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How to Make ISO 55000 and ISO 55001 Successful

Let a Plant Wellness Way EAM System-of-Reliability End Your Business Risks Forever

Abstract:

How to make ISO 55000 and ISO 55000 Successful: ISO 55000 and ISO 55001 are frameworks into which you must add the correct policies, procedures, knowledge, and actions that deliver world class physical asset management. They cannot of themselves cause asset management, maintenance and operational excellence. Users of ISO 55000 and ISO 55001 must turn the framework into a full set of the correct and proper processes and practices used business-wide and life-cycle-long in your company to cause it to operate at world class performance.

What is missing in ISO 55001 you do with the Plant Wellness Way enterprise asset management methodology. There is but one rule to follow in the PWW EAM methodology to get the best asset management and operational excellence solution: **Produce the least atomic stress state in component materials-of-construction all the time**. Select strategies, procedures and practices that cause that result and you have the best asset management solution to feed into an ISO 55001 framework. Plant Wellness Way EAM perfectly complements ISO 55000 and ISO 55001 so that when used together you build a life cycle EAM system with the processes and practices that ensure outstanding equipment reliability and great enterprise asset management success.

All industrial operations are looking for the fast road to world class enterprise asset management. The ISO 55000 asset management suite of documents was released to guide organisations in the supposedly correct ways to do physical asset management. The ISO 55000 set of documents is a concept with universal appeal to industry world-wide. Certification to the ISO 55001 asse management standard is a common management aim. The hope is ISO55001 will bring great asset management success—but it is impossible, as the standards have no internal mechanism to make plant and equipment reliable.

The standards make you strategize, plan, create documents and manage information; they do not contain the right knowledge, skills and solutions for world class asset reliability and plant availability. To get outstanding enterprise asset management success with ISO 55001 you must also use a world class reliability solution generator to feed correct answers into your EAM system.

Subclauses (e), (f), (g) and (h) below, from Clause 4.3.1 of ISO 55000, are an example. Taken together they get you to identify company asset importance, to review current performance and to improve it as necessary. But exactly what must you do to improve your assets' reliability? The clauses are full of good intent, but there is no advice on the right answers that give you world class asset management performance. On the most important decisions of all ISO 55000 cannot help you.

4.3.1 Asset management strategy

The organization shall establish, document, implement and maintain a long-term asset management strategy which shall be authorized by top management.
NOTE *The time horizon for a long-term asset management strategy would normally be aligned with that of the organizational strategic plan.*

The strategy shall:

a) be derived from, and be consistent with, the asset management policy and the organizational strategic plan;

b) be consistent with other organizational policies and strategies;

c) identify and consider the requirements of relevant stakeholders;

d) consider the life cycle management requirements of the assets;

e) take account of asset-related risks (see **4.4.7**), asset and asset system criticalities;

f) identify the function(s), performance and condition of existing asset systems and critical assets;

g) state the desired future function(s), performance and condition of existing and new asset systems and critical assets, on timescales aligned to those of the organizational strategic plan;

h) clearly state the approach and principal methods by which assets and asset systems will be managed;

NOTE *This may include, for example, the criteria to be adopted for determining asset criticality and value, the life cycle and sustainability basis for asset management planning, the approach to asset risk and reliability management and the methods of optimization and decision-making.*

i) provide sufficient information, direction and guidance to enable specific asset management objectives and asset management plan(s) to be produced;

j) include criteria for optimizing and prioritizing asset management objectives and plans;

k) be communicated to all relevant stakeholders, including contracted service providers, where there is a requirement that these persons are made aware of their asset management strategy-related obligations;

l) be reviewed periodically to ensure that it remains effective and consistent with the asset management policy and organizational strategic plan and with other organizational policies and strategies.

The partial extract below of Clause 4.4.7 from the draft ISO 55001 requirements is commendable. It tasks you to identify asset life cycle risk and develop mitigations. What makes it commendable is that it is a holistic perspective. But will satisfying clause 4.4.7 create world class asset management success? You cannot know—ISO 55001 does not measure the adequacy and correctness of your decisions. When you need to make key life cycle business choices the ISO 55000 Asset Management Standard talks only of risk management and says nothing of how to create and keep the world class asset reliability needed to stop business and operational risk.

