



ISO 16840 Wheelchair seating

What is ISO 16840 Wheelchair seating?

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 16840-1 was prepared by Technical Committee ISO/TC 173, *Assistive products for persons with disability*, Subcommittee SC 1, *Wheelchairs*.

ISO 16840 consists of the following parts, under the general title *Wheelchair seating*:

- — *Part 1: Vocabulary, reference axis convention and measures for body segments, posture and postural support surfaces*
- — *Part 2: Determination of physical and mechanical characteristics of devices intended to manage tissue integrity — Seat cushions*
- — *Part 3: Determination of static, impact and repetitive load strengths for postural support devices*

Introduction

The development of wheelchair seating as a sub-specialty of rehabilitation services has been occurring over the last several decades. This practice involves the selection and provision of wheelchair seating products that provide improved body support, movement control, and injury prevention for the wheelchair user. Inherent in this selection process is the measurement and communication of the anthropometrics and postural measures of the seated person, as well as the orientation, location and linear measures of the person's seating support surfaces.

However, there has been tremendous variation in the use of the terminology and definitions related to the clinical measures of a seated individual. Standard definitions and terms are lacking for communicating critical postural information and support surface parameters in a way that is uniformly useful to service providers, researchers, manufacturers, wheelchair users and purchasers when selecting and providing wheelchair seating devices.

The purpose of this part of 16840 is to specify standardised geometric terms and definitions for describing and quantifying a person's anthropometric measures and seated posture, as well as the spatial orientation and dimensions of a person's seating support surfaces. This also allows for the systematic monitoring of a person's seated posture change over time.

1 Scope

This part of ISO 16840 applies to seating intended to provide postural support within a wheelchair. It specifies:

- a) a global coordinate system that permits the determination and recording of a person's posture while seated in a wheelchair;
- b) the standard terms and definitions for use in describing both the posture and the anthropometrics of a person seated in a wheelchair;
- c) the terms and definitions for describing the dimensions, location and orientation of seating support surfaces, which together comprise the body support system.

This part of ISO 16840 does not specify any methods for use in measuring a person's seated posture, nor does it define terms for dynamic physiological movements (such as flexion or extension).

This part of 16840 might be applicable to seating other than that intended to be used within a wheelchair.

Generic support surfaces with abbreviations

Definitions in this clause permit the quantification of the location, linear measures, and spatial orientation of a seated person's support surfaces in the sagittal, frontal and transverse planes.

Generic support surfaces with abbreviations are used to represent various types of commonly used actual support surfaces. All support surface designations refer to the part of the support surface in contact with the person's body when in a seated position.

PS	indicates a generic support surface in contact with a posterior surface of the body.
AS	indicates a generic support surface in contact with the anterior surface of the body.
LS	indicates a generic support surface in contact with a lateral surface of the body.
MS	indicates a generic support surface in contact with a medial surface of the body.
SS	indicates a generic support surface in contact with a superior surface of the body.
IS	indicates a generic support surface in contact with an inferior surface of the body.

List of International Organization for Standardization standards

This is a list of published International Organization for Standardization (ISO) standards and other deliverables. For a complete and up-to-date list of all the ISO standards, see the ISO catalogue.

The standards are protected by copyright and most of them must be purchased. However, about 300 of the standards produced by ISO and IEC's Joint Technical Committee 1 (JTC 1) have been made freely and publicly available.



ISO Brand

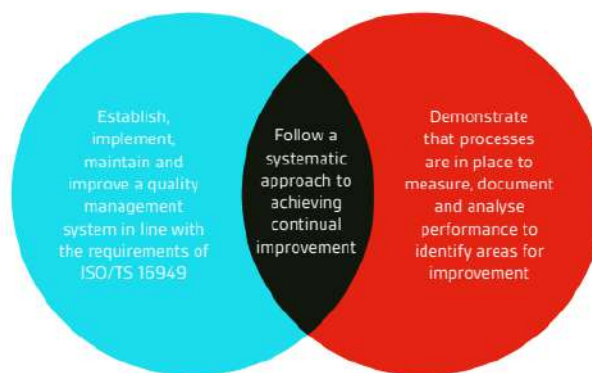
This is a dynamic list and may never be able to satisfy particular standards for completeness. You can help by adding missing items with reliable sources.

Which of the ISO standard provide guidelines for management system?

ISO 27001: Information Security Management System

ISO 27001 is the standard for an Information Security Management System (ISMS). The basic objective of the standard is to provide a model for establishing and maintaining an effective IT information management system based on the process approach.

The principal requirements of the standard are illustrated below:



The next few pages of the guide takes you through the Plan-Do-Check-Act (PDCA) methodology, common in all ISO management systems and how DCS can help and support you on your ISO/TS 16949 journey.

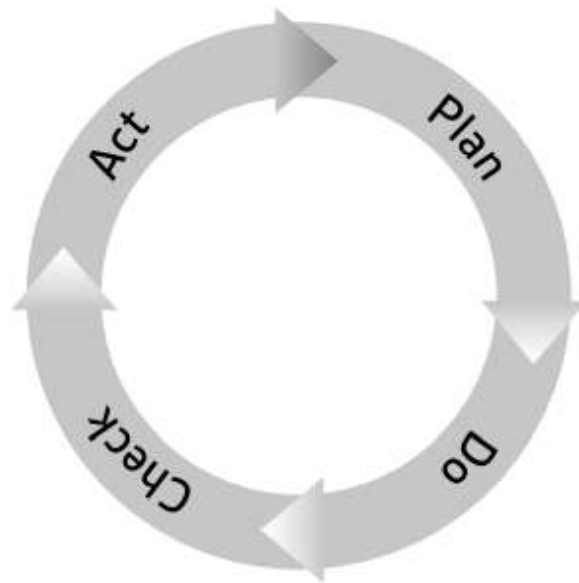
Understanding the principles of continual improvement

Act

Correct and improve your plans to meet and exceed your planned results

Check

Measure and monitor your actual results against your planned objectives



Plan

Establish objectives and draft your plans (analyse your organization's current systems, establish overall objectives, set interim targets for review and develop plans to achieve them)

Do

Implement your plans within a structured management framework