Harry Sweere

ERGOTRON, INC.

1181 Trapp Road
St. Paul, MN 55121
+651 681 7600
www.ergotron.com

Harry Sweere is the Founder and Owner of Ergotron, Inc., an internationally recognized company that designs and markets ergonomic computer mounting solutions. He is currently Chairman and Chief Scientist. Harry is the proud holder of 35 US patents and has recently led a work group at VESA that released the Flat Display Mounting Interface (FDMI) Standard, which covers the complete range of flat video monitors, displays and flat TVs from 4" to 90" diagonal.

ERGOTRON

interview

ERGOTRON, INC. IS A MINNESOTA-BASED CORPORATION FOUNDED (IN A GARAGE) IN 1982 AND IS NOW THE LARGEST COMPANY OF ITS KIND IN THE WORLD. THE NAME ERGOTRON IS DERIVED FROM THE WORDS ERGONOMICS AND ELECTRONICS. AS THE NAME SUGGESTS, ERGOTRON'S MISSION IS TO IMPROVE THE HUMAN INTERFACE WITH COMPUTERS. THEIR INNOVATIVE HIGH-QUALITY PRODUCTS ARE DESIGNED TO POSITION COMPUTERS WHERE THEY'RE NEEDED, PROVIDE ERGONOMIC ADJUSTABILITY AND SAVE SPACE.

Cleverdis: What's the main focus with Egrotron this year?

HS: Our primary focus has been the specialty markets such as medical, financial and industrial, where people need specialty mounts, although we're now starting to make a new effort in the office market. Flat panel monitor sales are growing by about 46% a year and will continue to do so for the next five years.

Cleverdis: We've stumbled upon a very interesting White Paper about ergonomics and LCD desktop monitors by Constant Force Technology, LLC (CFT), an affiliate of Ergotron, of which you are also Founder and Chairman.

HS: This is a project I started back in 1999. I met with a product development engineer from a major flat panel manufacturing company. They wanted us to bid on building an arm for a flat panel monitor mount, but with contractual issues and patent issues, I felt that a different concept was needed. My thoughts were to build a mechanism… a lift engine that could be industrialized around the design of the display. If we built a stand or arm that didn't match the design or color of the display, no one would buy it. So I presented the idea of building a lift engine that could be skinned and colored and molded… with plastic covers to match the industrial design of the display. He thought it was a great idea, but said it would have to be low cost and small. I racked my brain to find a way to do this in the cost and size limits that we had decided upon. Until this time, all of Ergotron's arms and lifts had used gas-spring technology as an energy source. Later, while recovering from an illness, I had a lot of time to think about this concept. So, along with a PhD I had on staff who did the mathematical calculations, we came up with the idea for a new, scaleable, constant force mechanism with an energy cost of one-twentieth of that of gas spring technology. The best example I can come up with is that of a fish scale that's just a spring with a little arrow welded to the end of the spring. If you have a forty-pound scale and put a twenty-pound fish on it, the spring goes half-way down. If you push down on the scale, it goes down all the way, but then pops back up to twenty. If you lift it and let it go, it drops back down to twenty. What I was able to do was to devise a way to take the ascending force of a standard cheap spring that you can buy for 50 cents and convert it to a perfectly horizontal counter-balance force. We do this with a proprietary design which we've patented. We've spent a year refining, developing and size-reducing this, so now we can make little towers that are two and a half or three inches square that can lift twenty pounds five inches vertically, just as smooth as silk. The moving forces on this new stand we've developed are phenomenal. You can take a twenty pound monitor on our stand and the lifting, tilting and horizontal pan forces are all about three pounds. You can take it with a couple of fingers and move the display in any direction. Nothing like this has ever been seen before. CFT, LLC is now offering this new technology to the world's flat panel manufacturers on an OEM basis, so we should see a major improvement in office ergonomics in the years ahead.

Cleverdis: When a CFO makes a decision for buying monitors, how can better ergonomics be reflected in Return on Investment?

HS: Medical costs have been rising around the world at such dramatic rates that everyone is looking at ways of keeping workers compensation and insurance costs down. Every major company has a safety department and an ergonomics specialist or at least a group of people focusing on this, and the larger corporations really understand the cost of providing a better work environment. Major progress has been made over the years meaning that the incidence of Carpal Tunnel and neck, back and eye strain issues have been diminished. Most companies are very conscious of this and understand the real benefit of instilling a better work environment.

Cleverdis: If someone asked you to outline your philosophy in a sentence, what would you say?

HS: Design innovative products of the highest quality and run our business with integrity. It is our goal to be the predominant flat panel mounting solutions supplier in the world. And I think we are already the predominant force in this industry.