

Milwaukie City Council

April 9, 2024



OECCO **A Brief history**



Gerald L Osborne left WWII with a solid knowledge in transformers and started Osborne Electronic Co in his basement in 1946

OSBORNE ELECTRIC
— COMPANY —

In 1948 he moved to an abandoned grocery store near 40th and division, then in 1952 moved to 7th and Hawthorne into a building previously vacated by Hawthorne Electronics (now Tektronix in Beaverton)



OECO **A Brief history**

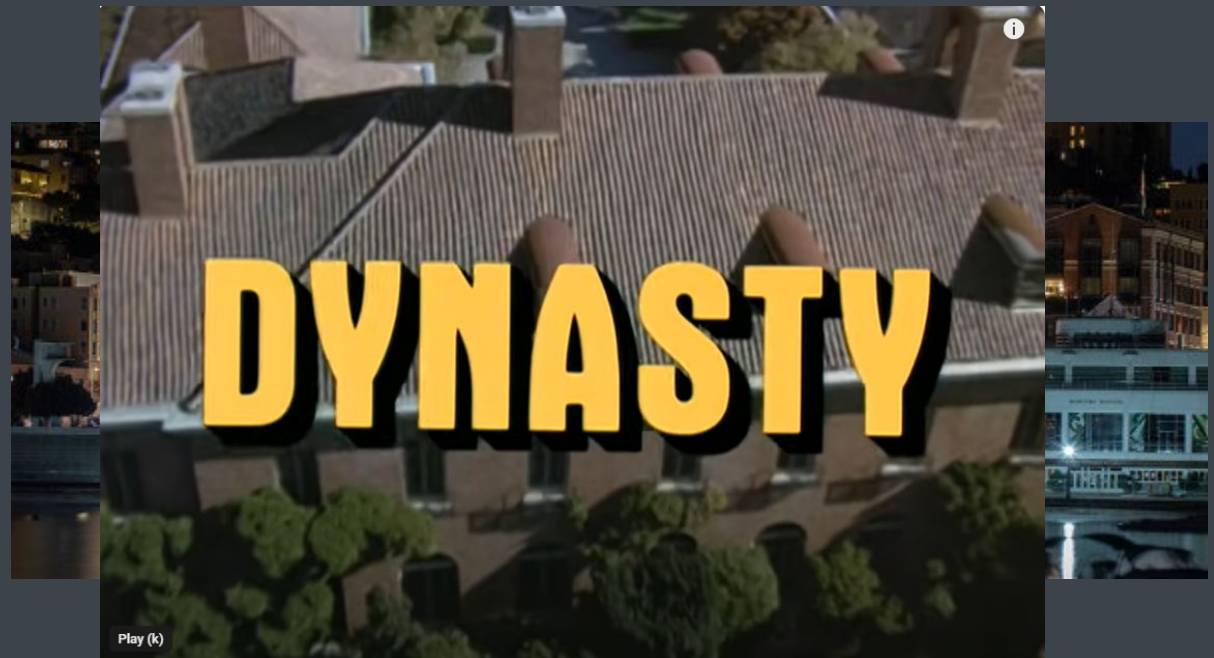


By 1961 Gerry had run into financial troubles and lost the business to Lurline Roth. Rather than fully change the name, she registered the business under the familiarity known to the company and customers, shortening Osborne Electric Company to OECO.

Fun Fact, Lurline Roth is a famous SF Bay Area philanthropist, famous for two large CA landmarks

Ghirardelli Square

And the 700+ acre 56-room Filoli Estates



OEEO **A Brief history**



By 1985, OEEO had expanded to 12 buildings near 7th and Hawthorne in what was referred to as OEEO city and employed nearly 700 people.

In April 1984, anti-war protestors targeted OEEO's downtown facilities due to its defense contracts, resulting in 25 arrests. Portland City Council floated the idea of a Nuclear Free Zone

In 1985, OEEO launched an \$8M building in Milwaukie, the Largest in Oregon since 1979. Senator Packwood & the Milwaukie HS band keynoted the ribbon cutting in 1986



