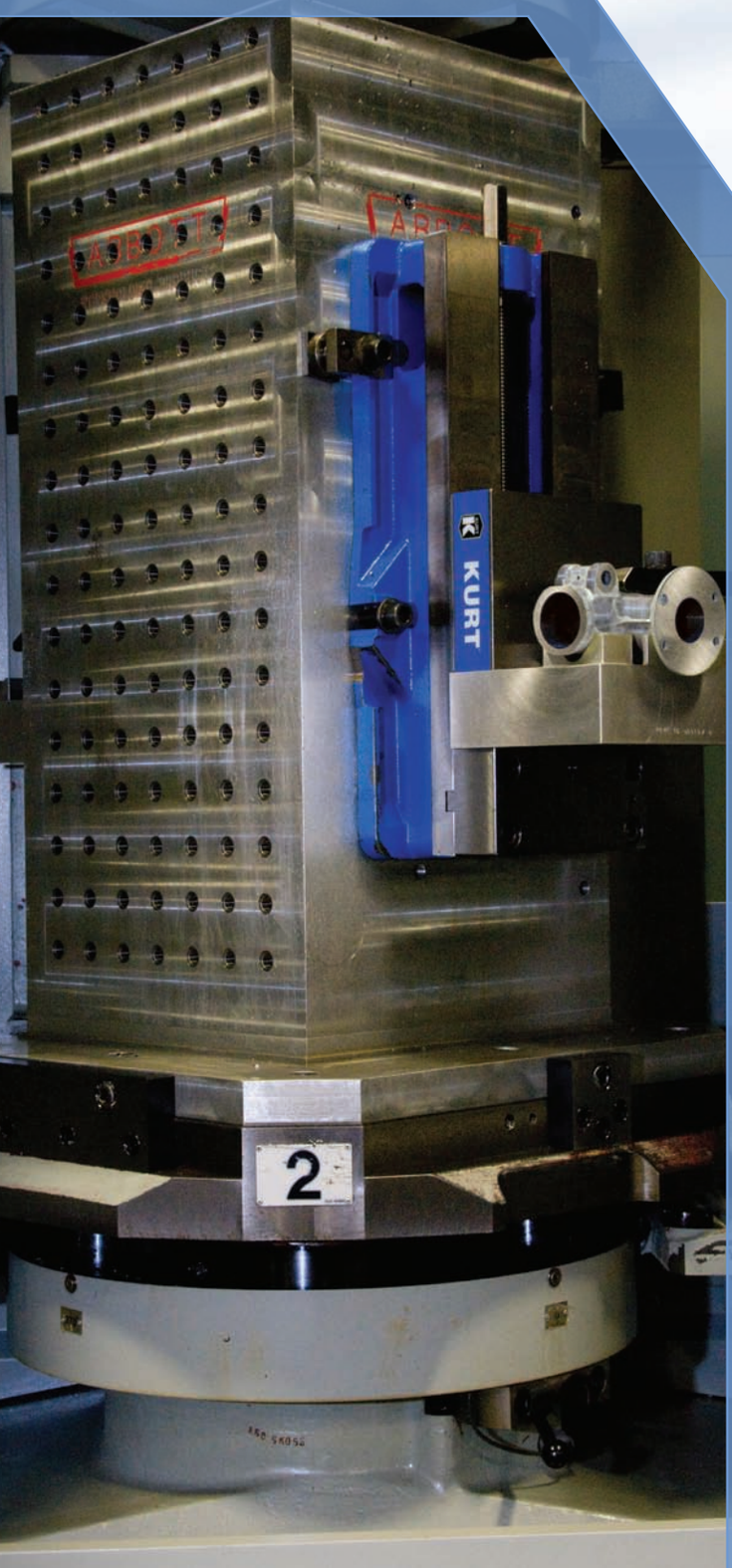
ECK & ECK MACHINE CO., INC.

EXPERTISE. TEAMWORK. INTEGRITY. ACCOUNTABILITY. **CASES IN POINT.**

Eck & Eck Machine Co. manufactures

CASE #1

Recently, a customer asked Eck & Eck to bid on a troublesome part. It seems the part, an assembly welded from aluminum tubing, was leading to scrap-material rates in excess of 85%. Because of the necessary repetition of heat-treating after welding, tolerances were erratic as well. We reported to the customer that we could indeed make the part with significantly less scrap were the part redesigned to be made from a hog out. With the new design in hand, we made a prototype for customer approval.