4.4.7 Risk management

4.4.7.1 Risk management process(es)

The organization shall establish, implement and maintain documented process(es) and/or procedure(s) for the ongoing identification and assessment of asset related and asset management-related risks, and the identification and implementation of necessary control measures throughout the life cycles of the assets.

4.4.7.2 Risk management methodology

The organization's methodology for risk management shall:

a) be proportionate to the level of risk under consideration;

b) be defined with respect to its scope, nature and timing to ensure it is proactive rather than reactive;

c) include, where appropriate, the assessment of how risks change or can change over time and usage;

d) provide for the classification of risks and identification of those risks that are to be avoided, eliminated or controlled by asset management objectives and plans (see 4.3.2 and 4.3.3);

e) be consistent with the organization's operating experience and the capabilities of risk control measures employed;

f) provide for the monitoring of required actions to ensure both the effectiveness and the timeliness of their implementation (see 4.6.1).

4.4.7.3 Risk identification and assessment

The identification and assessment of risks shall consider the probability of credible events and their consequences, and shall as a minimum cover:

a) physical failure risks, such as functional failure, incidental damage, malicious damage or terrorist action;

b) operational risks, including the control of the asset, human factors and all other activities which affect its performance, condition or safety;

c) natural environmental events (storm, floods, etc., including the likely effects of climate change);

d) factors outside of the organization's control, such as failures in externally supplied materials and services;

e) stakeholder risks, such as failure to meet regulatory performance requirements or risks to the reputation of the organization;

f) risks associated with the different life cycle phases of assets (see 4.5).

Give ISO 55000 or ISO 55001 to a thousand different people and you will get a thousand different answers. There would be massive variation within proposals and between proposals. ISO 55001 cannot tell you when you have made an ideal asset management choice. Some will be lucky and hit world class performance, but most would deliver the same average performance that they now get without ISO 55000, and the rest would still be in reactive mode. One sure outcome will be that the average and worst asset management performers can proudly show you their beautiful set of documents generated by using ISO 55001.

Add a World Class Reliability Solution Generator to ISO 55001 or ISO 55000

To get Operational Excellence productivity and profits your business must first be capable to deliver Operational Excellence results. With the right business system design you get Operational Excellence success. Without the right design world class production performance is impossible—no matter how hard you try. That is why so few companies have Operational Excellence productivity—only those with a business-wide, life-cycle system for reliability succeed. To create and keep Operational Excellence performance your company needs to be a business-wide, life-cycle long, system-of-reliability. Use the right solutions, tools and methods and your operation delivers world class production performance.

ISO 55001, ISO 55000 and all other such standards are useful to focus on what is important to do. But the standards cannot tell you what the best thing to do is. To find the best answer you need to supplement the standards with a methodology that inherently generates the right, best solution including indication of its associated costs and benefits. One methodology that does that is Plant and Equipment Wellness. The Plant Wellness Way (PWW) has a measure for gauging asset management and operational excellence success – "Does it produce the least atomic stress state in the materials of construction all the time?" Select the strategies, procedures and practices that produce that result and you have the best proactive asset management solution to feed into a ISO 55000 framework.

A PWW EAM system-of-reliability powers all enterprise asset management and quality system frameworks. If you use ISO 55001 Asset Management, ISO 20815 Production assurance and reliability management, an ISO 9001 quality system, or any other quality management framework, the PWW EAM works with all of them. It becomes the powerhouse that drives the system-of-reliability improvements you need to reach world class Operational Excellence performance.

Figure 1 summarises the Plant and Equipment Wellness Way philosophy.

Figure 2 summarises the methodology followed in using the Plant Wellness Way.

Figure 3 shows how Plant Wellness Way methodology and ISO 55000 or ISO 55001 work together.

