# DIN EN ISO 12499:2010-12 (E)

## Industrial fans - Mechanical safety of fans - Guarding (ISO 12499:1999)

## Contents

Page


Foreword ..... 3

Introduction ..... 4

1 Scope ..... 5

2 Normative references ..... 5

3 Definitions ..... 5

4 Hazards from fans ..... 8

5 Risk assessment ..... 9

6 Reduction of risk ..... 10

7 Types of safeguard ..... 10

8 Guard construction ..... 13

9 Design of fixed guards and fixed distance guards ..... 14

10 Noise ..... 15

11 Fans enclosed within units ..... 15

12 Safe working practices ..... 15

13 Information for use ..... 16

Annex A (informative) Bibliography ..... 17