

DIN EN ISO 11688-2:2001-03 (E)

Recommended practice for the design of low-noise machinery and equipment - Part 2: Introduction to the physics of low-noise design (ISO/TR 11688-2:1998); English version of DIN EN ISO 11688-2

Contents

1	Scope	4
2	References	4
3	Definitions	4
4	Acoustical modelling	4
5	Control of airborne and liquid-borne noise	5
5.1	Generation of fluid-dynamic noise	5
5.2	Noise control measures	11
6	Control of structure-borne sound	13
6.1	Model of sound generation	13
6.2	Internal sources	18
6.3	Transmission of structure-borne sound	21
6.4	Control of structure-borne sound transmission by damping	31
6.5	Radiation	33
7	Analysis by measurement methods	38
7.1	Purpose of the analysis	38
7.2	Internal sources	39
7.3	Transmission paths	39
7.4	Radiation	39
7.5	Summary of procedures for the analysis of existing machinery by measurement methods	40
8	Analysis by computational methods	42
8.1	Purpose of the analysis	42
8.2	Deterministic methods	42
8.3	Statistical methods	42
8.4	Applicability of computational methods	42
Annex A	Example of the estimation of airborne sound emission of a machine caused by structure-borne and airborne sound emission from a component	44
Annex B	Glossary	47
	Bibliography	48