

IN THE LINE OF FIRE

Montreal paintball manufacturer beefs packaging arsenal with top-notch, Canadian-made armor to defend its marketplace supremacy

Walking for the first time through the opulent foyer, and then proceeding on through the pristine production area of the **Procaps** facility—nestled in the Montreal suburb of St-Laurent—provides a good reminder about just how deceptive appearances, especially first impressions, can often be.

While it seems to have all the outwardly trappings of a high-tech computer chipmaking or pharmaceutical testing or design lab, the Procaps plant is neither—and not even close, at that.

Since its founding five years ago, Procaps has remained solely committed to its rather niche, but rapidly growing, business of making paintballs—such as those used in simulated war games played out by would-be soldiers at an ever-increasing number of so-called paintball “fields,” both outdoor and enclosed, springing up all over the continent.

While it may be tempting to dismiss the paintball craze as just another fad built around the need for midlife crisis-stricken men to relive their youth with an updated take on the cops-and-robbers and cowboys-and-indians shootouts of their childhood, Chris Black, Procaps director of research and development, begs to differ—profoundly.

“A lot of companies in the U.S., Canada and Europe are today using paintball as a team-building technique,” he points out. “They’re using paintball as a tool for that team-building.

“As for the sport itself and its evolution, paintball has progressed from guys playing around with guns used to mark trees and cattle, to where today there are professional players, who are heavily sponsored by the industry.

“It has come a very long way.”

For true aficionados, paintball is serious stuff. A pair of goggles, for example, is not so much a pair of goggles, but rather a sophisticated vision protection mechanism comprised of cutting-edge protective technologies such as forward tab retention, multidirectional venting, thermal lenses ... you get the picture.

As for the marker, the paintball euphemism for gun, the weekend commandos can think nothing about laying down a cool \$1,000 for a **Tipmann** A-5 Standard pistol, accessorized with a 88-cubic-inch, 4,500-pounds-per-square-inch energy tank, and a state-of-the-art Halo B loader. More advanced marker systems can easily cost three times as much.

Toss in some head-to-toe clothing, padding, and a neoprene chest protector, and you have all the makings of the ultimate paintball warrior ready to do battle.

Keeping that warrior well-supplied with top-quality ammo—ball-shaped shells filled with nonvolatile, biodegradable paints, derived from edible oils—is how Procaps earns its bread-and-butter.

In generic terms, the construction and composition of a typical paintball is similar to those of the old bath beads, which have been around for for about three decades.

But that’s where the similarities end, according to Black.

“There is a tremendous amount of modifying that goes on,” Black told *Canadian Packaging* during a visit to the St-Laurent plant last month. “A bath bead doesn’t need to be too precise, whereas a paintball has to be extremely precise.

“A bath bead typically has four quality control points; a paintball has fourteen.”

When talking about paintballs, Black often resorts to terms like “the correct positioning of the poles and equators” of each ball, as if these these paint-filled spheroids—made in a wide-and-wild assortment of colors and color combinations—are virtual planets unto themselves.

And they are, in a sense that Procaps is determined that each of its products is to a paintball enthusiast what a **Titleist** ball is to a golfer—the benchmark standard by which all the others are measured.

One of the crucial production considerations for Procaps is to ensure that all the paintballs it makes are of the exact specified size and symmetry, meaning that both the filling of each ball, and the materials used to fill it, are subjected to great scrutiny.

“If the fill is done with lesser-grained materials, the materials will separate,” explains Black.

“Over time, you will have a product that will be denser on bottom and lighter on top.