Figure 4 details how to get the best asset management solutions with the Plant Wellness Way.

Figure 5 highlights the outcomes of combining Plant Wellness Way with ISO 55001.

Plant Wellness Way: A Business Wide, Life Cycle System of Asset, Operations and Maintenance Management

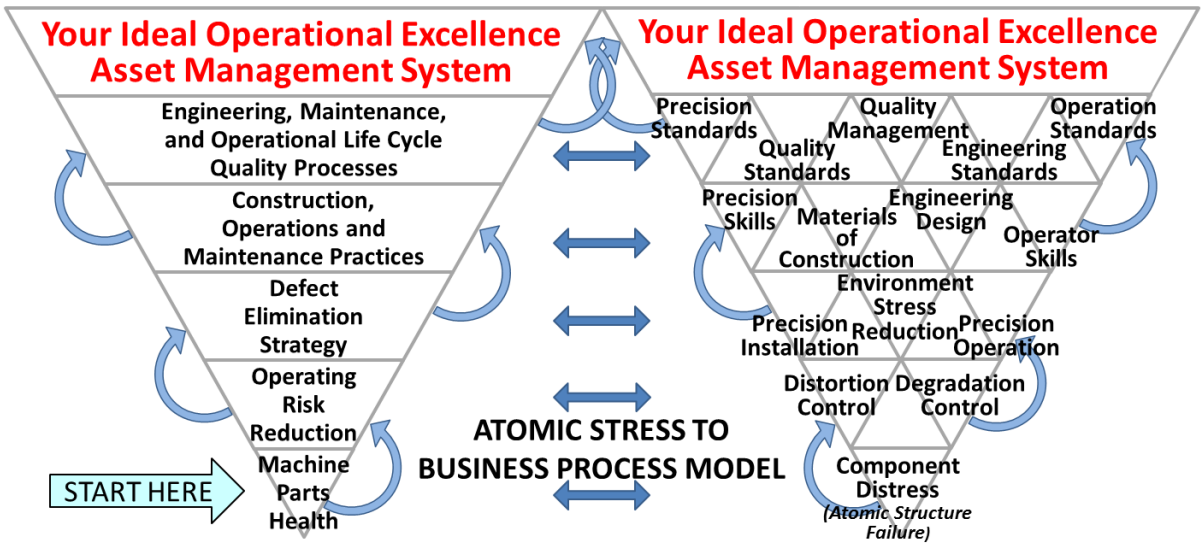

