INDEX OF NON-GOVERNMENT STANDARDS ON HUMAN ENGINEERING DESIGN CRITERIA AND PROGRAM REQUIREMENTS/GUIDELINES

VERSION 3
OCTOBER 1, 2002

HUMAN FACTORS STANDARDIZATION SUBTAG
TECHNICAL SOCIETY/INDUSTRY SUBGROUP

DEPARTMENT OF DEFENSE
HUMAN FACTORS ENGINEERING
TECHNICAL ADVISORY GROUP

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14. ABSTRACT

The Index is a reference list of non-government Human Systems/Human Engineering standardization documents. Since the designation of documents as standards by non-government standards bodies tends to be somewhat flexible, the scope of non-government standards for the Index was kept quite loose and includes standards, specifications, recommended practices, codes, guides, handbooks, etc. The Index also lists draft standards, standardization organizations, and where to obtain the documents.

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Index of Non-Government Standards on Human Engineering Design Criteria and Program Requirements/Guidelines

BACKGROUND

Version 1 (1995)

Discussions regarding specifications and standards reform were prominent topics at Department of Defense Human Factors Engineering Technical Advisory Group (DoD HFE TAG) meetings during the mid-1990s. A subject receiving considerable attention was the anticipated increased citation of non-government standards (NGS) in solicitations and contracts, and use of such standards during application work. During one of these discussions at a Technical Society/Industry (TS/I) SubTAG meeting, it was suggested that a listing or index of contemporary human engineering NGS would be of considerable value to both government and contractor human factors practitioners. Accordingly, the TS/I SubTAG prepared a preliminary index to accommodate the need and submitted it to the DoD HFE TAG during its 35th meeting in November 1995. Since that time, this *Index* was printed and distributed by the MATRIS Office of the Defense Technical Information Center.

Version 2 (1997)

As follow-up, the TS/I SubTAG, during its session held in conjunction with the 37th meeting of the DoD HFE TAG (November 1996), concluded that the *Index* was serving a useful purpose and identified over one hundred additions and changes. The second version of the *Index* was presented to the DoD HFE TAG at its 38th meeting in May 1997. Building upon the initial version, Version 2:

- incorporated additions, deletions, and changes reflecting recent non-government standards bodies catalogs, document listings, and program reports,
- incorporated changes to annotations of applicable document citations by human factors documents that were revised since the 1995 version,
- identified the non-government standards that have been adopted by DoD,
- expanded the listing of applicable documents cited by documents that fall within the Human Factors standardization area to include others covering the same subjects (such as sound, noise, and bioacoustics), and
- incorporated other corrections.

Version 3 (2002)

Since the designation of documents as standards by non-government standards bodies tends to be somewhat flexible, the scope of non-government standards for the *Index* was kept quite loose and includes standards, specifications, recommended practices, codes, guides, handbooks, etc.

Building upon what existed, Version 3:

- verified all titles and made changes as needed,
- updated information regarding the standard's revision and/or release date,
- added new standards,
- added information indicating the organizational website link where each standard could be obtained,
- added a notation identifying which standards were available via NASA's Standard Online Standard Center, and
- deleted standards that were obsolete or unavailable.

Is the listing current? The listing is reasonably current as of September 2002, and is as accurate as the various indexes, data bases, websites, and reports that were used as sources.

Is the listing complete? The listing is as complete as possible. Document selection is a function of how one defines "human engineering," "human factors," "ergonomics," and "standard." Moreover, titles may not disclose the human factors nature of a document's content.

Were the documents carefully reviewed and evaluated prior to listing? No.

Does the list contain non-human factors documents? Yes. Some non-human factors documents, cited by human factors standards, appear in the list and include general documents (e.g., metric system usage) and focused documents (e.g., acoustical measurements.)

CONTENT AND FORMAT

While documents clearly identified as standards are included in the list, some standards-like documents are also included. Some are titled as guides, preferred practices, or similar; however, they are written in the manner of standards, i.e., they contain provisions with traditional action verbs (shall/should/may) and bear a standard identifier number. Others were prepared by standards organizations and, presumably, proceed through a recognized due process type procedure for consensus acceptance. This *Index* is limited to non-government documents, and is also limited to documents designated by numbered identifiers.

Listing of Standards

The listing of standards is presented as a four-column table that contains subjects, titles, document identifiers, and organizational website links.

1. Subjects.

Major subjects are presented alphabetically in boldface. Both functional (e.g., access) and commodity (e.g., medical devices) categories have been used. Topics or sub-headings within these major subjects are also presented alphabetically. Only one level of sub-headings is used.

2. Titles.

With a few exceptions, titles appear only once, in alphabetical order, within the subject heading or sub-heading that seems most appropriate. While this approach may require the reader to search two topics for a listing (e.g., search “Lighting” and “Terminology” headings for a standard on lighting terminology), it results in a more compact listing.

The expression “As above” is used to avoid needless repetition of long titles. Where space could be saved, repeated, but readily understood title preambles or lead-ins, such as “American National Standard for,” are not included.

Title case was used for all titles, irrespective of whether the original titles appeared in sentence case, title case, or caps.

3. Document Identifiers.

Standards that are available for government employees online through NASA’s Online Standard Library are annotated with one diamond below their title as shown in the example below. The NASA Technical Standards Program Website provides a "One-Stop Shop" to the Agency wide Full-Text Technical Standards System. Most of the Standards that are found in this document can be retrieved and viewed via NASA's Online Library. Government employees can gain access to the site by going to http://standards.nasa.gov/NPTS/public_login.taf. Once you arrived at this site double click on the link entitled "Register to Obtain Pass Word". The site will continue to guide you throughout the remainder of the registration process. You should gain access to the site within 30 minutes of your registration. Public Access permits users to view the NASA Preferred Technical Standards index, with the capability to download free of charge the NASA-Developed Standards Products, Consultative Committee for Space Data Systems (CCSDS) standards, and Department of Defense (DoD) Standards Products.

Agricultural Tractors	Agricultural Wheeled Tractors-Operator’s Seat-Laboratory Measurement of Transmitted Vibration ♦	ISO 5007 1990

Standards that are available through the NASA Technical Standards Program as a hard copy only are annotated with two diamonds following their title as shown in the example below.

Construction	Construction Machinery - Minimum Access Dimensions	JIS A8301

	♦ ♦	1986

Standards that are cited by a current DoD Human Factors standardization area document as either an Applicable Document or as a source or guidance document are identified by a boldface **H** at the right side of the document identifier as shown in the example below.

Construction	Construction Machinery - Minimum Access Dimensions	SAE J185 **H** 1986

Non-government standards that have been adopted by DoD are identified by a boldface **D** at the right side of the document date as shown in the example below.

Construction	Access Systems for Construction and Industrial Equipment	SAE J185 1988 **D**

Of course, a standard could have multiple document identifiers as shown in the example below. In the example below, the standard is available through the NASA Online Standard Library as a hard copy document, is a standard that is cited by a current Human Factors standardization area document, and is a non-government standard that has been adopted by DoD.

Construction	Construction Machinery - Minimum Access Dimensions ♦ ♦	JIS A8301 **H** 1986 **D**

It should be noted that the document date represents the date of the base document. Amendments, notice changes, or reaffirmations may show a later date.

4. Organizational Website Link. An organizational website link is provided to indicate where each standard could be obtained.

Listing of Draft Standards

The table of draft standards follows the table of standards. Draft standards are listed separately as a reminder to the reader that the standards are a draft form. These standards have not yet been approved, and it is possible that agreement may never be reached. Furthermore, draft standards may be difficult to obtain. The intent of this table is to provide the reader some information on work in progress, however, the reader is cautioned to check the current status of standards in this table before use.

Organizational Abbreviations

Following the table of draft standards is a listing of the organizational abbreviations used in this *Index*, a website link, and addresses.

Subject Index

Lastly, a subject index is provided.

