Automated Miter Geometry Generator

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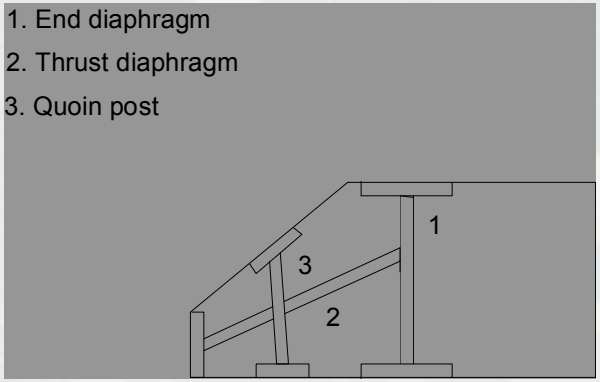
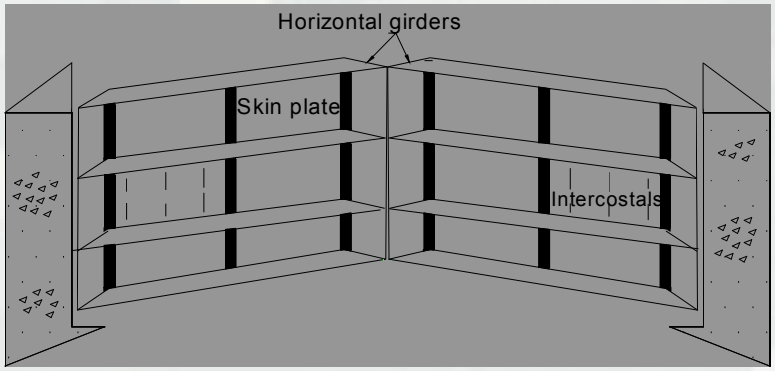
- Geometry Creation from Blueprints
  - 6 - 12 Months (Labor Intensive)
- ► 3D CAD Models
  - 3 - 6 Months
  - Geometry Problems
  - Fixing requires expertise and time

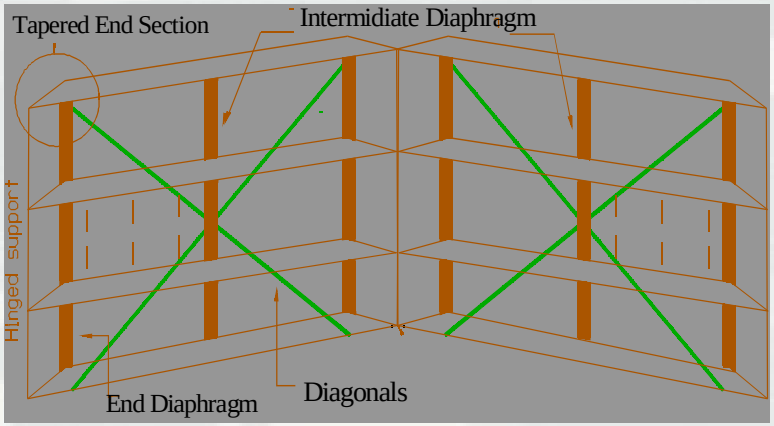
Automated Miter Geometry Generator

- Objectives
  - Simple input parameters
  - Follow existing C-Miter input file
  - Reduce pre-processing time from months to days
  - Output 3D Geometry
  - Wide range of output file formats
  - Seamless import into FEM Software
  - Abaqus, LSDyna, Ansys





