

# MRP-227 Revision 1

## *Updated Westinghouse Figures*

Westinghouse NSSS  
Combustion Engineering NSSS


2/2015

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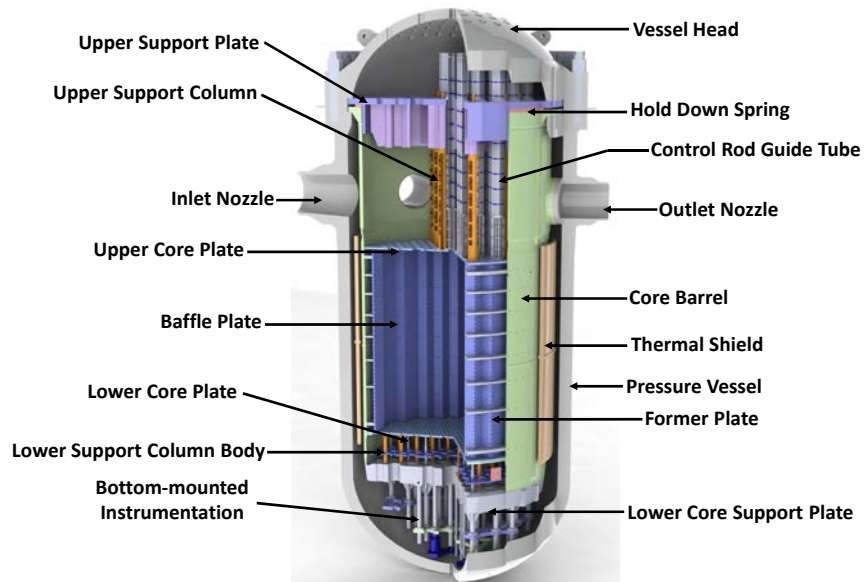
# Westinghouse NSSS Reactor Internals Component Figures

2

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## Overview of Westinghouse NSSS Internals (Figure 1)



3

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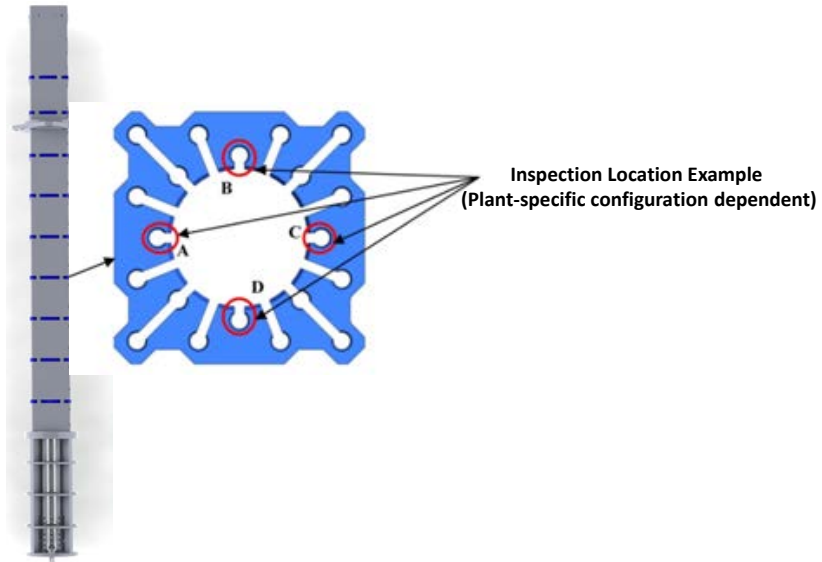
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4

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### Control Rod Guide Tube Assembly Guide plates (cards) (Figure 2)