OEEO & other names



OEEO in 2003

\$25M

**Acquired by Danaher
2003**

\$6.5B

Sold to Meggitt 2011

\$2.5B

**Acquired by Parker
Hannifin 2022**

\$20B

OEEO in 2024

\$100M



OECO Today

1 165k square feet

Roughly 100,000 factory, nearly 25,000 vacant office space upstairs

2 ~240 employees & counting

Roughly 125 direct staff, with 15+ positions open

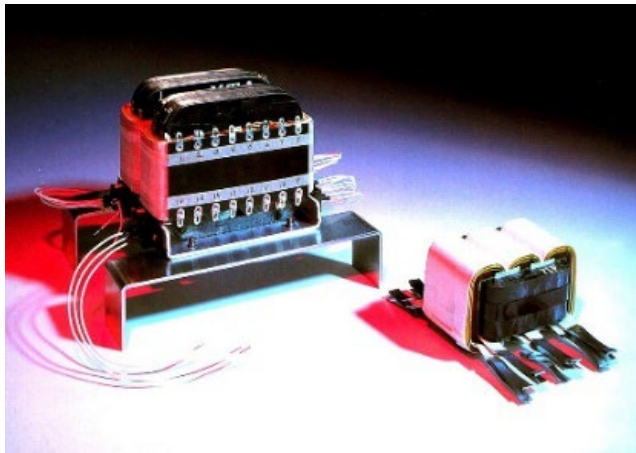
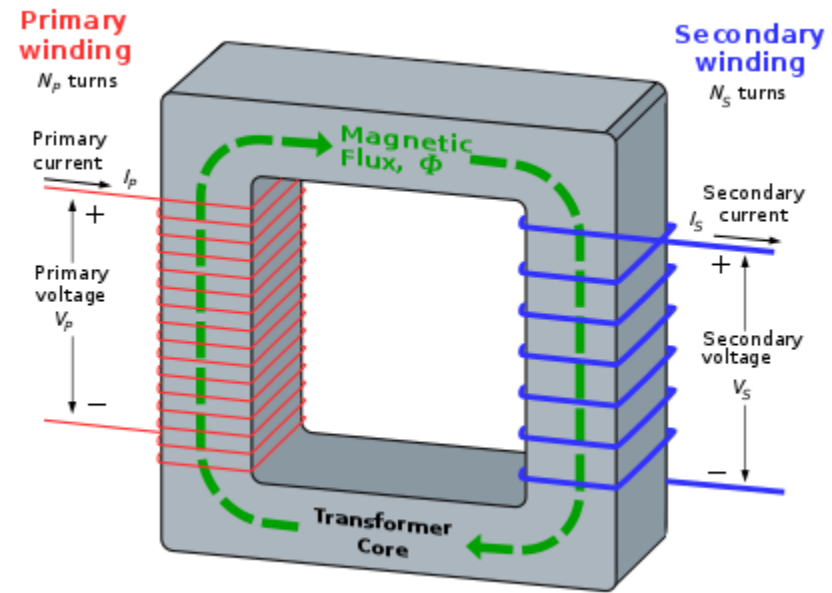
3 Full design, production, & repair capabilities

We are a fully integrated design house, not just a contract manufacturer

4 10-year lease through 2033 w/ two 5-yr options

Long term stability, nearly 50 years in this building by end of lease.

Magnetics



1 Power Transformers

Transformation of electricity from one circuit to another



2 Cockpit Dimmers

Like the old dining room lamp dimmer in your first house.

Input current creates a **magnetic field** which creates an **output current**. **Viola!**

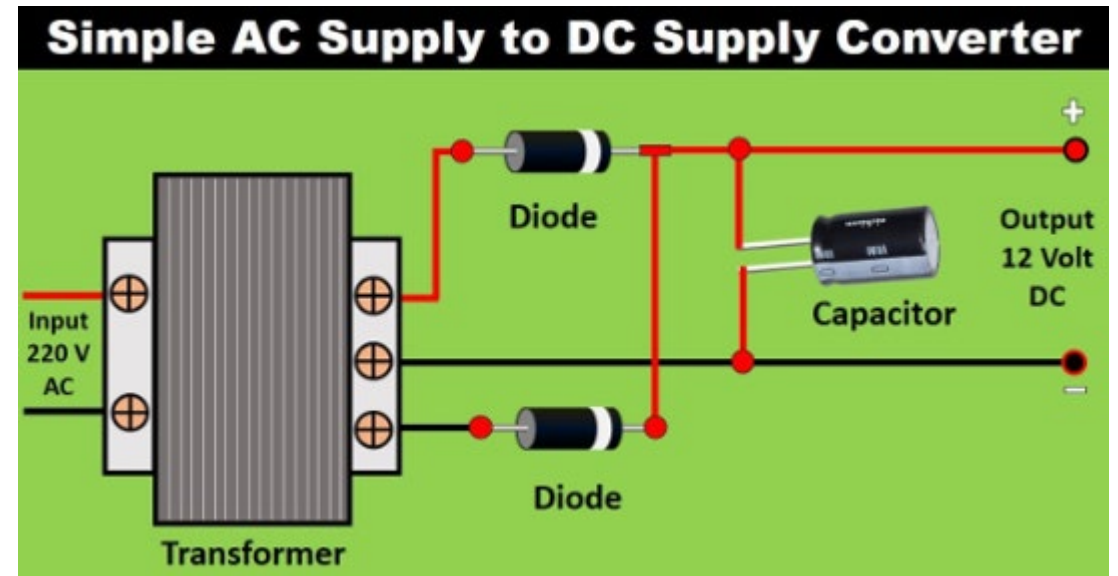
Products range from several thousand pounds to the size of a shirt button. Usage is typically as part of a more sophisticated power system, like the lunar module which had over 500 OECO transformers on each Apollo mission in 1969!

