Why didn't I think of that?

Ingenuity through simplicity. Discussing simple yet effective solutions to very common problems in the industry, with VelociWrapper®.

Thousands of years ago, a caveman brought a round, flat rock to his council meeting. He showed how the rock could be rolled on its side, enabling it to be moved with relatively little effort. If the rock was attached to a shaft of some sort and another rock was attached to the other side of the shaft, heavy loads could be carried with much less effort than before. The general reaction at the council was, 'Why didn't I think of that?'

Okay, so this story may not be true, but the concept certainly is. Some of the most amazing inventions and most useful things are the very simple items that we have all around us and often take for granted. Imagine how life changed when the pen was introduced. Dipping a piece of metal into ink and pressing it to paper literally changed our entire world by making books available to the masses. These things seem so insignificant and small to us now, but many of these things were revolutionary when first introduced. Undoubtedly there were many people who thought, 'Why didn't I think of that?'

How does this tie into solar installations, you ask? VelociWrapper® is a small company, based in Utah, whose mission is to invoke the question 'Why didn't I think of that?' in the minds of as many people as possible. Finding the pain points on utility-scale renewable energy installation projects and reducing or even eliminating them through innovative ideas and products is the idea behind the company and the track record speaks for itself.

It all started when a friend of the company's founder suggested to him that he should design a machine to replace the expensive and time-consuming process of triplexing underground MV cables manually with zip ties. The original idea was a complicated machine, connected somehow to the wheels of a reel trailer or something that had a motor or some other power source to spin it around and wrap the cables.

However, after thinking it over for quite some time, he had a thought. He could use the wrap material itself to run a drive wheel, rotating the machine without any electronics, engines or motors at all. So, he set to work and built the first machine in his uncle's garage. With very few changes, it worked exactly as he had imagined and perhaps even a little better. The need for such a solution soon became very apparent and he founded the company VelociWrapper® and began to build the machines.

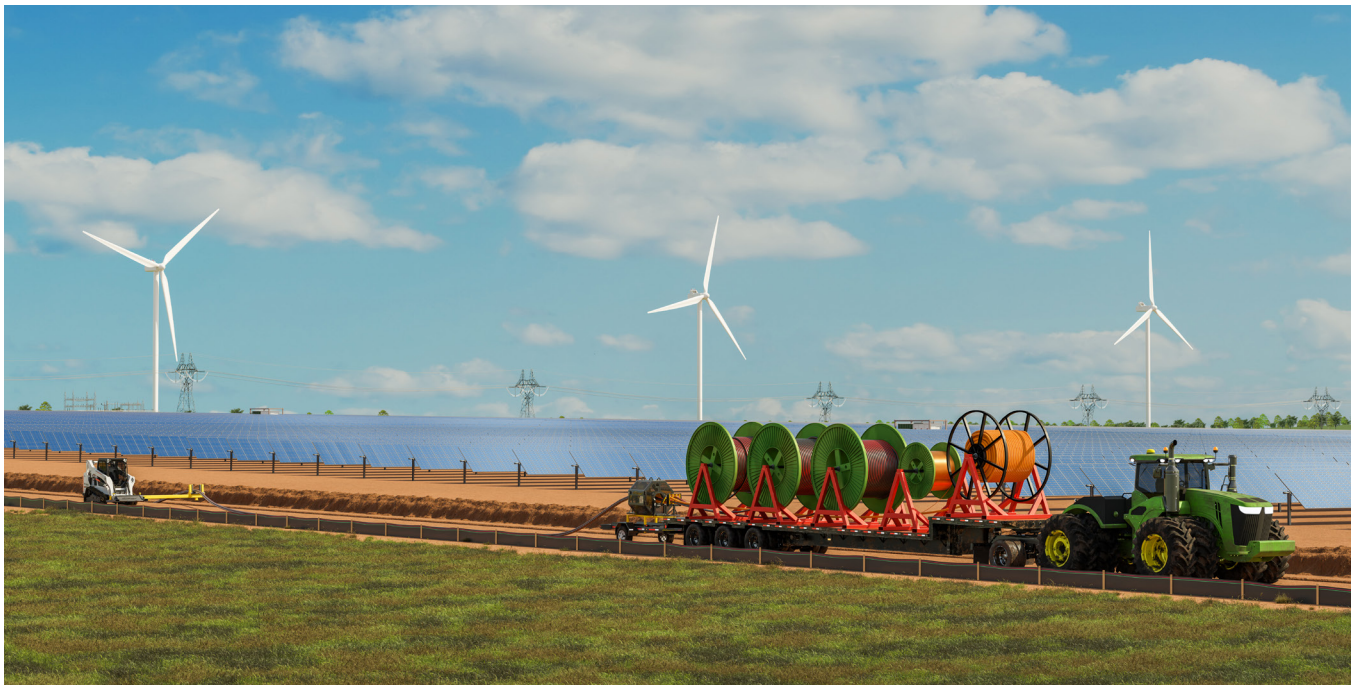
Soon, another problem was brought to his attention; getting the cables from the ground into the trench. He set to work on this challenge and eventually came up with a very simple roller design that attaches to either a forklift or skid steer and easily moves the heavy cables to exactly where you want them. When displayed at shows, both of these machines have caused many people to say, 'Why didn't I think of that?' They are simple yet effective solutions to very common problems in the industry.

