Visual Storytelling: The Design Process

Looking inside.

*In the real world, the front wall of this building is solid, and it butts up to the main office building, the parking lot, and an infinite amount of visual clutter — none of which help tell the story. 3D models tell **only** the story — without any of the distractions.*

We each have our own area of expertise. Mine happens to be visual storytelling: creating the best presentation to convey information clearly, easily and in an entertaining manner.

How the design process unfolds is different for every project, but the most important step is to listen to the client explain the problem as they see it. Then I evaluate it, consider the client's perceived solution as well as developing several of my own, review them with the client, reach agreement on the direction, and proceed with the design, keeping the client in the loop at each crucial step of the process. In all cases, to have a great working relationship, the designer must respect the client's knowledge of their industry, product and environs, and the client must respect the designer's expertise in the design arena. It is bringing both areas of expertise together effectively that results in the best design solutions.

Columbia River Carbonates (CRC), in Woodland, WA produces different grades of ground limestone products for many commercial industries and loads them into pneumatic tanker trucks, at their facility. Since the product is sold by bulk weight, the customer's truck is weighed on their huge scales when it arrives, and then again after it is loaded. Truck drivers perform several moves to align their trucks properly on the scale, as well as under the four overhead hoppers that dispense the powdered products into their single or tandem tanker trailers.

Rear view of truck model on scale, preparing to be loaded from above

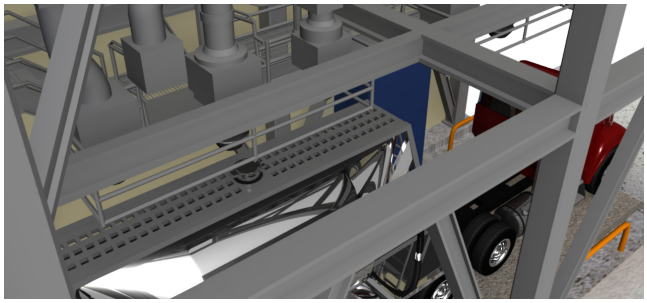
My clients can usually identify their problem, but they can't always identify the best visual solution for it. And that's my part.

CRC contacted me to create illustrations for a digital kiosk they were installing to guide incoming truck drivers through their tasks in the weighing and loading processes. We met at their facility, I talked with the process control technician who was creating the kiosk software and several engineers, listened to their ideas for a solution, watched actual trucks perform their loading operations, got appropriate facility blueprints and took lots of photos.

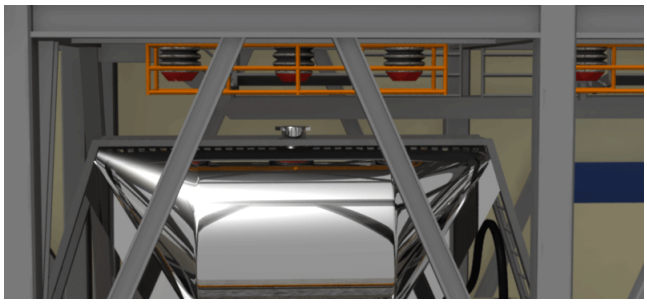
With any infographics, the content must tell the story clearly and concisely, with all extraneous, and potentially confusing details removed. The CRC loading facility is huge, mostly enclosed and extremely dusty, not the best place for photography. So I presented CRC with two design options: **technical illustrations** of truck side views in the correct positions on the scales (as they originally requested); or create **low detail 3D models** of a pneumatic tanker truck, and of their truck scale and loading building; then, make short, animated close-up movie clips showing each step of process, in action up close. They picked the model option! They liked the added clarity. *Smart client!*

I found side views online of typical trucks and trailers, built simple yet accurately scaled models of the truck and tanker units, worked with CRC engineers and with their facility blueprint library, and built just enough parts of the truck scale and loading building as were needed to tell the story...and nothing more. So I hid the front wall of the building, and zoomed my camera in close enough to see the whole process clearly — an impossible shot to get with a photo, especially that "hiding the wall" part! And I made the truck and tanker accurately enough for the drivers to instantly relate to them, and understand exactly how to perform their tasks.

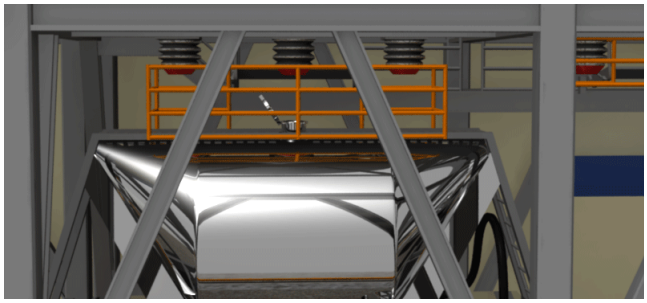
I created an animation of each step and supplied CRC with the movies in the format they needed, to work with the kiosk software, and was happy to see the results from Hank Morris, their process control technician, who created the final programming to put the process in action, and sent me a copy of the kiosk app to review. Thanks, Hank. The results really tell the story, and by incorporating the kiosk, CRC has automated a process that saves drivers time, and saves the company a lot of money, personnel and hand holding. *Nice!*



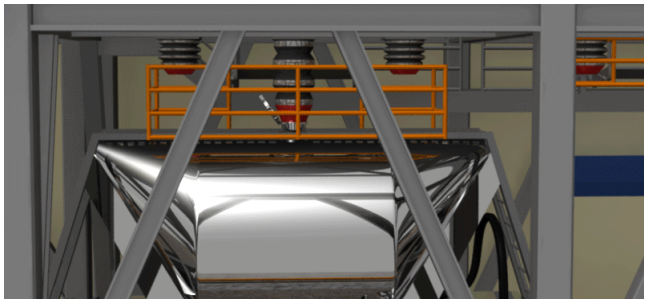
Top view shows driver how to align loading platform with truck



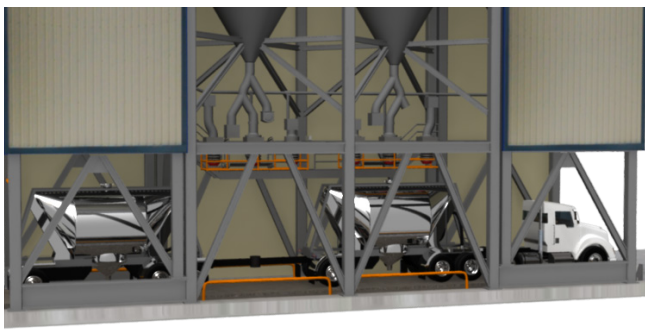
First side view: Tanker forward aligned to loading platform above



Second side view: Loading platform lowered and hatch opened



Third side view: Hopper spout mounted to hatch on tanker
Process repeats for second/tandem tanker, shown below.



"Bill delivered our project on time and exactly as specified, and was a pleasure to work with. We won't hesitate to contract with him for our future industrial design projects."

Hank Morris, Columbia River Carbonates, Woodland, WA

I tell visual stories. And make magic. Let me present your vision better than words alone can convey.

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