Power Supplies



1 Power Supplies

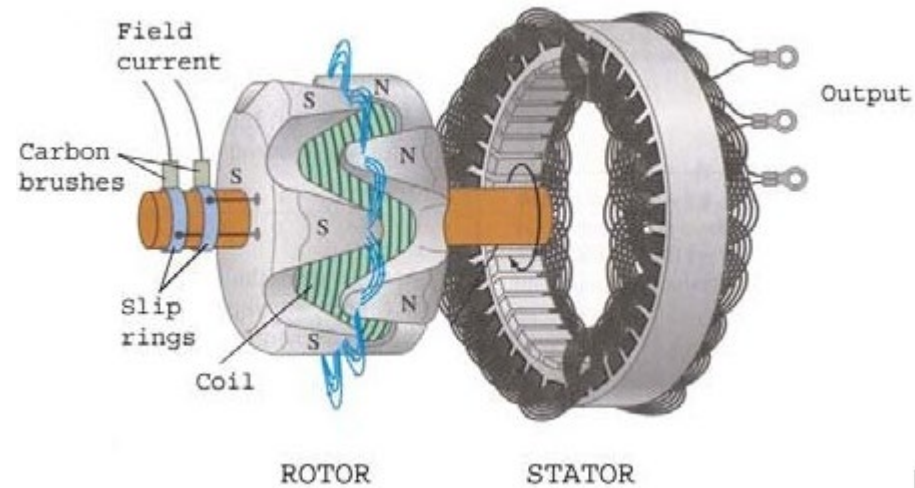
Taking an input voltage (AC or DC) and current and supplying the correct needed power (AC or DC)



When we start adding additional electronics to the transformer, it becomes a power supply

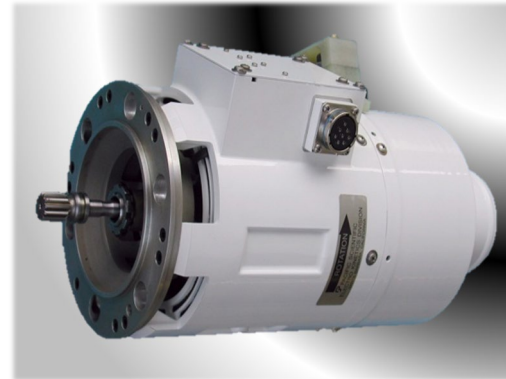
Products range in size, shape & power. The simplest usage is a small transformer inside an adapter that sits between your wall outlet and your phone. Ours are slightly more complicated...

Power Generation



1 Permanent Magnet Alternators

Using another source of mechanical rotation we spin a magnetic rotor to provide auxiliary power



