

**INSIDE THIS ISSUE**

ACOUSTIC MONITORING	1, 2
TOMORROWS WORKFORCE	2
7 THINGS ABOUT 3D SCANNERS	3
MGC LINE CARD	4
MGC CAPABILITIES	4

**BRANKAMP Monitoring System PK5000**



This is not just another die protection system begging you to spend your upgrading budget. With the PK 5000 you will never need to look back. With the PK 5000 you will never need to look back. Invest once in the right tool and reap the short and long term benefits of saving yourself thousands of dollars of unnecessary scrapped parts and sort-

**STATE OF THE ART ACOUSTIC DIE PROTECTION**

Benefit from our Industrial metal stamping / assembly knowledge and ability to identify or make continuous improvement opportunities a reality at a reasonable price. We are fond of most metal stamping processes

**Call MGC at  
905 715 7575  
... also for 3D CAD**



Mirco Graenert Consulting Inc. of Newmarket, Ontario is part of team Brankamp Canada. Die Protection systems for the stamping industry are offered. This fine technology ties in with the 20 plus years of industrial experience of the companies' founder. Mirco Graenert Consulting is very likely the right partner for your stamping challenge and implementation. Now Brankamp offers an array of revolutionary systems to go beyond the eyes, ears and seventh senses of the operators, toolmakers and plant personnel. Higher, faster, quality production is realized. The system is amazingly sensitive when it needs to be. There is virtually no false triggering of press stops. The automatically adjustable envelope curve enables

you to set parameters and give the process the space it needs to run smoothly. Trends can be set, die bushing and punch breaks cracks can be sensed. The units are sleek and tie in with any press environment. Factory net can connect the production with the current network with Ethernet capacity TCP/IP networks. Previous interference from other acoustic sources used to make it impossible to use this system in high speed applications or in very demanding environments. New sensor technology and electronic refinements now allow for signals to be easily and precisely recorded. Detailed evaluations can be drawn up; preventative maintenance schedules and accurate timely press stops are the result.

Monitoring in excess of 1000 strokes per minute is possible. Built-in comprehensive counter functions give a constant up to date overview of the current production status. Trend functionality detects long term process changes such as tool wear. The operator sets the number of production cycles and the monitor records and displays the cycles graphically. The monitor can be set up to shut down the machine when preset limits are exceeded. The Speedmatic functions allow monitoring independent from speed. Using an angle encoder enables reliable monitoring of the envelope curve. Especially critical phases such as production start ups can now be monitored accurately. Call MGC for more info.

## Building Tomorrow's Workforce

What is the best way to maintain a competitive edge? You'll get as many different answers as people you ask. The one answer you can't argue with is, "Teach the next generation of tradespeople with the latest and most innovative tools." With the skilled trades employment fields being considered a poor career choice by many parents, we need to address this perception. It is this perception that is keeping various government departments from funding technical trade education with the urgency and respect that it deserves. While recent provincial governments have tried to make headlines for themselves by announcing they have made additional funding available, it doesn't translate into a real purchasing capability for the individual schools. Like everyone else, schools are left asking the question, "How can we be most effective when spending department

money?"

With the advanced rate of teaching curriculums that used to be the subjects of University and College courses, we are already seeing the benefits of the material being taught much earlier.

*"It is quite common for Apprentices and College and University students, who have taken advantage of our technical offerings, to return and report their advanced standings and extreme comfort with material they encounter. Design and Engineering students often report that they are 'repeating the work that they did at our school, and are well ahead of their classmates in understanding.'" – Course calendar excerpt from a York Region school, 2007*

Mirco Graenert Consulting Inc. feels very strongly that a broad knowledge of current trends in manufacturing mixed with a greater exposure to emerging technologies will build a stronger Canadian manufacturing base which will benefit the entire coun-

try. One of these technologies is the ZCorp line of Rapid Prototyping Printers.

From viewing a course calendar, we identified 25 courses we felt could benefit from the presence of a ZCorp® printer. This included mechanical design, horticultural and landscape design, tool design, product design and marketing, architectural and interior design. The addition of the printer will only complement a school's ability to train the next generation of engineers, toolmakers, architects and product designers.

