

A close-up, high-angle photograph of a red Cummins engine. The engine is painted a vibrant red and features various mechanical components like hoses, bolts, and a large cylindrical part in the foreground. The word "CUMMINS" is embossed in large, dark letters on the side of this cylinder. The background is slightly blurred, showing more of the engine's structure.

Cummins Case

Group 2



Team Introductions



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Case Overview

- Review your current savings program.
- Confirm the amount of savings (or loss) expected in 2024 based on new prices.
- Analyze the data to determine financial impact.
- Develop a recommendation. Decide whether to proceed with the current plan or switch to a different supplier.
- Can it be done within 120 days?

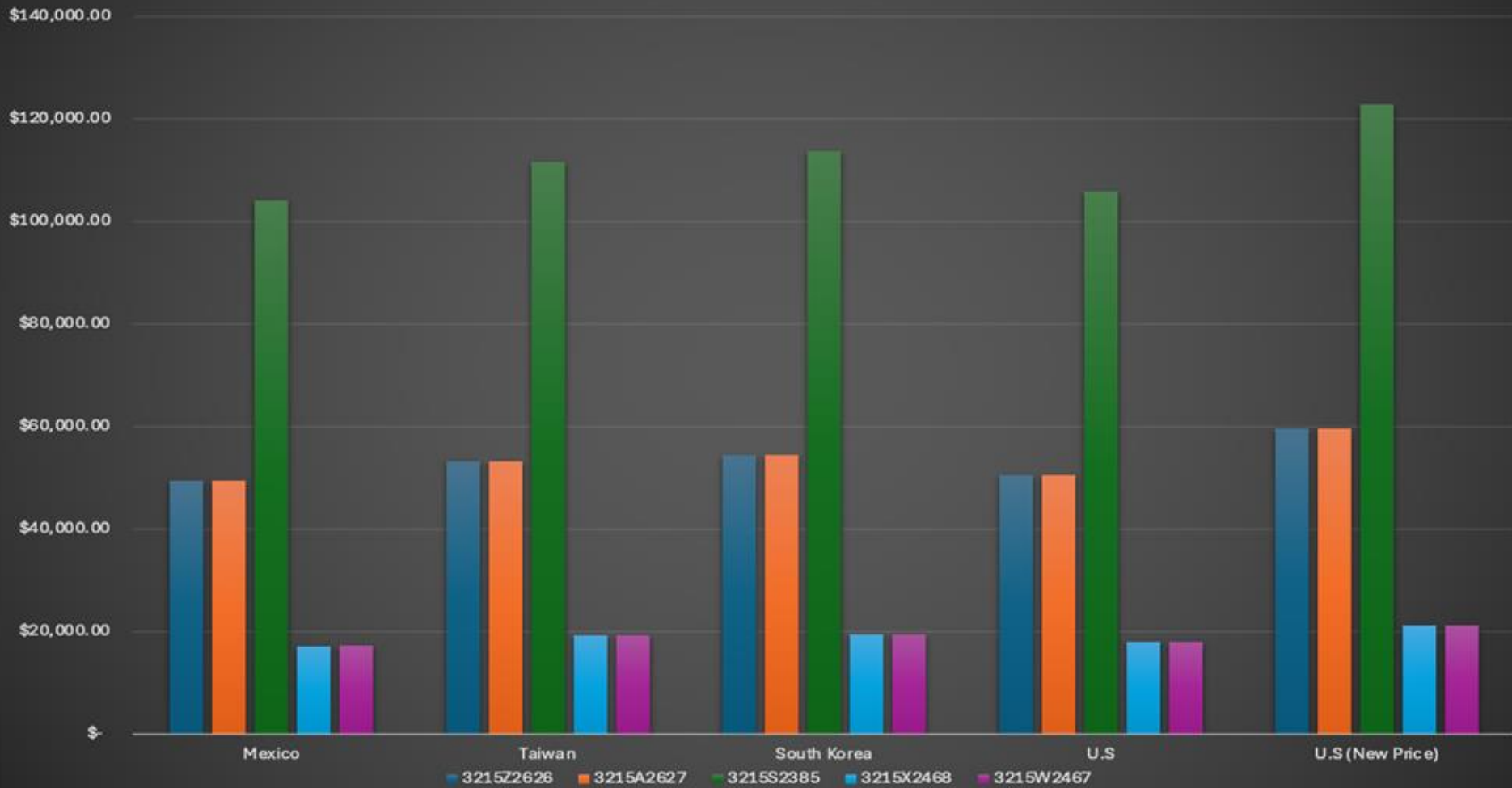




Scorecard

Factors	Weight	Supplier A	Supplier B	Supplier C	Cast Iron Co.
Price	.25	?	?	?	?
Quality	.25	?	?	?	?
Sustainability	.20	?	?	?	?
Risk & Location	.15	?	?	?	?
Delivery	.15	?	?	?	?
Supplier Score	1	?	?	?	?

