MUNRO

# TESLA
# MODEL S PLAID
# ELECTRICAL DRIVE MODULE
# COST ASSESSMENT



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## TESLA MODEL S PLAID ELECTRIC DRIVE MODULE

Purchasers of this **$35,000** **240+ page report** will receive a cost assessment of the Electric Drive Module (EDM). The analysis includes the Front Motor, Rear Motor, Inverter, Front Gear Box and Rear Gear Box.

**Report Includes:**

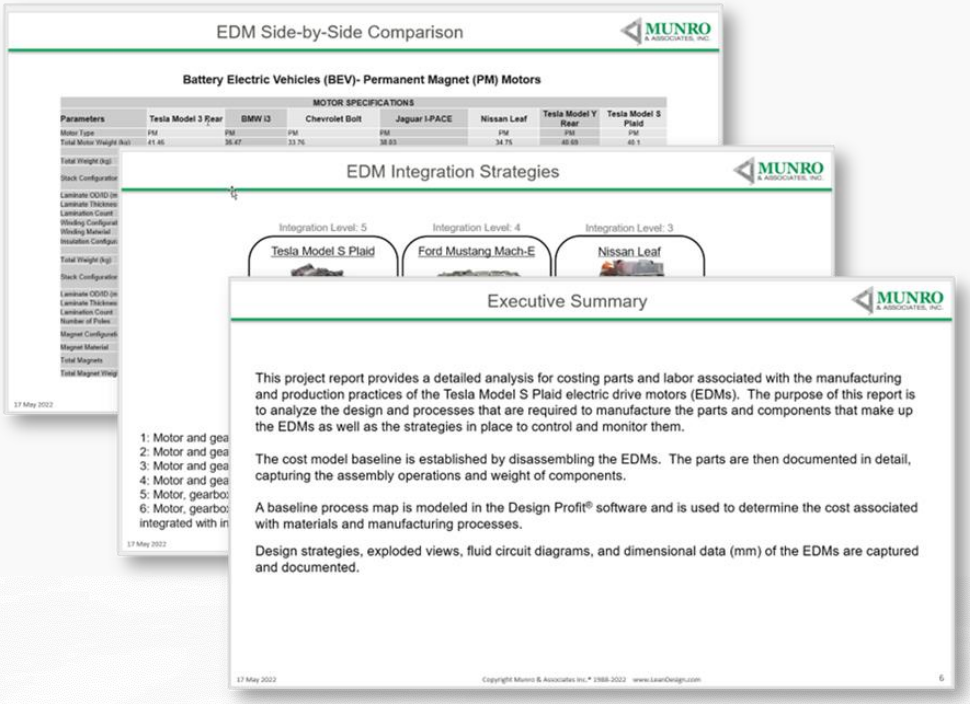
1) Executive Summary with EDM Side-by-Side Comparison
2) Eye-Catching Features
3) Quick Cost Estimate Report
4) Cooling Diagrams

## TESLA MODEL S PLAID EDM DESCRIPTION

- 1,020-horsepower powertrain using three 250kW motors; a single front motor with a differential and dual rear motors with torque vectoring, powered by a 100kWh battery pack with a 396-mile range at 119/112 MPGe city/highway
- The Tesla Model S Plaid front and rear gearboxes have a gear reduction ratio of 7.54:1 from the motor to the driveshaft, decreasing from the 9.00:1 gear ratio seen in the Model Y
- This new motor assembly is capable of 20,000 rpm and provides up to 1,050 lb-ft of torque
- The front motor and both rear motors use identical rotors and stators