2 Generators/Alternators

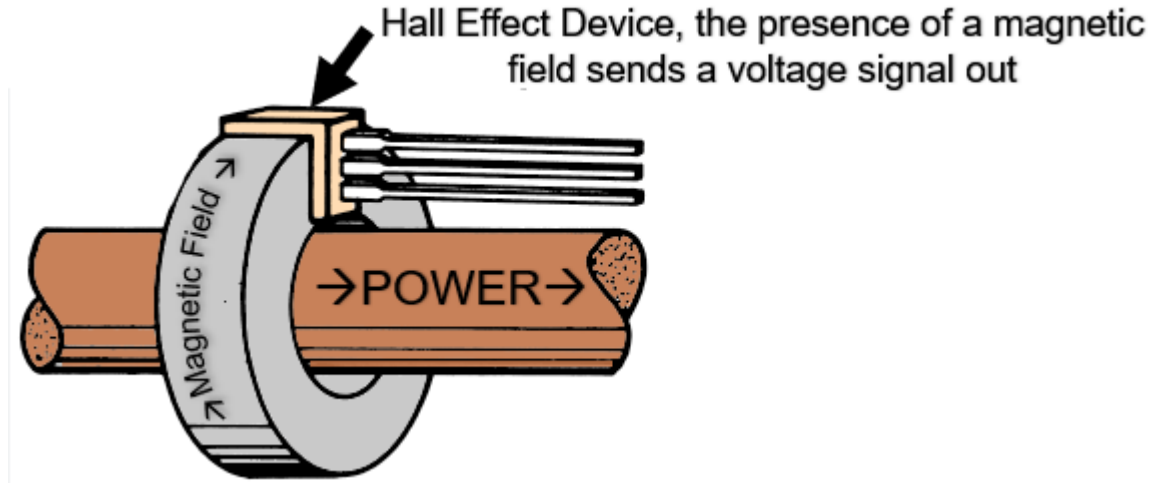
Creating an electromagnet rotor allows more power, flexibility and less degradation over time

To generate power, we use the same concepts but rotate a magnetic field (rotor) inside a stationary array of copper (stator).

Our largest is an 80,000W Generator for the M109A7 Paladin, it weighs 100 lbs and takes over 70 hrs to build. On its own, it would power 25 Air Conditioners. Simultaneously.



Power Sensing



We can generate power, and convert power, so our ability to sense power becomes key. If power can generate a magnetic field, we just need to measure that field.



