

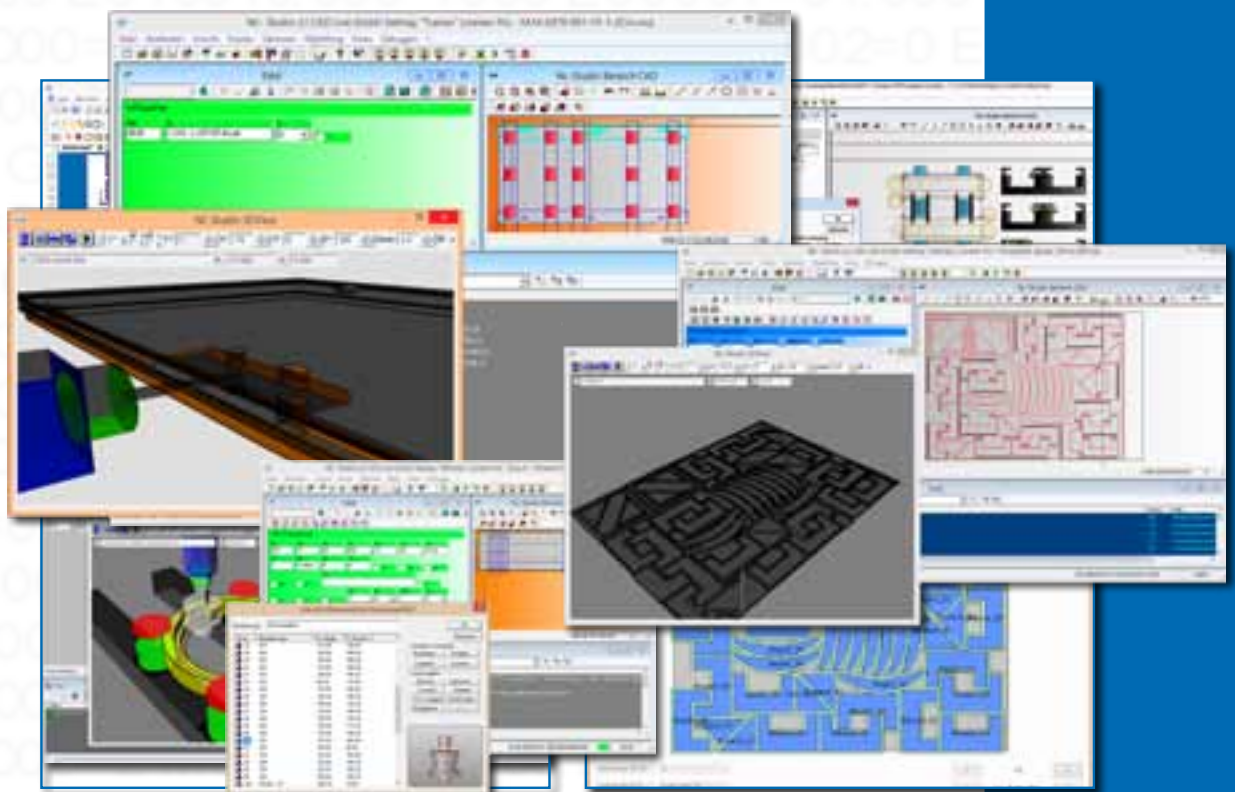
# CAD LINE

We develop ideas ...

## Product overview

CAD / CAM / Nesting / ...

As a specialist for CNC connections, we develop innovative software solutions for perfect final products.



**Future-proof CAD / CAM solutions and NC programming systems.**

Thank you for your interest in our products and services.

CAD Line GmbH is a specialist for CAD/CAM solutions and CNC programming interfaces. Thanks to 20 years of experience in wood processing, we can implement even the most complicated projects for end customers, machine manufacturers or retailers.

We have become particularly renowned as a market specialist in the field of "Windows/doors/automation".

Give us a challenge and join us on the road to success!



**The following pages will give you an overview of our top sellers  
NC-Studio®, Marvin/Marvin CAD(LT), Nesting Studio® and other products.**

The products we develop in-house are characterised by constant development and improvement. Our team focuses on customer consultation, cooperation and interfaces of design packages with machines.