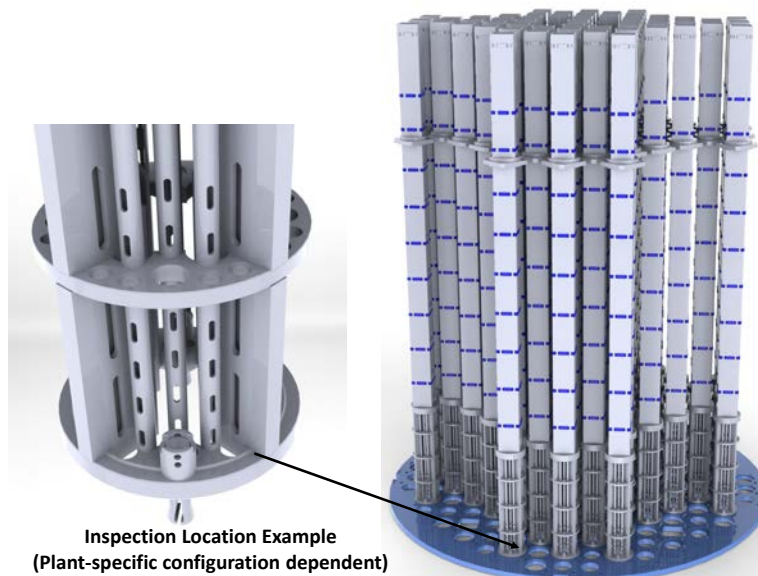


5

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### Control Rod Guide Tube Assembly Lower Flange Welds (Figure 3)

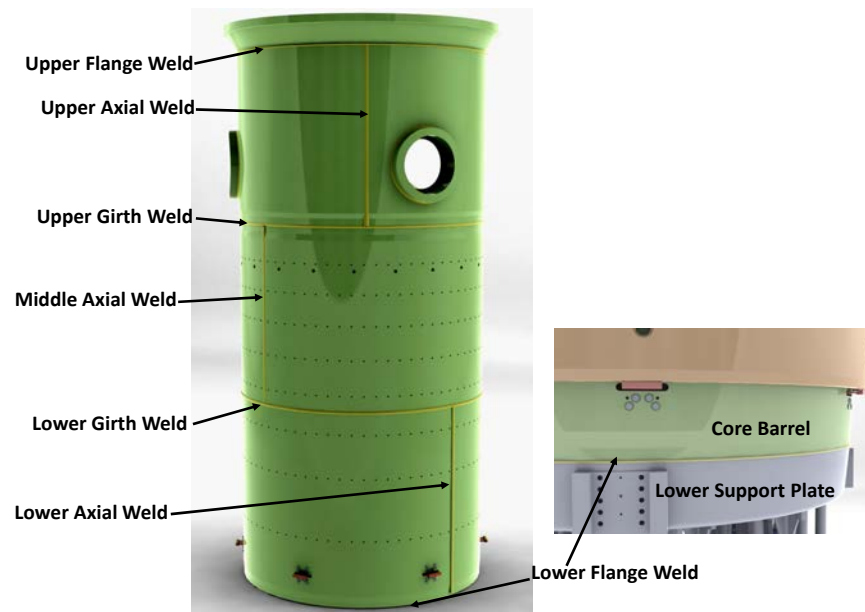


6

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### Core Barrel Assembly Core Barrel Welds (Figure 4)

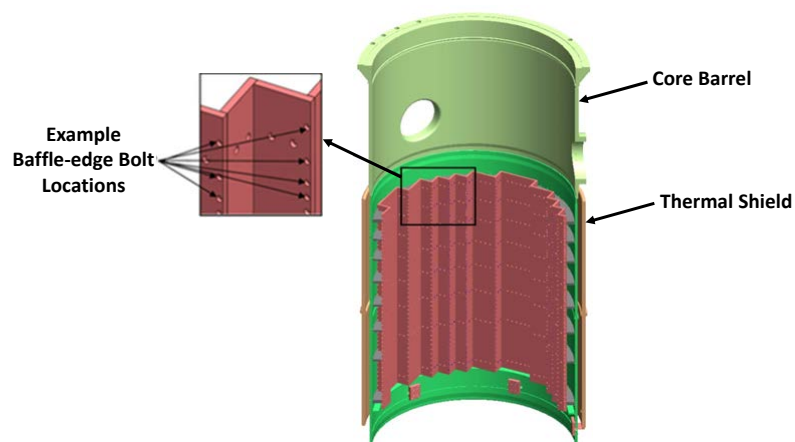


7

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### Baffle-Former Assembly Baffle-edge bolts (Figure 5)