Monthly Product Price by Part

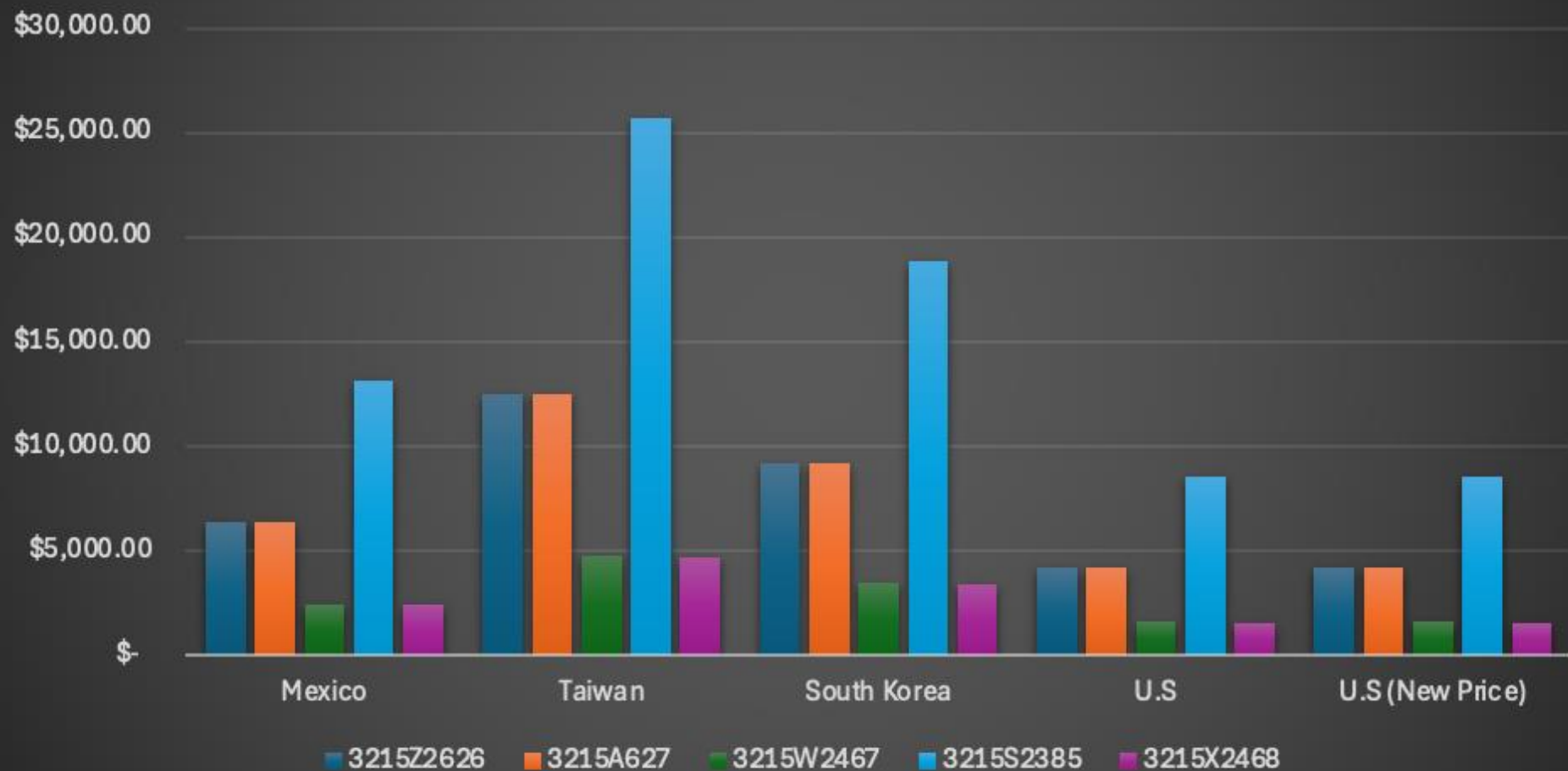




Total Annual Product Cost Before And After Tooling

Mexico	Taiwan	South Korea	U.S
Before tooling:\$2,851,178.64 After Tooling: \$3,051,178.64	Before tooling:\$3,080,775.60 After Tooling:\$3,160,775.60	Before Tooling:\$3,138,763.44 After Tooling:\$ 3,288,763.44	*No Tooling Required* Price: \$ 3,420,037.20

