

Ahmed Abdelhamid Ahmed

Technical Designer | CAD Constructor | Industrial Designer

Denmark, Fredericia 7000 · +45 29 93 12 84 · Ahmedabdelhamid.a@hotmail.com · Driving licence B

Portfolio: [ahmedabdelhamid.pplx.app](#) · LinkedIn: [linkedin.com/in/ahmed-abdelhamid-amin-7044a8b5](#)

PROFILE

Technical designer and industrial designer with 14+ years of SOLIDWORKS experience and professional roles in mechanical construction and product development at LBH International and Broen-Lab, covering metallic expansion bellows for the petroleum and gas industries and laboratory and safety products. Experienced in 3D modelling, production drawings, BOMs, plastic-part design and prototype testing. Combines industrial-design training with hands-on manufacturing knowledge gained from CNC and sheet-metal training and running a furniture workshop.

CORE SKILLS

- **SOLIDWORKS:** parts, assemblies, configurations, advanced modelling, surfacing, sheet metal, plastic mould tools, drawings, rendering and PDM (product data management)
- **Technical documentation:** production, assembly, spare-parts, BOM and customer drawings; installation manuals; service and warning-sign documentation
- **Product development:** concept development, form development, prototyping, design iteration, design for manufacture
- **Design validation:** basic simulation and static calculations
- **Manufacturing:** injection-moulded and multi-component plastic parts, sheet metal, CNC laser cutting, press brake, turret punch, rolling, welding coordination, solid-wood construction
- **Other software:** Autodesk Inventor, Fusion 360, 3ds Max, KeyShot, Photoshop, Illustrator, Microsoft Office

EXPERIENCE

Founder & Designer | Wooden Dream Studio, Denmark 2021 – present

- Design solid-wood furniture and products, from concept sketches and 3D models to technical drawings and finished pieces.
- Plan construction details, joinery, material selection and surface finishing for durable, practical use.
- Build prototypes and refine designs before small-batch production in my own workshop.
- Manage product photography, online sales, shipping and customer communication.

Technical Designer | LBH International A/S, Kerteminde Aug 2017 – Sep 2018

- Designed metallic expansion bellows for the petroleum, gas and fluid-process industries in accordance with EN 14917 and EJMA standards.
- Assisted in the design of a machine that adapts standard bellows to fit non-standard flanges, reducing the need for custom-made bellows and lowering production cost.
- Built 3D models and technical drawings in SOLIDWORKS for manufacture and assembly.
- Performed static calculations to validate design integrity and compliance.
- Wrote installation manuals to guide accurate assembly and setup.

Constructor | Broen-Lab A/S, Assens Feb 2016 – Mar 2017

Broen-Lab supplies emergency showers (ESS) and laboratory fittings worldwide.

- Researched, designed and constructed a new valve concept for emergency-shower systems that reduces water hammer and works as a shock absorber.
- Designed new handles for QC quick-connect regulators and for Waldner-Uniflex products, from concepts through prototypes to production.
- Designed a new multi-component injection-moulded colour-coding part for laboratory equipment according to EN 13792.
- Created 3D models and documentation for all ESS service and warning signs.

- Produced production, assembly, spare-parts, BOM and customer drawings, and set up a new drawing template for ESS customer drawings.
- Developed and tested prototypes, and took part in cross-functional project meetings.

SELECTED PROJECTS

Metallic expansion bellows and adaptation machine | LBH International

Designed metallic expansion bellows for petroleum, gas and fluid applications to EN 14917 and EJMA, and assisted in designing a machine that adapts standard bellows to non-standard flanges, so standard parts could replace costly custom-made bellows.

Key work: bellow design, machine design, assembly modelling, technical drawings, static calculations

Quick-connect regulator handle | Broen-Lab

Developed several handle concepts in SOLIDWORKS, produced physical prototypes and compared them with the original part, then refined the chosen design for production.

Key work: ideation, part modelling, configurations, prototypes, production drawings

Multi-component colour-coding part | Broen-Lab

Designed a multi-component injection-moulded part for laboratory fittings to EN 13792, considering mould construction, part assembly and colour identification.

Key work: plastic-part design, mould tools, multi-component moulding, prototypes

Water-hammer valve for emergency showers | Broen-Lab

Researched the problem, developed the valve concept and built the full assembly model with exploded views and technical drawings.

Key work: mechanical concept, assembly modelling, exploded views, drawings

Solid-wood furniture collection | Wooden Dream Studio

Took furniture from 3D model and drawings through prototypes to finished products, handling joinery, materials and finishing.

Key work: 3D modelling, technical drawings, joinery, prototyping, finishing, product photography

Full case studies with drawings, prototypes and finished products are in my portfolio.

EDUCATION

B.A.Sc., Industrial & Product Design — Sudan University of Science and Technology, Khartoum 2008 – 2012

Product Development & Innovation — University of Southern Denmark (SDU), Odense 2018 – 2021

Completed two years of the bachelor programme.

COURSES & CERTIFICATES

National Welding Coordinator — AMU-Fyn 2017

CNC press brake, sheet-metal rolling, CNC laser cutting, CNC turret punch — Tradium

LANGUAGES

Arabic: native · English: fluent · Danish: good working knowledge (Prøve i Dansk 2)

INTERESTS

Furniture design and woodworking, product photography and video, technical drawing and 3D visualisation.

REFERENCES

Available upon request.