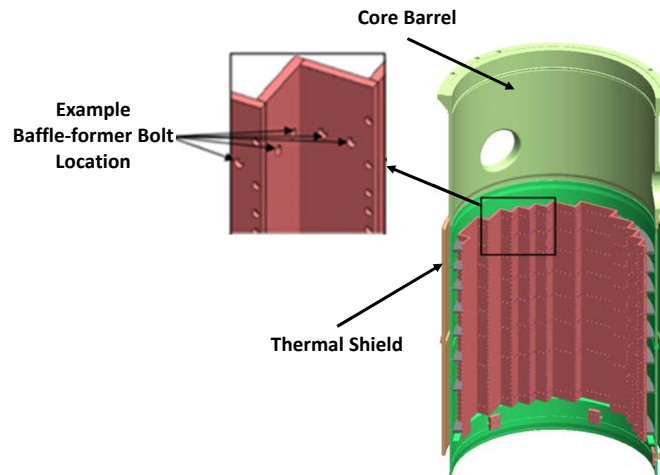


8

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### Baffle-Former Assembly Baffle-former bolts (Figure 6)

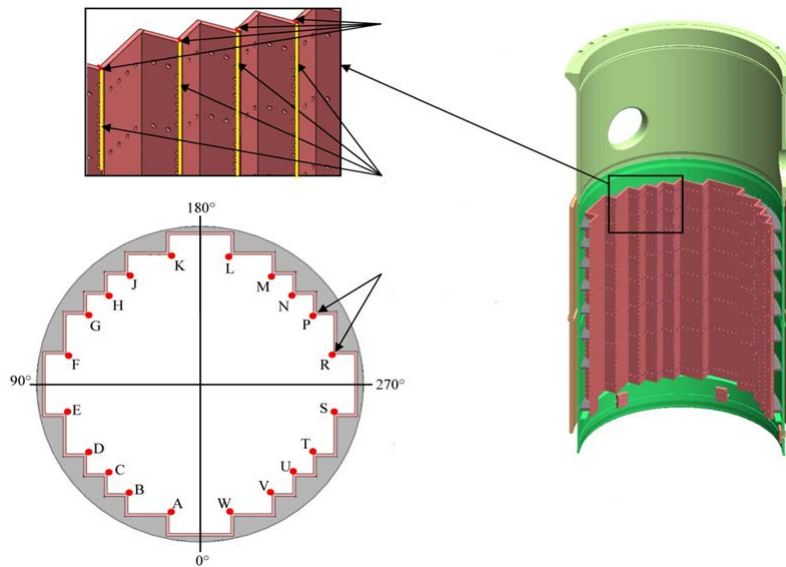


9

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### Baffle-Former Assembly Assembly (Figure 7)

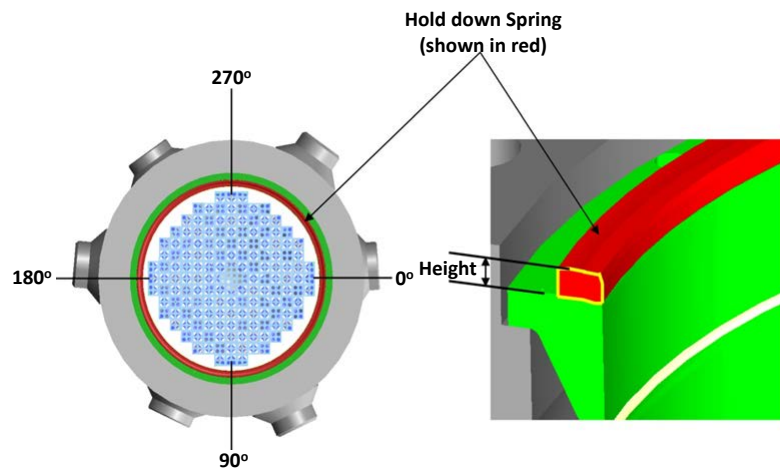


10

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### Alignment and Interfacing Components Internals Hold Down Spring (Figure 8)

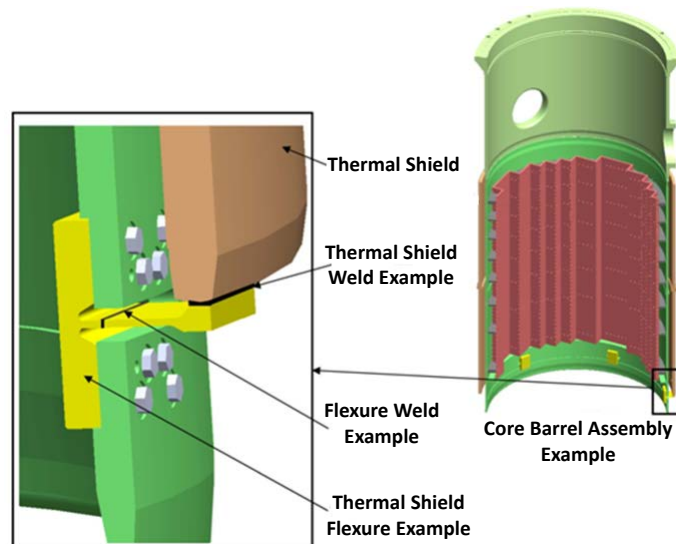


11

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### Thermal Shield Assembly Thermal Shield Flexures (Figure 9)