OUR RESULTS:

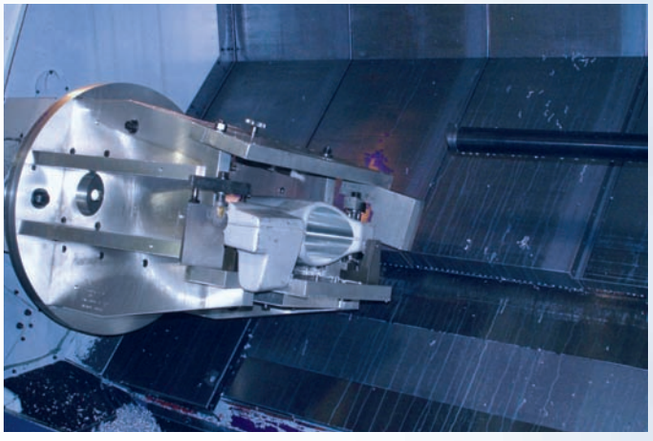
the parts delivered back to the customer, on a tight deadline, exactly on spec, with scrap rates less than 1%. Such a solution comes only from know-how, from expertise accumulated across a lifetime of working to close tolerances on deadlines that do not bend. Such efficiency comes only from manufacturing capacity gathered for no reason other than to serve the precise, ever-changing needs of customers.

ECK & ECK MACHINE CO., INC.

detail parts, assemblies, and sub-assemblies for the aerospace industry.

CASE #2

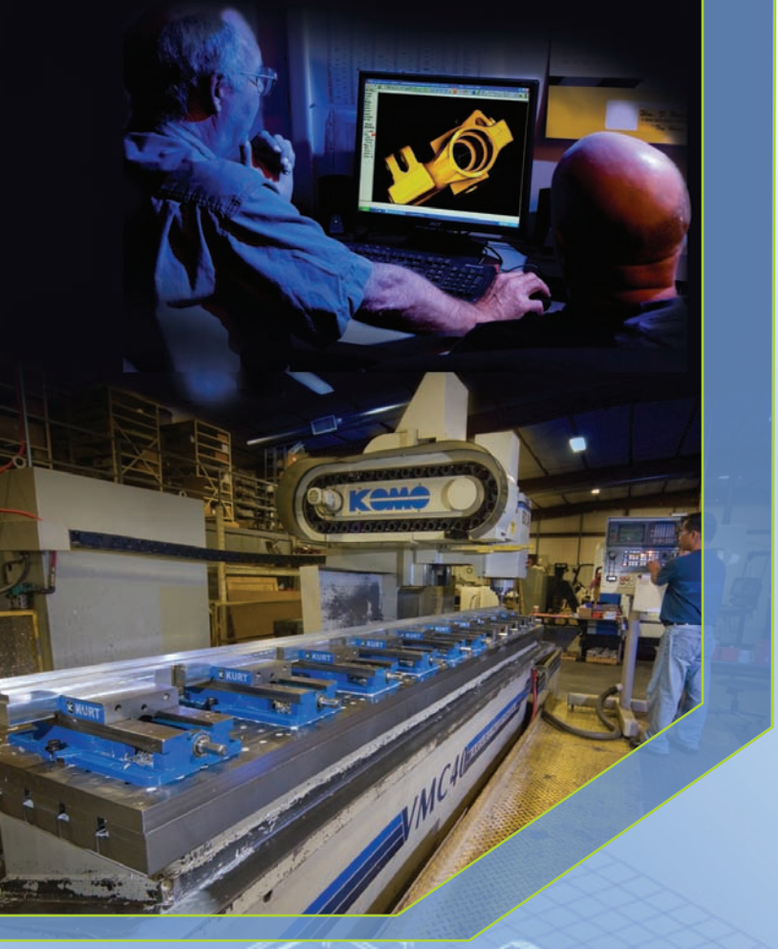
A major aircraft company was building in-house a part from a forging with scrap rates routinely exceeding 50%. Eck & Eck was asked to bid the part on shop-overload. Eck sent back 10 parts for review, parts immediately proclaimed "the best iterations of this part ever made." When the customer decided to go to permanent farm-out for the part, the bid went to another shop, a shop incapable of manufacturing this particular forged part, a shop owned by a friend of the Ecks who did not know that Eck & Eck had made the original parts. Consequently, this shop subcontracted the parts to other companies who quickly proved unequal to the task.



And finally the customer decided that Eck & Eck, the provider of those 10 perfect review parts, should become the farm-out provider of record. The customer later accelerated the delivery schedule and at last was persuaded that Eck & Eck should deliver "the best parts ever made" directly.

CASE CLOSED.

Such an answer comes about only through genuine commitment to the needs of the customer, a gung-ho way of thinking that admits no difficulty as too great or too prolonged, a rural work ethic that insists on a job done well for the most personal of reasons.



CASE #3

An aircraft manufacturer wrote a dual-source contract with Eck & Eck and with another supplier for an axle assembly. The other shop's parts were plagued by misalignments -- bolt-holes way off, keys 180° out of phase -- and missed deadlines. Meanwhile, with parts made by Eck & Eck also feeding the line, the buyer on this contract received a call from the manufacturing floor, a call demanding to know "Where'd you get these parts?" "Why?" asked the buyer. "What's wrong?" "Nothing's wrong," came the reply. "The entire assembly just slips together. We're not having to use hammers and rotary files to make everything fit."

