



At Pollex, “user-centered design” does not mean “design for the 95 percentile.” It means design for you. We do not customize. We create.

Designing Your Ideal Desk Chair

Before we can create the perfect chair for you, we need to know a little more about you... specifically, your measurements. So grab a friend and a measuring device and take a seat.

For accurate seated measurements, please ensure that the seat and floor are parallel and horizontal, thighs are horizontal, knees are at a 90° angle, lower legs are vertical, and feet are horizontal and flat on the ground.

Please record the following measurements in inches:



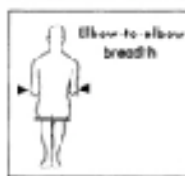
Seat height
(popliteal height):



Seat depth
(buttock-popliteal length):



Seat width
(seat breadth):



Armrest width
(elbow-to-elbow breadth):



Backrest height
(sitting height, erect):



Backrest height
(sitting height, normal):



Armrest height
(elbow rest height):

Contact Info

Name: _____

Phone: _____

Email: _____

Lexie Kirsch
Executive Summary

Ergonomics is the study of people at work. By identifying the factors that cause discomfort, stress injuries, and work-related musculoskeletal disorders, and designing a workplace that suits the user instead of the other way around, ergonomic design maximizes both productivity and satisfaction.

As more people spend more time sitting at work, the importance of an ergonomic work environment increases. A simple but effective way to improve productivity in the workplace is to minimize the problems associated with an ill-fitting desk chair. For instance, if the seat is too low, users must raise their shoulders to reach their workstation, leading to fatigue of the shoulder muscles and pain in the neck and shoulder areas. However, if the seat is too high, users must flex their backs to access the workstation, leading to backache. Furthermore, if the user's legs are dangling, pressure builds on the blood vessels and nerves under the user's thighs. This may inhibit blood flow to the lower limbs and cause tingling and numbness.

For these reasons, I, the CEO of Pollex, have created a worksheet for users to help them design their own ergonomic desk chair, which my company will then construct and deliver. The worksheet relies on the user's anthropometric data, or body measurements, to create a desk chair that is fitted to the user, regardless of their size and shape.

The worksheet includes seven measurements. The first, the popliteal height, is used so the user's feet can rest comfortably on the floor, or a footrest, and prevent pressure on the user's thighs. The buttock-popliteal length is used to prevent the backs of the user's knees from hitting the seat. The seat breadth is used to allocate space for the user's hips and clothing. The two backrest heights are used to accommodate the curvature of the user's spine and support the user's shoulder blades. Finally, the armrest height and width are used to provide support for the user's arms, which is important in relieving stress on the neck, shoulders, and back.

After the chair is constructed, it is delivered to the user with the following message:

Thank you for choosing Pollex to design your ideal desk chair!

An ergonomic chair can improve your productivity and satisfaction but only if used properly. No matter for whom the chair is designed, if you decide to slouch on the end of the seat, it will not be of much benefit. Therefore, it is important to recall the posture specified at the beginning of the worksheet: ensure your back is straight and supported by the backrest, thighs are horizontal, knees are at a 90° angle, lower legs are vertical, and feet are horizontal and resting flat on the ground or footrest. This makes the chair more effective at making *you* more effective. It is also worth noting that no posture can be held for long periods of time without some discomfort. As a result, please do not forget to take frequent breaks from working to stretch your body.

We hope you enjoy your new ergonomic chair.
Sincerely,

Lexie Kirsch

References

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