12

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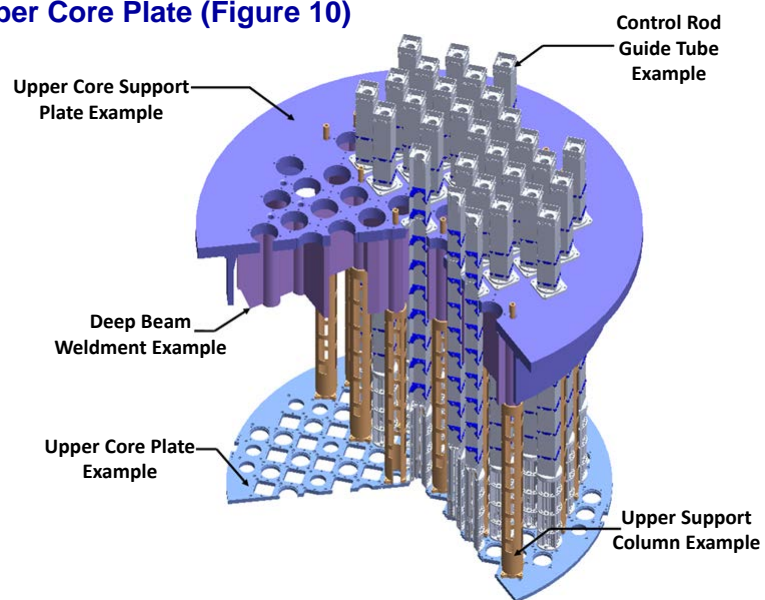
## Expansion

13

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### Upper Internals Assembly Upper Core Plate (Figure 10)

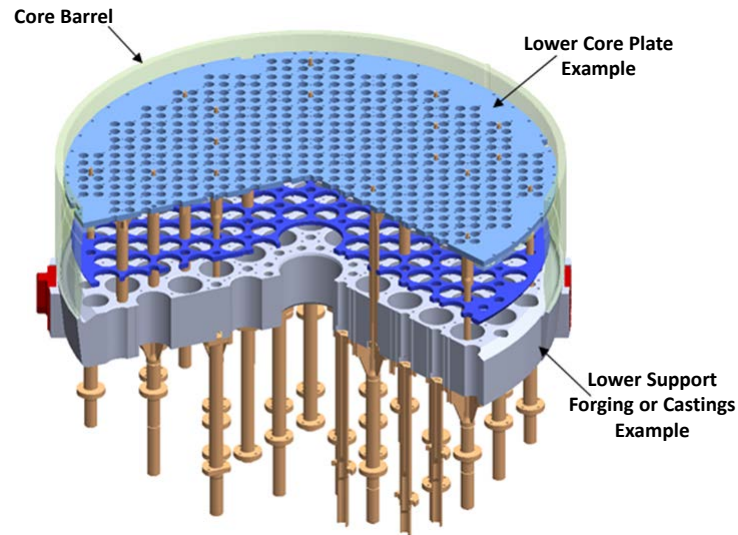


14

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### Lower Internals Assembly Lower Support Forging or Castings (Figure 11)

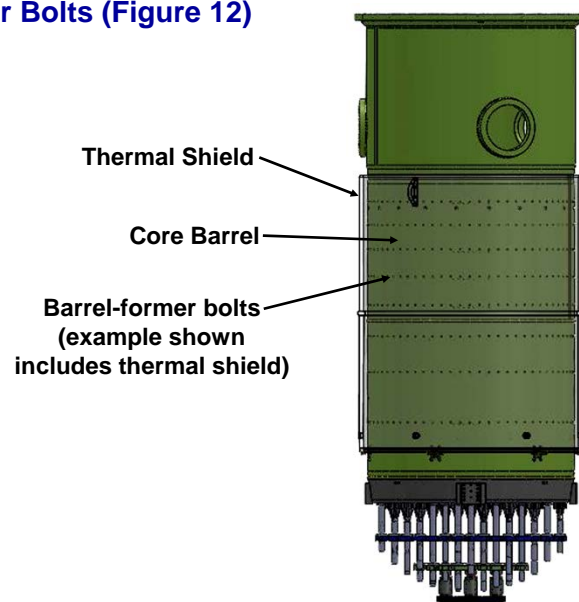


15

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### Core Barrel Assembly Barrel-former Bolts (Figure 12)



