



Standing work in the commercial courts



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Activities to be undertaken over an extended period of standing, are a strong physical stress dar. investigations of the Federal Institute for Occupational Safety and Health (BAuA) on "women in standing professions" show that, for example, more than half of all sellers health problems complain. Almost every second because of frequent attacks, especially pain and circulatory problems to medicines. Diseases of the supporting structures of the vascular system and cause standing occupations twice as many days lost, as in other professions. Even the premature birth is increased in standing occupations, compared to sitting around working women more than doubled.

Health Risks

Long standing over the body requires a continuing effort by large muscle groups. On joints, ligaments and tendons act unilaterally compressive and tensile forces. In addition, problems occur with the maintenance of the circuit. The effects of daily standing, over weeks, months, years to come, are back pain, varicose veins, circulatory diseases and fatigue.

Once on prolonged standing fatigue in the muscles occur, the spine is moved from its natural form. Due to this unfavorable attitude takes the pressure load on the intervertebral discs. The effects are cramps, painful cramps and muscle soreness. Unilateral posture leads to muscle fatigue and poor posture associated with tension in the muscles in the neck and spine.



Figure 1: Typical stand workstations in the sales

Due to the long standing beyond the intrinsic activity of the vessels in the legs is suffering. The blood vessels can no longer pull together and according to the mechanism of the "muscle pump" falls out. When the muscle pump, the veins in the legs by alternately tensing and relaxing the leg muscles pressed together and opened, whereby the blood is conveyed back to the heart.

Complaints by dilated veins painful blockages, varicose veins, and the feeling of always having "heavy legs" are the result. This is particularly stressful for pregnant women.

Activities that are long-lasting standing required, should therefore be included in operation and reduced as much as possible. The jobs and means, on / with which these activities should be performed, adapted to the work performed in the standing procedures and the best possible employees will be instructed on individual ways of minimizing exposure.

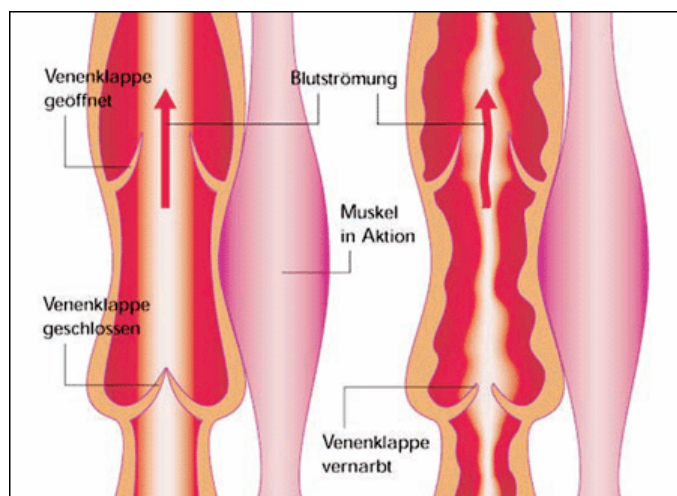


Figure 2: Blood flow through Movement: The muscle squeezes the veins in his relaxation widens the vein again. In the healthy vein (left), the blood escapes through the venous valves closed up. In the diseased vein, part of the blood flowing in the wrong direction, to the vein wall deposits act as a drag. (Source: Professional Association for Health Services and Welfare)

The most important measure: Mixed organize work

Standing for long periods is a unilateral burden on the human body is not set. The most important measure to prevent damage to health is, therefore, the interruption of standing. The work should be organized so that standing, sitting and alternate with plenty of exercise related activities. Especially walking reduces the physical strain. This allows even more variety to the everyday work and thus prevents one-sided psychological stress.

Requirements Seats and Stools

Needs seats are seats that are positioned in close proximity of the standing work station. They allow, for example, while waiting a short-term relief. Employees and supervisors should be aware that using these seats needed during working hours without "remorse" is desirable.

In addition, there are a variety of standing aids, to the work standing up, to relieve the employees there can be used if un favorable space conditions do not permit the work flow or the use of a proper seat. Standing aids are particularly suitable for short-term relief of employees.

Be careful in the choice of standing aids to

- a stable design,
- non-slip feet
- an adjustable seat height and tilt
- a durable and easy to clean seat and
- ease of use.

A list of manufacturers located in the Appendix .



Figure 3: Standing Aid

Selection of appropriate footwear

Employees must have the lot should wear appropriate shoes for this purpose (see Figure 4a, 4b). Additional information includes the selection of appropriate footwear our leaflet M 90 "Safe Shoes retail " .



Figure 4a: "Shoe Service" (in this women's model), which was developed specifically for the activity profile of the retail
(Photo: Louis Steitz Secura GmbH + Co. KG-, Kirchheimbolanden)



Figure 4b: The raised and reinforced heel gives the foot a secure grip and protects against injury from being hit by the rear.