Students will be able to see the benefits of having three-dimensional models built first hand to evaluate design changes, discuss manufacturing challenges, manage schedules better, and improve their CAD capabilities. They will develop an enhanced interest in the trades, as well as drawing parallels and exploring new uses of this technology; in short, to be very creative for tomorrow's needs.

## Prototyping / Design

Get Prototypes 5-10X  
Faster. Learn How



2007  
design news  
GOLDEN  
MOUSETRAP  
Winner



ZPrinter 450

Z CORPORATION™

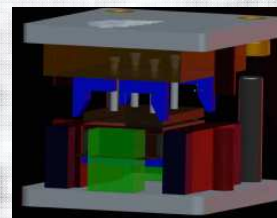
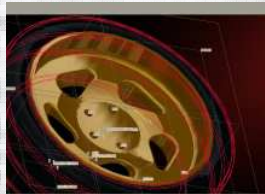
Mirco Graenert Consulting Inc. will be happy to provide a quote for your Z-Corp® 3D machine needs, contact [sales@canstampconsulting.com](mailto:sales@canstampconsulting.com)

or phone 905 715 7508.

### COST EFFECTIVE ADVERTISING HERE IN IMQ

Our current introductory ad rates are low. An advertisement in this space would be **under \$50!** Reach a targeted market of industrial customers locally. Although we focus on the Canadian market, this newsletter is also distributed via e-mail to the USA as well as Europe. Further publications are provided in print and are distributed in local restaurants close to industrial establishments. Call 905 715 7508.

### 3D CAD DESIGN, RELIABLE AND ACCURATE



Call on MGC for your CAD designs, industrial product design, general 2D CAD, stamping part and assembly design, tool design.

## Seven Things You Must Consider Before Buying a 3D Scanner

Do you have the expert advice to evaluate and select the 3D scanner that's right for you? To select the right 3D scanner, prospective users must first identify the intended applications and the intent of the scanned data. This will offer direction in identifying the critical criteria that are needed for successful scanning of objects for manufacturing. According to recognized experts in the field of 3D scanning and rapid prototyping, T.A. Grimm & Associates, there are seven criteria that must be considered before you purchase a 3D Scanner: *Accuracy, Resolution, Mobility, Range, Time, Ease of Use, and Versatility.*

With the ZCorp **ZScanner® 700** or the new **ZScanner® 800** you will be able to address aesthetic design, retrofitting and aftermarket replication, industrial and mechanical design, tool making and package design issues.

ZCorporation's line of 3D scanners are simply the best tool available to you for reverse engineering. The scanners have increased scanning resolution and accuracy to within 40µm (microns) and detect changes in surface height down to 50µm.

It is the world's first and only handheld, self-orienting 3D scanner, eliminating the need

for arms or external positioning devices that make hard-to-reach surfaces nearly impossible to scan. The **ZScanner®** can capture a complete scan all at once – with all the mobility that comes with a handheld device. Virtually any object, at any angle, in any location, can be scanned with the ZCorp **ZScanner®**.

Contact Mirco Graenert Consulting Inc. to assist you in determining the best 3D scanner for your design needs and to receive a quote from our sales staff for a handheld scanner or the complimenting 3D Printers, taking 3D objects and recreating them.

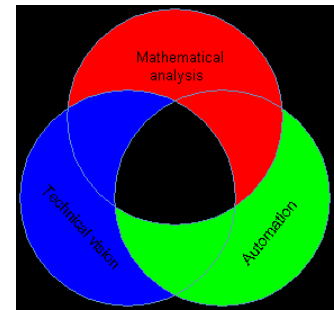
Call 905 715 7508 today.