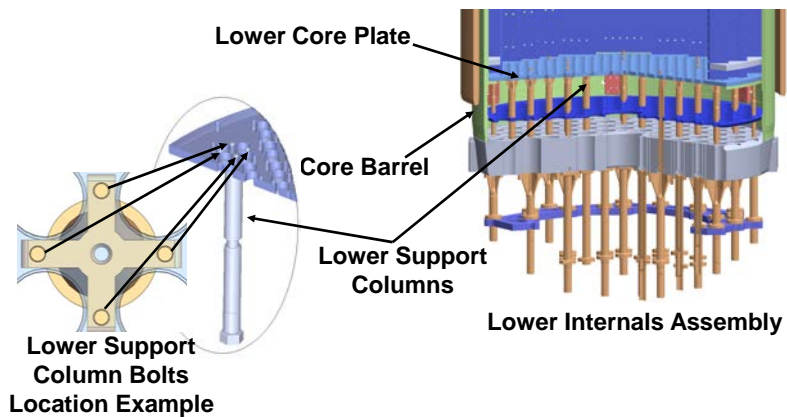
16

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### Lower Support Assembly Lower Support Column Bolts (Figure 13)

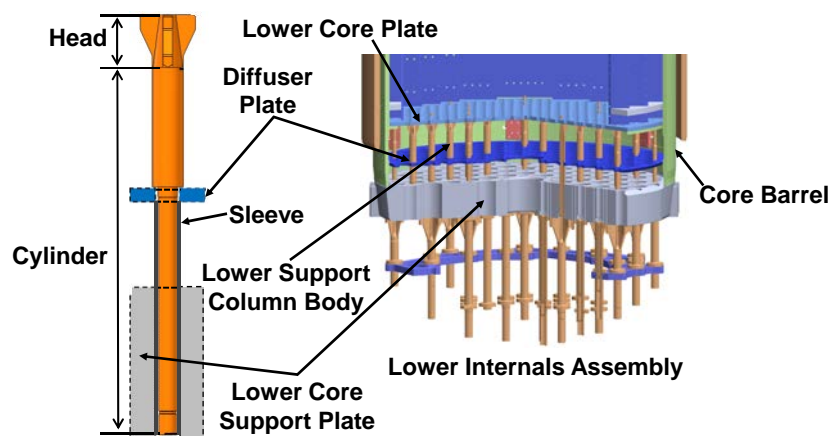


17

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### Lower Support Assembly Lower Support Column Bodies (Cast/Non-cast) (Figure 14)

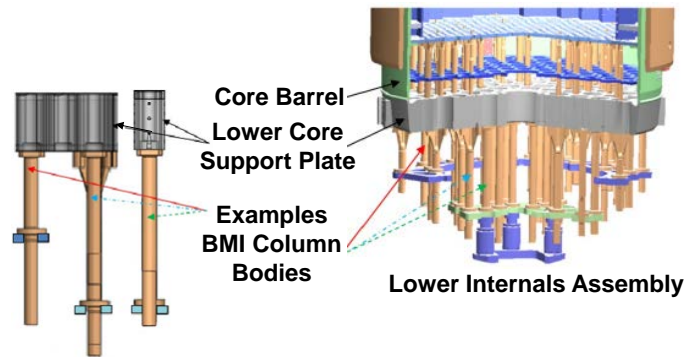


18

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### Lower Support Assembly Bottom-mounted Instrumentation (BMI) Column Bodies (Figure 15)



