

Metal Alloy and Rare Earth Alloy Manufacture Inert Atmosphere Grinding Atomizing Vacuum Induction Melting Vacuum Annealing Hydriding



#### Metal Alloys

- Ingots and Powder
- Hydrogen Storage
- Magnets
- Batteries
- Additive Materials
- CoAlTi, AlSc,
  NiCa, NiMH, AB5





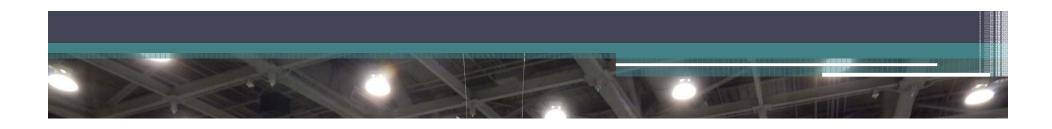


#### History

- 2014 Eutectix acquired GWTI
- 2012 BASF acquires OBC
- 2009 SB LiMotive acquires Cobasys
- 2007 GWMG acquired Ovonic Materials facilities from ECD
- 2004 Cobasys forms
- 2000 Chevron Texaco buys GM interest in GM Ovonic forms JV with ECD Ovonics called Texaco Ovonic Battery Systems & adds TO Hydrogen Systems and TO Fuel Cell Company

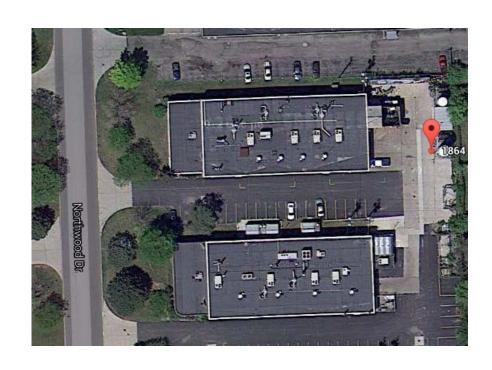
- 1999 Baotou Steel RE Hi-Tech forms JV to manufacture NiMH
- 1998 Sanyo buys 3% stake in GM Ovonic
- 1996 Ni(OH)<sub>2</sub> manufacture begins
  Honda buys 2% stake
- 1994 GM Ovonic JV for EV1
- 1985 ECD purchases ANR share of OBC
- 1982 ECD and ANR form OBC as JV
- 1978 ARCO funds R&D in hydrogen storage & PV





#### **Facilities**

- Two 12,000 square foot buildings
- 1864 and 1826 Northwood Drive





 Two PVT vacuum induction melting chambers (1,000 lb. capacity, 40 microns; semi-continuous melting)





 Three AVS vacuum hydriders (4,500 lb. capacity, up to 550 C and 25 PSI)





 Two inert atmosphere Vortex grind systems 1M lb./yr. capacity (Ar, N; 0.5% O2 limit, 650 lb. capacity to -400 mesh using high speed rotor with impact blocks)  Two explosionproofed grind rooms w/ dedicated baghouse. Annual output combined ~1M lbs. moderately friable w/ a density 7 - 8 g/cm3).



 Heat Source Vacuum annealer (2400 lb. capacity, carbon heating elements, 1225 C upper limit; working pressure to 10 (-6) micron)





- NEVA Vacuum Atomizer w/ 3 Kg VIM capacity; 1700 C capability
- AVS VIM melting chamber (500 lb. capacity) w/:
- Schutte Buffalo Hammermill System (200 lb. capacity, 2000 RPM w/ oxygen monitoring system)
- housed inside dedicated explosion-proofed room

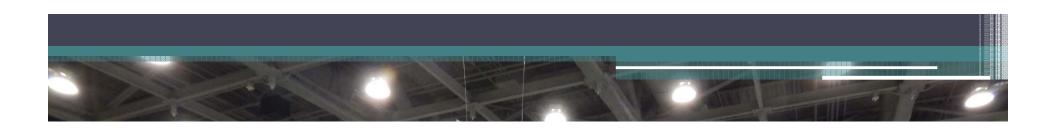




- Stokes VIM chamber with 3 Kg capacity, MG power supply, 15 Kw
- Lab-sized Hydrider system with 20-PSI pressure max., 10 Kg and 20 Kg reaction vessels, 400 C max temperature
- Heat Source Hydrogen
  Annealer with 2 Kg capacity







### Stay in Touch

#### **Plant**

1864 Northwood Drive

Troy, MI 48084

T: 248-293-3200

F: 248-362-3879

#### Headquarters

323 Main Street, 2<sup>nd</sup> Floor

Chatham, NJ 07928

T: 908-707-0724

F: 877-784-8569



www.eutectix.com