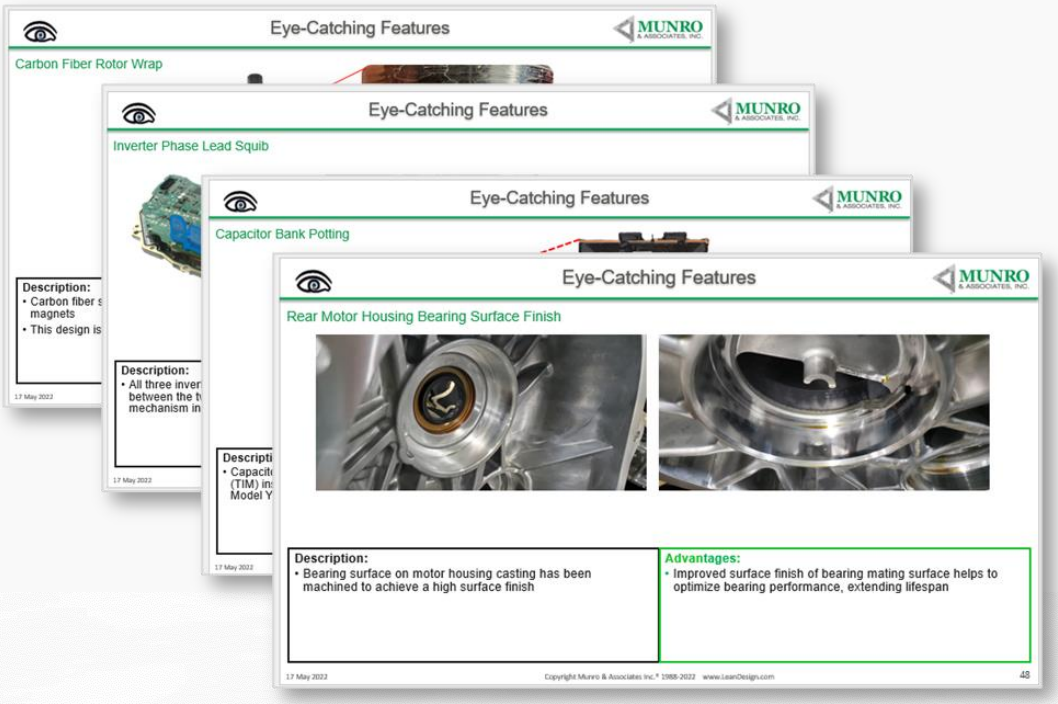
## 1. EXECUTIVE SUMMARY & SIDE-BY-SIDE COMPARISON

- The Executive Summary highlights the purpose and key points of each report including Munro's observations and cost summaries.
- Side by Side comparisons highlight prominent EVs and their associated specifications, features, integration strategies and other relevant data.



## 2. EYE-CATCHING FEATURES

- Munro identifies specific observations of interest called "Eye-Catching Features." These observations can represent advantages or disadvantages in cost, weight, feature content, or performance as related to design, material choice, assembly, or manufacturing process selection.

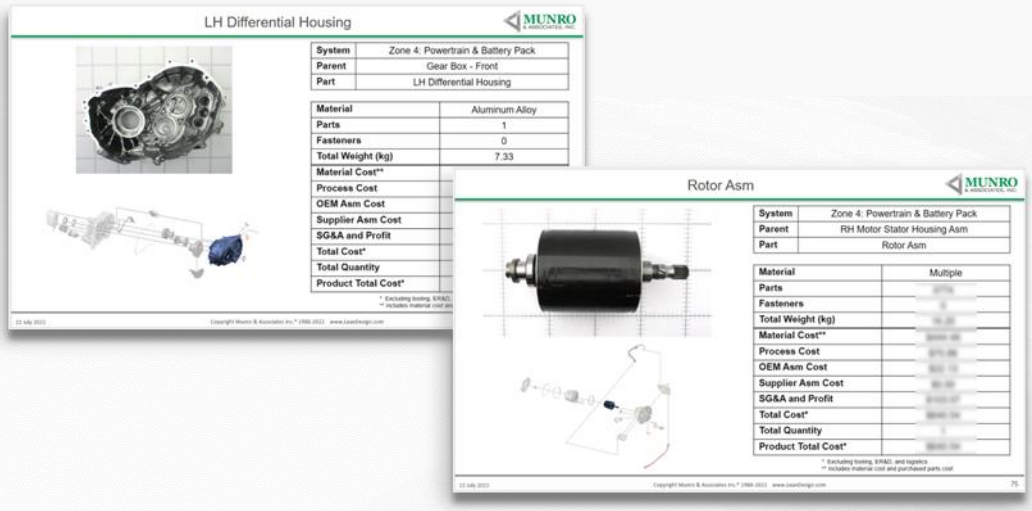


## 3. QUICK COST ESTIMATES

- The EDM is broken down into systems and components for Quick Cost Estimating (QCE). QCE is Munro's proprietary methodology developed in response to the need for speed-driven results and is quickly gaining popularity. Quick Cost Estimates provide approximate costs in a timely fashion. While less accurate than detailed costing (also available from Munro), QCE allows OEMs and suppliers the ability to make sound comparisons and directional decisions expediently.