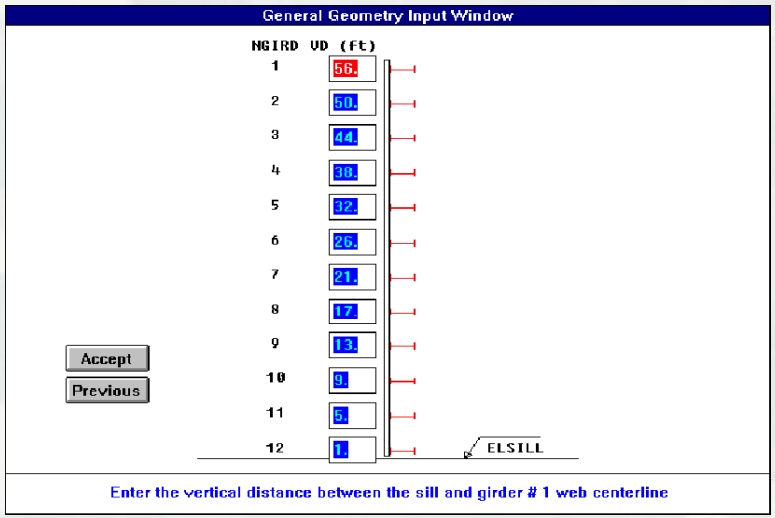
- Basic Structural Elements

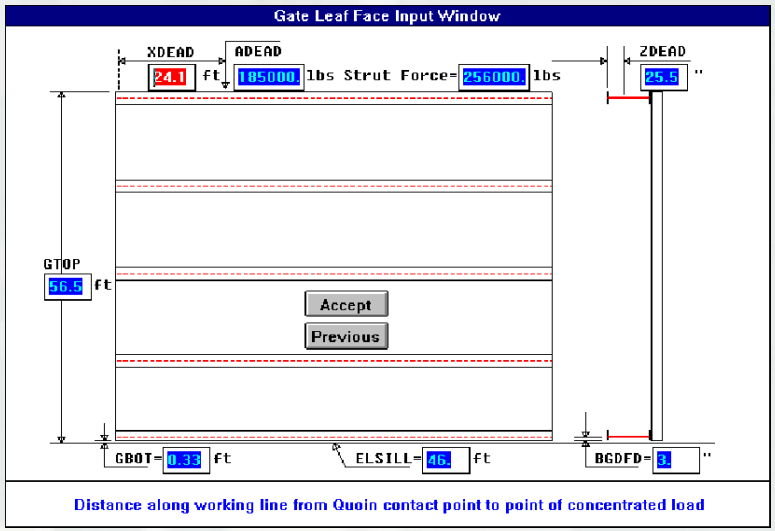


- Detailed Structural Elements

Automated Miter Geometry Generator

- Input Parameters
  - CMITER Program – “Computer Program for the Design and Investigation of Horizontally Framed Miter Gates,” TR-ITL-95-1, August 1995





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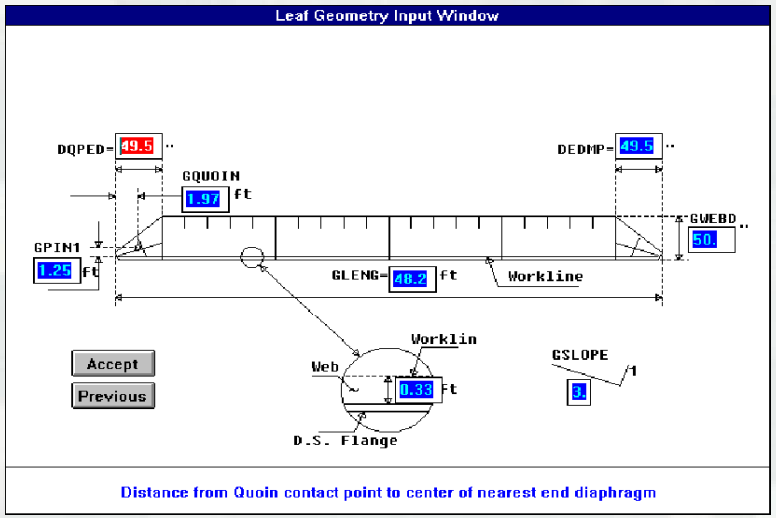

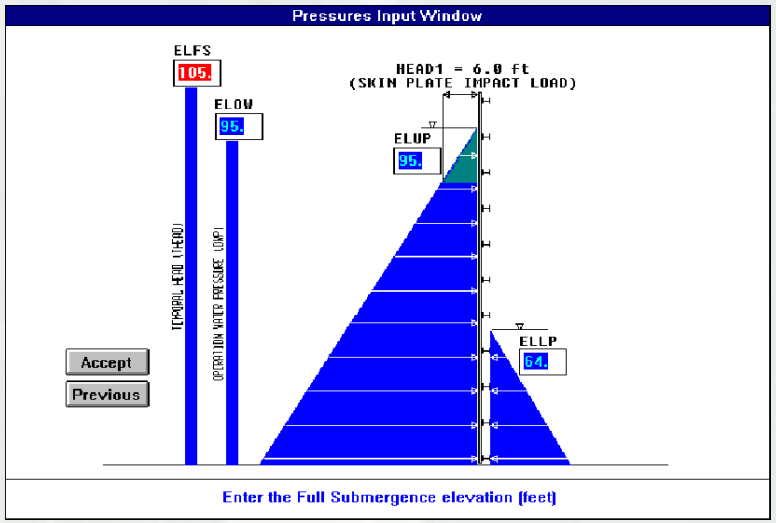

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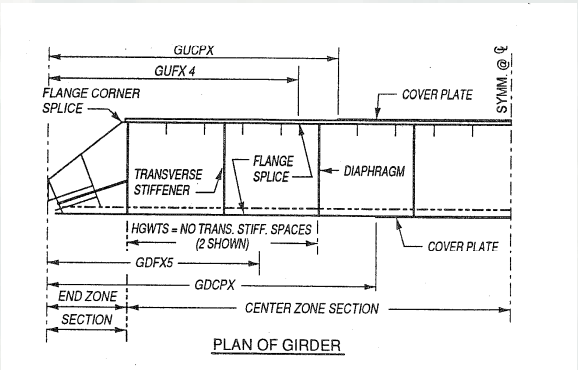