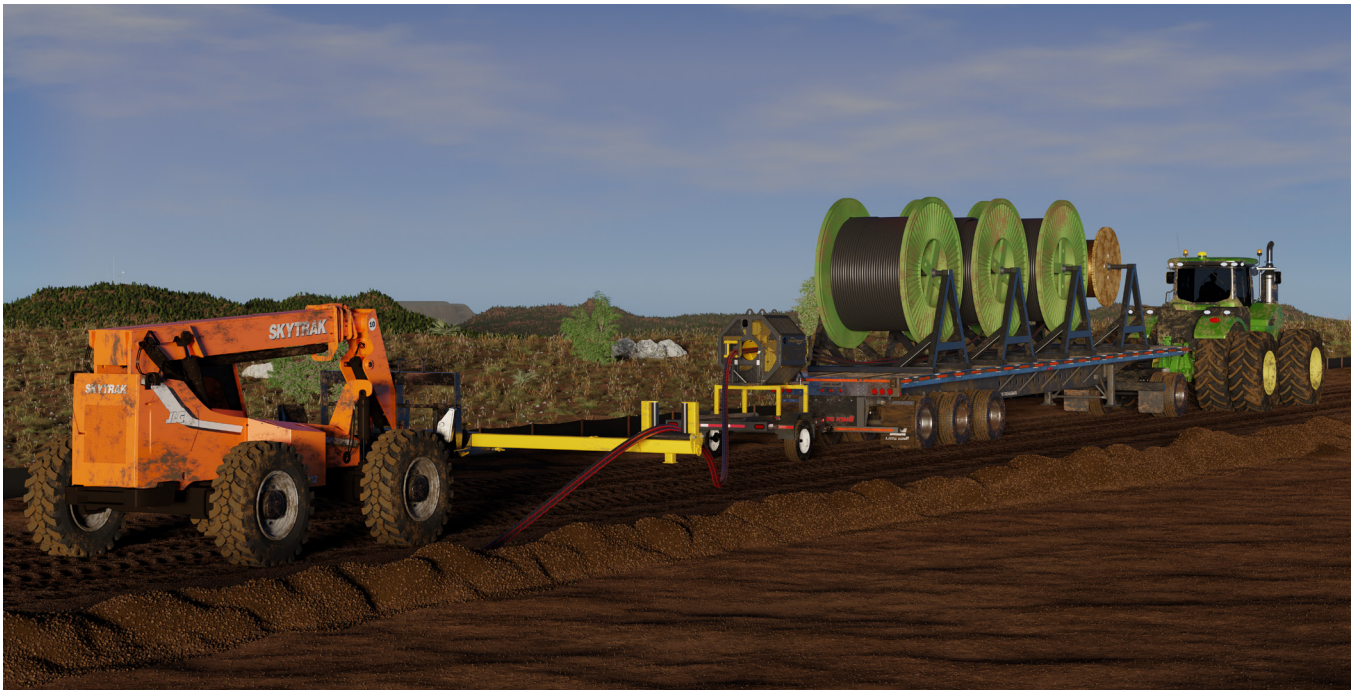
When the feedback began to come in that it was sometimes difficult or even impossible to mount the cable wrapping machine on a reel trailer, he set to work and designed a special-built trailer to connect to the back of the reel trailer and provide a platform to run the machine on without completely reconfiguring the existing reel trailer. These and many more products were and are being designed and built by him and his team now.

