieve and sustain product or service quality necessary to continually meet the customer's stated or implied needs;
- to provide confidence to management that the intended quality is being achieved and sustained, and
- to provide confidence to the customer that the intended quality is being achieved in the delivered product.

This means that the product provided to customers should have a level of quality appropriate to its purpose. ISO 9000 registration, when achieved, is of the supplier's quality system and does not in any way imply certification of the product. Registration demonstrates that the supplier has implemented a quality system for the products or services provided and that the systems are in place to produce the customer's specified product requirements.

- As you work on your documentation, a tiered approach is suggested. At the corporate level have a manual that makes statements of general intent for your quality system. The details of how the intent is implemented are dealt with at the divisional and departmental level.

- Don't try to write procedures that cover every possible eventuality. This is an impossible task. Rather write them as general guidelines and defer decisions to the judgment of a responsible person.
- Ensure that you are following your own procedures. If you are not following your procedures then question the validity of the procedure or task before you try to enforce it.
- As you develop the quality system, try to build on your existing quality procedures. They may need further development or modification but do not duplicate what exists (and has been effective) by overlaying a whole new layer of bureaucracy and paperwork.
- Keep the system as simple as possible and don't do anything that does not have business value. If an ISO 9000 requirement does not have business value you have probably misinterpreted the requirement. The whole objective of the ISO 9000 series is to make the business process more effective, not more cumbersome and rigid

The benefit of ISO 9000 registration is in the process that you go through to achieve this. The benefit is in the detailed thought and analysis that takes place as a result of having to describe and document what you should be doing to run your business. Preparing the documentation makes each person involved in the process think out and appreciate the sequence of events step by step.

Guidelines for interpretation of ISO 9000 series for application within the iron ore industry

1 Scope

This Technical Report gives guidelines for the interpretation of the ISO 9000 series for application within the iron ore industry, including the mining, concentrating, pelletizing and shipping processes.

This Technical Report will serve as a guide to help iron ore producers develop a quality system that can be registered to the ISO 9000 series of quality management standards. The quality system elements have been directly matched to ISO 9001 that includes all quality system elements of ISO 9001, ISO 9002 and ISO 9003. It is assumed that ISO 9001 is appropriate to the iron ore industry only when a strong design element for new product development exists.

2 References

The following standards relate to this Technical Report:

- | | |
|----------------|--|
| ISO 8402:1994, | Quality management and quality assurance — Vocabulary. |
| ISO 9000:1994, | Quality management and quality assurance standards — Guidelines for selection and use. |
| ISO 9001:1994, | Quality systems — Model for quality assurance in design development, production, installation and servicing. |
| ISO 9002:1994, | Quality systems — Model for quality assurance in production, installation and servicing. |
| ISO 9003:1994, | Quality systems — Model for quality assurance in final inspection and test. |

ISO 9004:1994, Quality management and quality system element guidelines.

ISO 10011-1:1994, Guidelines for auditing quality systems — Part 1: Auditing.

3 Terms and definitions

3.1 Throughout this Technical Report, the definitions given in ISO 8402 are applicable.

3.2 In the following clause, "**INTENT**" is the interpretation of the purpose of the respective clause, and "**GUIDELINES**" provides guidance or information for instruction for application by iron ore producers and "the standard" is that particular ISO 9000 standard that is applicable.

4 Guidelines for quality system requirements

In the following, sub--clause numbers for respective quality system requirements are the same as those in ISO 9001.

4.1 Management responsibility: In general terms, management's responsibility is to; create the quality policy, develop and staff the quality organization, provide verification resources, appoint a management representative and conduct management review of the quality system. Looking at each of these in turn:

4.1.1 Quality policy

INTENT This should be a clear demonstration of top management's commitment to the stated objectives and procedure that form the quality system.

GUIDELINES The quality policy should contain a commitment statement from top management, but it should also contain a series of objectives to support the policy. The objectives should be specific and measurable to ensure the effectiveness of the program. Management review should be able to assess progress against the policy objectives. The policy should be understood, it should be implemented and maintained at all levels within the company.

In reviewing your quality objectives address the question "What objectives would our customers like to see us achieve?"

You may wish to add quality objectives to your policy that are not specifically required by the standard but be careful of doing so. Whether or not elements are required by the standard if you include them in your quality system you may be audited to them.