**What are the advantages of using one of our products?**

You will be working with specialists, because we focus on what we do best, namely analysing problems, finding solutions, providing expert consultation and technical support for your everyday business needs. All of this makes it possible for you to take on even the most difficult CNC machining tasks. Throughout Europe we have installed approx. 600 Marvin installations and over 500 NC-Studio® installations .

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Your drawing reaches the CNC directly and with no need for reworking.

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The perfect nesting solution for YOUR individual production.



**Your design package combined with our 2-component system:  
CLXMLViewer + NC-Studio®**

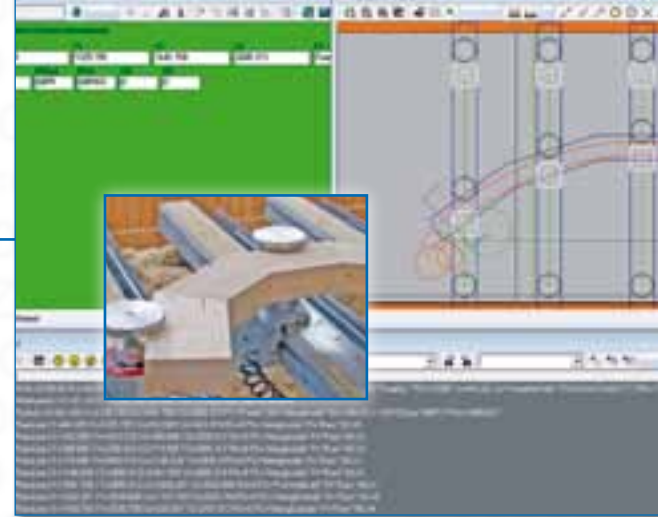
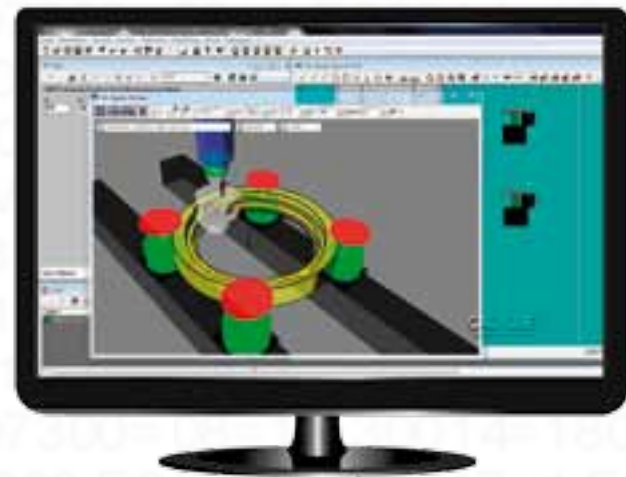
The designing process stays the same, but production becomes better, safer and faster.

**CLXMLViewer**

All information from your design package is simply transferred to the CLXMLViewer in XML files. The viewer checks and converts the files.

**NC-Studio®**

Complete CNC programming. You can quickly and easily carry out any everyday window manufacturing task. Depending on the window software and customer requests, the interfaces can be varied very individually. NC-Studio® is particularly open for external data. After a systematic training, users can create and modify profile systems, drilling pictures and strategies on their own.



**Flexible CNC programming system**

We implement our customer's strategy requests and optimise existing strategies. E.g. 4-sided machining, squaring sashes, linear machining or optimised pendulum machining.

**Highlights**

- Due to the pragmatic and realistic representation, you will immediately recognise the result of your programming work.
- Simple parameter input - direct graphical check. Each worklist step has its own individual parameters. Feeds, references and all other parameters can be entered quickly and easily and immediately checked in the graphical representation.