Figure 1 Plant Wellness Way Philosophy

To Operational Excellence the Plant and Equipment Wellness Way

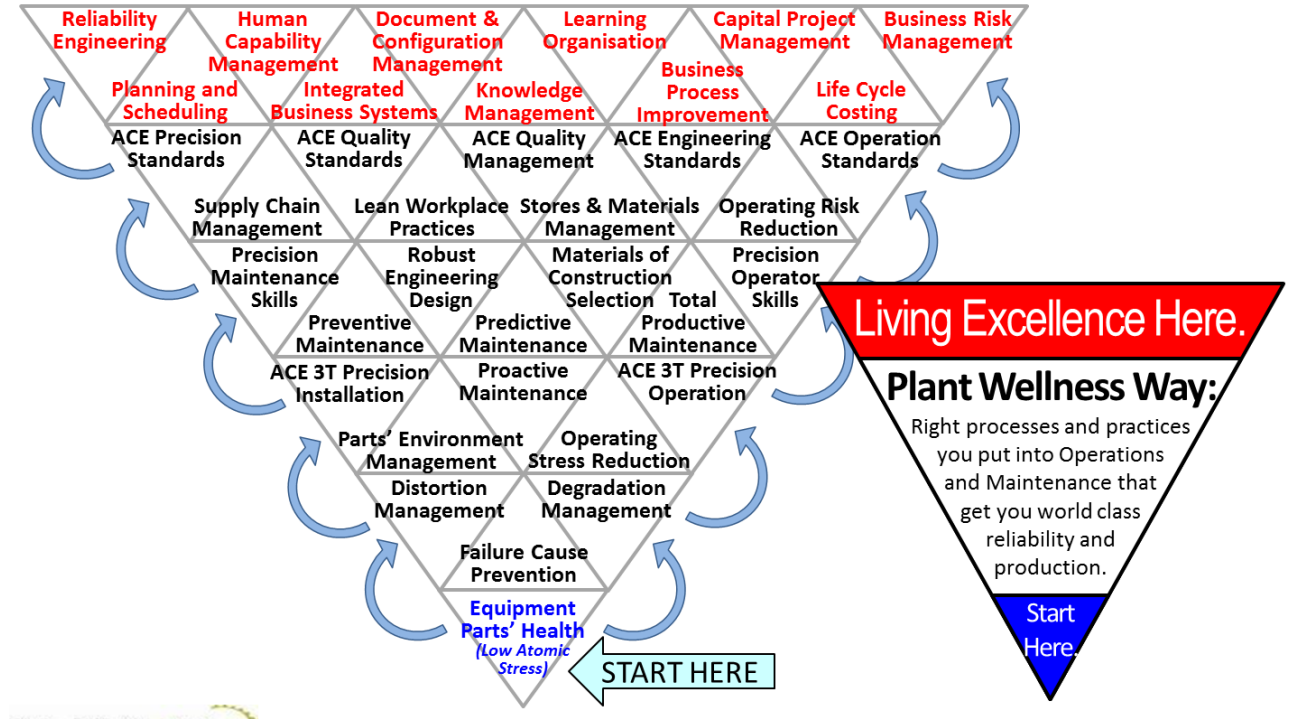

Figure 2 Plant Wellness Way Methodology

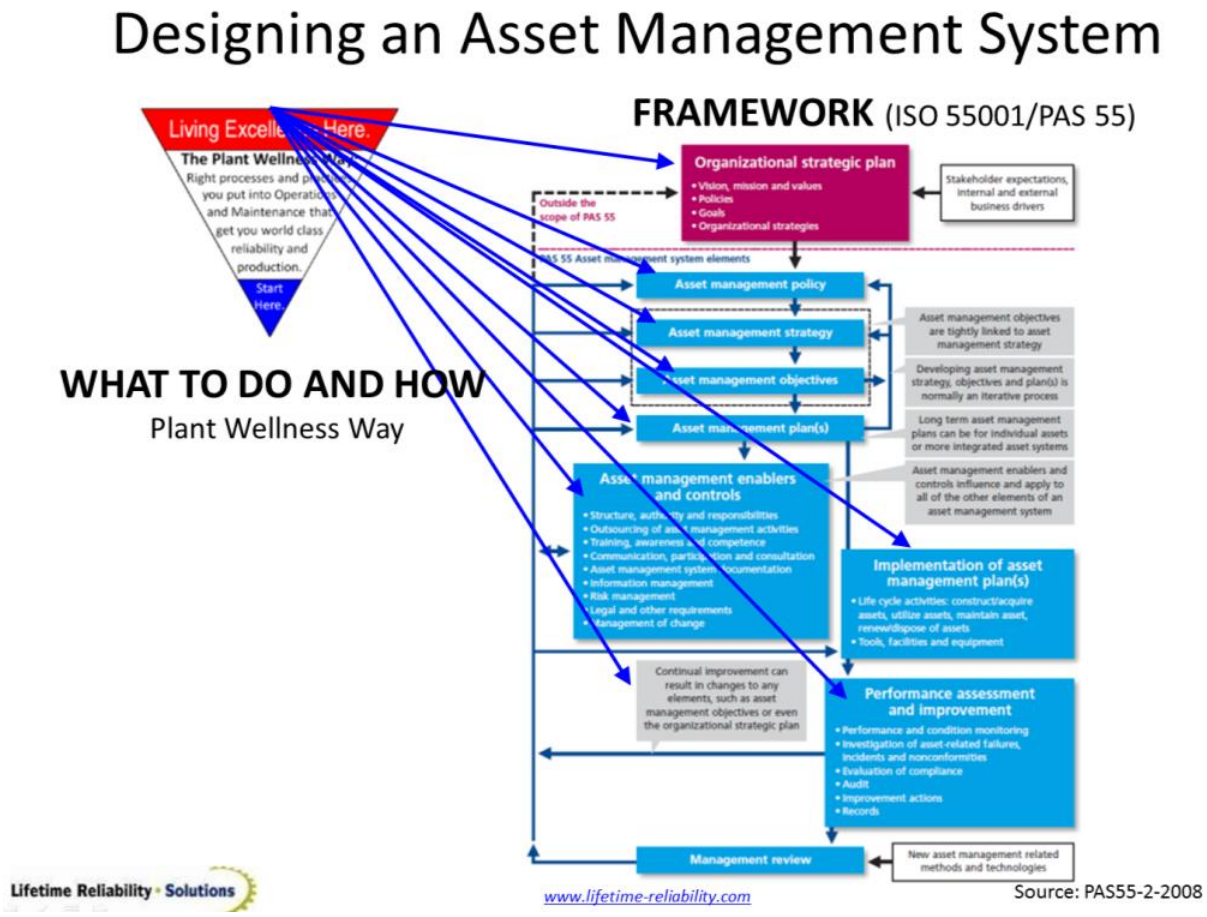

Figure 3 Putting ISO 55000 or ISO 55001 and the Plant Wellness Way Methodology Together

