PRACTICAL CASE

Traveler lifetime optimization with the OH and HL module of USTER® *TESTER 6*

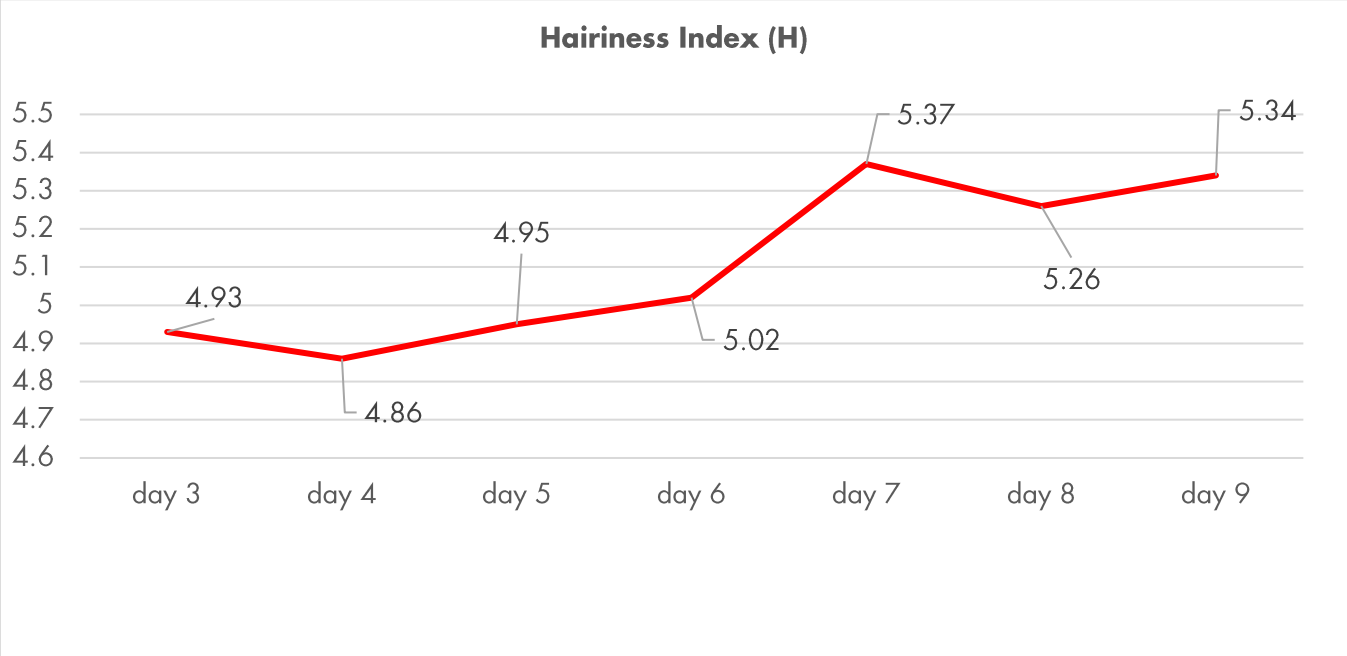
Optimizing traveler lifetime with consistent quality as a side effect.

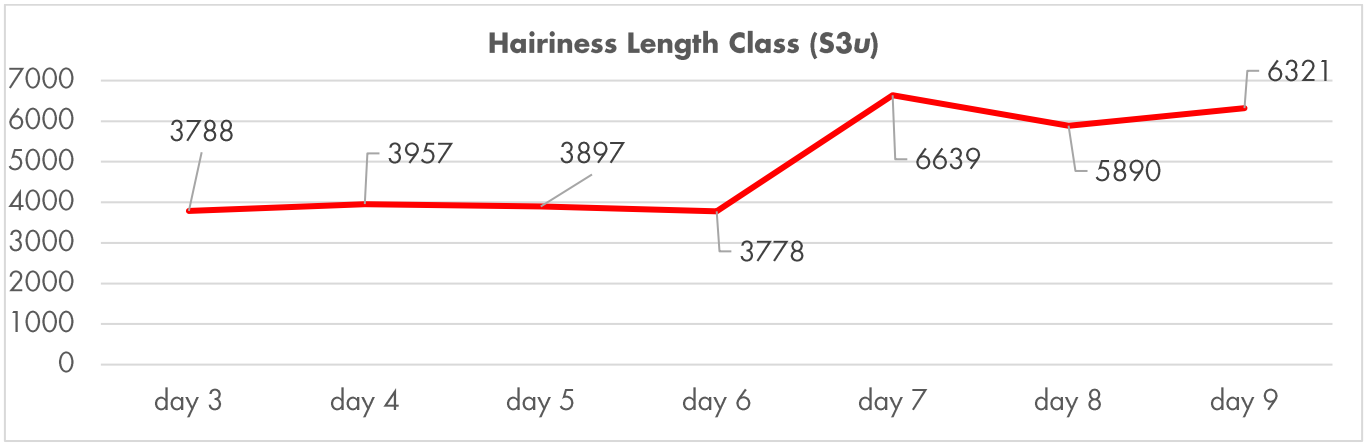
In an operating cycle of a specified number of days, the maintenance manager has to change the traveler. This is an essential routine affecting both production output – and quality. The mill has been changing the traveler after its expected lifetime of 10 days. But could this be done later? Or should it even be earlier? A trial provided the answer.

