Q&A: Dain Drake on breaking the status quo on steel procurement at DeSimone Consulting Engineering

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Dain Drake

DeSimone Consulting Engineering recently launched a steel procurement service to offer enhanced cost and delivery efficiencies for clients. Principal Dain Drake outlines how this new model of service will have a long-term impact on how the construction industry operates.

What are the challenges facing the US steel industry and how does that impact developers?

Price stability remains the single biggest steel issue impacting the construction sector. Prices can fluctuate very quickly, with high interest rates and economic headwinds contributing to this volatility. Modern mills are financially sophisticated when it comes to adjusting their pricing quickly in response to market events.

Steel used to be a very stable commodity, but that's no longer true. Historically, prices might have changed annually or quarterly to reflect cost-of-living and inflation increases. Now price increases can occur without warning and at a rapid pace. For this very reason it is difficult – and even dangerous – to forecast too far into the future (say more than 16 weeks). When it comes to building projects, particularly large-scale projects that may require substantial design, permitting, and planning time, price volatility has a huge impact on project budgets.

How is DeSimone's new steel procurement approach designed to tackle or reduce these challenges?

Nobody is happy paying more for steel prices, but by bringing procurement in-house we can now provide price transparency right at the very start of a project, which mitigates risk both for the client and DeSimone. The price of steel is benchmarked by the CRU Index (Commodities Research Unit), and we estimate project costs based on that. However, now we can include a Price Escalation Clause in our contracts with clients / owners that alerts them to the potential for price fluctuation that would be passed along to them. In the rare event that steel prices fall, everyone is happy, because that saves the client money. But overall, the benefit of bringing procurement in-house is really

offering price transparency so that clients won't be blindsided at any time during the contract.

DeSimone is now procuring steel for several projects across the US

What are the main elements or approaches incorporated into DeSimone's new procurement method?

Significantly, DeSimone is now able to provide structural engineering design, steel procurement and steel detailing (via DOWCO - A DeSimone Company), which together enable us to deliver a more efficient package to the client that expedites the process.

It may not be appropriate for all clients, and we anticipate demand primarily for large industrial and infrastructure projects. For any project, time is your enemy and the volatility of steel prices during the construction phase has a direct impact on the final cost. The longer the timeline, the greater the risk. Our ability to bundle all three of these services - not only structural design, but steel procurement and integrated steel design detailing - creates an array of efficiencies. In particular, as structural engineers, we now have a direct line of communication to the detailer and fabricator, rather than the fabricator communicating through the GC, who in turn brings RFI's to us and the architect. The communication can still be shared, but there is no friction or time loss.

This strategy to procure steel and combine it with structural engineering and detailing shifts our relationship to the process and to the project team, allowing us to mitigate cost not only through time and related efficiencies during the design process, but in terms of influencing the design and materials cost because we are involved in the process from the earliest stages.

How does DeSimone's approach to steel procurement distinguish you from other engineering firms?

It is rare for structural engineering firms to provide procurement services for any materials and this certainly sets DeSimone apart in the sector. DeSimone now has the engineering, procurement and detailing all in one shop able to share information early in a project with key stakeholders. It is a much speedier process with built-in price transparency that will create value for the company while providing value for our clients that other firms are unable to replicate.

DeSimone is now able to provide structural engineering design, steel procurement and steel detailing

Do you have any particular projects or case studies that showcase the effectiveness of your steel procurement approach?

We are currently involved with a project, a chip factory, for which we procured steel and are employing IDD, which enabled us to reduce the length of the process by half. We negotiated a fee and obtained a single source PO – thereby reducing design and bidding time (which was done up front). In the end, we shaved five weeks off the process; five weeks which would have created a revenue loss because the chip factory would not have been in operation

Since acquiring DOWCO last year, DeSimone has been able to expedite several projects through the partnering of structural engineering and detailing, including the Hard Rock Hotel and Casino in Bristol, VA.

How do you foresee this new practice influencing the construction industry overall and your clients, in both the short and long term?

This is certainly a new business model for DeSimone and one that will have, in the short term, an overwhelmingly positive impact for our clients in saving time and money. In the longer term, it will change the dynamic between the various project stakeholders and allow very significant decisions to be made by owners, architects and engineers in the early stages of design. This is a new model for how we can collaborate to save time and money while advocating the use of sustainable, American-made steel, and as owners see the benefits, they are going to start demanding it.