

Wouter Lochner

Senior Mechanical Draftsman and Design Detailer

I turn engineering intent into manufacturing-ready drawings that don't come back with questions.

Design draftsman since 1978 and freelance since 1996, with detailing and design work on aerospace and space-optics programmes, defence and maritime equipment, the Southern African Large Telescope, process plant and dedicated machinery. I work in Autodesk Inventor and AutoCAD 2D, with earlier years in SolidWorks and Siemens NX, slot into an existing team's standards and templates from day one, and build complete data packs that the shop floor can work from without questions. Available remotely for contract work in Australia, the UK, Europe, New Zealand and South Africa. Fixed-price or hourly.

CORE CAPABILITIES

Software

Current: Autodesk Inventor, AutoCAD 2D. Earlier: SolidWorks, Siemens NX, Teamcenter, Prime-Medusa.

Detailing and data packs

Part and assembly drawings, GD&T, BOMs, weldments, sheet metal, revision and configuration management.

Design

Optical jigs, fixtures, test and support equipment, dedicated machines, plant layouts, site measuring.

Sectors

Aerospace and space optics, defence, scientific instruments, maritime, boilers and structural steel, food and beverage, process plant.

Working with teams

Liaison with project engineers, workshops, subcontractors and manufacturers. Checking and group-lead experience.

Documentation

Reports, tender documents, drawing registers, CAD system administration.

EXPERIENCE

Oct 1996 to present

Freelance design draftsman and detailer Lochner Design, Somerset West

- 3D design of optical jigs, fixtures and dedicated machines; detailing and building of data packs; project and configuration management; liaison with clients and manufacturers.
- Clients have included Simera Aerospace, Dragonfly Aerospace, Spaceteq, the SALT telescope, Rheinmetall Denel, the SKAO radio telescope, Flightscope, Galvatech, John Thompson, CSIR Defencetek, SA Breweries, Appletiser, Two-a-Day, Kromco, SA Nylon Spinners, Hosaf Fibres and Dorbyl Marine.

May 1993 to Sep 2010

Design draftsman, full time and contract CSIR Defencetek, Stellenbosch

- Design of equipment for the maritime environment, jigs, support and test equipment. Data packs, reports and documentation.
- Liaison with client, workshop and subcontractors. Left on completion of the project.

Jul 1992 to May 1993

Contract design draftsman Houwteq, Grabouw (aerospace design and manufacture)

- Design of airframe components, jigs and support equipment. Liaison with project engineers, workshop and manufacturers. Reports and documentation. Division closed.

Oct 1990 to Mar 1992

Contract design draftsman and group leader John Thompson Africa, Bellville (boilers, structural steel)

- Design of boiler equipment, checking, boiler house layouts, site measuring, managing the design team, liaison with workshop and contract engineers.

EARLIER EXPERIENCE

- 1989 to 1990 **Design draftsman** Atlantis Diesel Engines
- Jigs, tools and fixtures. Liaison with planning, line managers and the workshop.
- 1987 to 1989 **Manager** Eugene Jewellers, Pretoria
- Ran the workshop and business: staff, stock, cash flow, debtors and creditors, jewellery design for clients.
- 1984 to 1987 **CAD design draftsman** Atlantis Diesel Engines
- Engine components, detail, option and layout drawings on Prime-Medusa. Managed the CAD system and its documentation.

- 1982 to 1983 **Design draftsman** Murray Biesenbach and Badenhorst, Stellenbosch
- Mechanical components for the agricultural market, winery layouts, site measuring and inspection, tender documents.
- 1978 to 1982 **Design draftsman and group leader** SADF Air Logistics Command, Pretoria
- Aircraft and high-precision parts. Trained apprentice draughtsmen, delegated and checked drawings, documentation.
- Contract **Contract design draftsman** SA Nylon Spinners, Bellville. Mechanical components, jigs and tools.

EDUCATION AND TRAINING

T1 and T2, Mechanical

Pretoria Technikon and Cape Town Technikon. Mathematics, calculus, applied technology, mechanics, engineering drawing.

Basic technical, SADF Verwoerdburg

Welding, fitting, general machines, lathes, sheet metal, electrical.

Business management, Damelin

Accounting, marketing, personnel management, management information systems, management accounting.

Matric, Sand du Plessis High School, Bloemfontein

1977. Mathematics, science, technical drawing.

Trade test, SADF Technical Institute

Flight theory, piston engines, hydraulics, turbines, basic electrical, technical organisation.

CAD

Central Data Systems: Medusa parametric design and 3D modelling. Later AutoCAD, Inventor, SolidWorks and NX.

Short courses

Steam (Spirax Sarco). Pneumatics (Cape Technikon and Festo).

PERSONAL

Languages

Afrikaans, English

Driver's licence

Code 08 and Code 02

Outside work

Mountain biking, adventure biking, camping

REFERENCES

Ockert Strydom

Project leader, SALT telescope

Stiaan Botha

Factory manager, Tessara

Contact details for references are available on request.

Deon Lategan

General manager, Simera Space

Francois Stumfer

Design lead, Dragonfly Space Optics