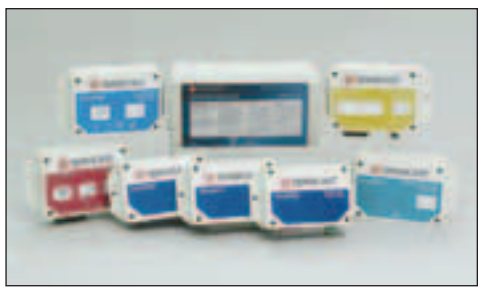
Inside: Motion Control ■ Hydraulics & Pneumatics ■ Enclosures ■ Connectors ■ Sensors

DPN DESIGN PRODUCT NEWS

May 2007

Covering the total design engineering function in Canada



## Wireless sensor network

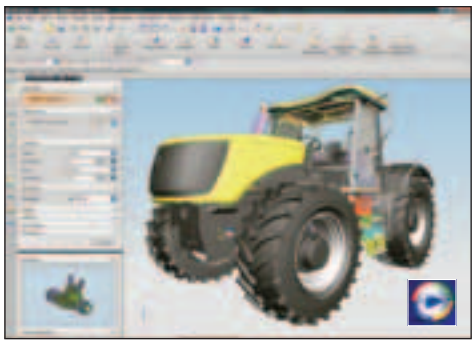
Sensicast smart wireless sensors provide a way to deploy networks through pre-integrated probes used for temperature and humidity, as well as motion, current and voltage. Small networks can be configured with just a few points or scaled up to hundreds of points.

**cdnova.com** Info Card 340


## Color 3D prototype printer

Z Corporation has announced the ZPrinter 450 color 3D printer, an output device that transforms electronic 3D data into handheld physical models, breaks the US$40,000 price point. Features include automatic set-up and self-monitoring of materials.

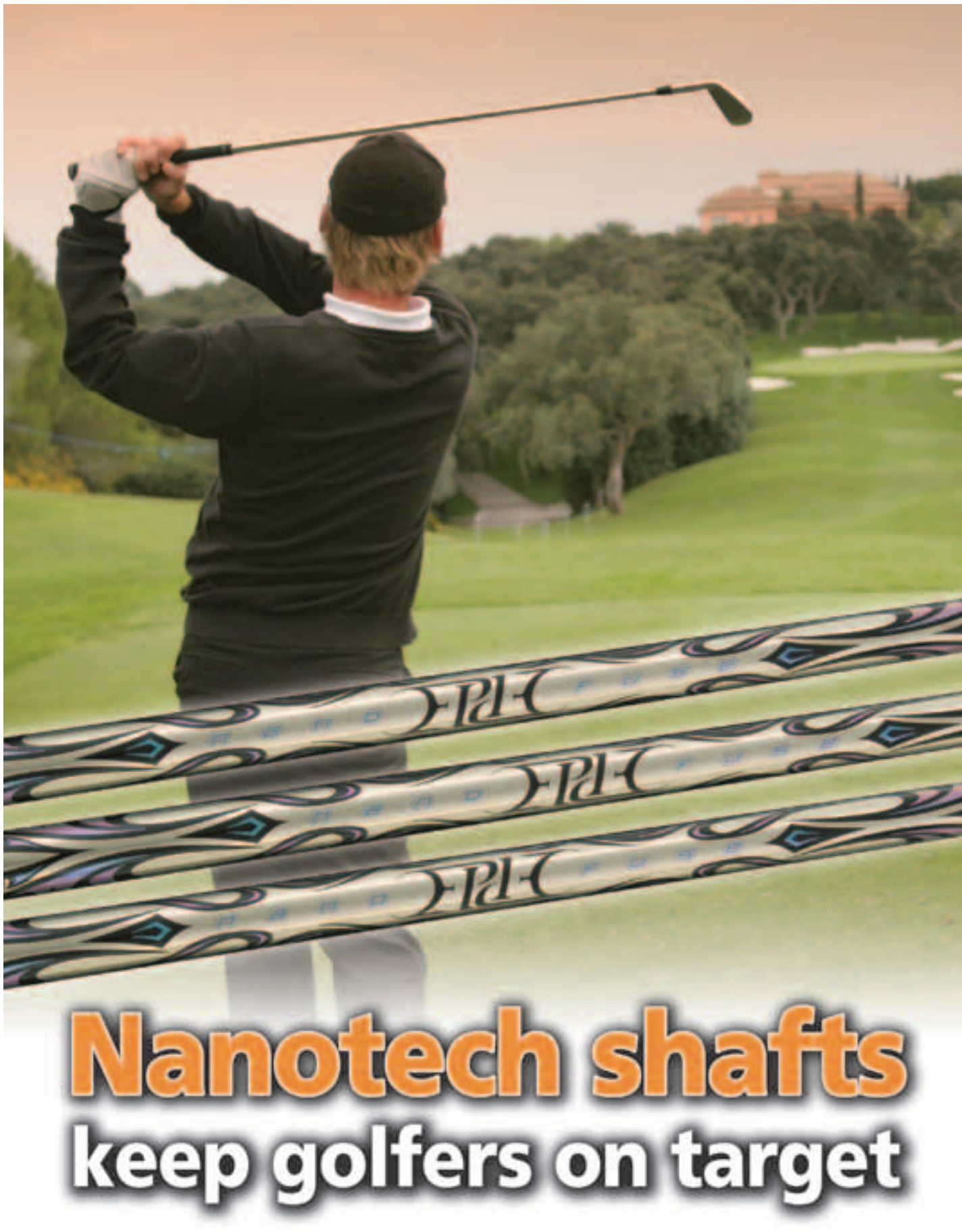
**zcorp.com** Info Card 341



## NX 5 CAD/CAM/CAE software

UGS Corp. has announced Version 5 of its NX digital product development software. Features include effective reuse without redesign of legacy data and Active Mockup to bring in third party files into the context of a total product or assembly.

**ugs.com/nx** Info Card 342



# Nanotech shafts keep golfers on target

*By Mike Edwards*

Getting set to rip up the fairways this summer are the Epic brand series of composite shafts. Made by Grafalloy of Memphis, TN, the shafts were developed with the assistance of nanotechnology R&D licensor Toronto-based Integran Technologies Inc. and sporting goods nanotechnology licensee Power-Metal Technologies of Carlsbad, CA.

Integran, which licenses its technology for sporting goods, industrial and environmental applications, has discovered that a nanometal coating acts as a hard but ductile protective layer on carbon fibre material typically prone to impact damage and crack propagation. In motorsports, engineers have found that nanometal coatings improve impact resistance to stone-chipping so that a coated carbon fibre tube sees little surface damage while an uncoated tube completely fractures.

Via Integran's patent-protected electrosynthesis technology, materials having average crystal sizes 1000x smaller – about 20 nm – than those found in conventional materials, can be inexpensively produced in a one-step process.

Golf clubs incorporating the nanotechnology

*Continued on page 8*

Volume 35 Number 3

PM# 40063602

PAP Registration No. 10773