Access			
Agricultural Tractors	Agricultural Wheeled Tractors - Operator's Seat-Laboratory Measurement of Transmitted Vibration ♦	ISO 5007 1990	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Construction	Access Systems for Off-Road Machines ♦	SAE J185 1988 **D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
	Earth-Moving Machinery - Minimum Access Dimensions ♦ ♦	JIS A8301 2000	http://www.jsa.or.jp/default_english.asp http://standards.nasa.gov/NPTS/login.taf
Earth-Moving Machinery	Earth-Moving Machinery - Access Systems ♦	ISO 2867 1994	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Earth-Moving Machinery - Access Systems ♦	CAN/CSA M2867 2000	http://www.csa.ca/language/default.asp?thisUrl=%2FDefault%2Easp http://standards.nasa.gov/NPTS/login.taf
	Earth-Moving Machinery - Human Physical Dimensions of Operators and Minimum Operator Space Envelope ♦	ISO 3411 1995	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Earth-Moving Machinery - Human Physical Dimensions of Operators and Minimum Operator Space Envelope ♦	CAN/CSA M3411 2000	http://www.csa.ca/language/default.asp?thisUrl=%2FDefault%2Easp http://standards.nasa.gov/NPTS/login.taf
	Earth-Moving Machinery - Minimum Access Dimensions ♦	ISO 2860 1992	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Safety of Earth-Moving Machinery, Part 5: Recommendations for Minimum Access Dimensions	BS-6912-10 01/01/1998	http://www.bsi-global.com/index.xalter http://www.techstreet.com/
	Earth Moving Machinery-Human Physical Dimensions of Operators And Minimum Operating Space Envelope ♦	BS 6912-28 2000	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
	Operator Controls - Horizontal Earthboring Machines ♦	SAE J1611 1998	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
	Earth-Moving Machinery - Zones of Comfort and Reach for Controls	BS EN ISO 6682 1995	http://www.bsi-global.com/index.xalter
Machinery	Earth-Moving Machinery - Access Systems - Machinery ♦	CAN/CSA- M2867 2000	http://www.csa.ca/language/default.asp?thisUrl=%2FDefault%2Easp http://standards.nasa.gov/NPTS/login.taf

	Safety of Machinery - Basic Concepts, General Principles for Design - Part 2: Technical Principles and Specifications ♦	ISO/TR 12100-2 1992	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Zones of Comfort and Reach for Controls - Machinery ♦	CAN/CSA- M6682 2002	http://www.csa.ca/language/default.asp?thisUrl=%2FDefault%2Easp http://standards.nasa.gov/NPTS/login.taf
	Earth-Moving Machinery - Zones of Comfort and Reach for Controls ♦	ISO 6682 1986	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Off-Road Machines	Minimum Service Access Dimensions for Off-Road Machines ♦	SAE J925 **H** 1993 **D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
	Operator Space Envelope Dimensions for Off-Road Machines ♦	SAE J154 1992 **D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
Passages & Accesses	Human Body Dimensions; Values ♦	DIN 33402-2 1986	http://www2.din.de/ http://standards.nasa.gov/NPTS/login.taf
Vehicle Controls	Passenger Cars - Driver Hand-Control Reach ♦	ISO 3958 1996	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Road Vehicles - Driver Hand-Control Reach - In Vehicle Checking Procedure ♦	ISO/TR 9511 1991	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Anthropometry & Biomechanics (Also See Access, above)			
	Ergonomics - Basic Human Body Measurements for Technological Design	JIS Z8500 2002	http://www.jsa.or.jp/default_english.asp
	Basic Human Body Measurements for Technological Design ♦	ISO 7250 1996	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Human Body Dimensions; Values	DIN 33402-2 1986	http://www2.din.de/ http://www.techstreet.com/
	Human Physical Dimensions ♦	SAE J833 1989 **D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
	Occupational Biomechanics	ACGIH 0822 1999	http://www.acgih.org/home.htm

Atmospheric Environment			
	Climate at Workplaces and in Working Environment; Basic Principles for Determining Climates ♦ ♦	DIN 33403-1 1984	http://www2.din.de/ http://standards.nasa.gov/NPTS/login.taf
Clothing			
	Protective Clothing - General Requirements ♦	ISO 13688 1998	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Standard Practices for Qualitatively Evaluation the Comfort, Fit, Function, and Integrity of Chemical-Protective Suit Ensembles	ASTM F1154 1999	http://www.astm.org/cgi-bin/SoftCart.exe/index.shtml?E+mystore
	Ergonomics of the Thermal Environment - Estimation of the Thermal Insulation and Evaporative Resistance of a Clothing Ensemble	ISO 9920 1995	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Collision Avoidance			
	Human Interface Criteria for Collision Avoidance Systems in Transport Aircraft ♦	SAE ARP 4153 1988	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
Color and Marking			
Controls/Displays	Basic and Safety Principles for Man-Machine Interfaces, Marking and Identification - Coding Principles for Indication Devices and Actuators ♦	IEC 60073 2002	http://www.iec.ch/ http://www.techstreet.com/
Identification & Coding	Colors for Color Identification and Coding ♦	EIA 359 1988 **D**	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Pipes	Scheme for the Identification of Piping Systems ♦	ASME A13.1 1996	http://www.asme.org/pvp/ http://standards.nasa.gov/NPTS/login.taf
Safety/Warnings	Radio Frequency Radiation Hazard Warning Symbol ♦	ANSI/IEEE C95.2 **H** 1981	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
	Radiation Symbol ♦ ♦	ANSI N2.1 **H** 1989 **D**	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
	Safety Color Code ♦ ♦	ANSI/NEMA Z535.1 **H** 1998	http://www.nema.org/ http://standards.nasa.gov/NPTS/login.taf

	Environmental and Facility Safety Signs ♦ ♦	ANSI/NEMA Z535.2 **H** 1998	http://www.nema.org/ http://standards.nasa.gov/NPTS/login.taf
Specification of	Chromaticity Space	CIE 1931 1931	http://www.videoessentials.com/jkp_facts.htm#Individual http://www.techstreet.com/
	Uniform Chromaticity Scale (UCS)	CIE 1976 1976	http://www.videoessentials.com/jkp_facts.htm#Individual http://www.techstreet.com/
Communication			
Data Link	Human Engineering Issues for Data Link Systems ♦	SAE ARD 50027 1991	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
	Human Engineering Recommendations for Data Link Systems ♦	SAE ARP 4791 1996	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
Miscellaneous	Information Technology - Representation for Human Communication of State Transition of Software ♦	ISO/IEC 11411 1995	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Pictograms	Human Factors; The Multiple Index Approach (MIA) for the Evaluation of Pictograms ♦ ♦	ETSI ETR 070 1993	http://www.etsi.org/ http://www.techstreet.com/
Telecommunication	Human Factors; Access to Telecommunications for People with Special Needs: Recommendations for Improving and Adapting Telecommunication Terminals and Services for People with Impairments	ETSI ETR 029 1998	http://www.etsi.org/ http://www.techstreet.com/
	Human Factors; European Standardization Situation of Telecommunications Facilities for People with Special Needs	ETSI ETR 068 1998	http://www.etsi.org/ http://www.techstreet.com/
	Human Factors; Generic User Control Procedures for Telecommunication Terminals and Services	ETSI ETR 170 1995	http://www.etsi.org/ http://www.techstreet.com/
	Human Factors; Guide for Usability Evaluations of Telecommunications Systems and Services	ETSI ETR 095 1993	http://www.etsi.org/ http://www.techstreet.com/
	Human Factors; Human Factors Aspects of Multimedia Telecommunications	ETSI ETR 160 1995	http://www.etsi.org/ http://www.techstreet.com/
	Human Factors; Human Factors Standards for Telecommunications Applications	ETSI ETR 039 1992	http://www.etsi.org/ http://www.techstreet.com/
	Human Factors; Recommendation for a Tactile Identifier on Machine Readable Cards for Telecommunication Terminals	ETSI ETR 165 1995	http://www.etsi.org/ http://www.techstreet.com/

	Human Factors; User Instructions for Public Telecommunications Services; Design Guidelines	ETSI ETR 167 1995	http://www.etsi.org/ http://www.techstreet.com/
Telephones	Human Factors; Usability Checklist for Telephones: Basic Requirements	ETSI ETR 051 1992	http://www.etsi.org/ http://www.techstreet.com/
	Human Factors; Phone Based Interfaces (PBI); Human Factors Guidelines for the Design of Minimum Phone Based User Interface to Computer Services	ETSI ETR 096 1993	http://www.etsi.org/ http://www.techstreet.com/
	Human Factors; Evaluation of Telephones for People with Special Needs; An Evaluation Method	ETSI ETR 166 1995	http://www.etsi.org/ http://www.techstreet.com/
	Human Factors; Recommendation of Characteristics of Telephone Services Tones When Locally Generated in Telephony Terminals	ETSI ETR 187 1995	http://www.etsi.org/ http://www.techstreet.com/
Videophones	Human Factors (HF); Pictograms for Point-to-Point Video Telephony	ETSI ETS 300 375 1994	http://www.etsi.org/ http://www.techstreet.com/
	Human Factors (HF); Results of an Evaluation Study of Pictogram for Point-to-Point Video Telephony	ETSI ETR 113 1993	http://www.etsi.org/ http://www.techstreet.com/
	Human Factors (HF); User Procedures for Multipoint Video Telephony	ETSI ETR 175 1995	http://www.etsi.org/ http://www.techstreet.com/
Control Rooms			
Control Arrangement	Ergonomic Design of Control Centres - Part 2: Principles for the Arrangement of Control Suites ♦	ISO 11064-2 2000	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
General	Ergonomic Design of Control Centres - Part 1: Principles for the Design of Control Centres ♦	ISO 11064-1 2000	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Human Engineering for Control Centers ♦♦	ISA RP 60.3 1985	http://www.isa.org http://standards.nasa.gov/NPTS/login.taf
Layout/Dimensions	Ergonomic Design of Control Centres - Part 3: Control Room Layout ♦	ISO 11064-3 1999	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Nuclear Power Plants	Nuclear Power Plants - Control Rooms - Operator Controls ♦♦	BS 7517 1995	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf

