



Unearthing genius

The team at Vulcan Industrial.

Vulcan developed the Blast Hole Drill, cut production time by one year and expects to increase company revenue by more than 25%.

The team uses the Autodesk® Product Design Suite with Autodesk® Inventor, part of the Autodesk® solution for Digital Prototyping.





Meet our ground breaker It's Rajiv Gandhi, director at Vulcan Industrial.

Rajiv masterminded Vulcan's Blast Hole Drill project. The company expects the drill to increase revenue by more than 25%. He uses Autodesk Product Design Suite, part of the Autodesk solution for Digital Prototyping.

"The Blast Hole Drill is a major milestone for Vulcan. We expect it to increase company revenue by more than 25%. At every stage of this project, we used the Autodesk solution for Digital Prototyping.

The complexity of developing products in the mining sector has increased significantly. Customers demand more functions, higher quality and increasingly sophisticated designs. However, we are setting trends, not following them.

To create a world-class product, we needed better software across concept, design and manufacturing, so we chose Autodesk Product Design Suite, part of the Autodesk solution for Digital Prototyping. It gives us 2D, 3D, rendering, simulation and animation tools in a single package, which was vital to handle the thousands of components on the Blast Hole Drill Machine project."



Meet our spin doctor It's Krishnan Chandran, general manager – technical, Vulcan Industrial.

Krishnan has saved Vulcan a significant amount of time and money by reducing rework from 20% to 5%.

He uses the Autodesk Product Design Suite with Inventor, part of the Autodesk solution for Digital Prototyping.

"We have produced three Blast Hole Drills so far. And, with the help of Digital Prototyping, we've really honed production. We can produce a Blast Hole Dill in six to eight months – that's a year faster than it took us to create the first one. In the past, we used to design piping with revolve and extrude features. Now, it's much easier with the rules-based routing tools in Autodesk Inventor. What's more,

the Autodesk solution for Digital



Prototyping has helped us reduce rework from 20% to 5%, which saves us time and money.

The software makes it easier for us to collaborate. With Autodesk Vault, we will be to able manage, analyze and transfer data across shifts and global teams working on the same project. It will also help us build a digital, intelligent and information-based manufacturing environment."



Meet our point man

It's Milind Barkale, senior design engineer at Vulcan Industrial.

Milind helped cut the time it takes to design a Blast Hole Drill by 50%. He uses Autodesk Product Design Suite, part of the Autodesk solution for Digital Prototyping.

"We have organized our technical and commercial systems so that colleagues working on the same project benefit from the work of others across design and production. Autodesk Product Design Suite integrates smoothly with our environment and helps us share data efficiently.

For example, we create 3D models in Inventor and pass them on to manufacturing without errors.



With the help of Autodesk Product Design Suite, we've cut design time by 50%. We can also produce quotes faster and have reduced the time between quotes and orders. The reuse of data is immensely important to us and has probably made the biggest contribution to improving our efficiency. We've built up a massive library of parts, which is growing with every job. The tools enable us to complete projects in six to eight months where it takes our competitors 12 to 18 months."

Discover what makes a manufacturing genius at www.autodesk-manufacturing-genius.com