



NAIMA 3E Plus[®] Software Update

NIA Annual Convention
March 30, 2022

Agenda

1. Background on 3E Plus[©]
 - ▶ Current software and uses
 - ▶ User survey results
2. 3E Plus[©] Updates
 - ▶ New platform + new features
 - ▶ Demo
3. What's Next

1

3E Plus Background

Who is NAIMA?

- ▶ The North American Insulation Manufacturers Association
- ▶ The association for North American manufacturers of fiber glass, rock wool, and slag wool insulation products
- ▶ Mission to promote energy efficiency and promote safe use of member products

Current software

- ▶ Free software for use in optimizing mechanical insulation levels
- ▶ Downloadable at 3Eplus.org for use on Windows PCs
- ▶ The 3 Es in 3E Plus refer to:
 - ▶ Energy
 - ▶ Environment
 - ▶ Economics

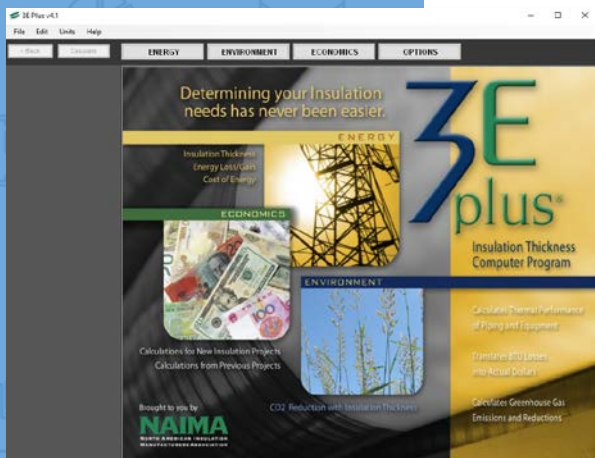
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3E Plus
Background

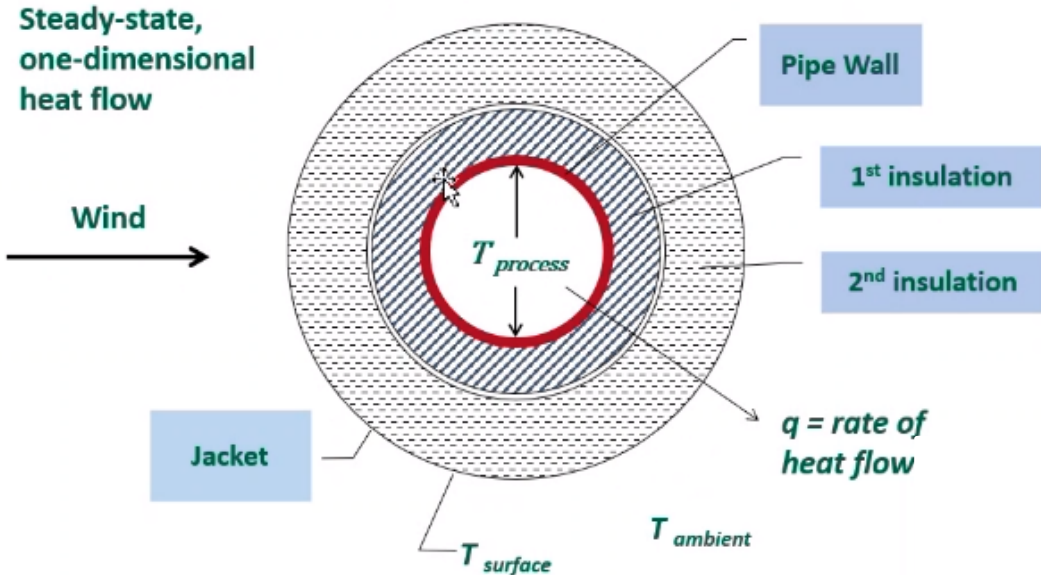
Current software

3E Plus Background

- ▶ 3E Plus can calculate:
 - ▶ Energy use & heat loss/gain
 - ▶ Emissions calculations
 - ▶ Economic thickness
 - ▶ Personnel protection (surface temp.)
 - ▶ Interface temperatures
 - ▶ Condensation control thickness



