

ACE Clearwater Enterprises

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aceclearwater.com



Since 1949 ACE Clearwater Enterprises has been building complex formed and welded assemblies for the aerospace and power generation industries. Operating from three facilities within a 10 sq. mile radius in Southern California, our employees are the best problem solving team in the business. ACE is the place for Engineering, Forming, Bending, Welding, Machining, Waterjet and Assembly. We have over 400,000 square feet of pure manufacturing agility and people with the experience to make it happen.

"We Do The Right Thing"

Employees: 195

Union Status: Non

Key Customers: Honeywell, Lockheed Martin, Textron/Bell, Cessna, General Electric, Hartzell Aerospace, Northrop Grumman, Sikorsky, Pratt & Whitney, Middle River, U.S. Government, Airbus, Boeing

Awards: 1999 Industry Week "One of Americas Top 25 Small Manufacturers"
LA Business Journal Top 100 '98, '99
Preferred Supplier Lockheed Martin
Boeing Supplier of The Year

Quality: ISO 9001:2008
AS9100C
Nadcap Accredited N.D.T., Welding
MIL- I 45208A
MIL- Q 9858A *Partial*



Complex Ducting Assembly
Forming - Aluminum Welding
Tube Bending - Assembly



Exotic Metal Forming
Complete Assembly
X-Ray Quality Welds - Machining

Core Competancies

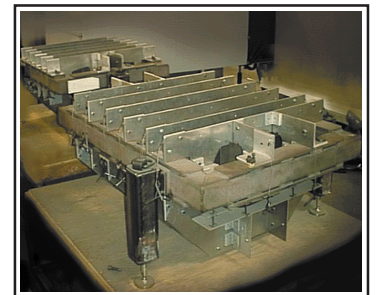
Welding	Drop Hammer
Machining	Hydraulic Press Forming
Tube Bending	Hydro Forming
Engineering	Metal Spinning
Tool Design	Foundry
(2) 5 Axis Water Jets	Pressure Test
5 Axis Laser Cutting	X-Ray/Dye Pen/CMM

New Capabilities

In February of 2012 a 9 Ft. Faro Arm was purchased to allow for portable inspection of form dies, and large assemblies without disrupting production flow. 2 New Drop Hammers have been installed to address capacity issues at the metal forming facility. 6 New Large Machining Centers were purchased from 2006 to 2012 bringing more in-house control to our tooling and machine shop. Additionally a New 5-Axis Laser was acquired in 2011.



Multi-Discipline Assemblies
Forming - Spinning - Bending
Welding - Machining



Total Tool Capabilities
Design - Models - Fabrication
Qualification

Attitude
Committed to
Excellence

Welding Department

- 22) **NEW '10** Miller Digital (Inverter) Dynasty TIG 350 AMP
- 1) Lincoln Square Wave TIG 350 Amp
- 1) Lincoln Precision TIG 375 AMP
- 2) 1000 Lb. Ransome Welding Turntables
- 10) Aircrafter Welding Turntables
- 1) Sciaky Spot Welder 100 KVA
- 1) **NEW '05** Janda Resistance Seam Welder 250 KVA
- 1) **NEW '06** Janda Spot Welder 175 KVA (Inverter)
- 1) Uniter Precision Spot-Poke-Tack Welder
- 1) Cress pro 24" X 36" Pre / Post Heat oven
- 4) Ton Arbor Press
- 3) Power Expanders
- 4) Band Saws
- 2) Drill Presses
- 3) 48" X 48" Sandblasting Chambers

Sheet Metal Department

- 1) Di-Arco 15 Ton 4' Press Brake
- 1) Chicago 30 Ton 6' Press Brake
- 1) Wysong 90 Ton 12' press Brake
- 1) Amada Vela II Punch Press
- 1) Amada 16' Shear
- 1) Amada Power Notcher
- 3) Manual Rollers 18" - 48"
- 2) Bridgeport Milling Machines