Freight Cost by Part





Total Freight Costs Annually

Mexico

\$ 368,774.64

Taiwan

\$ 721,515.60

South Korea

\$ 529,111.44

U.S

\$ 240,505.20

Cost of Carrying





Total Annual Cost of Carrying

Mexico

\$ 6,454,160.40

Taiwan

\$ 10,026,631.20

South Korea

\$ 11,221,264.80

U.S

\$ 4,452,084



Quality Analysis

Criteria	Supplier A (Mexico)	Supplier B (Taiwan)	Supplier C (South Korea)	Current Supplier (USA)
Quality %	90%	92%	87%	93%
Production Capacity	95,000 (highest)	80,000	70,000	90,000

Suppliers must meet a certain threshold: We require **minimum 85%** on the quality metric while **customer A requires a minimum 89%**, **customer B 76%, and customer C a 92%**



Sustainability Analysis

Criteria	Supplier A (Mexico)	Supplier B (Taiwan)	Supplier C (South Korea)	Cast Iron Co. (U.S)
Pros	• USMCA • Laws implemented for employee wellbeing. • New framework prioritizing economic growth and environmental safety.	• Good working conditions. • Low CO2 emissions with a plan to keep it low. • Uses solar powered machines for getting materials.	• Unions are expanding to allow women to join. • Have a roadmap to work on CO2 emissions. • Taking steps to ensure raw materials are supplied responsibly.	• Laws against forced labor & human trafficking • Requires permits for business' that release air pollution • Ensures suppliers follow environmental/labor laws
Cons	• Has laws against child labor BUT aren't heavily enforced.	• Low wages	• Are not welcoming to foreign workers • Long hours • Emits a lot of CO2	• Strikes



Risk Analysis

Criteria	Supplier A (Mexico)	Supplier B (Taiwan)	Supplier C (South Korea)	Current Supplier (USA)
Risks	• Trump has introduced a 25% tariff on Mexico • Mexico has shifting and unstable politics • Certain areas affected by Cartel and gangs (depending on certain supplier area)	• New tariffs in place, and the Trump administration bending the arm of Taiwan suppliers to relocate to the United States • The new president administration links between Taiwan semiconductors and The US are unknown • Another risk for supplier Taiwan are the growing tensions between China and Taiwan	• Similar to the other supplier South Korea is affected by new tariff regulations • South Korea also has current tensions with North Korea alongside China, which could cause supply chain issues	• Our current supplier runs the risk of us needing to pay more • Stricter Labor Laws • Recent Tariffs may mean suppliers charge more

A lot of risks are can still arise as geopolitical tensions between the U.S and where our three foreign suppliers are located are ever changing



Delivery Analysis

Criteria	Supplier A (Mexico)	Supplier B (Taiwan)	Supplier C (South Korea)	Current Supplier (USA)
Delivery%	91%	93%	89%	96%

Suppliers must meet a certain threshold: We don't have a specified %. While **customer A requires a minimum 93%, customer B 89%, and customer C a 86%**

 Scorecard					
Factors	Weight	Supplier A	Supplier B	Supplier C	Cast Iron Co.
Price	.25	3	2	1	4
Quality	.25	4	5	2	5
Sustainability	.20	4	4	1	4
Risk/Location	.15	3	1	2	5
Delivery	.15	5	4	4	5
Supplier Score	1	3.75	3.3	1.85	4.55



Our Plan

After careful consideration, our team has decided to stay with Cast Iron Co due to:

- Cost of Carrying and Freight Costs
- Tariff Uncertainty
- Complex Geopolitical Situations
- Meets quality and delivery requirements
- We will re-evaluate the landscape in 2030



Total Losses: \$ 1,202,536.80



What We Learned

- Different suppliers carry costs differently: (Cheaper product but higher Cost of Carrying Inventory)
- Watch foreign suppliers and their neighboring countries conflict and tensions to mitigate risk
- We all learned the importance of accountability in a group setting.
- We all learned that higher tariffs could make a break or decision in suppliers.
- Comparing multiple suppliers helps find better prices and quality.



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