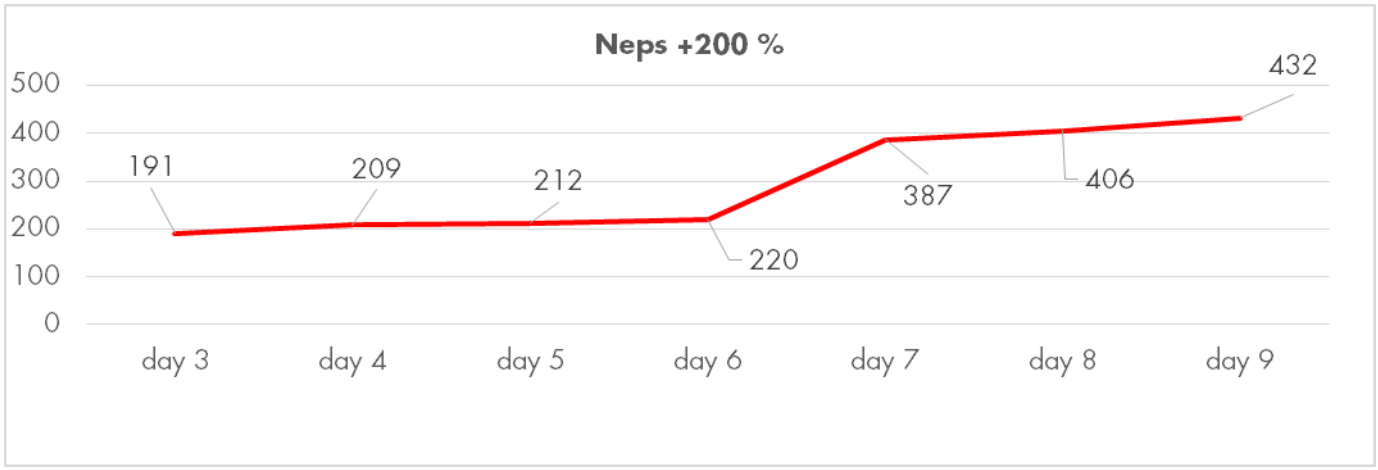
USTER solution

The test started the third day after traveler change. A set of 10 cops of a 100% cotton yarn, Ne 40, were tested from the same ring spinning position. The cops were taken to the laboratory daily to be tested on the USTER® *TESTER 6*.

The graphs illustrate the hairiness index as well as the S3*u* and neps values from the third day after traveler change.







The measurement report from the OH and HL module of the USTER® *TESTER 6* shows that on days 3, 4, 5 and 6 after the traveler change there was a positive trend in both hairiness index and S3*u* values. The study revealed that hairiness increased from day 7, which indicated a quality issue some days before the routine change cycle of 10 days. The value for +200% neps also increased on the same day.

Under these circumstances, the mill should exchange travelers on a 7-day cycle – and not wait three more days – due to the critical hairiness results.

Conclusion

It's not always recommended to follow predetermined lifetimes of ring travelers. Instead, it is advisable to analyze traveler lifetime in the mill under real conditions. The OH and HL module of the USTER® *TESTER 6* provide reliable data to define the ideal cycle for traveler change. Consistency of yarn quality with a maximum traveler utilization is the outcome of the analysis.

An investment with payback guarantee: Only USTER® *TESTER 6* with the OH and HL modules enables optimum traveler lifetime to be defined while ensuring that yarn quality is not affected.

Uster Technologies AG
Sonnenbergstrasse 10
8610 Uster
Switzerland
T. +41 43 366 36 36
F. +41 43 366 36 37
sales@uster.com
www.uster.com

USTER®
Think quality