1 Gaussmeters

Simply measuring magnetic field for scientific applications



2 Current Sensors

Measuring the strength of the magnetic field to verify operation

The simplest hall effect device in your life is in the base of your laptop and senses a small magnet inside the lid to turn on/off the screen when you open or close it.

Site facts & overview

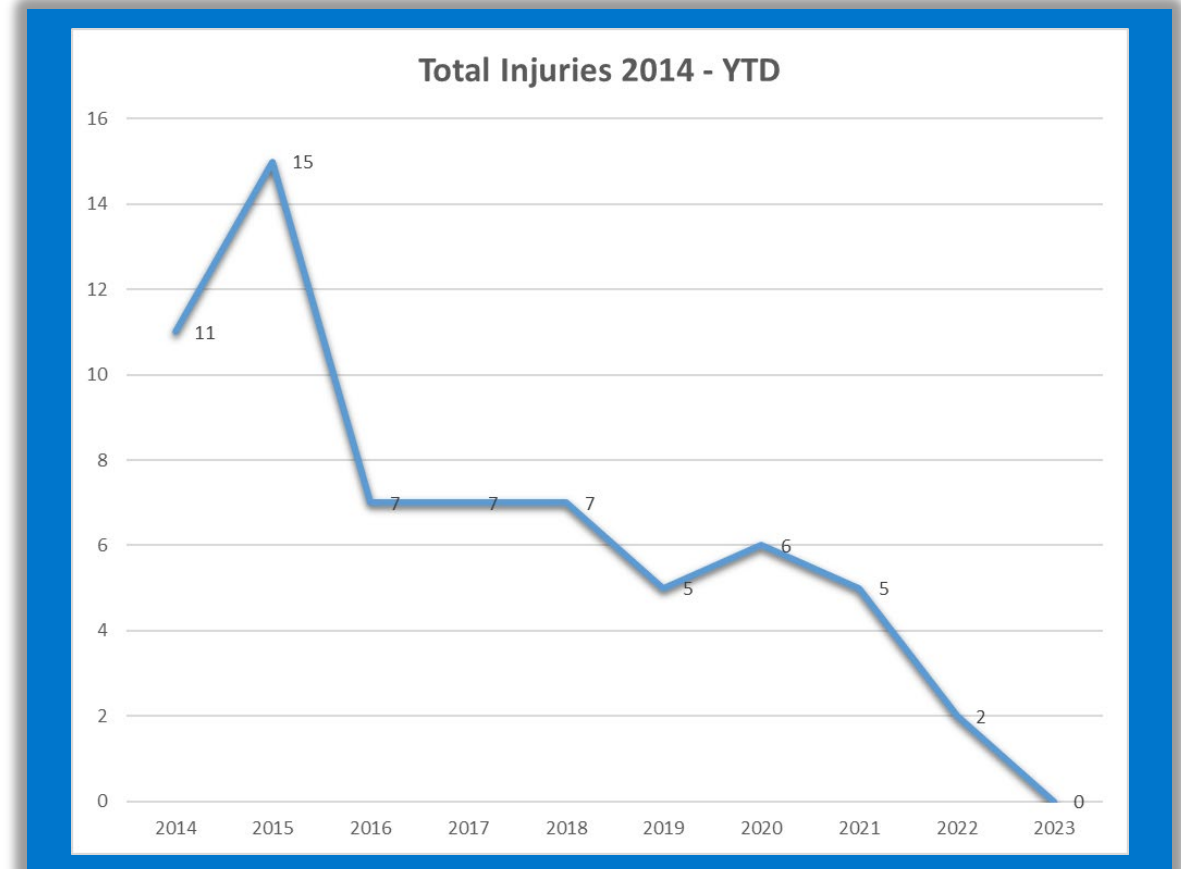
- Safety
- Sustainability
- Leadership
- Product Mix
- Customer Mix
- Demographics
- Job Skills
- Current headwinds