Selection of a suitable floor covering

Standing at work places should be springy, swinging soils may be present. This can be achieved subsequently by resilient flooring (see Figure 5). Investigations of the BAuA in Dortmund have shown that resilient flooring leads to a load reduction.



Figure 5: Resilient Flooring

Design of work standing up,

Free space for movement

Employees must be able to move freely in their workplace according to their work tasks. This unhealthy or tiring positions are avoided.

Work area and arm

Particularly common activities (frequency > 10/min) are run in the preferred workspace. The preferred operating range is the depth (C1) of 450 mm from front edge work surface (for prevention to 20 °).

(Frequency 10/min <) Other activities can be executed in the maximum operating range. The maximum working area has a depth (C2) of 570 mm.

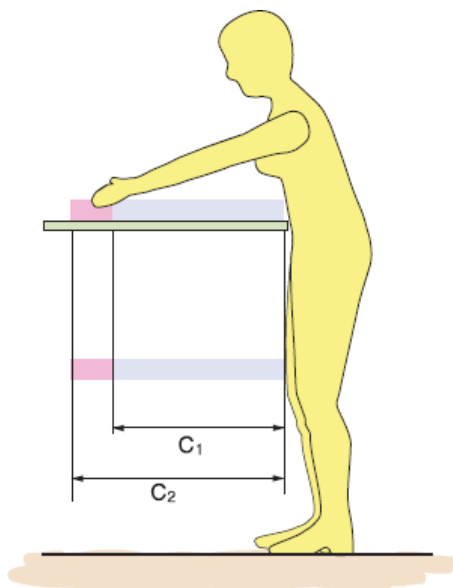


Figure 6: Workspaces in a standing

Legroom

The leg room must be such that it is possible for all activities required an optimal working position.

Working height

In addition to work standing up, also plays an important role in proper working height. For operational practice will apply in the following simplification rule to determine the ideal working height:

The right height depends not only on the type of work, but also on body size to the operator. The best solution for changing employees in the workplace are so height-adjustable desks that allow the working height can be adjusted to body size.

Ideal working height in [cm] (averages)

Activity	for women	for men
Fine work	95-105	100-110
Skill work	85-90	90-95
Working with high effort	70-85	75-90

Note: Table height = height plus labor. Amount of goods, machine, etc.

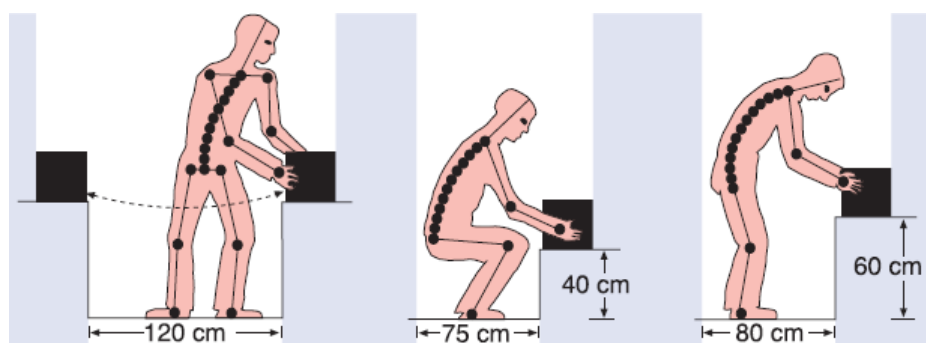


Figure 7: Indicative dimensions for the space (dimensions are only Abhaltswerte) (sketch from BGI 523 "Man and Computer")

Staff training

And through the company doctor, employees should be informed about health-promoting behaviors and their implementation by the supervisor and motivated.

For your information for employees

- Standing work in the commercial courts
- Movement is fun - compensation program related activities



Poster P 8
"Healthy Veins - nice legs"

Standing work in the commercial courts

Standing KO?

"Standstill" loaded in the working muscles and spine. Common symptoms are painful muscle spasms and a strain on the intervertebral discs to lumbago and herniated disc.

Sustained, relatively immobile standing not just in the back, but also in the legs. Possible consequences: varicose vein problems such as inflammation and to the thrombosis.

Before it gets that far, however, terminate the problems, "fortunately" due to low back pain or muscle tightness. These body signals you should definitely take it seriously!

Movement gain

On long standing it is important to stimulate the blood circulation in the legs. You should take advantage of every opportunity to gain as much movement and go.

Even while standing, you can stimulate the blood circulation by gently rocking (alternating standing on toes and heel). If possible, you should put up your work breaks in the legs.