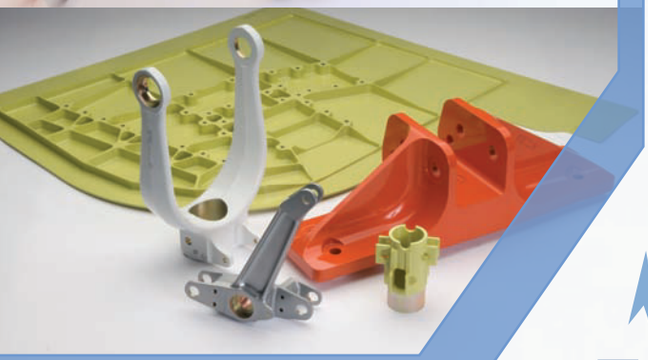
Still the other shop retained its contract, continuing to fall behind on deliveries, even of poorly made parts, until at last the manufacturer took the whole contract in house, Eck's half as well. Three months later, the manufacturer called Eck & Eck again, admitting that the assembly was still badly behind schedule, asking that a sufficient number of parts be produced in 180 days to bring the line up to speed.

We worked around the clock.

And delivered the necessary parts back in 60 days.

ECK & ECK MACHINE CO., INC.

Eck & Eck Machine Co. began in a garage. In 1966. A time when the letters "CNC" meant exactly nothing in the manufacture of detail parts and assemblies for the aerospace industry. In the years intervening, as our technical sophistication has kept lock-step pace with our customers', we've retained shop-wide flexibility and a company-wide sense of individual responsibility. When a customer asks for a six-month turn-around on a critical part, we set out to beat that schedule into submission. Not always three times faster, but every time the very best that a small, family-owned business can muster.



CASE #4

In the certification process for AS9100 REV B:2004 and ISO9001:2000, the on-site auditors refuse to accept perfection. Zero-defects is just not a possibility. And so, in their initial audit of Eck & Eck, we did not earn 100%; we earned 97%. Three little faults found, but a reputation of five decades made objective and verifiable.

Such numbers are comforting to customers coming to us for flight-critical parts. A near-perfect AS/ISO score is a perfect beginning to a manufacturing relationship.

All of us at Eck & Eck invite you, however, to learn at first-hand the less statistical rewards of doing business with people who keep their promises, three generations of craftspeople with many more stories to tell.

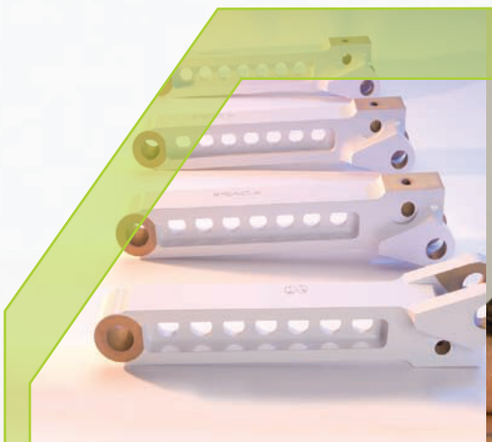
Stories that sound exactly like expertise, teamwork, integrity, and accountability.

We're honored in the work entrusted to us by our customers. Their names read exactly like a who's-who of the aviation community.

Applied Aerospace Structures Corp.
Bell Textron
Beechcraft Textron Aviation
Boeing Commercial
Boeing Defense and Space Group
Bombardier Aerospace
Cessna Textron Aviation
Figeac Aero
Senior Aerospace
Spirit Aerospace

Kindly begin the discussion by calling us at (316)942-5924, visiting us at 4606 West Harry Street in Wichita, or taking a virtual tour of our facilities at eckeck.com.

ISO 9001:2015 and AS9100D, ITAR Certified, Flight Critical, and US/CAN JCP Certified



Paul A. Eck
President, CEO

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BB12356

ISO 9001:2015 and AS9100D, ITAR Certified, Flight Critical, and US/CAN JCP Certified

CAPABILITIES

ECK & ECK MACHINE CO., INC.