Health/Safety/Environmental Review

Physical safety of site, environment, and personnel

- 0 Recordable Injuries 2023
- Target 1 'concern' reported per EE
- "No Exposure" certified stormwater
- Large Quantity Generator Haz Waste
- No wastewater or Air Permits
- No OSHA/EPA audit findings



SUSTAINABILITY



Over 1150 panels covering 50,000 sq ft **producing** up to 640 MWh per year

With enough energy to power 60 homes, OECO installed one of the largest panel arrays in the state of Oregon in 2022. The system has saved over 1M lbs of CO₂ emissions, the equivalent of planting over 8000 trees

OECO has also eliminated Single-use Plastics in the cafeteria market and installed a \$250k water cooling tower to reduce our water usage from 9000 to 5000 CCF

Fully supported internally

Site Leadership Committee (SLC)



General Manager
Rob Gustine



Manufacturing
Rosalin Tjia



Engineering
Kristina Korosi



Sales & Marketing
Chris Kuble



Quality
Andrew Castillo



Sr. Manager, Human Resources
Linda Harris



Contracts & Trade Compliance
Justin Hackett



Continuous Improvement
Deb Kaiser



Manager, HSE
Nicholette Romashko



Manager, Procurement
Lisa Wright

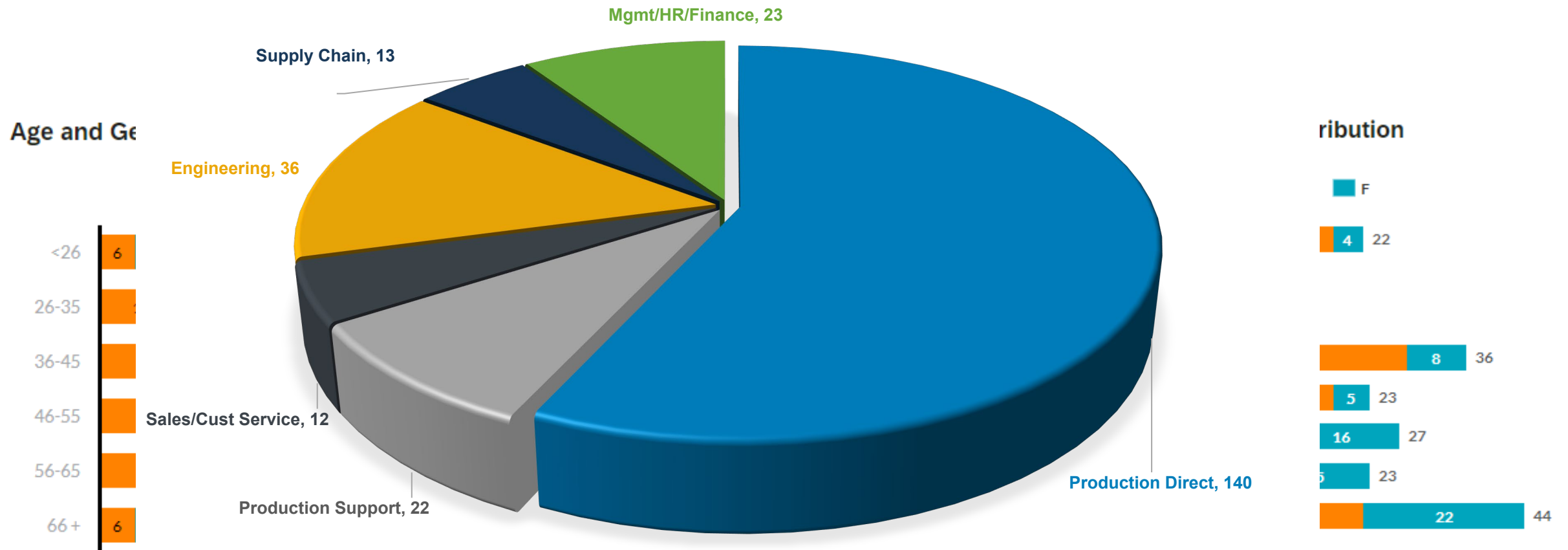


Finance
Sean Jordan



Program Management
Eric Davidson

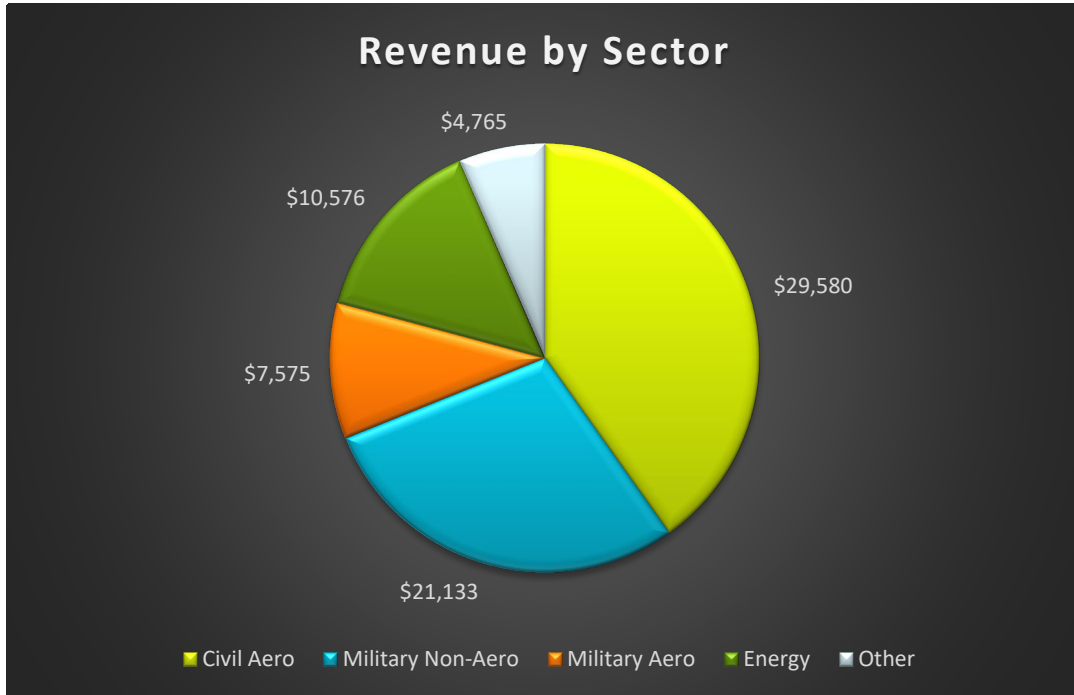
OECO employee demographics



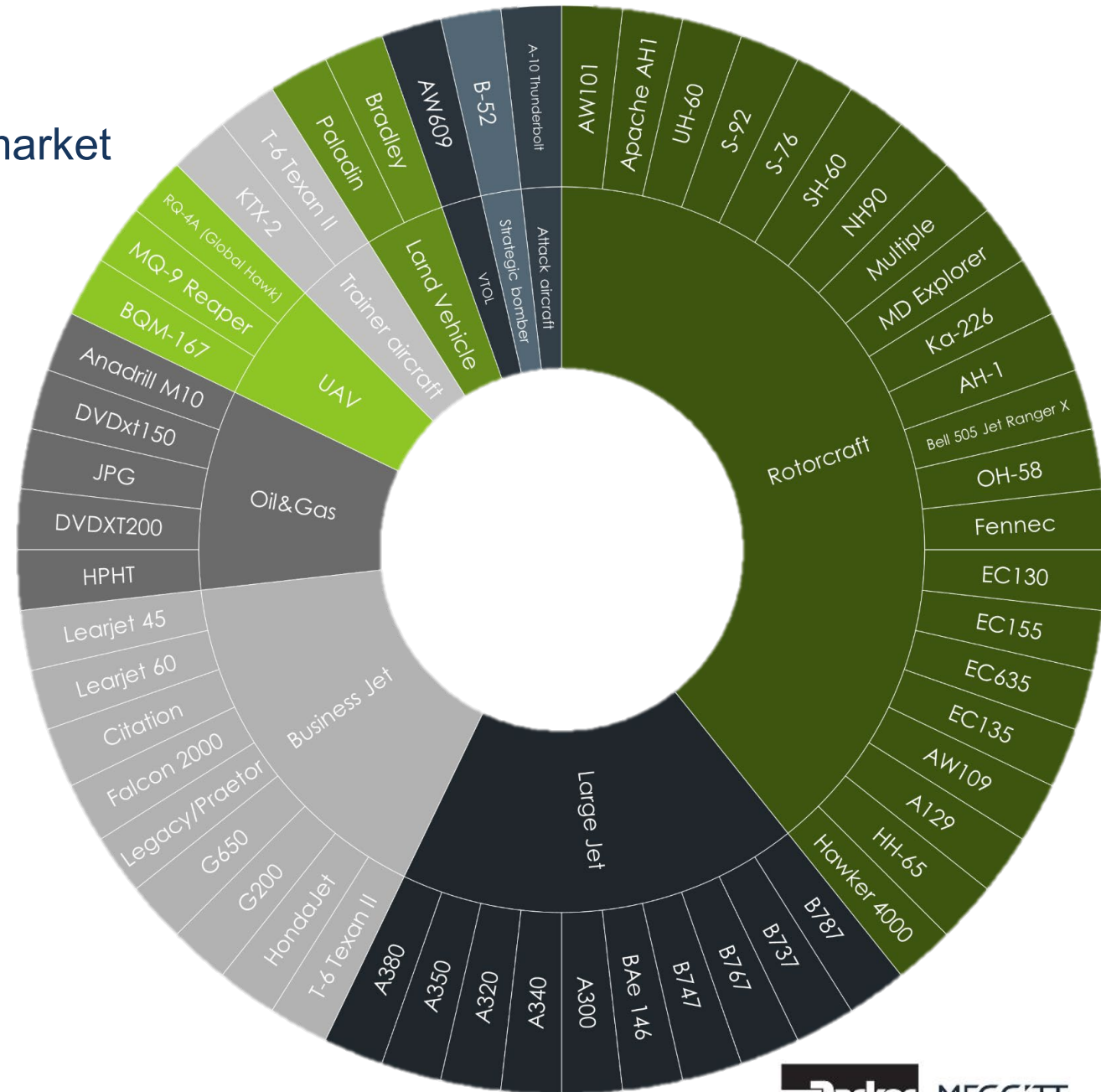
OECO Breakdown by numbers

Revenue Delineation – Market Sector & Aftermarket

•Market Sector (2022)



