

## DRV-Z1 – TAPPING INTO THE MEDICAL DEVICES SECTOR

Surgiwear was established in 1982 to manufacture innovative medical devices and disposables for the Indian market. Since then the company's scope has expanded considerably, reaching more than 50 countries around the world.

Today, Surgiwear manufactures almost 300 different products, including their highly regarded hydrocephalus shunt, which holds 25% of the global market for that particular product category.

### **Dedicated to delivering quality**

Surgiwear's success is founded on their focus on continued innovation and dedication to delivering products of exceptional quality. As an industry leader, the company has comprehensive and detailed quality control processes, which are supported by their EN ISO 13485-2012 certification.

One of the ways in which the Surgiwear team keep abreast of the latest technology and techniques is through visiting industry events and trade shows.

It was during one such visit that they first came across Vision Engineering's DRV-Z1 3D digital inspection system. They immediately recognised its value in improving the inspection processes and they subsequently purchased a system for their inspection team.



### **Non-destructive visual inspection**

DRV-Z1 is currently being used by the inspection team to examine Surgiwear's range of titanium alloy self tapping screws.

The team undertake 100% non-destructive visual inspection of self-tapping screws to ensure that the product meets the acceptable finish dictated by quality control protocols.

The core of the self tapping screw is critical to maintaining the strength of the screw and so is carefully checked to ensure the absence of quench cracks, wrinkles or other defects.

At the same time the head of the screw is checked for any surface defects and the cutting flutes inspected to ensure they have no rough edges or nicks which might impact their ability to create a channel during insertion.

Finally, threads are visually inspected for surface smoothness to ensure there are no slivers, flakes or other defects, which could

cause damage during the surgical procedure. Surgiwear also uses DRV-Z1 to inspect the surface finish of their neurosurgical plates.

### High speed optical inspection

In order to maintain optimal production outputs high-speed, accurate inspection is key. The excellent depth perception and clarity of the image delivered by DRV-Z1 allow faults to be identified extremely quickly and ensure the difference between shadows and imperfections is clear immediately. This is further aided by the use of sub-stage illumination.

Additionally, the wide field of view provided by DRV-Z1 offers the user a full view of the screw under magnification, further improving the rate of inspection. Since introducing DRV-Z1 the speed of inspection has greatly improved throughput.

Surgiwear Managing Director, Mr, Aggarwal had this to say,

*“Investing in such innovative products is a key element in improving our manufacturing processes. The purchase of DRV-Z1 was an integral part of upgrading quality control methods, ensuring that our inspection teams have the best possible equipment at their disposal.”*

[www.surgiwear.co.in](http://www.surgiwear.co.in)  
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