AS9100D AND ISO9001:2015 CERTIFIED; ITAR CERTIFIED; FLIGHT CRITICAL CERTIFIED AND US/CAN JCP CERTIFIED

Machining Centers

All capable of heavy duty; machine complete from forging and hog-out to close tolerance MBD and print dimensions

1ea 20' KOMO VMC 240 3 Axis Spar and Stringer machine 240x24x22"
1 ea 12' KOMO VMC 144 3 Axis Spar and Stringer machine 144x24x22"
1 ea Hyundia-Wia F960 Large 3 Axis 94x48x37" Hard/Soft metals
6 ea Hyundia-Wia F500 Vertical 3 Axis Machining Centers Hard/Soft metals 29x27x25"
4 ea Hyundia-Wia F500 Vertical 5 Axis Machining Centers Hard/Soft metals 24" square
1ea Hyundia-Wia F650+ Vertical 5 Axis Machining Center Hard/Soft metal 40x20x20"
2 ea Hurco VMX42SR 5 Axis Machining Centers Hard/Soft metals 21" square
1 ea Hyundia-Kia HX630 Twin Pallet 4 Axis Machining Center Hard/Soft metals 41x34'x34"
1 ea Hyundia-Kia KH50G Twin Pallet 4 Axis Machining Center Hard/Soft metals 47x20x25"
1ea Haas HS1 Twin Pallet 4 Axis Machining Center Hard/Soft metals 24x24x24"
2 ea Haas VF-E 3 Axis Vertical Machining Centers Hard/Soft metals 20x16x20"
2 ea Fadal Vertical 5 Axis Machines Hard/Soft metal 14" square
1 ea Leadwell V80i Vertical 3 Axis machine Hard/Soft metals 80"x40"x28""
2 ea Fadal 60/30 Vertical Machine Centers 3 Axis Hard/Soft metals 60x30x30"
1 ea Fadal 50/20 Vertical Machine Center 3 Axis Hard/Soft metals 50x30x30"
1 ea Fadal 40/20 Vertical Machine Center 3 Axis Hard/Soft metals 40x20x20"
2 ea Hyundia-Wia KF5600 Vertical Machining Centers 3 Axis Hard metals 43x22x20"
1 ea Daewoo DMV40/20 Vertical Machining Center 3 Axis Hard/Soft metals 40x20x

Lathes

Program and machine angles, contours, radii, threading

1 ea Daewoo Turning Center Puma 300c
1 ea Daewoo- Puma 12L-B CNC
2 ea Hwacheon ECO 45, 30 x 80, CNC
1 ea Hwacheon ECO 35L, 24 x 60, CNC
1 ea 18" Monarch, 48 C.C. (tooling)
1 ea Daewoo-Lynx Hi-Speed w/bar feed
1 ea Daewoo-Lynx 220A Hi-Speed w/bar feed

Mill-Turn

1 ea Integrated Turning Cell SKT2500MT/S 5 Axis Multi Tasking Machine with Y axis + C axis + ATC
1 ea Hyundai-Kia SKT200TTSY Multi-Tasking Twin Spindle Turning Center

Hones

2 ea CV616 Power Stroke vertical hone
2 ea MBB1650 Power Stroke horizontal hones
2 ea MBB 1600 Manual hones

Saws

1 ea Cosen AH-320H Horizontal Programmable NC Saw With Hydraulic Shuttle Feed & 5 HP motor Maximum; 12.6" Dia bar or 12.6" x 15" plate
2 ea Startrite vertical band saw with power feed table
1 ea Marvel vertical band saw with power feed

Welders

1 ea Miller Syncro-Wave 250 amp TIG Welder

Computer Systems & Electronic Commerce

CATIA V5-6R2016
ENOVIA DMU NAVIGATOR V5-6R2017
MASTER CAM X7 MU2
Catia C-hook translator V4,V5 Master Cam
Camax Camand V 14.0.2 5-Axis Software & SGI Indigo
Bar Coding
Totally Integrated MRP System
PC DMIS V2017R2
EDI
Esis
EProcurement
Exostar
Unipoint

Quality Control

1 ea Zeiss Contura G2 CMM 39X 62Y x 22Z
Calypso V6.2.1
CATIA V5
1 ea Roamer Absolute 75200SI with probe and scan capabilities
1 ea Videojet Excel 2000 Inkjet Part Marking Machine
Full line of digital and conventional inspection equipment

Sheet Metal Equipment

1 ea Hydro-Mech press brake, 65 ton x 8 ft
1 ea Amada S-2532, 8 ft 10 gauge shear, 24" slip roll

Conventional Mills

2 ea Bridgeport Vertical digital readout

Support Equipment

1 ea Handy Andy Dot-Peen Part Mark Machine
1 ea No. 2 Lapointe Pull Broach
1 ea Lake Erie 80 Ton Press, 18.0" Y, 108" X, 24" Z, Dig. Read out, Full Cage enclose
1 ea CONRAC 2CP Tube Flaring Machine
1 ea Imperial Eastman Tube Bender
4 ea Drill presses
1 ea Cincinnati Monisette grinder
3 ea Deburr Air Benches

Assembly Equipment

1 ea 80-Ton hydraulic press
1 ea 20-Ton hydraulic press
Miscellaneous arbor presses
Portable rivet squeeze, air drills
1 ea Floor C squeeze

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