

“With our new facility, we’re state of the art”

Karl Kaufmann AG, Thörishaus, Switzerland



Between the highway and railway: Karl Kaufmann AG



Managing Director Werner Nydegger (right) and Project Manager Ioannis Giouvanitskas

Just in time for the 150th anniversary of the company’s founding: Why the Swiss firm Karl Kaufmann AG decided to replace its Zerdirator plant with a more powerful one

In the Swiss village of Thörishaus in the Bernese Oberland (population 2,300), there’s no cinema, no pub, no theater and no museum. Instead, there are narrow streets that wind up and down the hillsides, ancient, well-preserved wood-paneled farmhouses and forests and fields stretching as far as the eye can see. The biggest tourist attraction? That’s a rhetorical question for Werner Nydegger, CEO of the Thörishaus-based company, Karl Kaufmann AG. “Of course, it’s our shredder,” he laughs. Karl Kaufmann AG, the leading metal-recycling company in the region, put the shredder into operation on 10 October 2010 – the very day the company celebrated its 150th anniversary and held an open house to mark the occasion. And 3,000 guests showed up – more than the entire population of Thörishaus.

Unique in every way

The new 1,250 HP Zerdirator, type ZZ 190 x 260, replaced the 850 HP Zerdirator the firm had operated since 1990 – and it’s unique in every way. The main reason is that the Karl Kaufmann AG is located on a site that is 995 meters long and 57 meters wide, with the A12 highway on one side and railway tracks on the other. Metso

had to plan and construct the new system on the foundations of the old system in the existing building, on this extremely narrow site located in the hollow of the Wangental valley. “Increasingly stringent environmental regulations led us to put new concepts into practice, particularly in the dedusting plant, and we are constantly developing these new concepts in consultation with Karl Kaufmann AG,” says Peter Wilbert, Vice President of Lindemann Shredder, Recycling business line. As if this were not challenging enough, the construction had to be completed within ten weeks – a very short time: On 23 July 2010, Nydegger shut down the old system for the last time. He wanted the new system operational for the firm’s 150th anniversary on 10 October – so that he would be able to shred some cars for the guests.

The heart of the Zerdirator

“Everything was to the customer’s complete satisfaction – thanks to precise planning by everyone involved and to a maximum amount of pre-assembly, which really saved time,” says Ioannis Giouvanitskas, Project Manager for Lindemann Shredder, Recycling business line. What’s the best thing about the cooperation with Metso? Werner Nydegger, sitting in the canteen while on a coffee break, sums it up in one word: “Quality.” And adds: “The system itself and the personal commitment from Metso are excellent. As soon as everything is in place, the system is up and running.” Nydegger knows his business like the back of his hand. Born in 1953, he was 23 years old when he started out as a metalworker with Karl Kaufmann; he became an operations manager and then, in 1998, managing director. An easygoing man, mar-



The core of the new system: the Power Zerdinator



The system was installed in a narrow area, yet is easily accessible at all levels

ried with three children, he chooses his words carefully – as if here, too, he’s separating the usable from the rubbish. With a touch of irony, he says: “I belong on the scrap heap myself.” And – sitting in the shredder control cabin, surveying an Opel that is about to undergo what Nydegger calls “radical separation” – he describes with cool precision the heart of the new Zerdinator: “28-ton rotor, 16 hammers. 10,000 beats per minute.” Moments later, small bits of Opel are tumbling onto the conveyor belt.

“It’s important to be innovative”

Every two years, Nydegger holds a “scrap-rock” – rock concerts on the company grounds. The 150th anniversary slogan was “scrap-culture by Karl Kaufmann.” And the company car is decorated with the words: “We recycle what others waste.” The company is equally as innovative with its core business as it appears to be in public. Why did they need this new machinery? “We used to output 22 tons per hour; now we achieve 38. And: We are now state of the art. It’s important to stay innovative these days,” says Nydegger. What about the legal limits on dust emissions? “Even our old machine was below the limit, and the new one is much cleaner, of course.” Noise? “The highway is louder than we are.”

In short: The culture of scrap metal in Switzerland is definitely a tourist attraction. In Thörishaus, it’s as if the recycling company and the town were melded together. And superior technology from Metso makes it possible. Let the next 150 years roll!

“We used to output 22 tons per hour; now we achieve 38.”

The company

Name	Karl Kaufmann AG
Location	Thörishaus, Switzerland
Shareholder structure	Shareholders are the two most important Swiss recycling companies: Thommen and Metallum
Size of property	35,000 m ²
Number of employees	33
Amount of scrap delivered daily	on the average 300 tons
Operating hours per year	1,900 (original plant: 2,700)
Additional location	Gisviez, Switzerland. Here, the firm operates a Lindemann scrap shear with 800t shear force, type LU 800/8 PA 60

The machine

Type	Power Zerdinator ZZ 190 x 260
Drive power output	1,250 HP
Features	Magnetic separation, separating drum, two separate dedusting systems, conveyor systems, appropriate electrical equipment
Output FE	approx. 45 t/h
Dust emission	< 10 mg/m ³
Noise emission	< 55 decibels
Feeding width	2,500 mm
Housing width	2,600 mm

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