	Nuclear Power Plants - Control Rooms - Operator Controls	IEC 61227 1993	http://www.iec.ch/ http://www.techstreet.com/
	Design for Control Rooms of Nuclear Power Plants ♦	IEC 60964 1989	http://www.iec.ch/ http://standards.nasa.gov/NPTS/login.taf
Controls			
Actuators	Ergonomic Requirements for the Design of Displays and Control Actuators - Part 1: Human Interactions with Displays and Control Actuators ♦	ISO 9355-1 1999	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Man-Machine Interface (MMI) - Actuating Principles	IEC 60447 1993	http://www.iec.ch/ http://standards.nasa.gov/NPTS/login.taf
	Man-Machine Interface (MMI) - Actuating Principles	CENELEC EN 60447 1993	http://www.cenelec.org/BASIS/celis/free/project/SF
Earth-Moving Equipment	Earth-Moving Machinery - Zones of Comfort and Reach for Controls ♦	ISO 6682 1986	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://www.techstreet.com/
	Earth-Moving Machinery - Operator's Controls ♦	ISO 10968 1995	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Hydraulic Excavator Operator Controls	SAE J1177 1988 **D**	http://www.sae.org/servlets/index http://www.techstreet.com/
	Operator's Controls for Earth-Moving Machinery: Crawler Tractors and Crawler Loaders ♦♦	BS 6211 1982	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
	Operator's Controls on Excavators Used for Earth-Moving ♦♦	BS 5528 1981	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
Graders	Operator Controls for Graders ♦	SAE J1071 1985	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
Hand Wheels	Human Physical Strength; Maximum Static Action Moments Applied by Male Operators when Actuating Hand-Wheels ♦♦	DIN 33411-3 1986	http://www2.din.de/ http://standards.nasa.gov/NPTS/login.taf
Industrial Equipment	Operator Controls on Industrial Equipment, Standard ♦	SAE J297 1994 **D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf

Movement, Direction	Geometrical Orientation and Directions of Movements ♦	ISO 1503 1977	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Numerical Controls	Operator Interface Functions of Numerical Controls ♦♦	EIA-441 1979	
Off-Road Machines	Operator Controls - Off-Road Machines ♦	SAE J1814 1993	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
Controls & Displays			
Aircraft	Flight Deck Panels, Controls, and Displays ♦	SAE ARP 4102 1988	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
	Flight Deck Panels, Controls, and Displays, Part 7: Electronic Display Symbology for EADI/PFD ♦	SAE ARP 4102/7 1993	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
	Flight Deck Panels, Controls, and Displays, Part 8: Flight Deck Head-Up Displays ♦	SAE ARP 4102/8 1998	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
	Head-Up Display Human Factors Issues	SAE ARD 50016 1998	http://www.sae.org/servlets/index http://www.techstreet.com/
Design of	Ergonomic Requirements for the Design of Displays and Control Actuators - Part 1: Human Interactions with Displays and Control Actuators ♦	ISO 9355-1 1999	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Motorcycles	Operator Controls and Displays on Motorcycles ♦	SAE J107 1996 **D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
Truck Cabs	Location and Operation of Instruments and Controls in Motor Truck Cabs ♦	SAE J680 1988 **D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
Displays			
Aircraft	Human Engineering Considerations in the Application of Color to Electronic Aircraft Displays ♦	SAE ARP 4032 1988	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
Construction Equipment	Instrument Face Design and Location for Construction and Industrial Equipment ♦	SAE J209 1987 **D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf

Design of	Ergonomic Requirements for the Design of Signals and Control Actuators - Part 2: Displays ♦	ISO 9355-2 1999	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Earth-Moving Equipment	Earth-Moving Machinery - Operating Instrumentation ♦	ISO 6011 1987	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Earth-Moving Machinery - Service Instrumentation ♦	ISO 6012 1997	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Panels	Photometric Guidelines for Instrument Panel Displays that Accommodate Older Drivers ♦	SAE J2217 1991	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
Truck Cabs	Location and Operation of Instruments and Controls in Motor Truck Cabs ♦	SAE J680 1988 **D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
Elderly/Impaired Users			
	Guidelines for Accessible and Usable Buildings and Facilities ♦♦	ANSI A117.1 1998 **D**	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
	Guide to Dimensions in Designing for Elderly People ♦♦	BS 4467 1991	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
Ergonomics/Human Engineering			
Factory/Office Work	Ergonomics in Computerized Offices	ACGIH 9331 1992	http://www.acgih.org/home.htm http://www.techstreet.com/
	Visual Ergonomics in the Workplace	ACGIH 99-036 1998	http://www.acgih.org/home.htm http://www.techstreet.com/
General	The Advanced Ergonomics Manual	ACGIH 9539 1994	http://www.acgih.org/home.htm http://www.techstreet.com/
	Applied Ergonomics Handbook	ACGIH 9272 1992	http://www.acgih.org/home.htm http://www.techstreet.com/
	An Ergonomics Guidebook for Computer Users	ACGIH 9703CB 1991	http://www.acgih.org/home.htm http://www.techstreet.com/
	Ergonomics: A Practical Guide	ACGIH 9417 1993	http://www.acgih.org/home.htm http://www.techstreet.com/

	Ergonomics for Beginners: A Quick Reference Guide	ACGIH 9403 2001	http://www.acgih.org/home.htm http://www.techstreet.com/
	Human Engineering - Principles and Practices	EIA HEB1 2002	http://www.eia.org/
Hand Tools	Ergonomics and Safety in Hand Tool Design	ACGIH 99-049 1999	http://www.acgih.org/home.htm http://www.techstreet.com/
Offices	Guideline on Office Ergonomics	CSA-Z412 2000	http://www.csa.ca/language/default.asp?thisUrl=%2FDefault%2Easp http://www.techstreet.com/
	Ergonomic Design for People at Work, Volumes 1 and 2	ACGIH 4790 1983	http://www.acgih.org/home.htm http://www.techstreet.com/
	The Ergonomics of Workspaces and Machines: A Design Manual	ACGIH 9548 1995	http://www.acgih.org/home.htm http://www.techstreet.com/
	Work Design: Industrial Ergonomics	ACGIH 9145 1999	http://www.acgih.org/home.htm http://www.techstreet.com/
	Ergonomic Principles in the Design of Work Systems	ISO 6385 1981	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://www.techstreet.com/
Furniture			
Educational Institutions	Furniture - Chairs and Tables for Educational Institutions - Functional Sizes ♦	ISO 5970 1979	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Offices	Guide to Ergonomics Principles in the Design and Selection of Office Furniture ♦♦	BS 3044 1990	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
Human Error			
	Human Error Reduction and Safety Management ♦	ACGIH 9658 1996	http://www.acgih.org/home.htm http://standards.nasa.gov/NPTS/login.taf
	Guidelines for Preventing Human Error in Process Safety ♦	AICHE G15 1994	http://www.aiche.org/ http://standards.nasa.gov/NPTS/login.taf
	An Engineer's View of Human Error ♦	AICHE U64 2001	http://www.aiche.org/ http://standards.nasa.gov/NPTS/login.taf

	A Manager's Guide to Reducing Human Errors: Improving Human Performance in the Process ♦	API 770 2001	http://api-ec.api.org/newsplashpage/index.cfm/ http://standards.nasa.gov/NPTS/login.taf
Identification			
Dental Equipment	Dental Equipment - Items of Dental Equipment at the Working Place - Identification System ♦	ISO 4073 1980	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Information Systems (Also see "Communication")			
Code, Info Exchange	Coded Character Sets - 7 Bit ♦	ANSI X3.4 1986	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Interaction	Man-Machine Interaction ♦♦	ITU-T Recommendation Z.323 1988	http://www.itu.int/home/index.html http://standards.nasa.gov/NPTS/login.taf
Optical Characters	Information Systems - Optical Character Recognition ♦	ANSI X3.99 1983	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Specifying	Data Oriented Human-Machine Interface Specification Technique - Introduction ♦♦	ITU-T Recommendation Z.351 1993	http://www.itu.int/home/index.html http://standards.nasa.gov/NPTS/login.taf
	Data Oriented Human-Machine Interface Specification Technique - Scope, Approach, and Reference Model ♦♦	ITU-T Recommendation Z.352 1993	http://www.itu.int/home/index.html http://standards.nasa.gov/NPTS/login.taf
Lighting			
Laser Operations	Human Factors Considerations for Outdoor Laser Operations in the Navigable Airspace	SAE AS 4970 1999	http://www.sae.org/ http://www.techstreet.com/
Educational Facilities	Educational Facilities Lighting	IESNA RP3 2000	http://www.iesna.org/ http://www.techstreet.com/
Indoor Work	Lighting of Indoor Work Places ♦	ISO/CIE 8995 2002	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Industrial	Practice for Industrial Lighting	IESNA RP7 2001	http://www.iesna.org/ http://www.techstreet.com/
Office	Office Lighting	IESNA RP1 1993	http://www.iesna.org/ http://www.techstreet.com/

