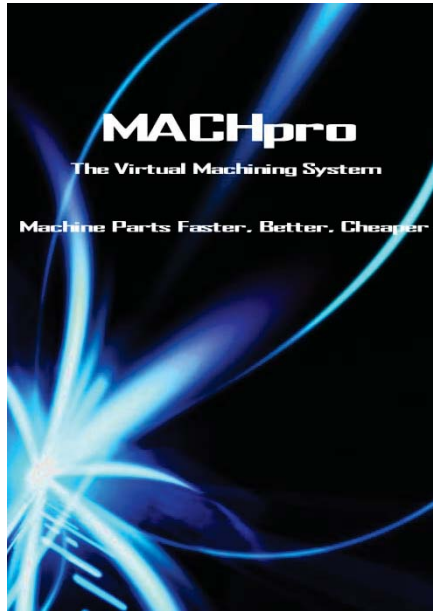


Meeting the Demands of the Machining Industry



MACHpro is the most advanced process simulation and NC program optimization software to

- ✓ **achieve high performance machining**
- ✓ **increase throughput**
- ✓ **increase tool life**
- ✓ **reduce scrap part rate**
- ✓ **reduce equipment maintenance**
- ✓ **minimize valuable engineering time**
- ✓ **eliminate costly trial and errors**

PROVEN TRACK RECORD
OF SUCCESS IN WIDE
RANGE OF APPLICATIONS

Aerospace

Automotive

Die and Mould

Electronic Component
Manufacturing

Power Generation

Medical

RESULTS SPEAK FOR
THEMSELVES



MACHpro enables process planners/production engineers to visualize and simulate real-world performance of machining operations early in the process planning stage. This capability offers engineers the flexibility to automatically optimize and improve critical processes prior to actual machining process helping them **save time and money, improve quality, and release untapped productivity opportunities within their existing** equipment, tooling, and machining processes.

malinc.com/virtualmachining.html

REGISTER NOW!



**manufacturing
automation
laboratories**

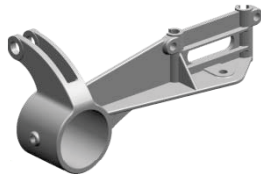
MAL Manufacturing Automation Laboratories Inc.
2829 Highbury Street Vancouver, B.C., Canada V6R 3T7
Tel: +1 (604) 228-9213 Fax: +1 (604) 228-9269
sales@malinc.com www.malinc.com

Complete Part Optimization

Fast, Accurate, Reliable

Combining your expertise in machining with unique Virtual Machining technology in **MACHpro**, parts can now be optimized prior to actual machining to increase productivity.

CAD Model



Original Part Program

```

ORIGINAL CL File
GOTO / X1, Y1, Z1
FEDRAT/ F1, MMPM
SPINDL/ S1, RPM, CLW
GOTO / X2, Y2, Z2
GOTO / X3, Y3, Z3
FEDRAT/ F2, MMPM
SPINDL/ S2, RPM, CLW
GOTO / X4, Y4, Z4
GOTO / X5, Y5, Z5
CIRCLE/ Xc, Yc, Zc, i, j, k, R, ...
GOTO / X6, Y6, Z6
    
```

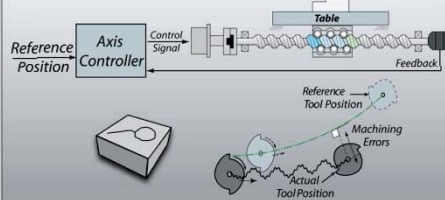
Virtual Machining Technology

Simulation of Milling Processes



- Shoulder Milling
- Face Milling
- Plunge Milling
- Ramp Milling
- Contour Milling
- Profile Milling
- ...

CNC Feed Drive Simulation & Estimation of Errors



Optimized Part Program

```

OPTIMIZED
GOTO / X1, Y1, Z1
FEDRAT/ F1, MMPM
SPINDL/ S1, RPM, CLW
GOTO / X2, Y2, Z2
GOTO / X3, Y3, Z3
FEDRAT/ F2, MMPM
SPINDL/ S2, RPM, CLW
GOTO / X4, Y4, Z4
GOTO / X5, Y5, Z5
CIRCLE/ Xc, Yc, Zc, i, j, k, R, ...
GOTO / X6, Y6, Z6
    
```



CONTACT US

Start your experience with the Manufacturing Automation Labs by contacting our experts at sales@malinc.com and we promise to find a solution that best suits your needs.

TECHNICAL SUPPORT

No question is too simple or too complex; we are here to help. Please contact one of our technical support engineers at support@malinc.com.



For more information on our products and services, visit our website.

✓ Speed and process improvement is the most **powerful** profit lever and yet the most **under-utilized** one.

✓ Considering only US manufacturing industry, 15% in cost reduction equals about **\$15 billion in potential savings**.



**manufacturing
automation
laboratories**

MAL Manufacturing Automation Laboratories Inc.
2829 Highbury Street Vancouver, B.C., Canada V6R 3T7
Tel: +1 (604) 228-9213 Fax: +1 (604) 228-9269
sales@malinc.com www.malinc.com