

# STRIKING WHILE THE IRON IS HOT

**S**teel is one hot commodity. It is in everything from ballpoint pens to skyscrapers, refrigerators to pipelines, nails to automobiles. And think of all the manufacturing equipment made of steel!

Steel is also recyclable. In fact, there are few other materials that can be recycled over and over again without loss of properties. Even steel created 150 years ago, when methods for mass production of steel were first worked out, can be recycled today and used in new products and applications.

## STEEL CENTRAL

One of North America's hot spots for the steel industry is Québec, Canada. Access to hydropower for relatively inexpensive electricity, close proximity to ship docking facilities and railroad lines, and location near iron ore mines in the northern part of the province, led the Québec government to create, in 1965, the Sidérurgie Québécoise

*Surrounded by metal fragments of all shapes and sizes, the Kawasaki guarding package enables the wheel loader to handle the harshest of environments.*

(Sidbec) which acquired Dosco's steel mill in Contrecoeur, Quebec. The Steel Company of Canada (Stelco) followed by establishing another steel mill in Contrecoeur (Stelco-McMaster) next door to Sidbec, with a subsidiary scrap processing company in La Prairie, Québec, called Fers & Métaux Recyclés Limitée.

Unlike private-enterprise companies, however, the government-managed Sidbec couldn't generate a profit. Giving up, the government sold the steel mill in the mid-1990s to Mittal Steel (then known as Ispat).

In a classic demonstration that private corporations can run businesses better than the government, within a year of taking over, Mittal was making a profit — and has continued to do so ever since. The entire region continues to transform raw and recycled materials into a variety of base products such as billets, slabs, bars, and sheets.



*Gaétan Morin, Director of Operations; Roland Thériault, General Director, Fers & Métaux Recyclés Limitée*



Mittal Steel, merging with Europe's Arcelor, has now become ArcelorMittal, the number one steel company in the world. Early in 2006, they took over Stelco-McMaster and its subsidiaries, including Fers & Métaux Recyclés Limitée in La Prairie, Québec.

## ONE MAN'S TRASH IS ANOTHER MAN'S TREASURE

"What we do is shred steel scrap," explains Roland Thériault, General Manager. "That includes flattened cars, appliances, and demolition materials. Our customers are primarily from southern Québec, eastern Ontario, New York, and Vermont. We purchase about 140,000 tonnes (154,000 US tons) of raw material each year to produce about 100,000 tonnes (110,000 US tons) of usable scrap steel."

Materials typically arrive via flat bed, walking floor, and dump trailer trucks. The company's Kawasaki 95ZV-2 offloads the materials, using forks for the flattened cars or a bucket

to stockpile and load the finished product, and provide various other bulk handling applications. Hydraulic material handlers with grapples feed the belt for the shredder.

After shredding, the scrap is sorted into three types of product: steel, non-ferrous metals (like copper, aluminum, zinc, etc., with some non-metallics), and the rest of the non-metallics — also known as "car fluff." The steel goes to the Contrecoeur mill. The non-ferrous metals are beneficiated in a heavy media flotation plant, then sold and shipped to low-cost labor markets like Asia where the material is hand-sorted and re-used. The non-metallics or "car fluff" goes to sanitary land-fill sites that use it as daily cover material. Research is being conducted to find economical ways to reuse the fluff to maximize the recycling potential.

## TAKES A LICKING, KEEPS ON TICKING

Of course, one reason steel is so versatile is its strength. Its strength, however, makes for a demanding work environment and an

extraordinarily tough application. During recycling, the environment is dusty, filled with sharp objects of all sizes, and the materials themselves can be heavy. Every piece of equipment, from the shredder on down, takes a beating.

To help protect the loader, the Kawasaki 95ZV-2 is specially equipped with a window guard, solid tires, and high lift arms to assist in loading out haul trucks. It also has a quick coupler to change between forks and a bucket without exiting the cab — a feature much appreciated by the operators, especially during the cold Canadian winters.

## WHY KAWASAKI?

The company uses two loaders, with the most recent purchase being the Kawasaki. Why did they choose Kawasaki?

"The company used to have two 30-year old Caterpillars," says Gaéтан Morin, Director of Operations. "When we couldn't get parts for them anymore, we realized it was time





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to move on. At the time, a Komatsu was purchased. Then, Roland and I concluded in 2006, it was time to replace the last remaining Cat.”

“I checked with people I used to work with at Hekett Multiserv,” continues Thériault. “There the application is even more demanding because they use their loaders in the hot slag. They told me they were buying Kawasaki. If it could handle hot slag, then I knew it could certainly handle things for us.”

For years, Fers & Métaux had been buying their Cat parts from Montreal Tracteur. In 2005, the dealership decided to represent Kawasaki. The timing couldn’t have been better because, in 2006, the recycling company’s management team of Thériault and Morin approached them about a Kawasaki loader.

“Montreal Tracteur took us over to a quarry where the owner was on his 11th Kawasaki,” recalls Thériault. “He said he wouldn’t buy



anything else. He let our operator, Michel Desjardins, run his, and Michel liked it and thought it was good. We knew Komatsu because we already had one. And we knew Caterpillar. When we compared prices, everything fit for the Kawasaki. So we all agreed to buy Kawasaki.”

#### **How is the Kawasaki holding up?**

“Very good,” replies Morin. “We’ve had no problems, except for something that just popped up yesterday. I called the dealer and they came out in a hurry. Other than that, it’s done a good job. It is a very efficient machine.”

**Fers & Métaux Recyclés Limitée is serviced by Montreal Tracteur Inc.**



## **WASTE HANDLING/REFUSE/RECYCLING**

Kawasaki has developed the Waste Handling Package for all types of refuse, recycling, and processing of solid waste materials. Equipped with special guarding, cab filtration, tires, and attachments, the Kawasaki wheel loader will provide a productive and safe machine for this demanding environment.

**THE KAWASAKI WASTE/REFUSE/RECYCLING PACKAGE IS AVAILABLE FROM THE 65Z THROUGH THE 115Z.**

#### **Basic Package Features:**

- Articulation Area Guard
- Axle Brake Piping
- Front Chassis Belly Guard, Lift Cylinder Line Guard
- Headlight and Tail Light Guards
- Rear Chassis Belly Guard
- Steel Headlight Housing
- Steel Radiator Grill
- Wheel Seal Guards
- Wide Fin Radiator

#### **Additional Options:**

- A/C Condenser Relocation/ Air Intake Screen
- Alternator, Sealed Electronics
- Autolube System
- Cab Air Pressurizer/Filter
- Cab Windshield Guard, Refuse, Hinged
- Engine Precleaner, Turbine Style
- Exhaust System Insulation
- Hydraulic Tank/Fuel Tank Guards
- Reversible Cooling Fan, Automatic
- Seal Saver™ Boots, Bucket Cylinder Seal Protectors
- Seal Saver™ Boots, Lift Cylinder Seal Protectors
- Seal Saver™ Boots, Steering Cylinder Seal Protectors
- Steel Cable Steps
- Transmission Filter Guard
- Transmission Oil Filter Assembly, Heavy Duty
- Under-Cab Shield
- Wheel Hub Studs