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Magna Steyr Paint Shop in Fine Feather

By Eric Mayne

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GRAZ, Austria - In a vast assembly complex here, Magna Steyr Fahrzeugtechnik AG & Co KG uses state-of-the-art technology and cutting-edge processes to build 10 different vehicles for five brands on three assembly lines. Yet, it still relies on emu feathers in its paint shop. "(They) are the best solution for dust removal," explains Wolfgang Zitz, paint shop general manager.

The massive plant builds the BMW X3 cross/utility vehicle; Chrysler 300C sedan and touring model; Chrysler Voyager and Grand Voyager minivans; Jeep Commander, Grand Cherokee and Mercedes-Benz G-Class SUVs; Mercedes-Benz E-Class sedan and Saab 9-3 convertible.

Dust is the enemy of a Class-A finish. And compared with emu feathers, "there's no synthetic solution in the market," Zitz says.

Emus are native to Australia and, along with the kangaroo, are that nation's symbol. At 5.7 ft. (1.7 m) tall, 110-120 lbs. (50-54 kg), they are the country's largest bird. Brown in color and flightless, their feathers each have two shafts, with barbs so widely spaced that they do not interlock to form a firm vane, as in most birds. Instead, they form a loose, hair-like body covering.

For Magna Steyr's purposes, the emu feathers are bunched together in what appears to be a giant feather duster. Vacuumed regularly to ensure peak performance, they can last up to three years, depending on production levels, Zitz tells Ward's.

And unlike steel and resin, emu feather prices have remained fairly stable. "In the last five years, we have had a price increase from \$25 a pound (0.46 kg) for body feathers, to \$27 a pound," says Myra Charleston, at-large director of the American Emu Association (AEA). "Tail feathers have remained steady at \$35 a pound."

But market conditions suggest a price increase is plausible. Just as China's growing auto industry has driven up steel prices by squeezing supply, the cost of emu feathers could be set to soar.

"Two years ago, I was contacted by a Chinese company asking for prices for a 40-ft. (12-m) shipping container full of feathers," says Joylene Reavis, a part-time emu farmer in Wisconsin. "Since we are just a small family farm that grows emus for our own products, we could not fill such an order."

Nevertheless, supply appears to be catching up with demand. In 1988, the U.S. was home to just 50 emu farms. Today, there are more than 5,000. Plus, emus are raised all over the world, from Chile to Canada, to Australia. Feathers aren't the industry's primary product. Increasingly, emus are coveted for their meat. Creams and oils extracted from emus with their high omega fatty acid content, are said to remedy everything from damaged hair to diaper rash.

But priorities are changing.

"Emu feathers have gone from being something that was thrown away at processing," says Peter Thompson of Australia-based Tjuringa Emu Products. "Now, virtually all of my clients use them for art work."



OTHER THOUGHTS ON EMU FEATHERS

Charleston says emu feathers remove dust well because of their long barbs. "Most other bird feathers have tiny barbs, which interlink and hold the vanes of the feather together, making it stiff and helping to keep its shape," she says. Emu feathers do not have these, and so the vanes move freely.

"If you spray an emu feather with a (dust-removing) agent, such as Pledge or Endust, more vane area is hit because they are not held tightly together," she adds.

Chrysler Group has used emu feathers at its assembly complex in Toledo, OH, as does the General Motors Auto Assembly Plant in Janesville, WI, while some other auto makers have used ostrich feathers.

Which is better? Charleston is unwilling to create a flap. "I am not going to pick a fight with the ostrich industry," she said.

EMU FEATHERS IN THE AUTO INDUSTRY

by Myra Charleston, At-Large Director, AEA

Eric Mayne is a journalist who covers the automotive industry. He recently returned from Graz, Austria, where he visited an assembly plant run by a subsidiary of Canada-based Magna International Inc. In the paint shop on that site, he was shown a giant wheel of emu feathers. It is used to prepare the vehicle surface for painting. Magna officials say electrostatically charged emu feathers are unparalleled for their capacity to remove dust. No synthetic product can match their effectiveness. Due to their high emu oil content, they do not create static electricity on the vehicle bodies, which could cause a flash fire in the base coat dip tanks that are electrically charged.

Here are the questions he asked about emus and emu feathers.....

What makes emu feathers superior to other feathers, i.e., ostrich? *There are two types of feathers, contour and down.*

Down *is a small, soft feather found beneath the outer feathers of ducks, geese and other waterfowl. Down has no central shaft. The silky fibers of down grow outward from a common center. Emu do not have down*

Contour Feathers *are the large feathers that cover the wings, body and tail of birds. There is a strong, flexible center shaft. On emu feathers, that center shaft is very thin and more flexible than those of many other birds. The lower part of the shaft is called the quill. The upper part of the shaft is called the rachis. It supports the vane. The vane is the flat part of the feather. Most vanes are made up of tiny barbs or hooks, which hold the vanes together. Emu feathers do not have these tiny hooks. Because of this, the vanes move freely. If you spray an emu feather with agent such as Pledge or Endust, more vane area is hit because they are not held together tightly.*

What is the trend line for emu feather prices? Has it been stable, inflationary or negative over the past 5-10 years? *Stable. Two years ago a member was contacted by a Chinese company asking for prices for a 40 ft. shipping container full of feathers. It would take a LOT of emu feather to fill that size container. They did not pursue it.*

Are they sold by the pound or some other measure, and what is the cost? *Emu feathers are occasionally sold individually, in packages ranging from 5 to 50 or by the pound. Product prices are set by the individual farmers, not AEA. Most emu growers do not sell large quantities of emu feathers. Most feathers are mainly sold in a zip-loc bag at 12 double veined feathers for \$1.00. Single feathers are grouped together and used in feather dusters and in craft items such as dream catchers, pencil toppers, cat toys, etc. Since they do not create static electricity, they are great for dusting electronic equipment. They are also used in floral arrangements.*

What is the trend line for the emu-raising industry, worldwide and in the U.S.? How many members in your organization and is your membership growing? **It is growing.** *In 1988 there were 50 emu farms in the U. S. Today in 2007 there are over 1,500. The emu industry is growing in other countries as well. Chili, India, China and South Africa are just a few of the countries pushing to get eggs and breeding stock from the US.*
