

CHECKLIST

"WATCHMAKERS' BENCHES FOR SCHOOLS"

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Structured planning aid for the evaluation, needs analysis and tender preparation of ergonomic and durable watchmakers' benches for schools.

When evaluating new watchmakers' benches for schools, it is worth taking a structured look at **all spatial, ergonomic and safety-related requirements**. To simplify your internal needs analysis and the preparation of tender documents, we have summarised the most important evaluation criteria in this clear checklist.

A. Ergonomics and multi-user adjustment

- ☐ **Stepless height adjustment range:** Does the adjustment range allow at least 95% of all users (SECO Art. 23) to maintain a healthy posture when working both seated and standing?
- ☐ **Multidimensional 3D/5D armrests:** Can the armrests be adjusted steplessly to specifically relieve strain on the shoulders and neck during delicate work under magnification?
- ☐ **Readable ergonomic adjustment scales:** Are clear scales provided on the adjustment mechanisms and armrests so that students can quickly return to their measured position at the start of each lesson?
- ☐ **Clear legroom geometry and edges:** Is there sufficient freedom of movement beneath the worktop, even when using a microscope or foot controls, without uncomfortable edges pressing against the forearms?

B. Work surface, materials and value retention

- ☐ **Surface selection according to requirements:**
 - **HPL laminate:** Sealed, non-porous and chemical-resistant surface for intensive use.
 - **Solid wood (beech/oak):** Sandable and re-oilable worktop for long-lasting value retention across several generations of students.
- ☐ **Low-reflection finish:** Does the light, matt surface reduce distracting reflections from the task light to minimise eye strain?
- ☐ **Raised edges:** Do integrated raised edges and protective rims prevent valuable small components from rolling onto the workshop floor?

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C. Utility management, lighting and safety

- ☐ **Integrated utility rail:** Are fixed connections for power (230 V), USB, compressed air and vacuum concealed within the frame to avoid loose cables on the work surface?
- ☐ **Visual ergonomics (750 to 1,000 lux at the visual task area, Ra > 90):** Does the task light provide dimmable, flicker-free LED lighting with high colour rendering (Ra > 90) for precise regulating work?
- ☐ **Safety and collision protection:** Does an integrated sensor prevent crushing injuries and damage when the electric height adjustment is operated in the training room?

D. Room layout, organisation and suitability for examinations

- ☐ **Consistency across student workstations:** Are all workstations in the room configured identically (e.g. based on the MODULAR series or the UNIQUE MASTER) to simplify workstation changes, teaching and spare parts management?
- ☐ **Flexible left-/right-handed conversion:** Can the workstation be easily adapted from right- to left-handed use?
- ☐ **Secure storage:** Are configurable drawer inserts and centrally lockable compartments available for students' tools and examination work?
- ☐ **Instruction and demonstration workstation:** Does the instructor workstation (e.g. UNIQUE MASTER) provide additional mounts for camera feeds, monitors or microscope arms?

E. Procurement, TCO and quality assurance

- ☐ **Prototyping/sample evaluation:** Is it possible for instructors and students to test a fully equipped sample workstation in everyday school use before series production?
- ☐ **Long-term availability of spare parts and replacement components:** Does the manufacturer guarantee the long-term availability of identical replacement components and worktop inserts?