Figure 4 Getting the Best Asset Management and Operational Excellence Solutions

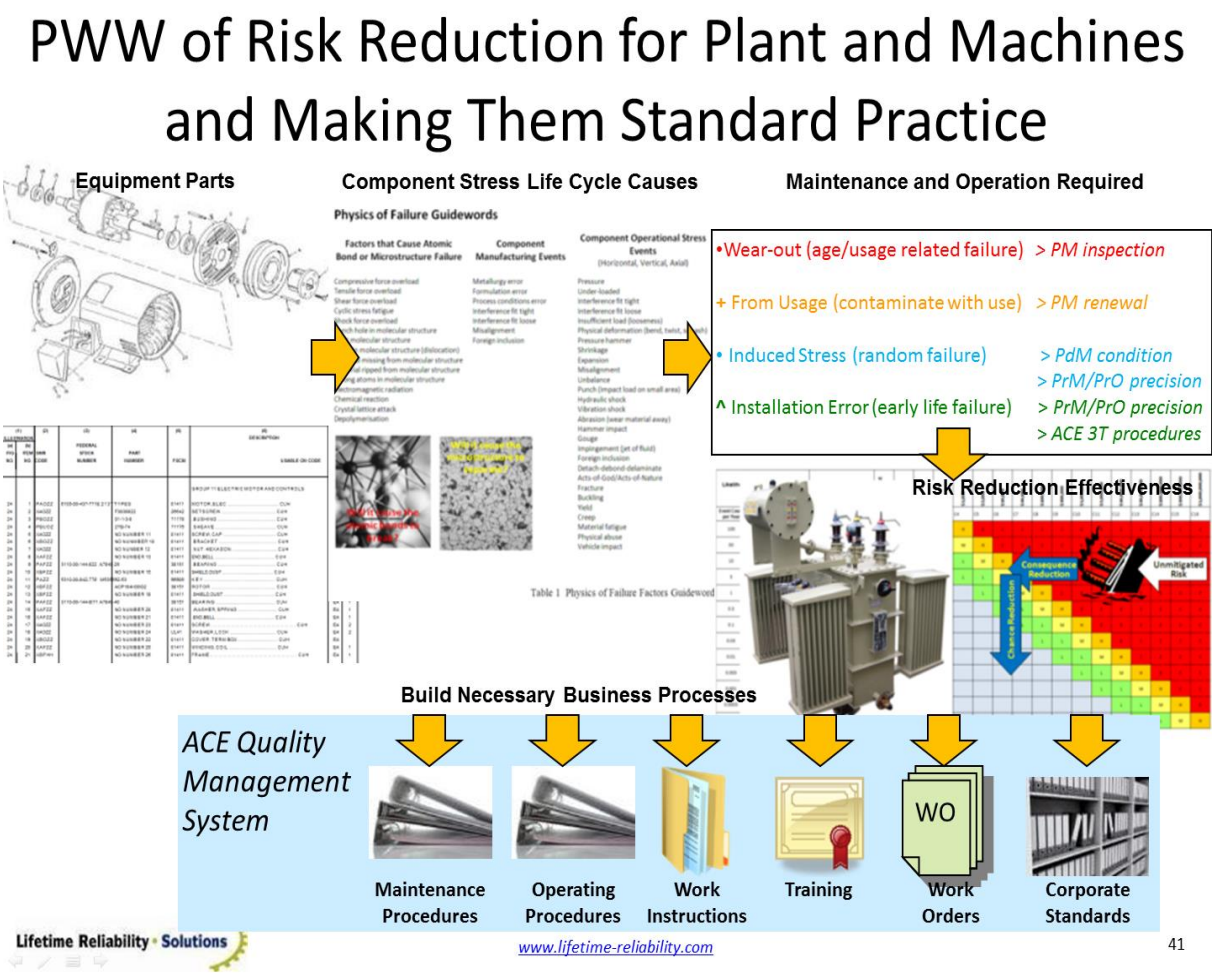

Figure 5 Outcomes of combining the Plant Wellness Way with ISO 55000 or ISO 55000

The Plant Wellness Way EAM approach combines the right ISO 55001 enterprise asset management requirements with optimized processes and practices. It redesigns the operational and business systems for operational excellence performance of every department, task, and practise in your company.

When your company becomes a PWW EAM system-of-reliability you break the endless cycle of operational troubles, problems and failures and replace them with a business built to get lasting Operational Excellence. Your company is designed and rebuilt to successfully drive your unit cost of production down to levels that give you massive competitive advantage.

The Plant Wellness Way powers companies to world class maintenance, maximum productivity and least operating costs with a system-of-reliability that:

1. **Gets your plant and equipment operating trouble-free and exceptionally reliable.**
2. Stops machines failing so they keep running and producing at best performance.
3. **Turns your business into a lifecycle system built for Operational Excellence success.**
4. Lets you run your operation systematically, with right-first-time production ticking over like clockwork.

5. **Measures operational risk and probability of success so you pick your best business options.**
6. Applies the science-of-failure so your equipment works within the limits of its material physics.
7. **Removes the tens-of-thousands of lifecycle failure causes waiting to be triggered in your business.**
8. Turns your operating losses into operating profits by preventing failures, wastes and excesses.