**Special functions especially for manufacturing wooden windows**

• **Tool and machine safety**

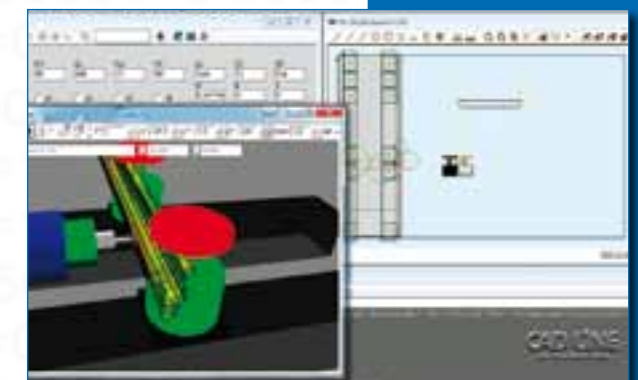
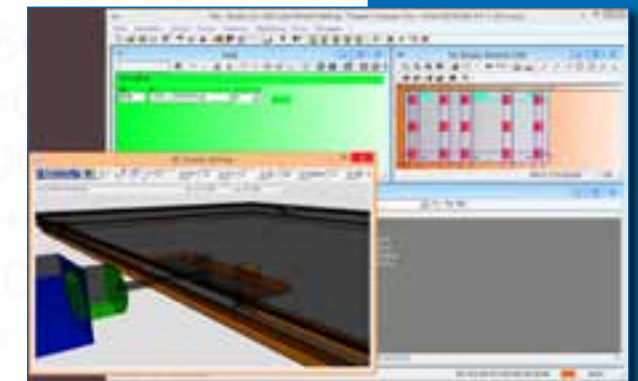
A section of the clamping situation generated from the actual tool geometries facilitates inserting tools and profiles. This prevents damage to the tools and machine.

• **Best possible convenience**

Even for hard-to-clamp parts, NC-Studio® offers the most convenient access to the worklist and calculation of the clamping situation.

**Extension options**

- Integrated programming language, integrated debugger, open, extendible postprocessor concept. Rebate change.
- Strategies for optimisation of speed and quality can simply be selected.



- Flexible configuration options permit an individual adaptation of the machine allocation and machining strategies.

- Extensive analyses determine the ideal rotation points and part positioning and automatically generate pairs of matching parts to optimise production.



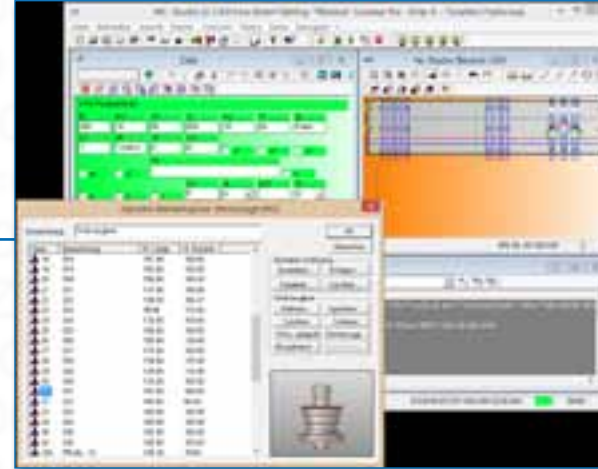


**Professional CNC connection, customised - easy, fast and convenient!****Different machine types? → Just one single programming system!**

NC-Studio® is our future-proof programming system for machine lines and special machines, for completely integrated production and even the most complicated drilling optimisation. At the same time, NC-Studio® is a modern programming system for "old" CNC machines.

**Efficient and flexible**

The efficiency and flexibility of NC-Studio® make it possible for the user to react independently to all demands of daily production. Production time is reduced in comparison to other programming systems!

**Excellent inspection options**

At the programming stage, NC-Studio® and its graphic display of the plate and machining simulation offer excellent options for inspection and testing.

