

Replace Expensive Fixtures

By continuing to replace expensive fixtures, you avoid the real underlying issues in your part setup process. Instead of trying to fixture your part in the exact same place, you should be locating your part wherever it is on the machine tool table. This saves you time and money by allowing you to use simple fixtures, which are cheaper and quicker to fix in place.

Before NC-PerfectPart

We were approached by one of our existing Tier 1 Aerospace suppliers, who were struggling with their time-consuming process. The process took seven days to machine each part, which involved re-fixturing the part four times. The process was complicated and expensive but they believed it would remove part errors. This didn't solve their problem as they had to scrap one in four highly expensive titanium parts.

The customer had created a complicated, expensive fixturing process which they believed would remove errors, and when this did not solve their problem they were at a loss.

After NC-PerfectPart

Every time the customer wants to create a part it should be perfect. After we studied the process, we knew NC-PerfectPart's automated part setup would benefit the customer. We started by replacing the complicated fixtures with a vacuum fixture. Using suction, the part was secured onto the fixture. As the part was larger than the fixture there was some overhang. This overhang made the process even quicker, by allowing the machine tool to access both sides of the part. As the machine tool could access all the key areas without the part being turned over, it saved even more time for the customer.

How the process has been radically simplified:

Original customer process:

- Process took 7 days per part
- Part re-fixtured 4 times
- 36 hours machining time

With NC-PerfectPart:

- Process takes 4 hours 38 minutes
- Fixturing now takes 38 minutes
- Machining time takes 4 hours
- An estimated £20 million saved over 5 years