

Hand Tool Ergonomics

Hand Tool Ergonomics - Introduction

On this page

[Are hand tools ergonomically designed?](#)

Are hand tools ergonomically designed?

Not necessarily. To be called “ergonomic”, a tool should reduce the physical effort required of the person using it. Tools should be designed to consider the following factors and be chosen accordingly:

- Operator characteristics
 - Physical characteristics and limitations (anthropometry)
 - Biomechanics - structure, strength and mobility
 - Fatigue
 - Manual dexterity
- Factors related to the workstation and the tasks
- Work Requirements - Tools must help meet production goals, requirements for accuracy, etc.

The mass production of hand tools has also changed our approach to the use of hand tools. The use of tools on an industrial scale made it apparent that using a tool which does not fit the person or task can seriously affect a user's health (see [Hand Tool Ergonomics - Health Hazards](#)).

Choosing the proper tool for the job and fitting it to the individual has become very important for productivity and worker health.

The ergonomic assessment of work where hand tools are used has helped people to understand that the layout of the workstation (see [Hand Tool Ergonomics - Workspace Design](#)), the variety and scheduling of tasks (see [Hand Tool Ergonomics - Job Design](#)) and the way tools are used, are all factors as important as tool design itself (see [Hand Tool Ergonomics - Tool Design](#)).

Disclaimer

Although every effort is made to ensure the accuracy, currency and completeness of the information, CCOHS does not guarantee, warrant, represent or undertake that the information provided is correct, accurate or current. CCOHS is not liable for any loss, claim, or demand arising directly or indirectly from any use or reliance upon the information.