Terminology	Nomenclature and Definitions for Illuminating Engineering	IESNA RP16 1996	http://www.iesna.org/ http://www.techstreet.com/
VDU Workstations	Artificial Lighting of Interiors; Lighting of Rooms with VDU Workstations or VDU Assisted Workplaces	DIN 5035-7 1988	http://www2.din.de/ http://www.techstreet.com/
Marking See "Color and Marking"			
Medical Devices			
	Human Factors Engineering Guidelines and Preferred Practices for the Design of Medical Devices ♦ ♦	AAMI HE48 1993 **D**	http://www.aami.org/ http://standards.nasa.gov/NPTS/login.taf
	Human Factors Design Process for Medical Devices	ANSI/AAMI HE74 2001	http://www.aami.org/
Nuclear Power			
Application	Guide for the Application of Human Factors Engineering to Systems, Equipment, and Facilities of Nuclear Power Generating Stations ♦ ♦	ANSI/IEEE STD1023 1988	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Performance, Human			
Measurements	Guide to Human Performance Measurements ♦	AIAA G-035 2000	http://www.aiaa.org/ http://standards.nasa.gov/NPTS/login.taf
	Evaluation of Human Work, A Practical Ergonomics Methodology	ACGIH 9651 1995	http://www.acgih.org/home.htm http://www.techstreet.com/
Reliability, Human			
	Guide for Incorporating Human Action Reliability for Nuclear Power Generating Stations ♦	IEEE 1082 1997	http://www.ieee.org/portal/index.jsp http://standards.nasa.gov/NPTS/login.taf
Robotics			
Pendants, Control	Industrial Robots and Robot Systems - Hand-Held Robot Control Pendants - Human Engineering Design Criteria	ANSI/RIA R15.02-1 1990	http://www.roboticsonline.com/store/ http://www.ansi.org/
Safety	Industrial Robots and Robot Systems – Safety Requirements	ANSI/RIA R15.06 1999	http://www.roboticsonline.com/store/ http://www.ansi.org/
Safety/Health/Protection (Also see Symbols)			

Danger Signals, Audio	Audible Emergency Evacuation Signal ♦	ANSI S3.41 1998	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
	Danger Signals for Work Places - Auditory Danger Signals ♦	ISO 7731 1986	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Danger Signals for Work Places - Auditory Danger Signals ♦ ♦	ANSI S12.14 1992	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Danger Signals, Audio and Visual	Ergonomics - System of Auditory and Visual Danger and Information Signals ♦	ISO 11429 1996	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Danger Signals, Visual	Ergonomics - Visual Danger Signals - General Requirements, Design and Testing ♦	ISO 11428 1996	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Electrical	National Electrical Code ♦ ♦	NFPA 70 2002	http://www.nfpa.org/Home/index.asp http://standards.nasa.gov/NPTS/login.taf
	National Electrical Safety Code ♦	ANSI/IEEE C2 **H** 2002	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
	Effects of Current on Human Beings and Livestock - Part 1: General Aspects ♦	IEC/TR2 60479-1 1994	http://www.iec.ch/ http://standards.nasa.gov/NPTS/login.taf
	Effects of Current Passing Through the Human Body - Part 2: Special Aspects ♦	IEC/TR 60479-2 1987	http://www.iec.ch/ http://standards.nasa.gov/NPTS/login.taf
	Methods of Measurement of Touch-Current and Protection Conductor Current. ♦	IEC 60990 1999	http://www.iec.ch/ http://standards.nasa.gov/NPTS/login.taf
Electromagnetic Fields	Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 KHz to 300 GHz ♦	IEEE STD C95.1 1999	http://standards.nasa.gov/NPTS/login.taf
Eye/Face Protection	Industrial Eye and Face Protectors ♦	CAN/CSA-Z94.3 1999	http://www.csa.ca/language/default.asp?thisUrl=%2FDefault%2Easp http://standards.nasa.gov/NPTS/login.taf
Fire	Code for Safety to Life from Fire in Buildings and Structures ♦ ♦	NFPA 101 2000	http://www.nfpa.org/Home/index.asp http://standards.nasa.gov/NPTS/login.taf
	Recommended Practice for Fire Flow Testing and Marking of Fire Hydrants ♦ ♦	NFPA 291 1995	http://www.nfpa.org/Home/index.asp http://standards.nasa.gov/NPTS/login.taf

Floors, Walls, Stairs, Rails	Safety Requirements for Workplace Floor and Wall Openings, Stairs, and Railing Systems ♦ ♦	ANSI A1264.1 1995	http://standards.nasa.gov/NPTS/login.taf http://www.ansi.org/
Footwear	Protective Footwear ♦	CAN/CSA Z195 2002	http://www.csa.ca/language/default.asp?thisUrl=%2FDefault%2Easp http://standards.nasa.gov/NPTS/login.taf
Headwear	Industrial Protective Headwear ♦	CAN/CSA Z94.1 1998	http://www.csa.ca/language/default.asp?thisUrl=%2FDefault%2Easp http://standards.nasa.gov/NPTS/login.taf
Hearing Conservation	Determination of Occupational Noise Exposure and Estimation of Noise-Induced Hearing Impairment ♦	ANSI S3.44 1996	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
	Measurement of Occupational Noise Exposure ♦	ANSI S12.19 1996	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Ladders	Ladders, Fixed, Safety Requirements ♦ ♦	ANSI A14.3 1992 **D**	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Lasers	Lasers, Safe Use of ♦ ♦	ANSI Z136.1 **H** 2000 **D**	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Machinery	Safety of Machinery - Minimum Gaps to Avoid Crushing of Parts of the Human Body ♦ ♦	BS EN 349 1993	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
	Safety of Machinery - Minimum Gaps to Avoid Crushing of Parts of the Human Body ♦ ♦	DIN EN 349 1993	http://www2.din.de/ http://standards.nasa.gov/NPTS/login.taf
Radiation	Radiation Symbol ♦ ♦	ANSI N2.1 **H** 1989 **D**	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Respirators	Selection, Care, and Use of Respirators	CAN/CSA Z94.4 1997	http://www.csa.ca/language/default.asp?thisUrl=%2FDefault%2Easp http://standards.nasa.gov/NPTS/login.taf
Signs, Labels	Safety Colours and Safety Signs ♦	ISO 3864 1984	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Safety Colours and Safety Signs – Part 1: Design Principles for Safety Signs in Workplaces and Public Areas	ISO 3864-1 2002	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf

Tags	Safety Tags and Barricade Tapes (for Temporary Hazards) ♦ ♦	ANSI Z535.5 2002	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Thermal Hazards	Safety of Machinery - Temperatures of Touchable Surfaces - Ergonomics Data to Establish Temperature Limit Values for Hot Surfaces ♦ ♦	BS EN 563 1994	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
	Safety of Machinery - Temperatures of Touchable Surfaces, Ergonomics Data to Establish Temperature Limit Values for Hot Surfaces ♦ ♦	CEN EN 563 1994	http://www.cenorm.be/ http://standards.nasa.gov/NPTS/login.taf
	Safety of Machinery - Temperatures of Touchable Surfaces - Ergonomics Data to Establish Temperature Limit Values for Hot Surfaces ♦ ♦	DIN EN 563 2000	http://www2.din.de/ http://standards.nasa.gov/NPTS/login.taf
	Medical Information on Human Reaction to Skin Contact with Hot Surfaces ♦ ♦	BS PD 6504 1983	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
TLVs and BEIs	Threshold Limit Values and Biological Exposure Indices ♦ ♦	ACGIH 0100DOC 2001	http://www.acgih.org/home.htm http://standards.nasa.gov/NPTS/login.taf
Vibration/Shock	Guide to Safety Aspects of Experiments in Which People are Exposed to Mechanical Vibration and Shock ♦ ♦	BS 7085 1989	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
Seating			
Agricultural Tractors	Agricultural Tractors - Operator's Seating Accommodation – Dimensions ♦	ISO 4253 1993	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Earth-Moving Machinery, and Tractors and Machines for Agriculture and Forestry - Seat Index Point ♦	ISO 5353 1995	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Earth-Moving Machinery	Earth-Moving Machinery - Operator's Seat - Dimensions and Requirements ♦	ISO 11112 1995	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Index Point	Determining Seat Index Point ♦	SAE J1163 1997 **D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
Off-Road Machines	Operator's Seat Dimensions for Off-Road, Self-Propelled Work Machines ♦	SAE J899 1988 **D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf