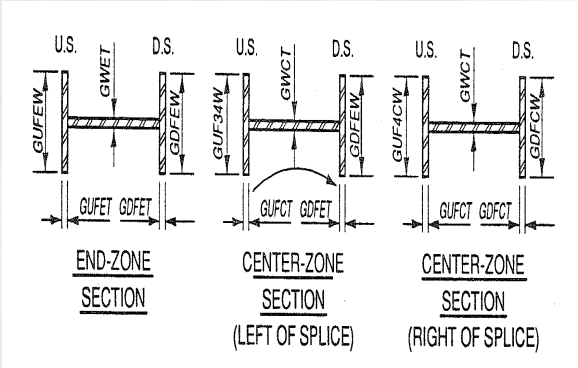

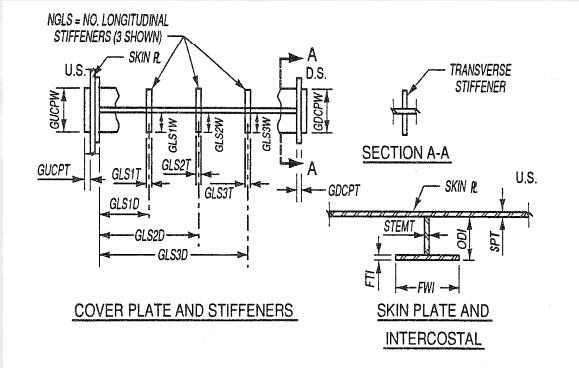

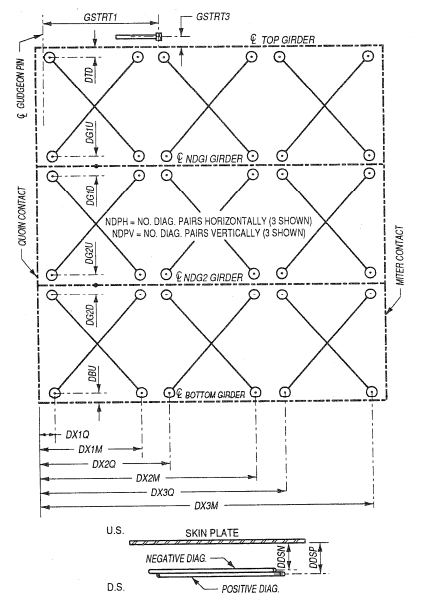

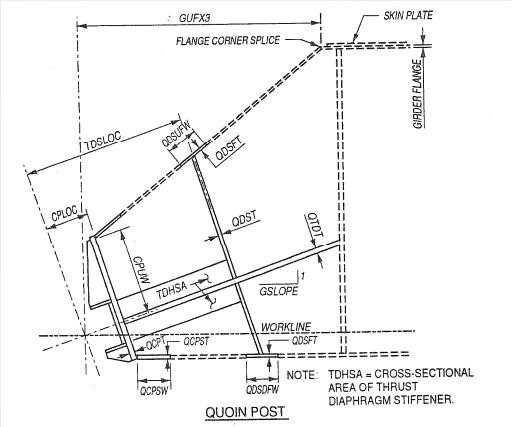

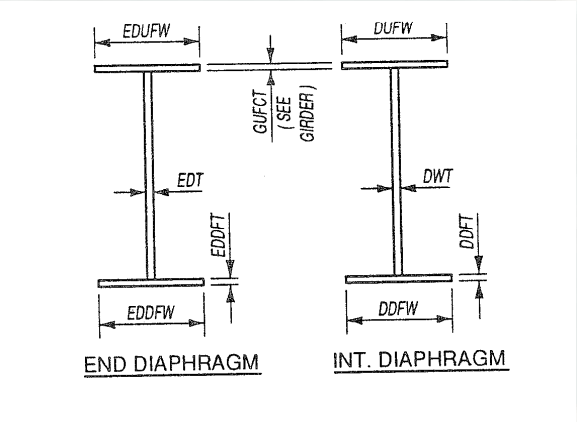