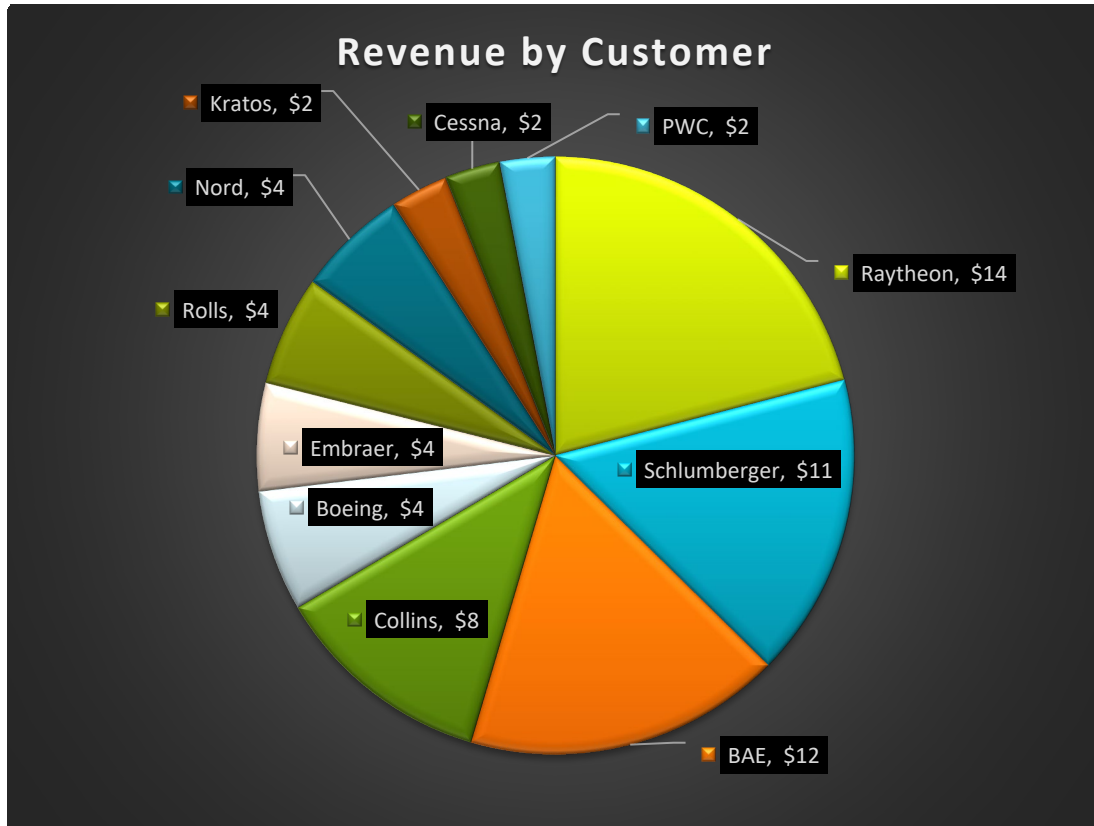
- Equal split between Military & Civil Aero at roughly \$30-35M ea
- \$15M provided from energy (oilfield) & commercial Gauss Meters



OECO Breakdown by numbers

Revenue Delineation – Market Sector & Aftermarket

•Customer (*2022)



- Total Raytheon Technologies = ~\$28M (Includes Hamilton Sundstrand, Rockwell Collins, Pratt & Whitney, and Raytheon)
- BAE includes land vehicles (\$5.5M) & aircraft electrical (\$6.5M)
- Boeing runs between \$4M-7M depending on the year
- Embraer & Cessna are both increasing rapidly due to travel shifts since Covid

Typical Manufacturing Skills

Winding

1

Wrapping wire ranging from the size of your pinky down to 1/3 the size of a human hair



2

Electrical Assembly

Soldering, assembly, and workmanship



Machine/Grind

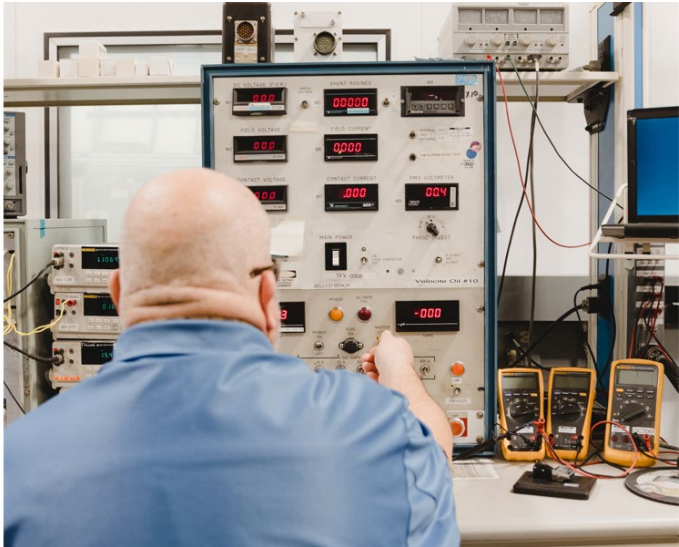
3

Manual & meticulous, dimensions down to 1/10,000 inches

4

Test Technician

High & Low voltage performance testing





Mayor for a day (help in a vacuum)

Sch I

Marijuana continues to make hiring 'tricky' as the FAA requires us to follow the Schedule I substance list, where it is still federally banned

BOLI

ORS 652.020 & 653.265 prohibits manufacturing workers from working over 55 hrs, or 60 hrs with consent. This limits our competitive landscape

BUS

Most of our day shift starts at 5 or 6am, however no bus service runs an 'earlybird' route to support this business district.

JOBS

A significant portion of early-career job seekers don't know or understand the careers manufacturing can provide.

Thank you!