**NC-Studio® is available in three license levels**

**"Standard"** - convenient, efficient range. Adaptable to any new or used machine available on the market!

**"Advanced"** - additional highly efficient functions, e.g. worklists, integrated macro editor.

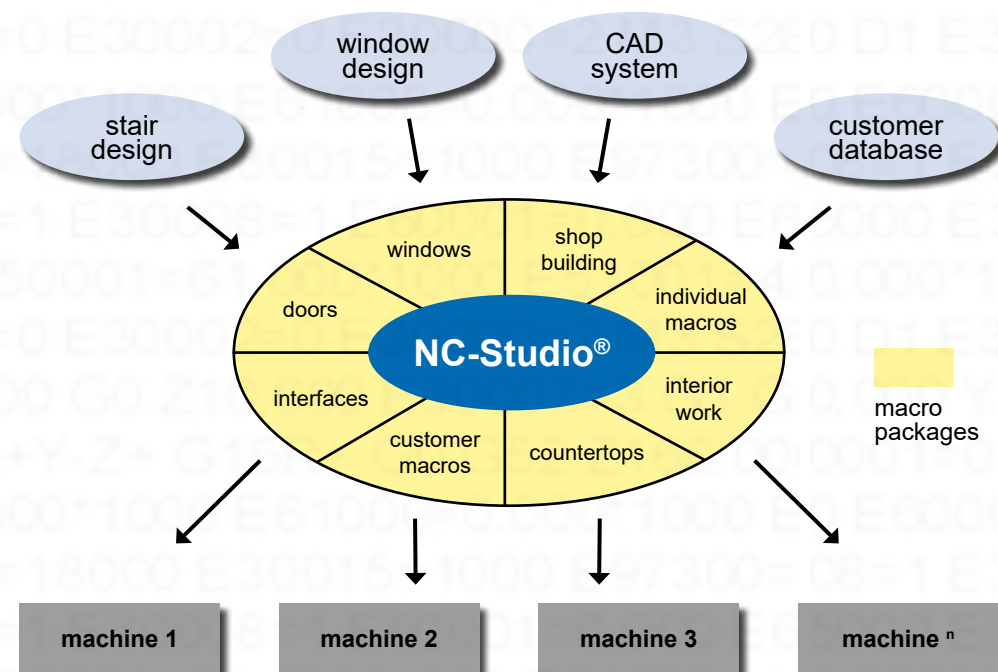
**"Professional"** - for users with high demands (integrated bar code scanner operation, integrated debugger, ...)



- Is your CNC machine utilisation rate 100%?
- Can you produce special parts quickly and with no problems?
- Can you use different employees for CNC programming?

**Open to new demands**

Extensive macro packages can be modified and extended easily from version "Advanced". Users can quickly create their own macros directly in NC-Studio®.

**NC-Studio® gives you limitless options.****Technical highlights:**

- Graphic user interface with intuitive operation
- Process simulation (in 3D from Advanced version)
- Diverse process optimisation (Drilling optimisation, tool change minimisation, structuring according to priorities)
- Integrated macro editor with graphic display even during programming (from Advanced version)
- Individual and structured list of variables
- Flexible worklists (from Advanced version)
- Integrated CAD system

**Special extensions**

NC-StudioTV (TrueView / 3D removal simulation), nesting, window / door manufacturing, BTL import, WEB application.

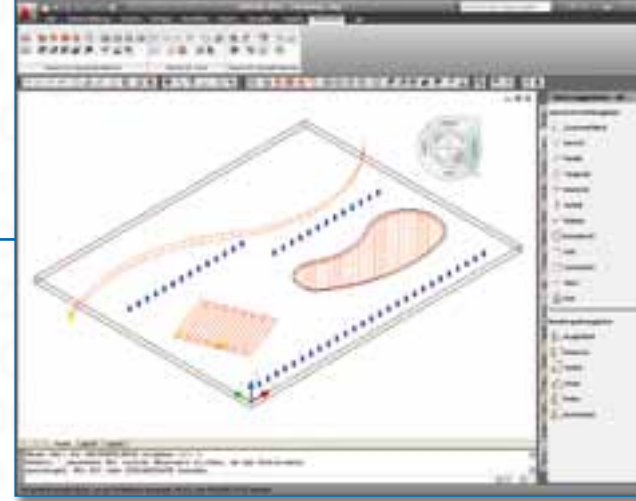




**Minimal programming effort!**  
**Your drawing reaches the CNC directly and with no need for reworking.**

Our special AutoCAD(LT) extension for CNC machines makes it possible to lay out the technological data of your CNC machine (e.g. tools, depths, feeds, worklists) in the drawing itself. With AutoCAD(LT) programming takes the least possible time and each shape is quick and easy to route.  
 Changes are simply made in the drawing, the CNC program is automatically updated.

**No more trouble with:**  
 routing text, complex shapes, pockets and islands, milling of complete parts, drilling, sawing, oversize tasks.



Available as  
**Annual Subscription\***  
 starting now!