Machine Shop

- 1) **NEW '05** YCM Vertical Mill 3 Axis 80" x 40" x 40" 15,000 lb. Capacity
- 1) **NEW '06** Okuma MA-650 VB 5 Axis High Speed Machining Center
- 1) **NEW '06** Johnford DMC-2600 SH 102" x 70" x 42" 22,000 lb. Capacity
- 1) **NEW '06** Femco BMC 110R2 CNC Boring Mill 4 Axis 78" x 71" x 67"
- 1) **NEW '09** OKK HM 1000S Dual Table HS Machining Center 55" x 43" x 40"
- 1) **NEW '10** Kafo/Femco VMC-137 CNC Vertical Mill 4 Axis 51" x 27"
- 1) Mazak V-15N CNC Vertical Mill 4 Axis
- 1) Mazak V-15N CNC Vertical Mill 3 Axis
- 1) Mazak H-800 CNC Horizontal Mill 4 Axis
- 1) Acroloc CNC Vertical Mill 3 Axis
- 1) Cincinnati CNC Machining Center 144" x 72" x 36"
- 1) Mazak Slant 50 CNC Horizontal Lathe 2 Axis, 50 HP 26" cut
- 1) Mazak Quickturn 20N CNC Horizontal lathe 16" cut
- 1) Ikegai AX25 CNC Horizontal Lathe 12" cut
- 1) Kingston Horizontal Lathe 40" Swing
- 1) Moriseiki Horizontal Lathe 24" Swing
- 1) Moriseiki Horizontal Lathe 18" Swing
- 9) Bridgeport Vertical Mills
- 2) Flow 5 Axis Waterjets 6' X 10' Bed
- 1) **NEW '11** NTC TLM610 3.3K 5 Axis Laser Bed Size 75"x122" 4000lb Capacity

Inspection / Quality

- NDT Pressure Testing Department
- Dedicated Dye Penetrant Line
- In-House Level III
- 360 Kv X-Ray Room
- 180 Kv X-Ray Booth
- Mitutoyo CMM 48" x 60"
- Mitutoyo CMM 72" x 114"
- 9 Ft. Faro Arm Portable CMM for in-place dimensional inspection

Drop Hammer / Hydroforming

- 1) 5 Ton Rope Hammer 48" X 84"
- 3) 3 Ton Rope Hammers 48" X 60"
 - 2) 2 Ton Rope 48" X 48"
- 2) 1 ½ Ton Rope Hammers 40" X 60"
 - 2) 1 Ton Rope Hammers 36" X 34"
 - 1) Ceco Stamp 24" X 30"
 - 2) Ceco Stamp 36" X 48"
 - 3) Ceco Stamp 48" X 48"
 - 1) Ceco Stamp 60" X 96"
 - 1) Ceco Stamp 66" X 68"
 - 1) Ceco Stamp 60" X 100"
- 1 Each) 12", 23", 26" Cincinnati Hydroform Presses
 - 1) 400 Ton Lien Chieh Press
- 1) 250 Ton Verson Draw Press 42" X 42"
 - 1) 10 Ton Arbor Press
- 5) Metal Spinning Lathes 72" Maximum
 - 4) Melting Pots & Furnaces
 - 3) 3500 Lb Bull Ladles
 - 2) Air Tamping Hammers
 - 1) Steel Casting Platform

Plaster Pattern / Form Tooling Department
 Planishing, Clean Line, Processing, Heat Treat,
 Passivate Tanks, De Greaser, Annealing Ovens,

Tube Bending Department

- 2) #4 Pines 4" Benders (1 Modified to 5")
 - 3) #2 Pines 2"
 - 1) Leonard Model 412 1"
 - 1) Leonard Model 62 1 ½"
- 5) Leonard & Conrac Hand Benders
- 5) Leonard Beading & Flaring Machines
- 2) Peak, Stow & Wilcox Beading Machines
 - 1) Fenn Reducer
- 2) Bridgeport Tooling Machines
- 2) Moriellci Conventional Lathes
 - 1) Custom Pull-Out Machine
- Complete Set of Bend Tooling ½" - 5"
 Titanium Bend Tools ½" - 3"

Build to Print Assemblies

- Complex Tubing
- De-Swirlers
- Diffusers
- Door Skins
- ECS/Exhaust Ducting
- Hush Kit Components
- Hydraulic Reservoirs
- Infrared Suppressers
- Manifolds
- Mixers
- Nozzles
- Plenums
- Shrouds
- Skins
- Tailpipes
- Toruses
- Transition Ducts