The question 'Why didn't I think of that?' is what drives the vision for VelociWrapper® as a company. The goal is to become not just the go-to problem solver in the industry but to solve every problem they are presented with ingenuity and simplicity.

The management team is driven by the desire to improve the lives of others through simple and effective elimination of their pain points, increasing not only productivity and profitability but even more importantly, increasing safety and the ability to allow workers to return home to their families safely at the end of each workday which improves not only the lives of the onsite workers but also the lives of their families and loved ones.

In an interview with Tim Dodd from the YouTube channel Everyday Astronaut, the founder and CEO of SpaceX, Elon Musk, outlined his five-step engineering protocol that he says is the secret behind the success of the business. Of those five steps, the first three are based around simplifying or completely eliminating components and/or processes. The less there is that can go wrong, the less will go wrong.





So, even in rocket science, the secret is to simplify and reduce complex engineering. Certainly, this can be applied to machines and processes in every industry including the construction of renewable energy. And indeed, simple engineering and fewer things going wrong are what the renewable energy industry needs as climate goals set by major corporations and governments are becoming increasingly more ambitious.

A famous quote by an unknown author in the engineering world is 'Anyone can build a bridge that stands, but it takes an engineer to build a bridge that barely stands.' When a product is being designed by the VelociWrapper® team, it is first engineered to complete the job at hand in whatever way is necessary, and then a rigorous process of what you might call 'de-engineering' happens to simplify the design and eliminate complexities until it is simplified as much as possible without cutting corners on safety and quality. This is how simple, yet effective designs have come about and have prompted many people, when looking at the VelociWrapper® products for the first time, to say, 'Why didn't I think of that?'

It can be said that VelociWrapper® loves problems. Not in a negative way, but because the desire and drive are there to effectively change your problems into your secret to success. So many amazing inventions throughout history came about because a problem existed and someone had the desire and drive to fix it. There are so many pain points and so many problems in the renewable energy industry. The team at VelociWrapper® relies heavily on communication from customers and others in the industry to point out where their pain points are and what they wish was streamlined in their construction workflow.

The focus for the team has been on cable installations for utility-scale solar and wind projects and the team has developed many products to simplify and speed up these installations. However, the vision is not limited to cable installation. The management team aims to expand to include solutions for as many different pain points as possible and to speed up, simplify and make safe all aspects of renewable energy construction projects.

The team believes that the ambitious renewable energy goals being set by corporations and governments can be met, but only through some amazing teamwork and engineering. However, it is important to not only bring down costs and speed up construction, but to increase safety and reliability on these projects. No one wants climate goals to be met at the expense of increasing injuries and deaths on job sites and these things don't have to happen.

Simple, innovative products and methods can greatly enhance safety on the job site. This is one area the company very much takes to heart. When engineering new equipment, the engineering teams put a lot of focus on engineering for safety. The VelociWrapper® cable wrapping machine and Fairlead are good examples of this focus. These machines greatly enhance safety by reducing and often completely eliminating the need for anyone to be in or next to an open trench.

There is no doubt that there is a great need for more innovative engineering and revolutionary ideas in this industry and it will not go away any time soon. The company will continue to develop new ideas, and new methods and try to spark new thought processes in the never-ending quest to make more people say, 'Why didn't I think of that?'

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