19

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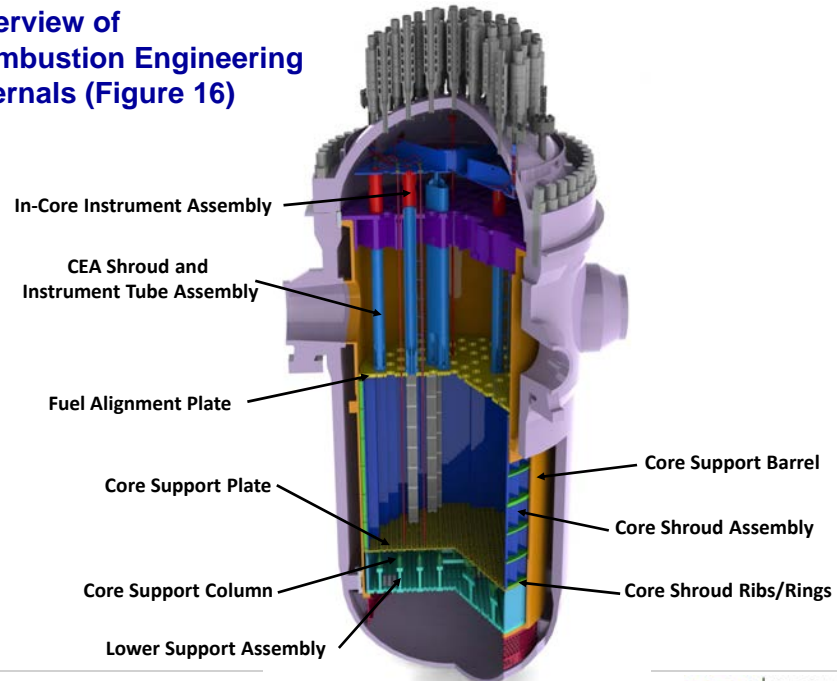
## Combustion Engineering NSSS Reactor Internals Component Figures

20

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## Overview of Combustion Engineering Internals (Figure 16)



21

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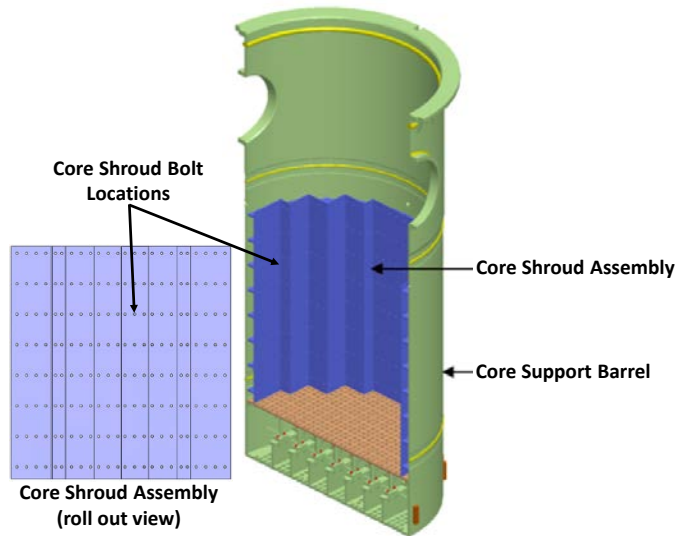
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22

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### Core Shroud Assembly (Bolted) Core shroud bolts (Figure 17)

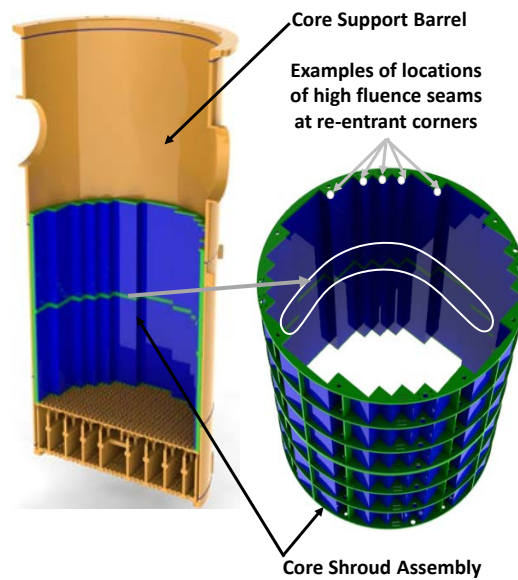


23

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### Core Shroud Assembly (Welded) Assembly and Core shroud plate-former plate weld (Figure 18)