Ships			
Design Criteria	Standard Practice for Human Engineering Design for Marine Systems, Equipment and Facilities ♦	ASTM F1166 1995 **D**	http://www.astm.org/cgi-bin/SoftCart.exe/index.shtml?E+mystore http://standards.nasa.gov/NPTS/login.taf
Program Requirements	Standard Practice for Human Engineering Program Requirements for Ships and Marine Systems, Equipment and Facilities ♦	ASTM F1337 1991	http://www.astm.org/cgi-bin/SoftCart.exe/index.shtml?E+mystore http://standards.nasa.gov/NPTS/login.taf
Sound/Noise/Bioacoustics			
Air-Moving Devices	Methods for the Measurement of Noise Emitted by Small Air-Moving Devices ♦	ANSI S12.11 1987	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Buildings	Building Construction - Expression of Users' Requirements Part 3: Acoustical Requirements ♦	ISO 6242-3 1992	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Building Construction - Expression of Users' Requirements Part 3: Acoustical Requirements ♦ ♦	BS BS 7643-3 1993	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
Calibrators	Specification for Acoustical Calibrators ♦	ANSI S1.40 **H** 1984 **D**	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Cinematography	Cinematography - B-Chain Electro-Acoustic Response of Motion-Picture Control Rooms and Indoor Theatres - Specifications and Measurements ♦	ISO 2969 1987	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Computers	Methods for the Measurement and Designation of Noise Emitted by Computer and Business Equipment ♦	ANSI S12.10 1985	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Damage Risk	Method of Test for Estimating the Risk of Hearing Handicap Due to Noise Exposure ♦ ♦	BS BS 5330 1976	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
	Acoustics - Determination of Occupational Noise Exposure and Estimation of Noise-Induced Hearing Impairment	ISO 1999 1990	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://www.techstreet.com/
Earth-Moving Machinery	Sound Measurements - Off-Road Work Machines ♦	SAE J88 **H** 1995 **D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
	Sound Measurement - Off-Road Work Machines - Operator - Singular Type ♦	SAE J919 1995 **D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf

Engines	Operator Ear Sound Level Measurement Procedure for Small Engine Powered Equipment ♦	SAE J1174 1985 **D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
Environmental Sound	Quantities and Procedures for Description and Measurement of Environmental Sound, Part 1 ♦	ANSI S12.9 1988	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
	Quantities and Procedures for Description and Measurement of Environmental Sound, Part 2: Measurement of Long-Term, Wide-Area Sound ♦	ANSI S12.9/Part 2 1992	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
	Quantities and Procedures for Description and Measurement of Environmental Sound, Part 3: Short-Term Measurements with an Observer Present ♦	ANSI 12.9/Part 3 1993	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Equal Loudness Contours	Acoustics - Normal Equal-Loudness Level Contours ♦	ISO 226 **H** 1987	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Normal Equal-Loudness Level Contours for Pure Tones Under Free-Field Listening Conditions ♦ ♦	BS 3383 1988	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
Filters	Octave Band and Fractional-Octave Band Analog and Digital Filters ♦	ANSI S1.11 **H** 1986 **D**	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Hearing Protectors	Method for the Measurement of the Real-Ear Attenuation of Hearing Protectors ♦	ANSI S12.6 **H** 1997 **D**	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
	Microphone-in-Real-Ear and Acoustic Test Fixture Methods for the Measurement of Insertion Loss of Circumaural Hearing Protection Devices ♦	ANSI S12.42 **H** 1995	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Impulse Noise	Methods for Measurements of Impulse Noise ♦	ANSI S12.7 1986	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Intelligibility	Method for Measuring the Intelligibility of Speech over Communication Systems ♦	ANSI S3.2 **H** 1989 **D**	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
	Methods for Calculation of Speech Intelligibility Index ♦	ANSI S3.5 **H** 1997 **D**	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf

	Ergonomic Assessment of Speech Communication - Part 1: Speech Interference Level and Communication Distances for Persons with Normal Hearing Capacity in Direct Communication (SIL Method) ♦	ISO 9921-1 1996	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Rating Noise with Respect to Speech Interference ♦	ANSI S3.14 1977 **H**	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Loudness	Acoustics - Method for Calculating Loudness Level ♦	ISO 532 1975	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Procedure for the Computation of Loudness of Noise ♦	ANSI S3.4 1980	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Machinery	Measurement of Occupational Noise Exposure	ANSI S12.19 1996	http://www.ansi.org/ http://www.techstreet.com/
	Guidelines for the Specification of Noise of New Machinery	ANSI S12.16 1992	http://www.ansi.org/ http://www.techstreet.com/
	Statistical Methods for Determining and Verifying Stated Noise Emission Values of Machinery and Equipment	ANSI S12.3 1985	http://www.ansi.org/ http://www.techstreet.com/
Measurement Method	Methods for Measurement of Sound Pressure Levels in Air	ANSI S1.13 1995 **H D**	http://www.ansi.org/ http://www.techstreet.com/
	Guidelines for the Preparation of Standard Procedures for the Determination of Noise Emission from Sources ♦	ANSI S12.1 1983	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
	Procedure for Outdoor Measurement of Sound Pressure Level ♦	ANSI S12.18 1994	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Microphones	Method for the Calibration of Microphone	ANSI S1.10 1966 **H D**	http://www.ansi.org/ http://www.techstreet.com/
Motor Vehicles	Engine Sound Level Measurement Procedure ♦	SAE J1074 2000 **H D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
	Exterior Sound Level for Heavy Trucks and Buses ♦	SAE J366 2001 **H D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
	Sound Level for Passenger Cars and Light Trucks ♦	SAE J986 1998 **H D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf

	Sound Measurement - Off-Road, Self-Propelled, Work Machines, Operator - Work Cycle ♦	SAE J1166 1998 **D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
	Maximum Sound Level for Passenger Cars and Light Trucks ♦	SAE J1030 1999	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
Power Tools	Acoustics - Portable Electric Power Tools, Stationary, and Fixed Electric Power Tools, and Gardening Appliances, Measurement of Sound Emitted ♦	ANSI S12.15 1992	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Preferred Frequencies	Preferred Frequencies, Frequency Levels, and Band Numbers for Acoustical Measurements ♦	ANSI S1.6 **H** 1984 **D**	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Qualification	Qualifying a Sound Data Acquisition System ♦	SAE J184 **H** 1998 **D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
Rooms	Criteria for Evaluating Room Noise	ANSI S12.2 1995	http://www.ansi.org/ http://www.techstreet.com/
Rooms, Reverberation	Precision Methods for the Determination of Sound Power Levels of Broad-Band Noise Sources in Reverberation Rooms ♦	ANSI S12.31 1990	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
	Precision Methods for the Determination of Sound Power Levels of Discrete-Frequency and Narrow-Band Noise Sources in Reverberation Rooms	ANSI S12.32 1990	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
	Engineering Methods for the Determination of Sound Power Levels of Noise Sources in a Special Reverberation Test Room ♦	ANSI S12.33 1990 **D**	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Sound Level Meters	Specification for Sound Level Meters ♦	ANSI S1.4 **H** 1983	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Sound Power	Guidelines for the Use of Sound Power Standard and for the Preparation of Noise Test Codes ♦	ANSI S12.30 1990	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
	Method for the Determination of Sound Power Emitted by Machinery and Equipment ♦	ANSI S12.23 1989	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Sound Power Levels	Engineering Method for the Determination of Sound Power Levels of Noise Sources using Sound Intensity ♦	ANSI S12.12 1992	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf

	Engineering Methods for the Determination of Sound Power Levels of Noise Sources for Essentially Free-Field Conditions over a Reflecting Plane ♦	ANSI 12.34 1988	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
	Survey Methods for the Determination of Sound Power Levels of Noise Sources ♦	ANSI S12.36 1990	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Terminology	Acoustical Terminology ♦	ANSI S1.1 **H** 1994	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
	Bioacoustical Terminology ♦	ANSI S3.20 1995	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Test Rooms, Audiometric	Maximum Permissible Ambient Noise Levels for Audiometric Test Rooms ♦	ANSI S3.1 1999 **D**	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Strength			
Hand Wheels	Human Physical Strength; Maximum Static Action Moments Applied by Male Operators when Actuating Hand-Wheels ♦♦	DIN 33411-3 1986	http://www2.din.de/ http://standards.nasa.gov/NPTS/login.taf
Static	Human Physical Strength; Maximum Static Action Forces (Isodynes) ♦♦	DIN 33411-4 1987	http://www2.din.de/ http://standards.nasa.gov/NPTS/login.taf
Symbols			
Agricultural Machinery	Agriculture Tractors and Machines - Symbols for Operator Controls	JIS B9126 1997	http://www.jsa.or.jp/default_english.asp http://www.techstreet.com/
	Tractors, Machinery for Agriculture and Forestry, Powered Lawn and Garden Equipment - Symbols for Operator Controls and Other Displays - Part 1: Common Symbols ♦	ISO 3767-1 1998	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	As above - Part 2: Symbols for Agricultural Tractors and Machinery ♦	ISO 3767-2 1991	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	As above - Part 3: Symbols for Powered Lawn and Garden Equipment ♦	ISO 3767-3 1995	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	As above - Part 4: Symbols for Forestry Machinery ♦	ISO 3767-4 1993	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf