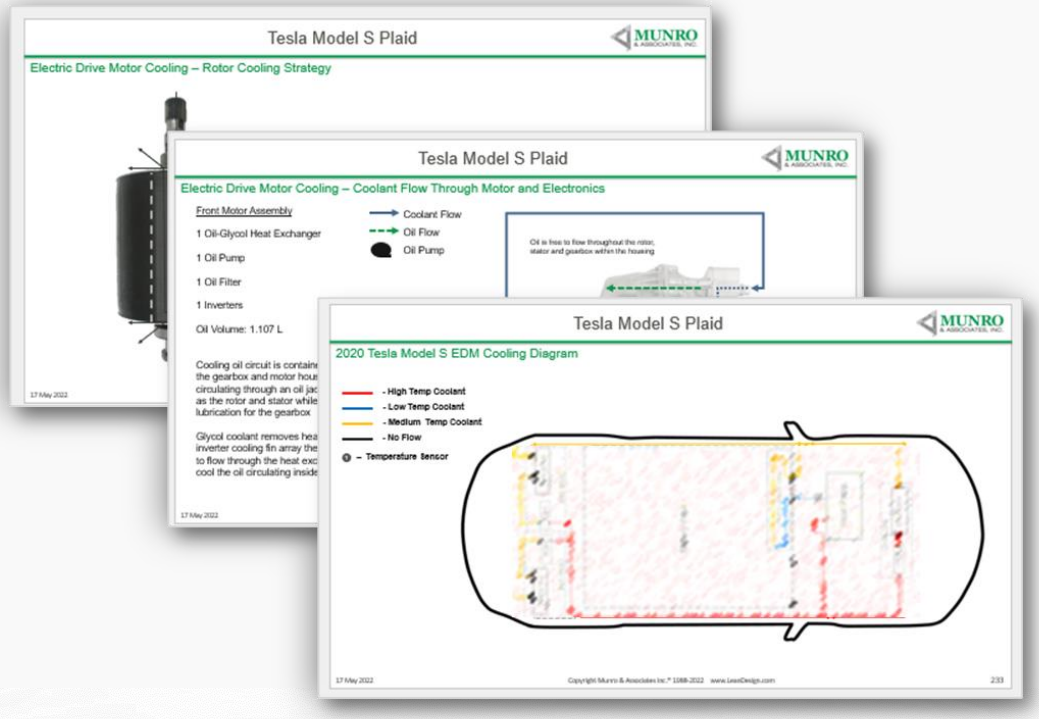
**Douglas Richman** - EPA Peer Reviewer from Kaiser Aluminum

*"Munro is recognized as being technically competent, highly experienced, knowledgeable and creative in benchmarking and lean engineering of automotive and non-automotive systems. Costing models are thorough covering all elements of total production cost."*



## 4. COOLING DIAGRAMS

- This report outlines the cooling lines and connections for coolant and refrigeration fluids. Both the heating and cooling circuits are illustrated



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- All reports and accompanying deliverables are made available for easy access through a secure File Transfer Protocol (FTP) site.
- A user-friendly PDF format ensures ease of viewing, sharing, and printing.
- The large reports feature a linked table of contents, allowing users to easily navigate the report contents and quickly locate specific data.

## FREQUENTLY ASKED QUESTIONS

- **Were any OEMs involved in the study?**

  No. Neither Tesla nor any supplier's quoted costs were used in this study.

- **Is there any Tesla proprietary information in this report?**

  No. All data was developed through Munro's proven methodologies, obtained by analyzing Munro's purchased production-version Model S Plaid..

- **Are the components costed using country specific costing centers?**

  Yes. Munro uses country-specific labor rates and working patterns, factory floor costs, utility rates, and loan interest rates.

- **Is this a Costing or Pricing report?**

  This is a Costing Report. Pricing has too many variables.

- **How can I receive more details on the contents of the reports?**

  Questions regarding report contents should be sent to sales@leandesign.com Munro will respond with clarification, and if necessary, meet virtually to discuss and review. Complex and/or detailed requests may require additional consulting fees.

- **Are Sample reports available?**

  Sample reports are available. Please contact sales@leandesign.com
  Note: Some data may be redacted.