## MACHINE VISION SYSTEMS

Are you aware of all the sensors available to you, and how they affect your process? It is time to take a serious look at machine vision! There are many low cost systems available, some with stunning results. It will be worth to ask your sensor tech or integrator about the benefits of a vision system for your application. In some cases, unless you are in need to incorporate expensive conveyors, it is feasible to purchase vision systems that are affective for lower end sensing applications for around \$10k- \$15K including the integration. In many cases all that is required is to just stop the component to be checked for a fraction of a second, and to use an air cylin-


der to steady the part, while in motion between processes. Of course higher end systems can cause you to inspect your part while in motion, but get ready for a high quote. It is a real balancing act, either the money is spend on the camera system, or money is spend on the fixture or other complementary tooling. Some of the lower end cameras have proven to have many nifty futures which high end cams don't have. After all keeping it simple wherever possible usually pays off handsomely. Of course there are more choices, such as 2D or 3D inspection. Generally the bottom line – the greater the resolution required, the closer the camera will need to be, or the more

money must be spend for lenses or processor speed. There are 2D and 3D systems available which can capture in full colour. Future research will lead to affordability and a better product at a better price for the companies who choose to buy into this technology, and know what their vision is.

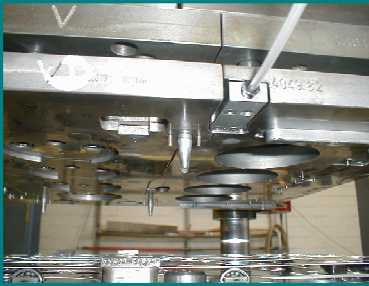


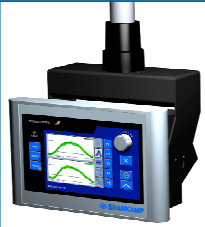


# BRANKAMP



**GO AHEAD - CHECK THE "HEART BEAT" OF YOUR STAMPING CYCLE**





**PK 4 U Process Monitor**  
shown above

Call MGC at 905-715-7508 to learn more about Acoustic machine-die Monitoring.

## ELECTRICAL SYSTEM INTEGRATION

"We have solutions for your automation needs"

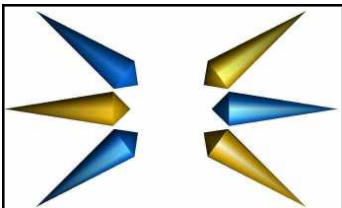
Tel: (905) 716 6523, Fax (905) 726 9105

E-Mail - sandhaus@aci.on.ca

**FERRUMATIC INC.**  
Electrical - Automation - Integrator

255 Industrial Pkwy. South, Unit 3

Aurora, Ontario, L4G 3V5



[www.canstampconsulting.com](http://www.canstampconsulting.com)

Mirco Graenert Consulting Inc.

# Services

- Z-Corp Rapid Prototyping sales / 3D Printing
- Continuous improvements
- Metal stamping assistance / rapid repair—tool steel welding on site.
- Prototyping
- 3D CAD Design
- Promotion of your technical company
- Stamping / assembly consulting
- Tool and Die Contracting
- High tech product sales
- Value added process integrations



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#3 - 580 Steven Court

Newmarket, Ontario



MGC line Card:

# BRANKAMP

State of the art German made manufacturing monitoring systems

# ipdisplays

Smart LED lean manufacturing displays get the message across at the speed of light !



**24 BIT COLOUR 3D RAPID PROTOTYPING MACHINES**

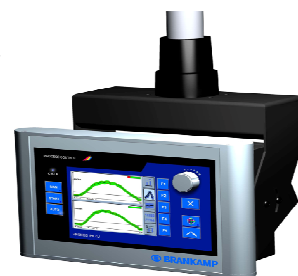


# BRANKAMP



## GO AHEAD - CHECK THE "BEAT" OF YOUR STAMPING CYCLE

Call MGC to find out more about what acoustic die protection can do for your stamping operation. As part of Team Brankamp Canada, we understand this state of the art electronic process monitoring equipment. MGC can quickly relate to your associated stamping processes. Call us at 905-715-7508 to learn more about acoustic machine-die monitoring, or for pricing.



WHEN ARE YOU GOING TO "Q" IN IMQ?