

[Print](#) | [Close Window](#)**Subject:** Updated proposal for Niles lathe CNC**From:** "Peter van den Heuvel" <peterv@csinnovation.com>**Date:** Mon, Sep 29, 2014 8:33 am**To:** <KarlLange@langeprecisioninc.com>**Cc:** "Ben Huynh" <benh@csinnovation.com>**Attach:** Q140714R1 - Lange Niles lathe retrofit.pdf

Hi Karl,

Please see updated pricing with a new servo spindle motor, new servo drive and upgraded power supply from 16KW to 80KW. The new spindle motor is a 45KW unit and has the same torque characteristic as your existing spindle motor.

80kw Active line module	6SL3130-7TE28-0AA3	1
45kw at 2000rpm, 215Nm at 2000rpm, 75amps, Drive Cliq encoder, keyed shaft, IP55	1PH8165-1DF10-2BA1	1
1 X 85/141amp Motor Module	6SL3120-1TE28-5AA3	1

Please let me know if you have any questions or concerns.

As mentioned in my phone conversation with you, can you pull the X and Z motor from the lathe and look at the actual motor data so that we can verify the characteristics.

Regards,

Peter van den Heuvel  
 Applications engineer  
 Control System Innovators Corp  
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September 29, 2014

**Karl Lange**

Lange Precision Inc  
6981 Cornell Rd, Cincinnati, Ohio 45242  
Tel 1 513 530 9500  
[Karllange@langeprecisioninc.com](mailto:Karllange@langeprecisioninc.com)

**Re: Q140714R1 Lange, Niles lathe retrofit**

Dear Karl,

I first would like to thank you for the opportunity to quote on this system. This quotation is based on our conversation and subsequent information provided by you.

CSI would provide the overall project management, system & electrical engineering, control cabinets & control hardware components, controls and programming, electrical install of piping, wiring and commissioning.

After reviewing this information, we are pleased to present you with this quotation. If you have any questions, please do not hesitate to contact me or Ben Huyhn.

Best Regards,

Peter van den Heuvel, B.A.Sc.  
*Applications Engineering*



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## **1 General**

The scope of this project is retrofit an existing Niles lathe with a DC spindle motor and 2 servo axes motors. We would replace the complete CNC system with a new Siemens sinumerik 828 controller with new motors and drives including a new spindle motor and drive. We will replace all the contactors and overloads with new devices. We are assuming that all the field devices are in good working order and can be reused. Same applies for all the motors with the exception of the servomotors for the X, Z and spindle axes which we will replace.

We will supply new drawings, assemble the panels based on the new drawings and then ship it to your plant. The motors may require mechanical fitting and we would leave that up to the customer as you are the machinists.

## **2 Details of Work**

### **2.1 Engineering**

We will produce a new set of drawings to reflect the new installation and can later be used to troubleshoot the system. We will have a set for you in electronic format.

### **2.2 Panel building**

CSIC will build the new panel and house all the drives and power sections into the cabinet as well as have a disconnect on the panel and all protective devices. All contactors, relays and overloads will be replaced with new parts. As part of the cabinet we will have an emergency stop circuit that can be tied in with the existing emergency stop. When pressed, it will remove power from the new drive system.

We will have 72 Digital inputs and 72 digital outputs in the cabinet to connect to the contactors and various switches.

The Customer will be responsible to feed power into the cabinet.

### **2.3 PLC/CNC/MD configuration**

CSIC will program the PLC and the CNC so that the lathe will have the same functionality as before the retrofit.

### **2.4 Installation**

The installation of the electrical cabinet, running of all the motor cables, running of the profinet cable and installation of the motors will be done by customer and is not included in the scope of this quotation

### **2.5 Commissioning**

The commissioning process will involve checking all I/O as per drawings and check and debug the PLC program in combination with the CNC. We will also tune the motors to your system and verify functionality.

### **2.6 Onsite Support**



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In the event that additional support is needed, our engineers or service technicians are available 24/7 days a week.

- Regular Hours: \$ 95.00
- Overtime : x1.5

Note: Travel & Accommodations extra.

### **2.7 System Pricing**

1. Complete system addition as per above:	\$85500.00USD
Onsite commissioning (Expected to be 5 days)	\$850UDS/day

Travel and accommodations are extra and not included in this quotation.  
(We charge .89/mile of travel plus actual time of travel)

We are assuming the following:

Customer does the electrical panel install and connections to the field devices as well as the mechanical install for all the new motors. (X,Z and spindle)  
All field devices are in good working order and need not to be replaced.

All materials are FOB our plant in Michigan.

Our standard term and conditions apply.

30% with P.O  
30% with all materials in our office  
30% FAT test at our office  
10% after final commissioning