Other ways to compensate for the costs of long standing, are:

- Walking veins, vein gymnastics
- Fitness break at work (compensation program related activity)
- Targeted Wirbelsäulengymnastik
- Treading water or cold treatments after Kneipp foot baths and foot massages
- Use of aids such as orthotics, braces and compression stockings may

To compensate for the unilateral burden of prolonged standing at work, you should exercise at your leisure activities as possible, promote blood circulation and build muscle in the legs. These include for example cycling, swimming or hiking.

A simple accurate measure is also managing shorter distances on foot instead of by car, bus or tram or in the building using the stairs instead of the elevator.

Documents with detailed information on the above measures offer the most health insurance to their members free of charge.

On the right shoe that counts

Do not use shoes with high heels, because they restrict the activity of the calf muscle and thereby impede the blood circulation. We recommend a heel height of 2 - 4 cm.

Heels and soles also need to be able to absorb impact forces that occur during walking.

Your shoes should have a good fit. The footbed should be the shape of a healthy foot to be modeled. When buying the fact that the shoes to the feet, especially toes, offer enough space.

You can put your foot home on a piece of cardboard, cut it with a pencil to the operands and shape. When selecting the shoe slide into the template. Only when the template is not bent on the condition that the shoe offers plenty of space.

Some manufacturers offer shoes for slim, regular and wide feet. Too small shoes to postures that may increase the burden by standing. Upon standing, should in the heel and the toes from a few millimeters to remain free.

For complaints

If you regularly after work experience symptoms such as pain and swelling in the legs and feet, you should consult a physician. These could be signs of venous disease, which are often not taken seriously.

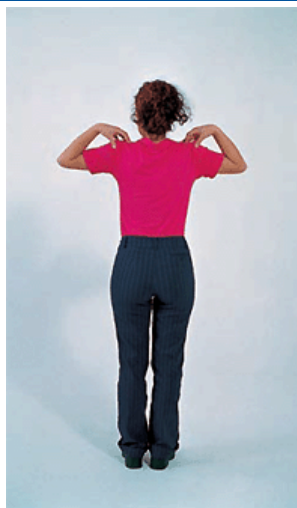
In advanced stages, skin lesions and rashes occur in the range of ankle and calf. These characters are often not interpreted as a disease. Effective protection against venous diseases offer only regular preventive examinations.

Movement is fun Compensation program for standing work



First stretch, stretch and loll you. To solve tense muscle groups and strengthen the back muscles. You will also depend on your spine.

2nd Circle your shoulders forward and backward several times. To loosen up your shoulder belt.



3rd Drag the right shoulder to right ear, and then bring them back. Change to the left side. Repeat several times. In this way, Their shoulder and neck muscles increasing blood flow. Tension is reduced.

4th Raise and lower your knees in the change (keep torso upright). To stimulate your circulation. Good for venous problems.





Fifth lift the heels off the floor and then bring them back. The toes remain firmly on the ground. At the same time tighten abdominal and buttock muscles. Repeat several times. This enables the "venous pump" and thus preventing varicose veins.

6th describe small circles with the toes. Stretch your toes and then pull it again. Repeat several times. Also prevents varicose veins before.



Appendix: Manufacturers of standing aids *

aeris Impulsmöbel GmbH & Co. KG

Ahrntaler 2-6
D-85540 Haar near Munich
Tel: 089/90 05 06-0
Fax: 089/90 39 39 1

COMFORTO

Harworth GmbH
Ackenbach-of-Straße 21-23
59229 Ahlen
Tel: 02382/7810

Frederick W. Dauphin GmbH & Co.

Espanstr. 29
91 238 Offenhausen
Tel: 09158/170
Fax: 09158/1007

Gioflex GmbH

Industriestr. 25
78647 Trossingen
Tel: 07425/2390
Fax: 07425/239100

HAIDER BIOSWING

Health and Therapy Systems GmbH seat
Dechant Seeser Str 4
95 704 Pullenreuth
Tel: 09 234 / 9922-0

Koehl Office Seating GmbH

Paul-Ehrlich-Straße 4
63322 Rödermark
Tel: 06074/9280
Fax: 06074/95951

LEITNER ERGO FURNITURE GmbH

57 Castle Street Weger
4923 Lohnsburg
Austria
Tel: +43 (0) 7754 3137-0
Fax: +43 (0) 7754 3137-15

Mayer Seating GmbH & Co. KG

At the well 7
96257 Redwitz

MOIZI Furniture Ltd.

Warburger 37 st
33034 Brakel
Tel: 05272/37 15 0
Fax: 05272/37 15 23

Variér Furniture GmbH

Ziegelstraße 20-24/EG
71063 Sindelfingen
Tel: 07031/81764 0
Fax: 07031/81764 65

Fax: 09 234 / 9922-66

Wilkahn
Wilkening + Hahne GmbH + Co.KG
Fritz-Hahne-Straße 8
31848 Bad mouths
Tel: 05042/999-0
Fax: 05042/999-226

* This list is not exhaustive