

## A Bunch Of NURBS!

Our customers ask, "What are the advantages of NURBS over chords?" They seem to be under the impression that the accurate NURBS interpolation produces better tolerances. The reality is that chords can achieve the same level of accuracy if you specify a tighter chordal tolerance in the CAM software – resulting in shorter chords in higher quantities. But, this frequently results in an increased file size of the program. So, the next question is whether the CNC machine can execute such a large program. The answer is yes. Nonetheless, it's clear that NURBS deliver the required accuracy in a more efficient file format than chords. These are just a few facts that you can stick in your pocket protector ... you NURB!

Nonuniform Rational B-Splines (NURBS) are industry standard tools for the representation and design of geometry. They offer one common mathematical form for both, standard analytical shapes and free form shapes.

## Pass Me The Remote.

If your Datron CNC machine is attached to an Ethernet network and has the new Windows®-based controller, it can be monitored remotely through a standard Internet connection — anytime, anyplace. You can check on the real-time spindle load and see what process the machine is performing and how it's functioning — all from a remote location — giving you the dynamic control and agility in scheduling that you always dreamed of. Sorry, LazyBoy® not included!

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## Can You Hear The Money Talk?

Every so many years, there's a new batch of "buzz words" within virtually every industry. Take the Internet for example, it's amazing how quickly we cruised across the "Information Super Highway", launched into "Cyberspace", and abandoned a traditional "Brick and Mortar" business model in favor of the, now laughable, "Click and Mortar" virtual business. Worried about being left behind, businesses seem to fall victim to the buzz-word-du-jour all at one time — generating a feverish initial interest just before the word becomes passé or cliché and rides off into the sunset to join it's buddies the "Scooter-Pie" "Hula-Hoop" and "Beta Tape".

Well, there's one buzz word that stands the test of time and hangs around manufacturing environments with crocodile-like tenacity. R.O.I. (Return On Investment) — the time-honored goal of every savvy businessman and the promise of crafty salesmen everywhere. But wait, before you write this one off as a malleable marketing ploy, rest assured R.O.I. is both quantifiable ... and achievable. When researching and comparing CNC machines, you can use a standard Excel® spreadsheet to cut through all specmanship and see exactly what's in it for you.

In a recent competitive situation, we determined that while our Datron CNC machine was more expensive than that of our competitor, the costs associated with running the machine leveled the playing field. Factoring in consumables like cutting tools, coolant and electricity are important considerations that impact R.O.I. In this case, by the time we got down to the "operator cost" line on the spreadsheet, a total \$35 per month difference indicated that this was going to be a real horse race. And then came "cycle time." Frankly, here's, where we pulled ahead — the low spindle speed and feed rates of our competitor's conventional mill were no match for our 60,000 RPM spindle speed and feeds that produced two times as many parts per hour. This resulted in a whopping \$1.88 saving per part for this particular panel manufacturer and sold them on the Datron Machine.

This type of comparison should be part of the due diligence done by any manufacturer considering the purchase of a new machine. For that reason, we'd be happy to provide you with both a sample and a blank Excel spreadsheet for your own use — just contact Robert Murphy at 888.262.2833 or rmurphy@datrondynamics.com and he'll email the file to you.

When you've finished your comparison feel free to kick back, crank up the AC/DC and sing along ... "Come on, come on, listen to the money talk!"