Current software



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3E Plus
Background

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3E Plus Background

User survey

- ▶ 2020 polling top-requested features
 1. Improved reporting (Excel/report)
 2. Keep current calculation types
 3. Better maintain/share material lists
 4. Create results over range of inputs
 5. Work on more than just Windows PCs

1

3E Plus Background

User survey

- ▶ Polled users on access and over half indicated online/app would be preferable
- ▶ Online version also identified as best path forward to provide requested features

2

3E Plus
Updates

3E Plus[®]

2

3E Plus Updates

What's the same?

- ▶ **Reliable, repeatable results.**
 - ▶ Built on ASTM Standard C680 just like previous versions of 3E Plus to deliver clear unbiased results
- ▶ **Material standards.**
 - ▶ Includes ASTM material standard K-values for all insulation types

2

3E Plus Updates

What's the same?

- ▶ **System applications.**
 - ▶ Applies to vertical and horizontal pipes, tubes, ducts, tanks, and more
- ▶ **Calculation types.**
 - ▶ All previous calculation types included
- ▶ **Unit systems.**
 - ▶ Available in SI and IP unit systems

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3E Plus Updates

What's the same?

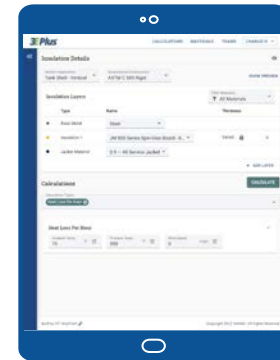
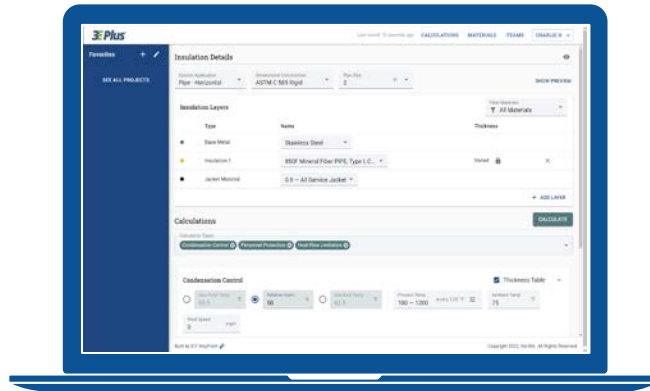
- ▶ **Multiple languages.**
 - ▶ Web-based and able to be actively translated via browser
- ▶ **Unit systems.**
 - ▶ Switchable between both SI and IP unit systems

2

3E Plus Updates

What's new?

- ▶ **Available on all devices.**
 - ▶ Built for use on desktops/laptop computers
 - ▶ Able to be accessed on tablets & phones



2

3E Plus Updates

What's new?

- ▶ **Save calculations and share projects.**
 - ▶ New structure of projects with multiple scenarios under each
 - ▶ Share projects with others via link

2

3E Plus Updates

What's new?

- ▶ **Calculates results over range of inputs.**
 - ▶ Create insulation thickness tables for a variety of design goals—more than just personnel protection
 - ▶ Create database of results under a variety of conditions