	As above - Part 5: Symbols for Manual Portable Forestry Machinery ♦	ISO 3767-5 1992	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Controls/Displays	Symbols for Operator Controls and Other Displays ♦	CAN/CSA M6405-1 2000	http://www.csa.ca/language/default.asp?thisUrl=%2FDefault%2Easp http://standards.nasa.gov/NPTS/login.taf
Displays	Human Interface Design Methodology for Integrated Display Symbology ♦	ANSI/SAE ARP 4155 10/01/1990	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
Earth-Moving Machinery	Operation and Maintenance of Earth-Moving Machinery Part 8: Specification for Common Symbols for Operator Controls and Other Displays ♦	BS 6913-8 1992	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
	Earth-Moving Machinery - Symbols for Operator Controls and Other Displays ♦♦	JIS A8310 01/01/1993	http://www.jsa.or.jp/default_english.asp http://standards.nasa.gov/NPTS/login.taf
	Earth-Moving Machinery - Symbols for Operator Controls and Other Displays - Part 1: Common Symbols ♦	ISO 6405-1 1991	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	As above - Part 2: Additional Symbols ♦	ISO 6405-2 1993	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Equipment	Graphical Symbols for Use on Equipment - Index and Synopsis ♦	ISO 7000 1989	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Fissile Material	Fissile Material Symbol ♦♦	ANSI N12.1 1989	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
General Criteria	Criteria for Safety Symbols ♦♦	ANSI/NEMA Z535.3 1998	http://www.nema.org/ http://standards.nasa.gov/NPTS/login.taf
Off-Road Machines	Graphical Symbols for Operator Controls and Displays on Off-Road, Self-Propelled Work Machines ♦♦	SAE J1362 1997 **D**	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Radiation Warning	Radiation Symbol ♦♦	ANSI N2.1 **H** 1989 **D**	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
RF Hazard	Radio Frequency Energy and Current Flow ♦	ANSI/IEEE C95.2 1999	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf

Thermal Environment			
Air Condit/Ventilation	Air Conditioning and Ventilation of Machinery Control Rooms on Board Ships - Design Conditions and Basis of Calculations ♦	ISO 8862 1987	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Buildings	Building Construction - Expression of Users' Requirements, Part 1: Thermal Requirements ♦	ISO 6242-1 1992	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Building Construction - Expression of Users' Requirements Part 1: Thermal Requirements ♦ ♦	BS 7643-1 1993	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
Clothing	Ergonomics of the Thermal Environment - Estimation of the Thermal Insulation and Evaporative Resistance of a Clothing Ensemble	BS 9920 1995	http://www.bsi-global.com/index.xalter http://www.techstreet.com/
	Ergonomics of the Thermal Environment - Estimation of the Thermal Insulation and Evaporative Resistance of a Clothing Ensemble ♦	ISO 9920 1995	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Cold Environments	Evaluation of Cold Environments - Determination of Requisite Clothing Insulation (IREC) ♦	ISO/TR 11079 1993	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Cold or Hot Environments	Ergonomics of the Thermal Environment—Medical Supervision of Individuals Exposed to Extreme Hot or Cold Environments ♦	ISO12894 2001	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Definitions	Ergonomics of the Thermal Environment - Vocabulary and Symbols ♦	ISO 13731 2001	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
General	Ergonomics - Determination of Metabolic Heat Production ♦ ♦	BS EN 28996 01/01/1994	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
	Ergonomics - Determination of Metabolic Heat Production ♦ ♦	CEN EN 28996 1993	http://www.cenorm.be/ http://standards.nasa.gov/NPTS/login.taf
	Ergonomics - Determination of Metabolic Heat Production ♦ ♦	DIN EN 28996 1993	http://www2.din.de/ http://standards.nasa.gov/NPTS/login.taf
	Ergonomics - Determination of Metabolic Heat Production ♦	ISO 8996 1990	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf

Hot Environments	Hot Environments - Analytical Determination and Interpretation of Thermal Stress Using Calculation of Required Sweat Rate ♦	ISO 7933 1989	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Hot environments - Estimation of the Heat Stress on Working Man, Based on the WBGT-Index ♦	ISO 7243 1989	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Hot Surfaces	Medical Information on Human Reaction to Skin Contact with Hot Surfaces ♦ ♦	BS PD 6504 1983	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
Instruments/Methods	Ergonomics of the Thermal Environment - Instruments for Measuring Physical Quantities ♦	ISO 7726 1998	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Metabolic Heat Production	Ergonomics - Determination of Metabolic Heat Production ♦	ISO 8996 1990	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Moderate Environments	Moderate Thermal Environments - Determination of the PMV and PPD Indices and Specification of the Conditions for Thermal Comfort ♦	ISO 7730 1994	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Standards	Ergonomics of the Thermal Environment - Principles and Application of Relevant International Standards ♦	ISO 11399 1995	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Subjective Judgment	Ergonomics of the Thermal Environment - Assessment of the Influence of the Thermal Environment using Subjective Judgment Scales ♦	ISO 10551 1995	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Terminology & Symbols	Ergonomics of the Thermal Environment - Vocabulary and Symbols ♦	ISO 13731 2001	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Thermal Strain	Evaluation of Thermal Strain by Physiological Measurements ♦	ISO 9886 1992	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Ventilation/Airflow			
	Building Construction - Expression of Users' Requirements Part 2: Air Purity Requirements ♦	ISO 6242-2 1992	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf

	Building Construction - Expression of Users' Requirements Part 2: Air Purity Requirements ♦ ♦	BS 7643-2 1993	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
Vibration/Shock			
Buildings	Evaluation of Human Exposure to Vibration in Buildings (1 Hz to 80 Hz) ♦ ♦	BS 6472 1992	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
	Guide to the Evaluation of Human Exposure to Vibration in Buildings ♦	ANSI S3.29 1983	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Buildings/Off Shore	Guide to Evaluation of Response of Occupants of Fixed Structures, Especially Buildings and Offshore Structures, to Low-Frequency Horizontal Motion (0.063 Hz to 1 Hz) ♦ ♦	BS 6611 1985	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
	Guidelines for the Evaluation of Response of Occupants of Fixed Structures, Especially Buildings and Off-Shore Structures, to Low-Frequency Horizontal Motion (0.063 Hz to 1 Hz) ♦	ISO 6897 1984	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Experiments, Safety	Guide to Safety Aspects of Experiments in which People Are Exposed to Mechanical Vibration and Shock ♦ ♦	BS 7085 1989	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
General	Human Mechanical Impact Response Characteristics - Dynamic Response of the Human Abdomen ♦	SAE J1460/1 2000	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
Hand	Measurement and Evaluation of the Vibration Transmissibility of Gloves at the Palm of the Hand ♦	ANSI S3.40 2002	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
	Guide for the Measurement and Evaluation of Human Exposure to Vibration Transmitted to the Hand ♦	ANSI S3.34 1986	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
	Measurement and Evaluation of Human Exposure to Vibration Transmitted to the Hand	BS 4842 1984	http://www.bsi-global.com/index.xalter http://www.techstreet.com/
	Mechanical Vibration - Guidelines for the Measurement and the Assessment of Human Exposure to Hand-Transmitted Vibration	CEN ENV 25349 1993	http://www.techstreet.com/ http://www.cenorm.be/
	Mechanical Vibration – Measurement and Evaluation of Human Exposure to Hand-Transmitted Vibration, Part 1: General Requirements	ISO 5349-1 2001	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf

