CASE STUDY:

Construction Products OEM

Flack Global Metals was founded in 2010 to create certainty of supply and pricing for OEM clients – to be an antidote to supply chain volatility. FGM is built with a unique grouping of disciplines combined and refined by the Company to deliver unparalleled volatility reduction in what, over the last twelve years, has become the most volatile steel market in the world – North America. FGM has uniquely woven together three disparate traditional business functions: flat-rolled steel and aluminum distribution, international commodity trading, and financial services into a business platform. This structure offers an unparalleled ability to reduce supply chain risks when used to its full potential by FGM clients.

This case study showcases the range and depth of the FGM business model to deliver absolute certainty of supply and price during the most historic disruption in the steel markets since at least the early 1970s – the post-COVID steel market. An FGM customer leveraged the capabilities inherent in our business model by granting our organization full latitude to structure a new supply chain.





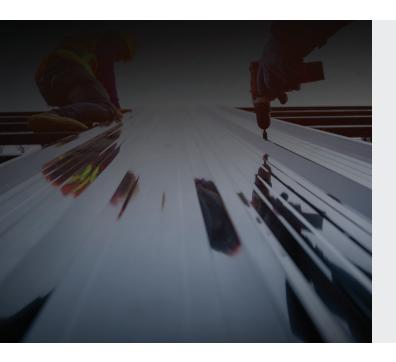
Situational Market Background: VOLATILITY

In the late spring of 2021, the pandemic-induced North American steel shortage had sent steel prices soaring to unprecedented levels. There appeared to be no end in sight to most market participants. A seemingly perpetual mismatch of production and consumption dragged from 2020 into 2021. For some OEMs, the situation had become desperate. Consumers, having exhausted traditional means of dealing with price/supply runs, were searching for new strategies to 1) assure supply and 2) combat runaway input costs.

While the mills struggled to supply the market, demand for things made from steel had exploded in the American economy. There was a mismatch of supply and demand from a general standpoint. Further, steel production supply chains (particularly in value-added galvanized steels) servicing the American economy were not built for the dramatic COVID demand transition. The American consumer turned its sights on all types of manufactured goods in volumes never before

experienced. The general economic disruption issues are amply documented in the press. Not discussed is the fact that domestic mills no longer had enough value-added (galvanized) production to meet post-COVID demand to American manufacturers. This situation added stress and uncertainty to OEMs looking for baseline, let alone increased volume needs.

Therefore, the physical supply landscape at the time was opaque to buyers. The North American steel mills were reeling – attempting to resolve very long lead times and late deliveries. Spot steel sales from the mills had dried up completely – leaving OEMs and distributors short of material, the eventuality in some situations being plant shutdowns. Whole purchasing departments at some of FGM's customers were fired and replaced. Many had failed to recognize the unprecedented, several million-ton supply deficit and the unlikelihood that it would resolve quickly.



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No one knew for sure when this situation would resolve, leaving consumers to wonder when, if ever, they would be taken off allocation and have access to additional tons. Adding to the problem, ample foreign supplies, which traditionally filled gaps, had not yet become widely available to the market – shock from the Trump 232 tariffs still hung over the market.



At the time, the FGM research team developed a hypothesis about what the shortage would mean for steel consumers over the ensuing decade – it was internally called the "Scary One-Pager" (although it was three pages). The piece included an empirical analysis of the steel market back to 1994. With the onset of the COVID shortage, it concluded that the steel market had likely "step changed" to a higher permanent level of pricing; i.e., pricing would likely never go back to prior COVID average steel prices. How to deal with this as a consumer? The research team pointed out that the shape of the steel futures curve on the CME was steeply backwardated (meaning prices in the later months of the curve were substantially

discounted to the current market prices). The team indicated that the out months of the curve were transacting at prices with a higher discount to spot prices than ever in its thirteen-year history. The upshot? Steel buyers had a unique opportunity to lock in prices up to \$900/ton less than where the spot price was about to head.

The immediate uncertainty of supply and pricing was a huge problem in and of itself. But by the spring of 2021, market participants had no idea what the mills would present to the steelconsuming community insofar as availability for 2022 either. Would they continue with baseline commitments? Would they reduce their contract books overall? How about discontinuing the manufacture of certain types and sizes of coil to "gain efficiency"? In rare situations, the mills were obligated to continue similarly in 2022 as in 2021 and prior years. Those were the exceptions to the new rule. The mills were also dealing with new combinations - that of AK Steel and Arcelor Mittal under Cliffs' and US Steel's tie-up of Big River Steel. More production had made its way into the hands of fewer players - how would they act for 2022? Only they knew, and with the turmoil in these businesses, it was a gamble to count on them for 2022 the same way you had in prior years.

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The Customer:

The customer is a publicly-traded multinational construction products OEM with over \$600 million in annual revenues and a market capitalization of approximately \$1.5 billion.

For several years, the OEM had shared FGM's viewpoints around the unacknowledged risks of employing an indexed purchasing methodology for 100% of a manufacturer's demand. FGM had been hedging on behalf of the customer for some time before the events of 2021 and managing supply chains to their multiple manufacturing sites.