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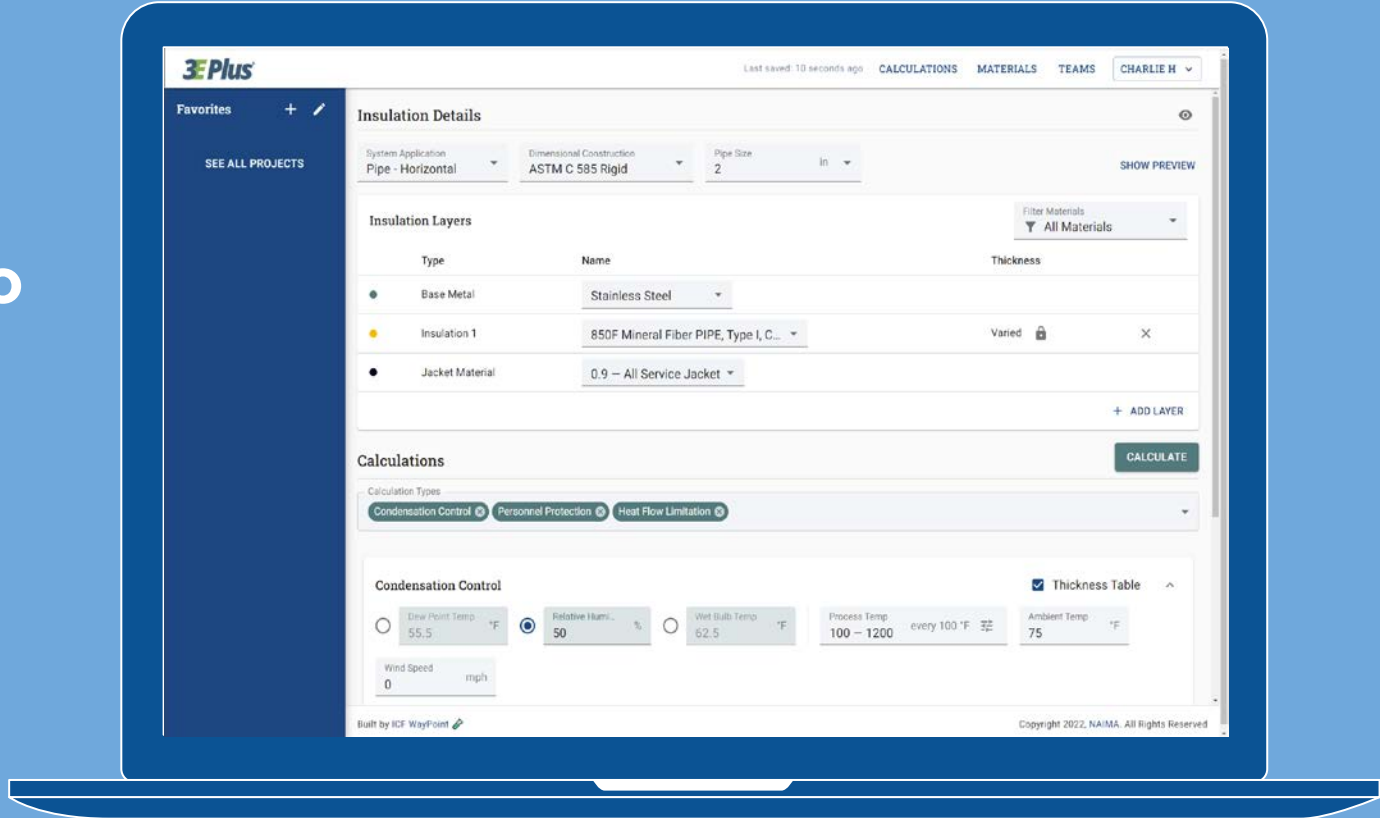
3E Plus Updates

What's new?

- ▶ **Material improvements.**
 - ▶ No need to re-enter product info on a new computer/device
 - ▶ Share material data with your team
 - ▶ NAIMA member products automatically added/updated

2

Live Demo



3

3E Plus What's next

What's next?

- ▶ Currently available at 3Eplus.org
- ▶ New platform allows for rollout of new features/options in future
- ▶ Users can submit ideas for new features for consideration

3

3E Plus What's next

Transition timeline

- ▶ 3E Plus Version 4.1 still available at www.pipeinsulation.org
- ▶ No planned updates to desktop version moving forward

3

3E Plus What's next

Insulation Energy Appraisal Program (IEAP)

- ▶ NIA is planning to update the certification program to align with the updated 3E Plus
- ▶ Upcoming Virtual Course Dates:
 - ▶ June 8–9, 2022
 - ▶ November 8–9, 2022





Thank You!

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