Birth of V-Rod

When engineers think of a new design it cannot be created on the spot. Making a new design takes a lot time to go through each stage of the engineering design process. This is exactly what Harley Davidson had to do.

After years of being in high demand, the want for a classic Harley Davidson motorcycle was beginning to decline. Instead, people began to buy motorcycles that were faster and could achieve much higher accelerations. Harley Davidson needed to come up with a bike that could compare to these. The company decided that instead of creating a bike that was just as fast as the others they would create one that was not only fast but had the classic look and sound of a Harley Davidson.

As they began to gather information they looked to other bikes to see how they were able to achieve such high speeds. With this they learned that they needed to use a liquid cooled engine. They also learned that the classic body of their bikes would not be able to withstand the power this new engine would provide. They continued the design process by brainstorming ideas of what this new model would look like. The company wanted to maintain the well-known look of their bikes while pulling in inspiration from dragsters.

As the design team broke into separate groups, they decided on the ideas for the new bike that they would begin to pursue. When these groups would collaborate and compare their ideas with each other they realized that they would have to combine all of these ideas to find a happy medium between style and functionality. While designing the engine Harley Davidson teamed up with Porsche to create the perfect liquid cooled engine for a motorcycle.
With the help of Harley Davidsons testing facilities the design team was able to test different prototypes for things like the radiation system and the engine itself. While testing things out they learned that the placement of the engine and the gas tank would have to be in a different position than they usually were. After testing some of the parts on their own they finally created a prototype of the bike that they would be able to test drive. From this test they knew what they would have to go back to redesign. They recreated parts, reconfigured where they belonged and continued to improve upon the look of the bike.

New prototypes of the bike were produced throughout this process as different parts were changed and perfected. Each of the design groups would verbally communicate with each other what they thought should change. When there was finally a prototype that all the groups seemed pleased with they began they intensive testing to see how the bike would be able to withstand the wear and tear of everyday use.

Tests were run to make sure the bike had the perfect sound by using a machine with many microphones on it to find where each sound was coming from. Other tests on the bike included making sure it wouldn’t overheat by driving the bike for 8 hours, leaving it in the hot sun for a while and continuing to ride it again. They bike was ridden on rough terrain to make sure nothing would happen to it while it was going over bumps and making sharp turns.

Finally the bike was ready. After seven years of hard work and dedication, the company had created a bike with speed and undeniable look of a Harley Davidson. They named this motorcycle the V-Rod.