9. **With the Plant Wellness Way system-of-reliability you use powerful business risk abatement tools in a simple methodology that gets you all the right answers to Operational Excellence success.**

Operations generate more operating profits, higher productivity, and hundreds (even thousands) of percent ROI with a Plant Wellness Way EAM System-of-Reliability. New, best-practise reliability and maintenance solutions stop your production, maintenance, and reliability problems.

There are three enormous advantages with a PWW EAM System-of-Reliability which you cannot get from any other EAM methodology.

1. Your company gets to Operational Excellence performance in months, not years. Starting from where you are today, you redesign your processes in weeks and install world class practices in months. The speed of your new operational success will astound everyone.
2. It focuses your efforts into designing and planning the simplest and most successful Operational Excellence solution for your company. You use specially developed operating risk abatement tools to design a business built for maximum success, productivity and operating profits.
3. You work through a strategy that insures Operational Excellence is the only way that your whole business runs. You do not use point-in-time solutions. Such solutions are doomed to fail because they neglect life cycle and system-wide causes and effects. Your operation only uses system-wide and life-cycle long solutions built to deliver maximum business success.

When rebuilding your business for world class performance and productivity, ask us how your company can reach Operational Excellence fast as a Plant Wellness Way EAM System-of-Reliability.

My best regards to you,

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