**Functions:**

- Rows of holes, drilling pictures, hinges ...
- Worklists (e.g. roughing, finishing, sanding)
- Multiple machining steps (e.g. in three depths)
- Pocket cycles
- Approach and retraction
- Milling of splines
- Freeform pockets with island detection
- Rounding text (10 fonts) on arcs, splines, etc.
- Over 500 fonts on CD-ROM (optional)
- and many more

**Options:**

- Importing TRIA: Importing TRIA drilling and milling programs, TRIA 4000, TRIA 6000, TRIA 6500, TRIA from 7500 (no variable programs)
- Importing MPR (acc. to CAD Line specification)
- 5 axis extension: Extension for controlling 5 axes from AutoCad(LT)

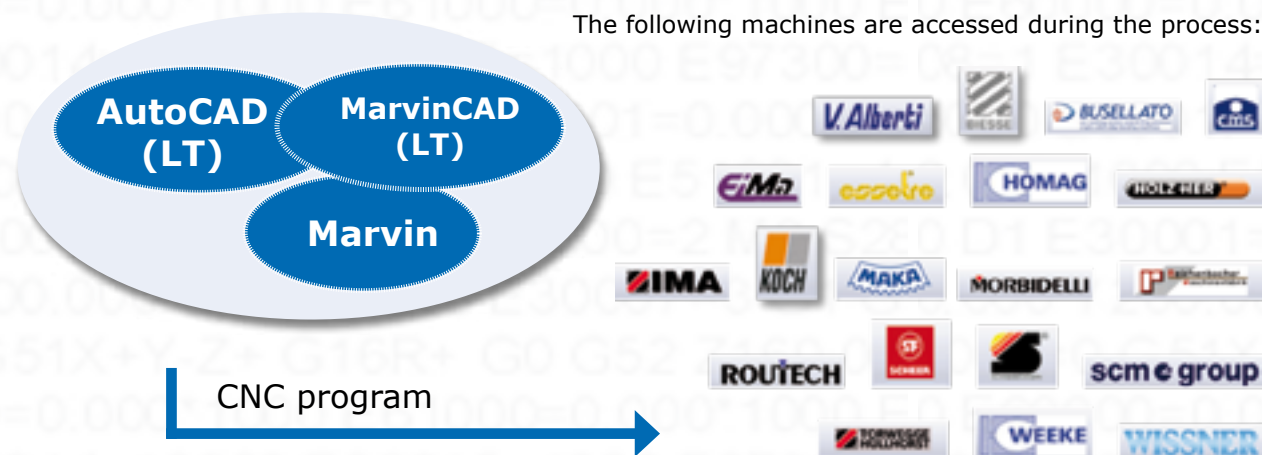
**Extensions:**

- NEW: "Quick-Trace"  
 Picture rectification for digitalisation with faster contour detection (2D). (integrated since version 2015).
- MarvinCAD "Selection"  
 Special extension for dismantling closets from the design program "Hettich Selectionm Professional 2.0". (integrated in Marvin/MarvinCAD(LT) since 2013)

- Your drawing and the CNC program are always equally up-to-date.
- Changes in your drawing are transferred to Marvin and therefore to your CNC-machine at the push of a button.
- Inspection of all depths in the 3D display.

**Here's how it works:**

(Prerequisites: AutoCAD or AutoCAD LT + CNC machining centre)



Your machine is not listed? Give us a challenge!

\*This offer is currently only for Germany.

**... for your success**



**Effective and convenient nesting.  
The perfect nesting solution for YOUR individual production.**

Nesting-Studio® is a combination of the best available nesting algorithm and the convenience of a CAD Line solution.

Nesting is always a significant optimisation factor in the production process. For this reason, we developed Nesting-Studio® especially for the requirements of our customers. It is particularly adaptable and a great help for saving material and reducing time and expenses of CNC machining.

**Areas of application:**

Interior fittings, frame construction, parts production, booth construction, prefabricated house construction, toy manufacturing, etc..



**High flexibility for freeform part production.**

The integration of NC-Studio® provides our customers with an individually optimisable NC program and various optimisation strategies. At the same time, both programs are easily adaptable and optimisable.