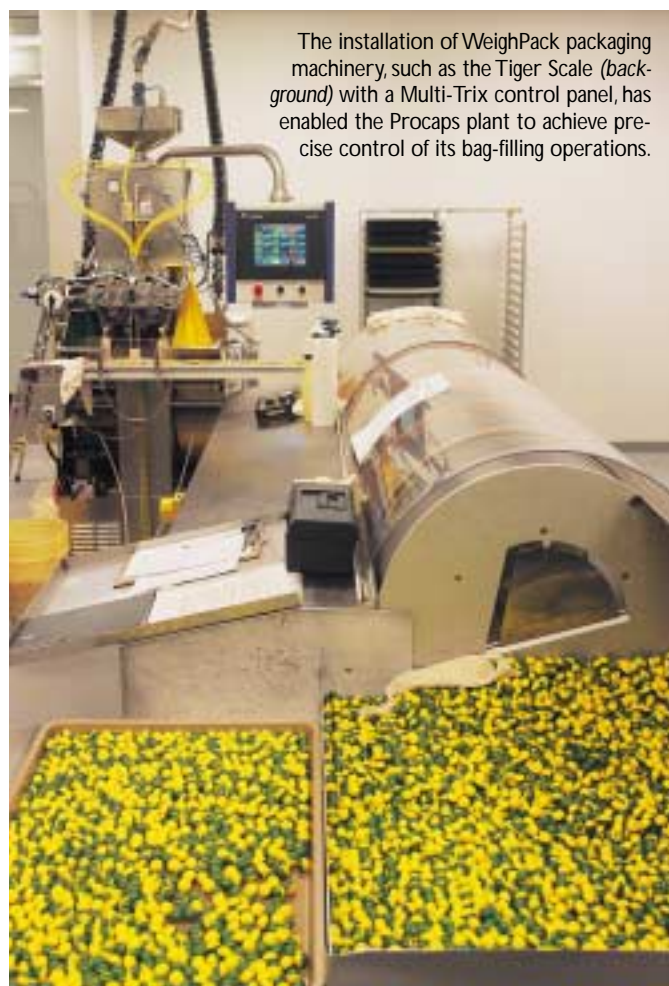
“That will cause a deviation in the direction of your paintball.” Provided that

they’re not exposed to extreme conditions or temperatures, Procaps paintballs can maintain their precise suspension for up to a year.

Still, all this commendable dedication to quality control would count for little if Procaps was unable to package and ship the right quantities of these colorful pellets into the market.

Which is where the Montreal-based **WeighPack Systems Inc.**, a well-established designer and manufacturer of vertical form/fill/seal and bagging machinery—enters the fray.

To help Procaps get its packaging arsenal in full battle-ready mode, WeighPack supplied the plant with its four-lane, model V-9 Tiger Scale, integrated with the WeighPack-built Multi-Trix control panel. Based on the use of vibratory technology, the Tiger Scale installed at Procaps was specifically fine-tuned to ensure optimal control of the rolling and bouncing



The installation of WeighPack packaging machinery, such as the Tiger Scale (background) with a Multi-Trix control panel, has enabled the Procaps plant to achieve precise control of its bag-filling operations.



COVER STORY

paintballs that, just to make it more of a challenge, are also quite fragile.

As far as Procaps was concerned, the main objective with the Tiger Scale was to package between 500 and 505 balls into each bag, which are retailed as 500-ball bags, rather than by any sort of a specified product weight reference.

“We absolutely have to make sure that the customer is getting 500 balls,” stresses Black, “so we use a safe margin-of-error by going three to four balls over.”

Before the arrival of the WeighPack equipment, all those balls were counted, weighed

and packed manually, meaning that human errors were inevitably commonplace. According to Black, such errors have been reduced at least by 20 per cent since many of those functions were automated with the WeighPack system.

One of the more handy operational features of the Tiger Scale is that its design allows for a totally tool-free removal of the weight bucket, the vibrator pan, and the hopper. It also comes with levelling pads that make it possible to mount on practically any machine or floor-stand. The materials the scale can handle range from fine powders to large one-piece items, with the weight range from one ounce up to 50 pounds.

For its part, the Multi-Trix control panel provides such productivity-boosting capabilities as automatic tracking of weight tolerances, vibrator speed controls, a “dump” that can be activated either automatically or via a foot switch, product memory that can accommodate up to 100 recipes, a pace timer, and an overweight alarm. Besides having a diagnosis menu for testing outputs, the system also features a built-in simulator that allows for a cycle to be tested without any product.

The system installed at Procaps also includes a VerTek 1150 machine for bagmaking and sealing applications, handling speeds of 35 to 40 units per minute.

While Procaps may for now claim to be the largest paintball manufacturer in the world, Black is more than aware that there is a lot of competition out there gunning for its market-leading status. Simply resting on its laurels and reputation is not an option, he says, which is why the company dedicates about 2,000 manhours per year to pure research-and-development activities.

“We’re very conscious of other companies who in the past made the mistake of sitting back on their backsides and letting the market go right by them,” he sums up. “We don’t intend to make that mistake.

“We continuously try to improve the paintball at our in-house laboratory, and at laboratories throughout Montreal, because we definitely intend to do our best to stay on top.” □

For more information on:
WeighPack Systems Inc.

440