EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

FINAL DRAFT prEN 12921-2

December 2004

ICS 25.220.10; 25.220.20

English version

Machines for surface cleaning and pre-treatment of industrial items using liquids or vapours - Part 2: Safety of machines using water based cleaning liquids

Machines de nettoyage et de pré-traitement de pièces industrielles utilisant des liquides ou des vapeurs - Partie 2: Sécurité des machines utilisant des liquides de nettoyage aqueux

Maschinen zur Oberflächenreinigung und -vorbehandlung von industriellen Produkten mittels Flüssigkeiten oder Dampffasen - Teil 2: Anlagen, in denen wässrige Reinigungsmittel verwendet werden

This draft European Standard is submitted to CEN members for formal vote. It has been drawn up by the Technical Committee CEN/TC 271.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

This draft European Standard was established by CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Warning: This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents page

Fore	word	3
Intro	duction	4
1	Scope	4
2	Normative references	4
3	Terms and definitions	5
4	List of significant hazards	6
5	Safety requirements and/or measures	8
5.1	General	8
5.2	Mechanical hazards	8
5.3	Electrical requirements	9
5.4	Safety requirements and measures against thermal hazards	10
5.5	Safety requirements and measures against noise	10
5.6	Safety requirements and measures against hazards generated by materials and substances processed, used or emitted by the cleaning machine	10
5.7	Safety requirements and measures against hazard combinations	13
5.8	Safety requirements and measures against failure of energy supply	13
5.9	Control systems	14
6	Verification of the safety requirements and/or measures	14
6.1	General	14
6.2	Mechanical	14
6.3	Electrical	14
6.4	Thermal	14
6.5	Noise	15
6.6	Material and substances processed, used or emitted by the cleaning machines	15
6.7	Hazard combinations	15
6.8	Failure of energy supply and other functional disorder	15
6.9	Control systems	15
7	Information for use	15
7.1	General	15
7.2	Instruction handbook	15
7.3	Minimum Marking	16
Anne	ex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC	17

Foreword

This document (prEN 12921-2:2004) has been prepared by Technical Committee CEN /TC 271, "Surface treatment equipment — Safety", the secretariat of which is held by DIN.

This document is currently submitted to the Formal Vote.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directives, see informative annex ZA, which is an integral part of this document.

This standard is part of a series of standards in the area of safety for development and construction of machines for surface cleaning and pre-treatment of industrial items using liquids or vapours.