



Eureka  
**Chronos**

NC feedrate optimization software



# A.I. Feedrate Optimization

Eureka Chronos is a CNC feedrate optimization software developed by Roboris Srl. Chronos optimizes G-code program feedrates using A.I. based algorithms to maintain constant tool engagement and material removal, while maintaining the original CAM programs toolpath geometry.

Eureka Chronos is compatible with all popular CAM software.





# Benefits

- ✓ Improved Surface Quality
- ✓ Reduced manual post processing
- ✓ Longer tool life
- ✓ Complete automatic optimization
- ✓ Artificial Intelligence based Algorithm's
- ✓ Optimize existing ISO programs
- ✓ Compatible with all popular CAM software





# How much can you save?

Eureka Chronos optimizes the feedrate (F) without changing the toolpath geometry.

In the real case shown here the processing time has been reduced by 22%

To estimate how much you can save on your work visit

[roboris.com/eureka-chronos](https://roboris.com/eureka-chronos)

- Spindle speed (s): 1.000 rpm
- Feedrate (F): 2.000 mm/min

Machining time

434 sec

```
Program on Fanuc:
File: OP010
Stack:
18 N12 G0 G90 G54 B0 M8
19 N13 G0 G43 H#7D#7X-158 Y132.5 Z300 S#132 M3
20 N14 G0 Z3
21 G1 Z1. F12000
22 G1 X158.
23 G1 Y79.5
24 G1 X-158.
25 G1 Y26.5
26 G1 X158.
27 G1 Y-26.5
28 G1 X-158.
29 G1 Y-79.5
30 G1 X158.
31 G1 Y-132.5
32 G1 X-158.
33 G1 Z3
34 N28 M01
35 N29 G0 X-158 Y132.5 Z3
36 N30 G1 Z0.2 F12000
37 G1 Z0.2 F15000
38 G1 X-153.063
39 G1 X-148.125
40 G1 X-143.188
41 G1 X-138.25
42 G1 X-133.313
43 G1 X-128.375
44 G1 X-123.438
45 G1 X88.875
46 G1 X93.812
47 G1 X118.5
48 G1 X123.437
49 G1 X158.
50 G1 Y79.5
51 G1 X153.063
52 G1 X148.125
53 G1 X143.188
54 G1 X138.25
55 G1 X133.313
56 G1 X128.375
57 G1 X123.438
58 G1 X-88.875
59 G1 X-83.812 F12000
```

- Spindle speed (s): 1.000 rpm
- Feedrate (F): from 2.000 to 7.000 mm/min

Machining time

338 sec

```
Program on Fanuc:
File: OP010
Stack: OP010
28 N12 G0 G90 G54 B0 M8
29 N13 G0 G43 H#7D#7X-158 Y132.5 Z300 S#132 M3
30 N14 G0 Z3
31 G1 Z1. F15000
32 G1 X158.
33 G1 Y79.5
34 G1 X-158.
35 G1 Y26.5
36 G1 X158.
37 G1 Y-26.5
38 G1 X-158.
39 G1 Y-79.5
40 G1 X158.
41 G1 Y-132.5
42 G1 X-158.
43 G1 Z3.
44 F8000
45 N28 M01
46 N29 G0 X-158 Y132.5 Z3
47 G1 Z0.2 F15000
48 G1 X-153.063 F15000
49 G1 X-148.125 F12000
50 G1 X-143.188 F9327
51 G1 X-138.25 F9327
52 G1 X-133.313 F8410
53 G1 X-128.375 F8410
54 G1 X-123.438 F8156
55 G1 X88.875 F8156
56 G1 X93.812 F12000
57 G1 X118.5 F12000
58 G1 X123.437 F15000
59 G1 X158.
60 G1 Y79.5
61 G1 X153.063 F15000
62 G1 X148.125 F12000
63 G1 X143.188 F9327
64 G1 X138.25 F9327
65 G1 X133.313 F8345
66 G1 X128.375 F8345
67 G1 X123.438 F8027
68 G1 X-88.875 F8027
69 G1 X-83.812 F12000
```



## About us

For over 15 years, Roboris has been a leading developer of manufacturing software solutions. **Eureka Virtual Machining** is an innovative **suite of software products for the simulation and optimization of NC programs and industrial robots.**

**Roboris software is designed and developed 100% internally,** allowing for in-depth customization at any level.

Over the years **Roboris has earned a reputation of excellent customer service**, for both our direct customers and our partners. We strongly believe that **we can provide our Customers excellent tools to increase their productivity** by combining leading-edge software technology with a constant attention to our users' needs.





# Subsidiaries & Master Distributors

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