

Irfan Iqbal (left), CEO of Nova Leathers, and Arshad Gazi, Customer Solutions Manager for Novozymes in Pakistan, examine the finished leather. Fatty spews are no longer a problem.



Nova Leathers does not just process the leather but also cuts and stitches it into garments, gloves, and bags.



NOTHING WORKED LIKE NOVOCOR® AD L FOR NOVA LEATHERS

After receiving complaints from international buyers about fatty spews on their garments, Nova Leathers tried various methods to avoid these unpleasant spots. The lipase NovoCor AD L was the only practical alternative.

Nova Leathers in Karachi is the largest tannery in Pakistan. Each month, they process 2.5–3 million sq.ft (230,000–280,000 sq.m) of leather and produce 75,000–80,000 leather garments. This is a high-volume producer with a high throughput and some high-profile customers. The garments are sold through major retailers in Europe and around the world such as the Inditex group, one of the world's largest fashion distributors.

Spews mean spots

The company makes leather almost entirely from imported sheepskins and goatskins. About 70% of the skins are wetblues whereas the rest are natural crust leather. Until 2006, Nova Leathers purchased most of its skins locally or from Africa. The fat content of these skins was quite low (around 10%) due to environmental conditions. However, following a dramatic reduction in the price of skins from Europe, Russia and the Middle East in 2006, Nova Leathers began buying more skins from these areas. The fat content was much higher, causing problems of fatty spews in the final garments. A spew results from a residual fat deposit inside the leather. Depending on the temperature conditions, the fat can migrate to the surface after a few months. Fatty spews are white greasy spots

on the surface and they are unpleasant to smell and touch.

Expensive to dry clean

A well known way of reducing the fat content is dry cleaning. Nova Leathers had three dry cleaning machines at the tannery, each with a capacity of treating 500 skins per day. "With our throughput, we would have needed to buy about 100 machines to dry clean all the skins. It would work out to be extremely expensive. Tumbling in these machines also reduces the area by 3–4% and can damage the leather by making it loose. More dye is needed as well. Dry cleaning was just out of the question for us," comments Irfan Iqbal, the CEO of Nova Leathers (pvt) Ltd.

The tannery also tried using two different types of surfactants but the results were not satisfactory.

Acid lipase to the rescue

In 2006, Nova Leathers contacted Novozymes in Pakistan and asked them if they had any solution for fatty spews. The answer was lipases. Under the guidance of Novozymes, they began to test lipases in both small trials and bulk production batches with sheepskins. They tried the unique acid lipase NovoCor AD L designed for degreasing in acidic conditions of pH 3.5–4.5 typical for

pickled skin or for wetblues. In the case of crust leather, Greasex® 50 L was recommended because it is more suitable for pH 6–8 when processing this type of leather. ▶▶

They were able to remove 90% of the fat deposits, thereby reducing the residual fat content to below 5%. At this level, fatty spews do not usually appear on finished garments.

Nova Leathers has now become a regular user of lipases from Novozymes.

"There are a lot of side-effects when dry cleaning. But with enzymes, the leather does not become looser," says Irfan Iqbal. "Enzymes do not have any adverse effects."

Arshad Gazi, the local Customer Solutions Manager for Novozymes in Pakistan, agrees: "The overall look and quality are much better. You maintain a tight, normal grain." ■

FOR MORE INFORMATION

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