The FGM Commercial team stepped up communication with the OEM during this time, educating them on opportunities for fixed pricing over extended periods through steel hedging. The FGM team presented the market study and strategy suggested by the FGM research group and developed a deeper understanding of the OEM's business needs.

The landscape of concerns at the OEM at the time included:

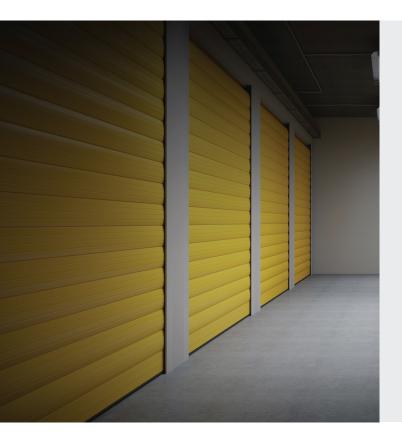
- The desire for a consistent supply of high-quality painted and slit coil to multiple geographic manufacturing locations of a fixed total volume yet spread over a calendar year.
- The ability to shift volumes from plant to plant according to loading / localized volumes.
- Regular daily, weekly, and monthly shipments, although varied to a degree depending upon the manufacturing requirements of individual plants.
- Certainty of material cost from now on to protect profitability.
- Support significant customer contract commitments with back-to-back pricing.
- Confidence in financial planning and forecasting – both a critical need for the OEM after their IPO on the NYSE in 2021.





In past years when FGM conducted fixed price programs for the customer, FGM had supplied all its tons to the OEM with domestic sources and backed those tons with futures – what was in doubt was the domestic availability. FGM's traditional distribution would undoubtedly get some tons, but likely not all. Of course, FGM's risk team would get the necessary pricing needs – now, filling the gap would fall upon FGM's ability to source qualified foreign capacity for the OEM for 2022.

FGM and the OEM agreed to a transparent, collaborative approach to address mutual market concerns regarding pricing and availability in North America. They decided to embark on a strategy to reduce the volatility of each and ensure that the manufacturer's 2022 operating plan would be successful.



The big questions became:

- Would traditional domestic mill sources to the OEM continue to make the products they required?
- Would traditional domestic mill sources provide enough total volume to supply the OEM?
- How could the OEM prevent ever higher steel prices from negatively impacting profitability?
- How would the OEM represent to the steel community that earnings are protected from steel price fluctuations?





THE FGM STRATEGY IN ACTION

FGM devised, presented, then executed a three-step plan to create certainty for our customer:

- Place long-dated long futures positions for the calendar year of 2022 at steep discounts to spring and summer 2021 spot prices.
- Directly source a significant amount of OEM/FGM monthly volume with qualified imported steel and apply the futures positions to control the total price of these tons to the OEM.
- Have FGM work on traditional OEM/FGM domestic supply solutions for as much volume as possible for 2022 and apply the necessary futures positions to control the total price of those tons to the OEM.

FGM and the OEM customer accurately anticipated the extended timeline for the domestic 2022 supply situation to be defined. It was the mid-fourth quarter of 2021 before FGM could secure firm domestic mill contracts for the OEM. The resultant contracts were, as expected, availability constrained. In the meantime, FGM had proactively arranged for foreign suppliers to bridge potential gaps in the supply chain.

The 2022 futures positions, which The FGM Risk Management Team entered into in mid-2021, were at a considerable discount to the spot pricing available late in 2021. As agreed, these futures positions were applied against the imported and the domestic tons, guaranteeing our customer a significant pricing advantage over the market as it began for January shipments.

Beginning on Jan 1, 2022, the OEM customer was amply supplied at the originally negotiated pricing from late Q2 2021.







OUR CUSTOMER HAS ACHIEVED...

- Fixed prices at well below published prices as the market ran up to historical levels.
- FGM managed the supply chain through global shortages and disruptions.
- As the market has turned down in 2022, the OEM is not suffering through the high cost of trailing index programs and the damage to their balance sheet of above-market cost steel in their inventory.
- In mid-year 2021, the FGM Asset
 Management group provided analysis
 that resulted in the OEM taking
 HRC hedged fixed price positions
 into 2022. These positions were
 taken without absolute clarity from
 the domestic mills on physical supply
 or conversions to HDG. FGM and
 the OEM agreed to a transparent,
 collaborative approach to making
 this happen.





	Total Savings	Total Tons	Savings/Ton
2020	\$(115,917)	12,100	\$(9)
2021	\$5,025,785	8,080	\$622
2022	\$5,578,080	24,540	\$227

Over \$10.4 million dollars in savings on 44,720 tons.



Average HRC Price 2020 – June 2022

Effective HRC Base \$885

Effective Spot Price \$1,104

April 9, 2021

June 30, 2021

August 3, 2021

November 2021

Initiated 1st half 2022 hedge

Initiated 2nd half 2022 hedge

Initiated 1st foreign buy in place of 1st half domestic contract tons

Domestic supplier contract confirmed