	As above, Part 2: Practical Guidance for Measurement at the Workplace	ISO 5349-2 2001	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Method of Measurement and Description of Hand-Transmitted Vibration Level ♦♦	JIS B4900 1986	http://www.jsa.or.jp/default_english.asp http://standards.nasa.gov/NPTS/login.taf
Hand-Arm	Mechanical Vibration and Shock - Hand-Arm Vibration - Method for the Measurement and Evaluation of the Vibration Transmissibility of Gloves at the Palm of the Hand ♦♦	ISO 10819 1996	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Mechanical Vibration and Shock - Hand-Arm Vibration - Method for the Measurement and Evaluation of the Vibration Transmissibility of Gloves at the Palm of the Hand ♦♦	CEN PREN 30819	http://standards.nasa.gov/NPTS/login.taf http://www.cenorm.be/
Head	Test Device Head Contact Duration Analysis ♦	SAE J2052 1997	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
Impact Conditions	Human Tolerance to Impact Conditions as Related to Motor Vehicle Design ♦	SAE J885 1986	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
Impedance, Body	Mechanical Vibration and Shock - Range of Idealized Values to Characterize Seated-Body Biodynamic Response Under Vertical Vibration ♦	ISO 5982 2001	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Instrumentation	Human Response to Vibration - Measuring Instrumentation ♦♦	BS DD ENV 28041 1993	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
	1993 Human Response to Vibration - Measuring Instrumentation ♦♦	CEN ENV 28041 1993	http://www.cenorm.be/ http://standards.nasa.gov/NPTS/login.taf
	Human Response to Vibration - Measuring Instrumentation ♦	ISO 8041 1990	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Methods for Calibration of Shock and Vibration Pickups	ANSI S2.2 1959	http://www.ansi.org/ http://www.techstreet.com/
	Instrumentation for the Measurement of Vibration Exposure of Human Beings Part 1: Specification for General Requirements for Instrumentation for Measuring the Vibration Applied to Human Beings ♦♦	BS 7482-1 1991	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf

	As above, Part 2: Specification for Instrumentation for Measuring Vibration Transmitted to the Hand ♦ ♦	BS 7482-2 1991	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
	Vibration and Shock - Human Response Vibration-Measuring Instrumentation	AS 2973 1987	http://www.standards.com.au/catalogue/script/search.asp http://www.techstreet.com/
Measurement	Agricultural Wheeled Tractors - Operator's Seat - Laboratory Measurement of Transmitted Vibration ♦	ISO 5007 1990	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Agricultural Wheeled Tractors - Operator's Seat - Laboratory Measurement of Transmitted Vibration ♦	CAN/CSA M5007 1999	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Road Vehicles - Procedures for H- and R-Point Determination ♦	ISO 6549 1999	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Seat	Earth-Moving Machinery - Laboratory Evaluation of Operator Seat Vibration ♦	ISO 7096 2000	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Earth-Moving Machinery - Laboratory Evaluation of Operator's Seat Vibration ♦	CAN/CSA- M7096 2000	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Terminology	Mechanical Vibration and Shock Affecting Man - Vocabulary ♦	ANSI S3.32 1982	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
	Mechanical Vibration and Shock - Human Exposure - Vocabulary ♦ ♦	ISO 5805 **H** 1997	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Whole Body	Guide to Measurement and Evaluation of Human Exposure to Whole-Body Mechanical Vibration and Repeated Shock ♦ ♦	BS 6841 1987	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
	Agricultural Wheeled Tractors and Field Machinery - Measurement of Whole Body Vibration of the Operator	ISO 5008 2002	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://www.techstreet.com/
	Evaluation of Human Exposure to Whole-Body Vibration	ANSI S3.18 2002	http://www.ansi.org/ http://www.techstreet.com/
	Evaluation of Human Exposure to Whole-Body Vibration - Part 1: General Requirements	ISO 2631-1 **H** 1997	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://www.techstreet.com/

	As above - Part 2: Continuous and Shock-Induced Vibration in Buildings (1 - 80 Hz)	ISO 2631-2 1989 **H**	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://www.techstreet.com/
	Measurement of Whole Body Vibration of the Seated Operator of Off-Highway Work Machines ♦	SAE J1013 1992	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
	Testing of Mobile Machinery in Order to Determine the Whole-Body Vibration Emission Value - General ♦♦	EN 1032 1996	http://www.cenorm.be/ http://standards.nasa.gov/NPTS/login.taf
View, Visibility			
Driver's	Describing and Measuring the Driver's Field of View ♦	SAE J1050 1994 **D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
	Motor Vehicle Driver's Eye Locations	SAE J941 1997 **D**	http://www.techstreet.com/ http://www.ansi.org/
Passenger Cars	Passenger Cars - Verification of Driver's Direct Field of View - Part 1: Vehicle Positioning for Static Measurement ♦	ISO 7397-1 1993	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Passenger Cars -Verification of Driver's Direct Field of View - Part 2: Test Method ♦	ISO 7397-2 1993	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Road Vehicles	Road Vehicles - Visibility - Method for Establishment of Ellipses for Driver's Eye Location ♦	ISO 4513 1978	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Vision Systems			
	Human Engineering Issues for Enhanced Vision Systems ♦	SAE ARD 50019 1995	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf
Visual Display Terminals			
Colors	Ergonomic Requirements for Office Work with Visual Display Terminals (VDTs) - Part 8: Requirement for Displayed Colours ♦	ISO 9241-8 1997	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Command Dialogues	As above - Part 15: Command Dialogues ♦	ISO 9241-15 1997	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf

Dialogue Principles	As above - Part 10: Dialogue Principles ♦	ISO 9241-10 1996	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Direct Manipulation	Ergonomic Requirements for Office Work with Visual Display Terminals (VDTs) - Part 16: Direct Manipulation Dialogues	ISO 9241-16 1999	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://www.techstreet.com/
Display, Visual	Ergonomic Requirements for Office Work with Visual Display Terminals (VDTs) - Part 3: Visual Display Requirements ♦ ♦	BS EN 29241-3 1993	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
	Ergonomic Requirements for Office Work with Visual Display Terminals (VDTs) - Part 3: Visual Display Requirements ♦	ISO 9241-3 1992	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Ergonomic Requirements for Office Work with Visual Display Terminals (VDTs) - Part 3: Visual Display Requirements ♦	JTC1 9241-3 2000	http://www.jtc1.org/ http://standards.nasa.gov/NPTS/login.taf
	Ergonomic Requirements for Office Work with Visual Display Terminals (VDTs) - Part 7: Requirements for Displays with Reflections ♦	ISO 9241-7 1998	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Environment	Ergonomics of Design and Use of Visual Display Terminals (VDTs) in Offices, Part 6: Guidance on the Work Environment	BS EN ISO 9241-6 2000	http://www.bsi-global.com/index.xalter http://www.techstreet.com/
	Ergonomic Requirements for Office Work with Visual Display Terminals (VDTs) - Part 6: Guidance on the Work Environment	ISO 9241-6 1999	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://www.techstreet.com/
Flat Panel Technology	Ergonomic Requirements for Work with Visual Displays Based on Flat Panels - Part 1: Introduction	ISO 13406-1 1999	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://www.techstreet.com/
	As above - Part 2: Ergonomic Requirements for Flat Panel Displays	ISO 13406-2 2001	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://www.techstreet.com/
Form-Filling	Ergonomics of Design and Use of Visual Display Terminals (VDTs) - Part 17: Form Filling Dialogues	ISO 9241-17 1998	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://www.techstreet.com/
General	Ergonomic Requirements for Office Work with Visual Display Terminals (VDTs) - Part 2: Guidelines on Task Requirements	CEN EN 29241-2 1993	http://www.cenorm.be/ http://www.techstreet.com/

	Ergonomic Requirements for Office Work with Visual Display Terminals (VDTs) - Part 2: Guidance on Task Requirements ♦	ISO 9241-2 1992	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Accommodating User Needs in Computer Program Development ♦	ANSI/ANS 10.5 1994	http://www.ans.org/ http://standards.nasa.gov/NPTS/login.taf
Information	Ergonomic Requirements for Office Work with Visual Display Terminals (VDTs) - Part 12: Presentation of Information	ISO 9241-12 1998	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://www.techstreet.com/
Interactive Systems	Human-Centered Design Processes for Interactive Systems	ISO 13407 1999	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://www.techstreet.com/
Keyboards	Ergonomics of Design and Use of Visual Display Terminals (VDTs) in Offices, Part 4: Keyboards ♦	BS EN ISO 9241-4 1998	http://www.bsi-global.com/index.xalter http://standards.nasa.gov/NPTS/login.taf
	Ergonomic Requirements for Office Work with Visual Display Terminals (VDTs) - Part 4 Keyboard Requirements ♦	ISO 9241-4 1998	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	As above - Part 9: Requirements for Non-Keyboard Input Devices ♦	ISO 9241-9 2000	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Keyboard Arrangement for Alphanumeric Machines ♦	ANSI X3.154 1987	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
	Office Machines and Supplies - Alphanumeric Machines - Alternative Keyboard Arrangement ♦	ANSI X3.207 1991	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Menu Dialogues	Ergonomic Requirements for Office Work with Visual Display Terminals (VDTs) - Part 14: Menu Dialogues ♦	ISO 9241-14 1997	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Public Terminals	Human Factors Aspects of Public Terminals: Generic Operating Procedures ♦	ITU-T Recommendation E.134 1993	http://www.itu.int/home/index.html http://standards.nasa.gov/NPTS/login.taf
	Minimum User-Terminal Interface for a Human User Entering Address Information into an ISDN Terminal ♦	ITU-T Recommendation E.331 1991	http://www.itu.int/home/index.html http://standards.nasa.gov/NPTS/login.taf
Safety	Information Technology Equipment – Safety – Part 1: General Requirements ♦	IEC 60950-1 2001	http://www.iec.ch/ http://standards.nasa.gov/NPTS/login.taf

