

PROCESSOR



# Firewood Automation

## SAMI 185-TEC 440 Mobile



**Manufacturer**  
Firewood Automation  
W3508 Grundy Rd.  
Irma, WI 54442  
ph: 715/360-6292  
[www.firewood-automation.com](http://www.firewood-automation.com)

**Machine Operator**  
Don Liebelt

**Assistant**  
Brandon Scott

**Time**  
28 min. 55 sec.

**Cords Processed**  
1.5 Cords

**Cords/Hour**  
3.1 Cords

Well, it has finally happened. Someone finally figured out how to automate the firewood-manufacturing processing to the point where even a single operator spends most of his/her time watching the machine work by itself. This system is the brainchild of Firewood Automation, a 2-year-old company that has taken almost all the work out of producing firewood. Firewood Automation put the Finnish-built SAMI 185-TEC 440 firewood processor on a tandem axle trailer and added a grapple loader. “The mobile unit is new,” explained Don Liebelt, CEO and owner of Firewood Automation. “This is the second show we’ve had it at. A lot of people are surprised that we have the ability to automate the process to this level.”

Don described running the machine at the Shoot-Out. “We ran the SAMI 185 in the automated

mode,” he said in a post-Shoot-Out interview. “It automatically cuts wood to length, centers the wedge, and splits the wood. The entire system is computer controlled. A screen and a few controls allow the user to program the length of the firewood desired and how to handle any odd-length last pieces. A sensor determines the log diameter and automatically centers the wedge on the log.” “You can also program it to raise the wedge and just split the wood in half if it is below a certain size,” he added.

For those who want control over the process, the SAMI 185 can also operate from a joystick input in a manual mode, or “semi-auto” mode, in which the infeed conveyor moves automatically for the desired length of firewood, and the operator initiates the cutting and splitting cycle with a nudge on the joystick. According to Don, the industrial-grade computer and electronics are designed to withstand the demanding conditions of

dust, vibration, and temperatures. The computer interface is straightforward, in simple English (or Finnish, if you prefer). Working in the automated mode allows the operator to work on other tasks, such as loading the live deck, talking to customers, or just relaxing with a cup of coffee.

So much for “brains”; how about “brawn”? A 56-hp Kohler turbo diesel is at the heart of the machine. “We sized the engine so that it doesn’t have to run at wide-open throttle, which keeps it at a lower fuel consumption,” Don said. “Even if we max out all our hydraulic pressure, it only drops by about 150 rpm.” Two hydraulic pumps power the SAMI 185, and a third pump powers the grapple loader and log deck. “We use about 40 hp for the processor, and the other 16 for the loader and deck. This lets the machine run in automatic mode while the operator is running the loader. You can pull up to a pile, one man can keep it loaded, and the machine does the rest.” He concluded, “I think the Shoot-Out was a good real-world test. It was interesting to watch others struggle to get the best possible output, but we just let the machine run at its own pace, and it put out the cordage that we advertise.” ●



## MACHINE SPECS

Model .....	SAMI 185-TEC 440 Mobile
Power .....	56-hp Kohler turbo diesel
Cutoff .....	18-in. bar chain saw, 0.404 gauge
Cycle time .....	3 sec.
Log loading .....	2-strand live deck
Max diameter .....	17 in.
Options used .....	None

The “**perfect split**” functionality of a Japa 405 or 435 Firewood Processor means never having to re-split again!

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