

► Aerospace Production Capability



W. R. Davis Engineering Limited specializes in the fabrication of welded and riveted complex geometry sheet metal assemblies for the aerospace market. We are equipped to perform both large and small quantity manufacture. Forming, welding, fitting, heat treat, passivation, and finishing operations are performed at our facility in Ottawa, Canada. Our skilled technicians have extensive experience working with stainless steel, aluminum, titanium, and Inconel.

Production planning, program scheduling, and technical support are provided by the Davis professional engineering staff.

We supply to major integrators, airframers, and operators, including the U. S. Army, Boeing, BAE Systems, and Agusta Westland. Our quality system is certified to AS9100B and is integrated into all aspects of our production process.



Our aerospace manufacturing experience has been developed through the fabrication of aircraft engine exhaust infrared suppression systems. We have designed and manufactured IR suppressors for the following aircraft types: Bell 212/412; UH-1H; Bell 407; MIL Mi-17; Eurocopter AS332 Super Puma; CASA CN-235; Boeing CH-47; Beechcraft KA350; and the Agusta-Westland AW129. Over 200 aircraft shipsets have been produced at our facility.

► Facility and Personnel

- 60,000 square foot production facility located at our company headquarters in Ottawa, Canada
- 40 metal technicians trained in welding (aluminum, stainless steel, Inconel, and titanium), riveting, forming, and passivation;
- Certified (through the Canadian Government Standards Board) Level II LPI weld Inspectors;
- Dedicated Quality Assurance team;
- Production engineering team (planners and professional engineers).

► Processes

- Welding by MIG, TIG, Seam and Spot (to ASME Section 9 / MIL Std D17.1 / CWB 47.1 & 47.2)
- Chemical conversion coating of Aluminum per MIL-C-5541 (Alodine)
- Passivation of Stainless, Inconel, and Titanium to ASTM Specs
- Fluorescent and visible Dye Inspections
- Painting and paint curing
- Heat treat / Stress Relieving
- Glass Beading
- Riveting

► Fitting and Forming Equipment

- Eckold Kraftformer model KF 340
- English Wheel
- Pullmax former
- Power hammer shaping machine
- Shrinker, Stretchers
- 3 sets of sheet roll formers
- Angle and bar rolling machine
- 125 ton and 60 ton Brake presses
- 20 ton 4 post press
- Hydraulic Shears 4 ft and 10 ft.
- Multiple drill press stations
- 5 Rivet stations 24" by 20,000 lb capacity
- Multiple pneumatic rivet squeezers
- Multiple pneumatic drills, grinders, and deburring tools
- 3 Air compressors, 25, 30, and 50 HP
- Metal cutting band saws

► Welding Equipment

- National Seam welder
- 2 Precision spot weld stations
- 2 Aronson Digital Weld positioners
- Gullco Automatic seam tracker
- Assorted welding machines
- Automatic wire feeders

► Finishing Equipment

- 2 stress relief ovens
- Alodine chemical treatment baths
- Passivation chemical line baths
- Crossing Tech down draft spray booth
- Gruenberg paint curing oven
- 2 Glass bead cleaning stations
- Video Jet Part marking machine model Excel 2000

► Quality Assurance Equipment

- Inspection surface plates
- Calibrated inspection measuring tools
- Pem Insertion station
- 2 Faro Arm Inspection stations



Davis

For further information, please contact: W.R. Davis Engineering Ltd., 1260 Old Innes Road, Ottawa, ON, Canada K1B 3V3
Tel: (613) 748-5500 Fax: (613) 748-3972
E-mail: marketing@wrdavis.com Website: www.wrdavis.com
© 2010 W.R. Davis Engineering Ltd.