Förhandsgranskning / Preview

Machine anchoring and foundations for connections affected by thermal expansion

Scope

This standard provides guidance on the design of machine foundations where connections to rotating machinery are affected by movements that arise during thermal expansion.

Setting up machinery on traditional fixed foundations, where piping systems do not have a built-in range of motion, results in thermal expansion pushing or pulling the machine, reducing the service life of bearings and seals.

The solution in this standard provides the foundation with the potential to make small movements itself. As the machine can follow variations in thermal expansion, this also means there is no need to realign the machine setup when the system heats up or cools down. This applies provided that the alignment has been correctly carried out at the temperature corresponding to the machine's operating conditions.

The standard can be used in industry as a basis for project planning and procurement. The purpose is that affected parties can receive information about conditions and assumptions at an early stage so that the design is executed correctly.

Contents

1 Principle solution . . . 2
1.1 Suitable applications . . . 2
2 General requirements . . . 3
2.1 Ordering support . . . 4
2.2 Technical vibration provisions . . . 4
2.3 Responsibilities of the Purchaser . . . 4
2.4 Responsibilities of the Supplier . . . 4
3 Preparation of the bottom slab . . . 5
3.1 New construction . . . 5
3.2 Renovation . . . 5
4 Design instructions . . . 6
4.1 Technical information for design . . . 6
4.2 Manufacture . . . 6
4.3 Installation . . . 7
4.4 Coordination and limits of responsibility . . . 7
4.5 Lifting and moving heavy equipment . . . 8
4.6 Requirements for rubber mat . . . 8
5 References . . . 8
Appendix 1: Examples of machine foundations

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