Tasks	Ergonomic Requirements for Office Work with Visual Display Terminals (VDTs) - Part 2: Guidance on Task Requirements	BS EN 29241-2 1993	http://www.bsi-ssglobal.com/index.xalter http://www.techstreet.com/
	Ergonomic Requirements for Office Work with Visual Display Terminals (VDTs) - Part 2: Guidance on Task Requirements ♦	ISO 9241-2 1992	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
	Ergonomic Requirements for Office Work with Visual Display Terminals (VDTs) - Part 2: Guidance on Task Requirements ♦	JTC1 9241-2 1992	http://www.jtc1.org/ http://standards.nasa.gov/NPTS/login.taf
Usability and Testing	Ergonomic Requirements for Office Work with Visual Display Terminals (VDTs) - Part 11: Guidance on Usability ♦	ISO 9241-11 1998	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
User Guidance	As above - Part 13: User Guidance ♦	ISO 9241-13 1998	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Work Stations and Workplaces	Ergonomic Requirements for Office Work with Visual Display Terminals (VDTs) -Part 5: Workplace Layout and Postural Requirements ♦	ISO 9241-5 1998	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://standards.nasa.gov/NPTS/login.taf
Workload, Mental			
Design Principles	Ergonomic Principles Related to Mental Workload - Part 2: Design Principles	ISO 10075-2 1996	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://www.techstreet.com/
Terminology	Ergonomic Principles Related to Mental Workload - General Terms and Definitions	ISO 10075 1991	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html http://www.techstreet.com/
Workspace			
Aircraft	Flight Deck Layout and Facilities ♦	SAE ARP 4101 1988	http://www.ansi.org/ http://standards.nasa.gov/NPTS/login.taf
Machinery	Earth-Moving Machinery - Human Physical Dimensions of Operators and Minimum Operator Space Envelope	CAN/CSA- M3411 2000	http://www.csa.ca/language/default.asp?thisUrl=%2FDefault%2Easp http://www.techstreet.com/
Machines, Off-Road	Operator Space Envelope Dimensions for Off-Road Machines ♦	SAE J154 1992 **D**	http://www.sae.org/servlets/index http://standards.nasa.gov/NPTS/login.taf

Office	Guideline on Office Ergonomics	CSA Z412 2000	http://www.csa.ca/language/default.asp?thisUrl=%2FDefault%2Easp http://www.techstreet.com/

DRAFT STANDARDS		
Anthropometry and Biomechanics	Manual Handling - Part 1: Lifting and Carrying	ISO/CD 11228-1 Still in draft; not available
	Manual Handling - Part 2: Pushing and Pulling	ISO/CD 11228-2 Still in draft; not available
	Manual Handling - Part 3: Handling, at High Repetition, of Low Loads	ISO/CD 11228-3 Still in draft; not available
Computer Workstations	Human Factors Engineering of Computer Workstations	HFES 100 Issued March 2002 as a Draft Standard for Trial Use for a period not to exceed 36 months
Control Rooms	Ergonomic Design of Control Centers - Part 5: Display s and Controls	ISO/WD 11064-5 Still in draft form; not available
	Ergonomic Design of Control Centers - Part 6: Environmental Requirements for Control Centers	ISO/CD 11064-6 Still in draft form; available
	Ergonomic Design of Control Centers - Part 7: Principles for the Evaluation of Control Centers	ISO/WD 11064-7 Still in draft form; available
	Ergonomic Design of Control Centers - Part 7: Principles for the Evaluation of Control Centers	ISO/WD 11064-7 Still in draft form; available
	Ergonomic Design of Control Centers - Part 4: Workstation Layout and Dimensions	ISO/WD 11064-4 Still in draft form; not available
Controls	Ergonomic Requirements for the Design of Signals and Control Actuators - Part 3: Control Actuators	ISO/CD 9355-3 Still in draft form; not available
Nuclear Power	Guide for the Application of Human Factors Engineering in the Design of Computer-Based Monitoring and Control Displays for Nuclear Power Generating Stations	IEEE P1289 Still in draft form
	IEEE Guide to Evaluation of Man-Machine Performance in Nuclear Power Generating Station Control Rooms and Other Peripheries.	IEEE-Std 845 Still in draft form
Performance, Human	Manager's Guide to Reducing Human Errors	CMA 022006 Still in draft form
Sound, Noise, Bioacoustics	Ergonomic Assessment of Speech Communication - Part 2: Assessment of Speech Communication by means of the Modified Articulation Index (MAI Method)	ISO/CD 9921-2 Still in draft form

ORGANIZATIONAL ABBREVIATIONS/ LINKS TO WEBSITE

(*ORGANIZATION PHYSICAL ADDRESS WHERE AVAILABLE)*

AAMI	Association for the Advancement of Medical Instrumentation (1110 North Glebe Road, Suite 220, Arlington, VA 22201-4796)	http://www.aami.org/
ACGIH	American Conference of Governmental Industrial Hygienists (1330 Kemper Meadow Drive, Cincinnati, OH 45240)	http://www.acgih.org/home.htm
AIAA	American Institute of Aeronautics and Astronautics (1801 Alexander Bell Drive, Suite 500, Reston, VA 20191-4344)	http://www.aiaa.org
AICHE	American Institute of Chemical Engineers (3 Park Avenue, New York, NY 10016-5991)	http://www.aiche.org/
ANS	American Nuclear Society (555 North Kensington Avenue, LaGrange Park, IL 60526)	http://www.ans.org/
ANSI	American National Standards Institute (1819 L Street, NW, Washington, DC 20036)	http://www.ansi.org/
API	American Petroleum Institute (1220 L Street NW, Washington, DC 20005-4070)	http://api-ec.api.org/
AS	Australian Standard	http://www.standards.com.au/catalogue/script/search.asp
ASME	American Society of Mechanical Engineers	http://www.asme.org/
ASTM	American Society for Testing and Materials (100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959)	http://www.astm.org/cgi-bin/SoftCart.exe/index.shtml?E+mystore
BS	British Standard	http://www.bsi-global.com/index.xalter
CEN	European Committee for Standardization (EN = European Normalisation)	http://www.cenorm.be/
CENELEC	European Committee for Electrotechnical Standardization	http://www.cenelec.org/
CIE	Commission Internationale de l'Eclairage	http://members.eunet.at/cie/
CSA	Canadian Standards Association	http://www.csa.ca/language/default.asp?thisUrl=%2FDefault%2Easp
DIN	Deutsches Institut für Normung	http://www2.din.de/
EIA	Electronic Industries Alliance (2500 Wilson Blvd., Alexandria, VA 22201)	http://www.eia.org/
EN	European Norm	http://www.etsi.org/

ETSI	European Telecommunications Standardization Institute	http://www.etsi.org/
HFES	Human Factors and Ergonomics Society (P.O. Box 1369, Santa Monica, CA 90406-1369)	http://hfes.org/
IEC	International Electrotechnical Commission	http://www.iec.ch/
IEEE	Institute of Electrical and Electronics Engineers (445 Hoes Lane, Piscataway, NY 08854-1331)	http://www.ieee.org/portal/index.jsp
IESNA	Illuminating Engineering Society of North America (120 Wall Street, Floor 17, New York, NY 10005)	http://www.iesna.org/
ISA	Instrumentation, Systems, and Automation Society	http://www.isa.org/
ISO	International Organization for Standardization	http://www.iso.ch/iso/en/prods-services/ISOstore/store.html
ITU	International Telecommunication Union	http://www.itu.int/home/index.html
JIS	Japanese Industrial Standard	http://www.jsa.or.jp/default_english.asp
JTC 1	ISO/IEC Joint Technical Committee for Standards in Information Technology	http://www.jtc1.org/
NEMA	National Electrical Manufacturers Association (1300 N. 17th Street, Suite 1847, Rosslyn, VA 22209)	http://www.nema.org/
NFPA	National Fire Protection Association (1 Batterymarch Park, PO Box 9101, Quincy, MA 02269-9101)	http://www.nfpa.org/Home/index.asp
PREN	Preliminary Release of European Norm	http://www.etsi.org/
RIA	Robotics Industries Association (900 Victors Way, Suite 140, PO Box 3724, Ann Arbor, MI 48106)	http://www.robotics.org/
SAE	Society of Automotive Engineers (400 Commonwealth Drive, Warrendale, PA 15096-0001)	http://www.sae.org/servlets/index

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