

Press release

The double security stress-busting solution for weavers

Why Uster Q-Bar 2 should be a standard in fabric inspection

Uster, Switzerland, 14th July 2021 – What do weavers need? In a word, it's security – for both fabric quality and profit margins. And for this double security, there's only one solution: the Uster Q-Bar 2 formation monitoring system. It's like having an extra operator dedicated to a single weaving machine...

Operators should be everywhere at the same time – checking, fixing, keeping the machines continuously running – no matter in which weaving mill, all around the globe. Operators should be as fast as world record sprinter Usain Bolt, see as good as an eagle and with the knowhow of an engineer and service technician for different kinds of weaving machines. As operators with this skill set are really rare it's a matter of fact that most of them are stressed.

Don't risk profitability

This kind of stress can be a risk to weavers' profitability. For example, a worn-out part might be overlooked, setting off a drama affecting margins. Defects could be repeated, showing up again and again – linear meter by linear meter – for as long as it takes to identify the fault and fix the issue. If only someone could have an eye on things, constantly.



Uster Q-Bar 2 – The formation monitoring system

Long-running defects can also arise from dirty parts, or from missing or inadequate maintenance. Whatever the issue, what they have in common is that they spoil lots of good fabric – worst of all in the middle of the web – and yet they can be automatically detected and damage avoided. Q-Bar 2 is the solution, working with various weaving machine types (except water-jet and jacquard).

Uster Q-Bar 2 has its inspection position within the fabric formation area, allowing it to respond quickly when a defect appears and avoid long-running or repeating faults. Alarms and stop signals alert the operator to correct problems immediately. This early detection reduces second quality and material loss.

Q-Bar 2 also monitors critical machine units in the formation zone. If there is a problem here, the system makes it easy to identify and eliminate it, preventing further defects, and again maximizing fabric yield.

Smarter than loom sensors

To err is human – which makes it essential to have machines. Smart weaving machines do point out issues to the operator, but Q-Bar 2 sees what weaving machines can't. For example: the constantly stressed operator fixes a broken warp yarn, picking the yarn and drawing it in the reed position; loom sensors get the signal that the missing yarn is now available and accelerate to full speed within milliseconds. Immediately, an alert starts at Q-Bar 2, with a red light indicating the location of the issue. What happened? The operator picked the wrong reed position. Without the Uster formation monitoring system, the defect stayed undetected, as the operator had already moved on to fix the next issue at another machine.

Time pressure is not the only worry. Complex patterns, fine yarns and a lack of experience can all lead to wrongly drawn-in warp yarns – defects that are hard to recognize with the human eye. Without an automatic solution in place, the problem with wrong draw-ins is usually unnoticed until it's woven into the fabric for some meters of length.



Wrong drawn-in defect in fabric formation zone

Security for management and shop floor

The best way to avoid off-quality is simply not to make it. A zero-defect standard is what many weavers wish to achieve. Q-Bar 2 is the way forward. Weaving defects can have various root causes, so Uster Q-Bar 2 provides different algorithms to identify specific defects and their causes. With this knowledge, it is possible to prevent defects during the actual weaving process.

Uster Q-Bar 2 monitors the fabric already at the critical stage in fabric formation with automatic, in-line inspection. Identifying problems here brings enormous benefits and enables weavers to deliver constant quality and stay competitive in the market.

Operators would surely vote for Q-Bar 2 as a standard on every weaving machine. They would appreciate Q-Bar 2 as the new colleague in their team, reliably keeping an eye on the web all day long. Whether a single or repeating defect occurs, the integrated LEDs used by Q-Bar 2 would highlight the system status and pinpoint the location of defects with red lights. Wouldn't it be great to empower operators to secure both profitability and quality for the boss!