Work Stations & Benches

CUSTOMISED, ERGONOMIC WORK BENCHES
IDEAL FOR CLEAN ROOMS & ASSEMBLY STATIONS

T-Slot Aluminium Profile - Safety Fencing
Robot Heads- Linear Guides - CNC Frames
Machine Guarding - Machinery Frames
What to look for in a well designed workstation

WORKSTATION ‘GOOD DESIGN’ CHECKLIST

1. Correct Work Height
   - An operator’s arms should be below shoulder level
   - Precise tasks: 50mm below elbow
   - Light assembly: 50–100mm below elbow
   - Heavy work: 100–200mm below elbow

2. Properly Adjust Work Equipment to the Task
   - Adjust the workstation:
     - Seat height and angle; footrest height and angle
   - Adjust the work piece and parts containers:
     - Work piece and parts containers in optimal positions (refer to points 3 and 4)

3. Work Piece & Parts Container Layout
   - Optimise container layout to reduce wasted motion and speed up throughput
   - Heavy and/or most used parts should be placed in the closest containers
   - Optimal container layout is within a 400mm radius, as measured from each shoulder

4. Working Area
   - Maximum grab area: 540mm radius, measured 160mm to the left and right from the centreline and front edge of the work top
   - Optimum grab area: 280mm radius, measured 160mm to the left and right from the centreline and front edge of the work top

5. Consider Fields of Vision
   - Operators should view the work piece without turning head or eyes
   - A 15° view angle requires no head or eye movement to grab parts
   - A 35° view angle requires only eye movement to grab parts
   - Viewing distance to a Monitor should be between 350mm and 750mm

6. Match Light Intensity to the Work Task
   - Standard assembly tasks: 500–750 lux
   - Complex tasks (e.g. electrical assembly): 1000–1500 lux
   - Delicate and/or critical work: 1500–2000 lux

7. Do Not Work Above the Heart
   - Keep all work below the heart to enhance blood circulation
   - Reduce static holding during assembly as it increases muscle fatigue
How to configure your customised workstation:

**Step 1:** What is the purpose of your workstation? E.g. QA Checking? An Assembly station? Repairs and Maintenance?

**Step 2:** Does the workstation need to support a specific load/weight?
- We can select differing profile sizes, or alter our design to cater for specific requirements

**Step 3:** Do you need to support or manipulate a large/bulky item? If yes, would an overhead Linear Rail or Integrated Conveyor may be beneficial?

**Step 4:** Do you need Tote Bins, Shelves or Racking to cater for components within your assembly task or to store finished product?

**Step 5:** Do you require Power, Data or Compressed Air at the workstation?

**Step 6:** Do you require a computer and/or monitor at the workstation?

**Step 7:** Select a Base Frame Size
- Length and Depth (mm)
- We can customise to virtually any dimension

**Step 8:** Select a Bench Height (from floor)
- Sitting Height: 650—800 mm
- Standing Height: 750—1000 mm
- Option for an electric height adjustment (see page 6)

**Step 9:** Select a Bench Top
- Material, colour, depth
- Anti-Static or Wash Down friendly

**Step 10:** Select other Accessories to customise the Workstation to your requirements e.g. drawers, lighting, monitor stands, keyboard cut-outs, modesty panels, foot-rest, parcel chutes, etc.

We can add virtually anything you need to your Work Station!
ELECTRIC HEIGHT ADJUSTABLE WORKSTATIONS

Correct ergonomics are important for the health and safety of your workers and every worker is different. They are of different heights and even different arm lengths. Both of these things can affect worker productivity if they are limited to a fixed height workstation by increasing fatigue and potentially causing strain injuries. Alternatively, you may have different tasks to perform at the same station that need to be performed safely at different heights.

An electrically height adjustable workstation can solve these problems by allowing each worker to sit or stand according to their own requirements and to achieve positive ergonomics at their work station.

No two workstations are the same! Our height adjustable workstations are purpose built to suit your requirements.

Ideal for medical device assembly, electronics assembly, toy assembly, pharmaceutical and laboratory environments, universities and a range of other industries and applications.

Specifications:

⇒ Standard single, Up/ Down switch, or “dead-man” switch optional
⇒ Can be adjusted from 600mm to 1,500mm height
⇒ Max. load 300kg (dependent on actuators)
⇒ Stainless steel/IP rated actuator variants available for workstations in wash down or food grade environments.
Do you have an Order Picking Line, Sorting Line or an Automated Assembly Line?

Workstations that feature an integrated conveyor system may help increase your productivity and reduce strain injuries.

We offer multiple, integrated conveyor types:

⇒ Belt Conveyor*
⇒ Gravity Roller (non powered)
⇒ Powered Roller Conveyor*
⇒ Plastic Slat Chain Conveyor*

Belt Conveyor Options

Best for light weight products or where there is restricted height for installation

*Motor/gearbox located away from working area to ensure a safe working environment.

Specifications:

Belt speed: 2m/min to 40m/min
Motor Rating: 0.12 kW to 0.37 kW
RPM: 14.5 min\(^{-1}\) to 401 min\(^{-1}\)
Available Lengths: 350mm to 6000mm
Available Widths: 100mm to 600mm
Max Belt Load: 30kg/m

Belt Types Available:

⇒ Rough top fabric belt
⇒ Flat top fabric belt
⇒ Food approved belts
⇒ Cleated belts
⇒ Specialised belts for custom applications

Ask us about other options.
T-SLOT ALUMINIUM PROFILE
WORKSTATIONS & BENCHES
LINEAR GUIDES
CONVEYORS
CNC MACHINE FRAMES
CAMERA/ 3D SCANNING MOUNTS
MACHINE GUARDS & FENCING
MACHINERY FRAMES
DISPLAY UNITS
CLEAN ROOMS
EXHIBITION STANDS
DESIGN CONSULTANCY
DEVELOPMENT & PROTOTYPING

Web:  www.aluminiumprofile.com.au
Email:  sales@aluminiumprofile.com.au
Address:  25 Harley Crescent
          Condell Park NSW  2200
Telephone:  +61 2 9707 5000
Fax:  +61 2 9708 3564

Local stockists:

VIC and SA:  Eljay Engineering Pty Ltd
Phone:  +61 3 9738 2388
Mobile:  0438 554 899
Email:  profilium@eljay.com.au
Address:  2/19 Edelmaier St
          Bayswater VIC  3153

QLD:  Gap Engineering Pty Ltd
Phone:  +61 7 3823 1079
Mobile:  0400 032 616
Email:  greg@gapengineering.com.au
Address:  2863 Old Cleveland Rd
          Chandler QLD  4155