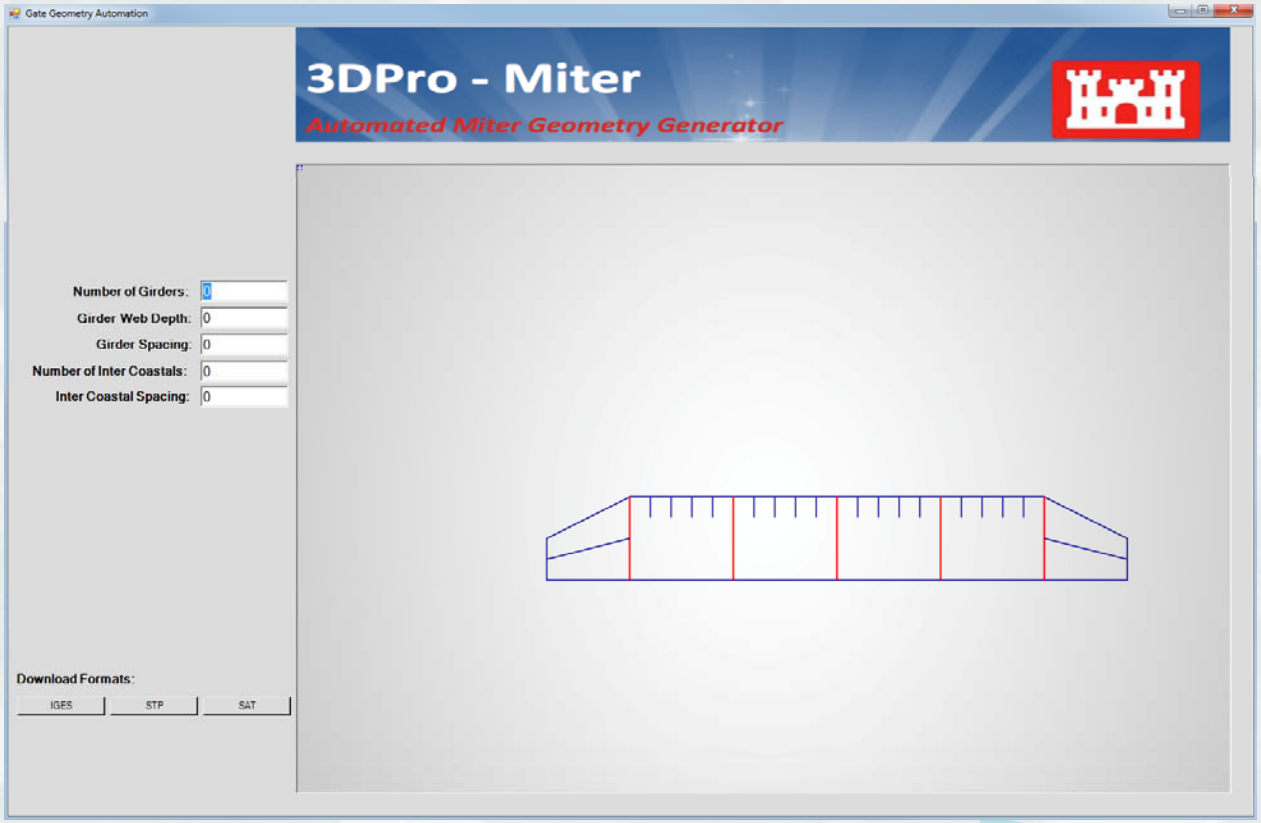

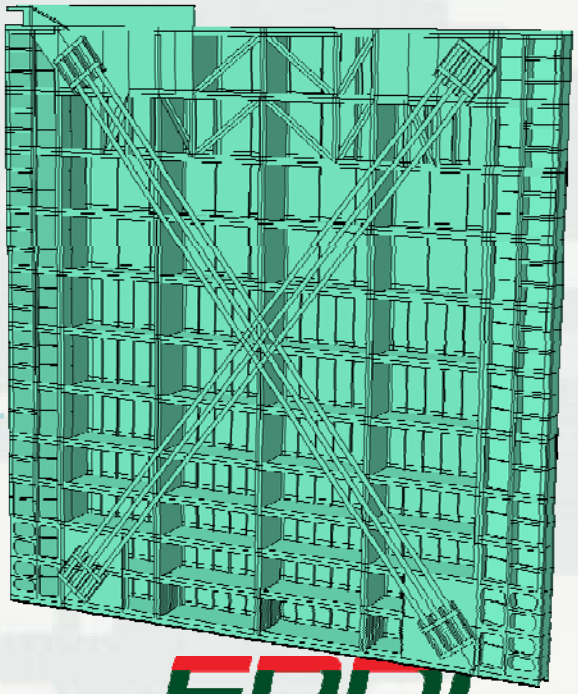

Seamless import in FEM Softwares
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