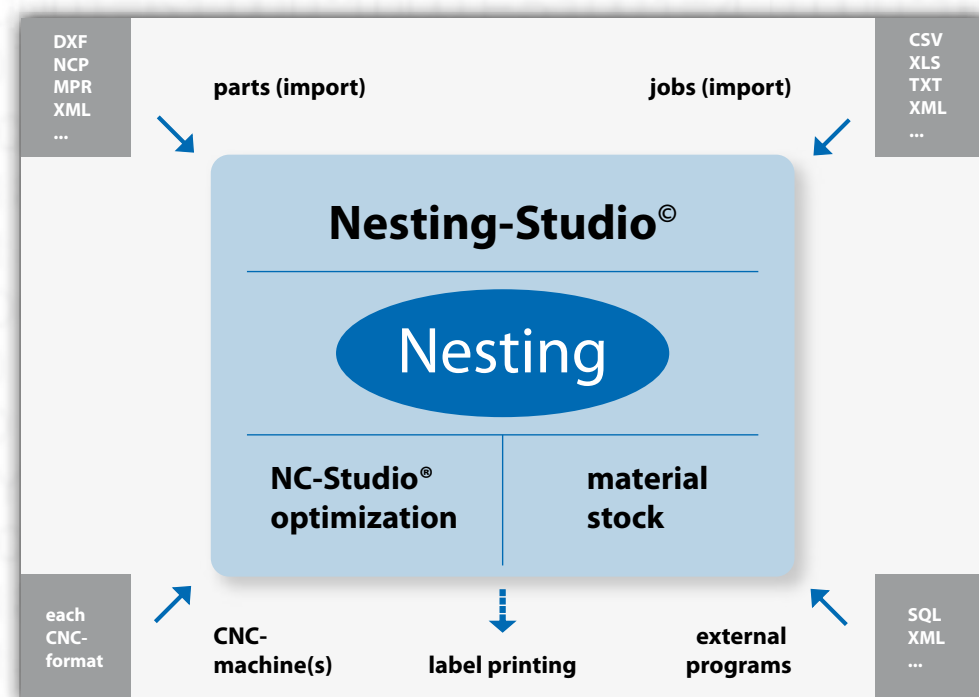
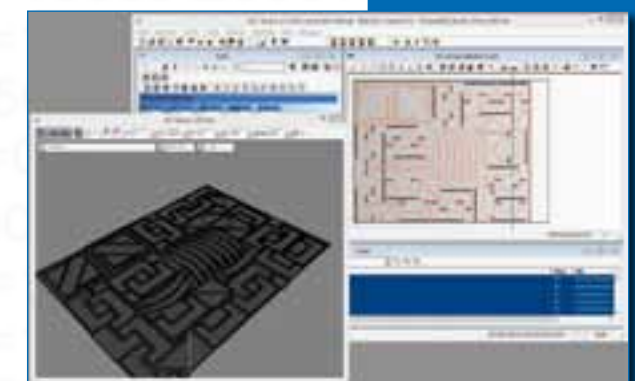
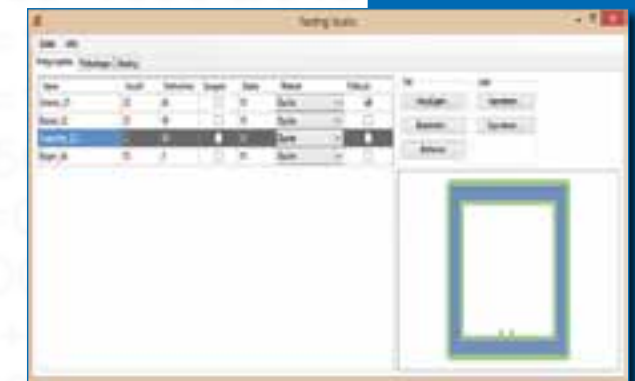
**Advantages:**

- Best available nesting core
- Seamless integration into existing systems
- Simple operation and flexible configuration (setting of the nesting parameters)
- Open in all directions (parts and job import, output on machines, label printing, export to various programs SQL, XML...)
- Adaptable to individual demands through special programming

**New features:**

- Detailed report on nesting results in a PDF format
- Automatic contour detection from milling paths (fault and finished contour)
- Part-in-part nesting: Even better utilisation of the raw plate
- Multi-level optimisation process for more efficient nesting in many application fields.

- All machining types can be executed in one go.
- Less handling – less intermediate storage.
- Finished freeform parts come directly from the raw plate.
- No pre-cutting is required.



... for your success

Join us on the road to **success!**

# CAD LINE

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ONLINE PRESENTATION:

Phone or e-mail us to set a date.

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Submitted by: