Tesla Model 3 China Benchmark Report

Analysis for $40,000 USD

The Munro US Long Range Premium Package Model 3 cost analysis reconfigured to a Standard Package Trim level.

Purchasers of this report will receive the following:
All Report Costs Represented in RMB

A. Zone Quick Cost Estimate Reports with Zone Summaries

   Zone 1  Body and Chassis
   Zone 2  Controlling Electronics
   Zone 3  Interiors and Safety
   Zone 4  Powertrain and Battery Pack

B. Vehicle Costed Bill of Material (CBOM) with weights and most materials identified.
   ▪ CBOM reports the vehicle as manufactured in China using China material, machine, and labor rates.

C. Side by Side Report
Description of the Analyzed Tesla 3

Base or Standard Equipment Trim Package

❖ The Base Model 3 at $35,000 has been promised for almost a year now and its launch date continues to be delayed. The Base Model 3 is expected to have:
  – 258 HP, 317 lb-ft torque, all-electric RWD using one rear drive MGU for the rear wheels.
  – 50 kWh microprocessor controlled, lithium-ion battery
  – 264 miles of range

❖ Munro has disassembled the Premium Package Tesla Model 3 down to: nuts, bolts, sensors, PCBs, battery pack, control management, drivetrain, etc. This package has been de-contented and reconfigured to develop the Standard Equipment package.

❖ Munro documented our assumptions and findings related to weights, number of parts, materials and suppliers, where possible, and conducted a complete Munro Vehicle Quick Cost Analysis.

❖ Technical Disclaimer: The goal of this analysis is to establish a should cost value for manufacturing the vehicle and its sub-systems. These cost totals do not include tooling, Engineering Research and Development (ER&D), testing and calibration, or logistics.

Report Delivery

❖ All reports and accompanying deliverables will be made available for easy access through a secure File Transfer Protocol (FTP) site.

❖ A user-friendly PDF format will help ensure that customers can easily locate a wide range of materials in addition to the reports.

❖ The large reports utilize hyperlinks within a table of contents to facilitate the ability to easily navigate throughout the contents and quickly find specific data and information to meet user needs.
Cost Estimates

Each Zone is broken down to systems and components for Quick Cost Estimating (QCE). QCE is gaining popularity due to the need for speed-driven results. In response, Munro has developed a proprietary methodology. Quick Cost estimates provide the customer with approximate versus detailed costs which are more expensive and time consuming to generate. A Quick Cost analysis will deliver complete vehicle estimates with an accuracy of +/- 8%. This level of accuracy provides OEM’s and Suppliers the ability to make sound comparisons and directional decisions.

Richman from EPA

“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.”
Model 3 Zone Benchmark Report

- The Benchmark Report is highly advantageous for OEMs or Tier Suppliers looking to effectively expand and compete in new EV markets.
- The report is a comprehensive cost analysis of all four Zones of the vehicle.
- This report contains descriptive and pictorial detail on every facet of the vehicle from manufacturing to Quick Cost Analysis.
- Those who purchase the report will receive:
  a. Vehicle Executive Summary
  b. Zone Summary
  c. Zone Quick Cost Estimate by sub assembly and component
  d. Zone Costed Bill of Material
Vehicle or Zone Summary Costed Bill of Material

- The vehicle costed bill of material is a consolidated view of the information presented in the Zone reports. An overall vehicle CBOM report is provided, in addition to CBOM sections at the end of each Zone report.
- The bill of material is an indented format and includes:
  - Part name
  - Material
  - Supplier (as is feasible)
  - Total Cost
  - Weight
  - Quantity
  - Total Weight

Please note the costed bill of material is provided in PDF format and will not be available or provided in Excel.
## Side by Side Report

- The vehicle Side by Side Report is a high level comparison between three vehicle trim packages. It compares the US built Long Range & Premium Trim Package, Estimated China built Long Range & Premium Trim Package, and Estimated China built Standard Range & Trim Package.
- The report provides a comparison of total cost and weight between the three different trim packages. A quick analysis explaining the difference between trim packages is included on system slides.

### Side-by-Side Comparison

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### Tesla Model 3 Side-by-Side Analysis

- **USA**
  - Long Range Premium Package
- **China**
  - Long Range Premium Package
  - Standard Package
The China Version of the Tesla Model 3 is currently a speculative estimate of the vehicle content and cost that will be produced out of the future Tesla China production plant. As the plant is not currently operational, and has yet to produce any vehicle, estimates of Production, Performance, and Trim level differences are based on published information when available, or based on automotive industry typical trends related to option and trim level adjustments of content.

The adjustments made in content, shown on the two previous pages, are typical of industry and do not effect what are believed to be the main selling features of the Model 3. Below is a list of additional content that could be removed in a more aggressive content adjustment of the vehicle to a standard trim package. However, these adjustments do represent an impact on primary features of the vehicle.

These cost totals do not include tooling, Engineering Research and Development (ER&D), testing and calibration, logistics, or other Tesla overhead costs related to sales, marketing, etc.

Assume that the Standard Trim Level Vehicle will have the same Sales Price in the US and China, since it will be produced in-country and will not be subject to tariffs.

US Sales Price is $35,000, per Tesla publications.

Exchange Rate is ¥6.79 to $1.

All Labor Rates were adjusted based on Economic Data for the differences between the US and Chinese Market

All Material Costs per Kg were adjusted based on market research for the differences between the US and Chinese Markets
FAQ (Frequently Asked Questions)

❖ Was Tesla involved in the study?
No, Tesla proprietary costs nor any Tesla 3 suppliers quoted costs were used in this study.

❖ Is there any Tesla 3 propriety (stolen) IP in this report?
No. All data was developed through Munro’s proven methodologies from th purchased production Tesla 3

❖ Is the car costed using only NAFTA costing centers?
Yes, Munro includes labor, factory floor cost, taxes and SG&A for OEM or Tier Suppliers.

❖ Is this a Costing or Pricing report?
This is a Costing Report. Pricing has too many variables.

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❖ If there are a few but specific questions on the content of report, is it possible to support a phone or e-mail communication?
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