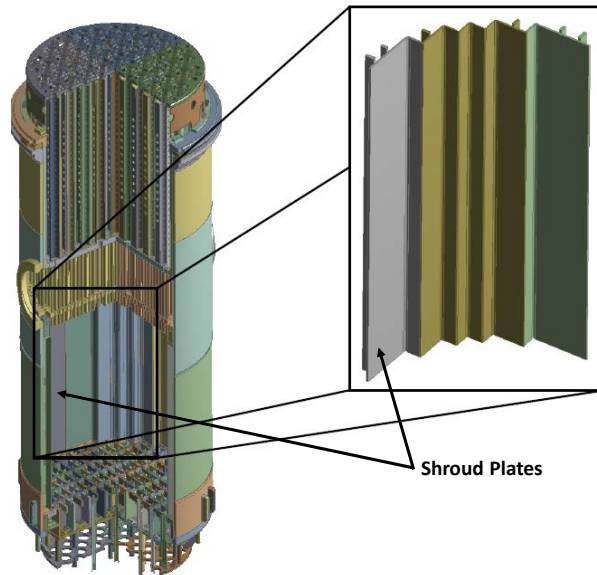


24

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### Core Shroud Assembly (Welded) Shroud plates (Figure 19)

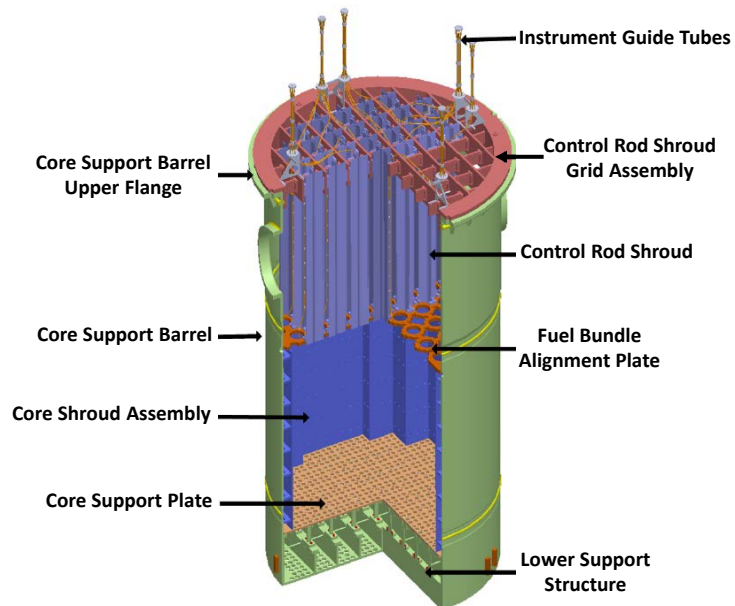


25

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### Core Shroud Assembly (Bolted) Assembly (Figure 20)

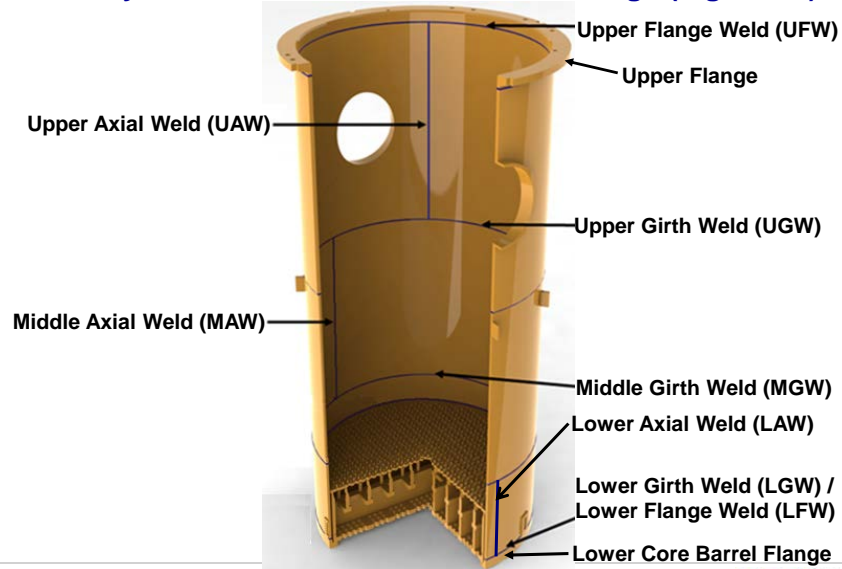


26

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**Core Support Barrel Assembly – Welds, Upper cylinder (including welds), Upper core barrel flange, Core barrel assembly axial welds, Lower core barrel flange (Figure 21)**

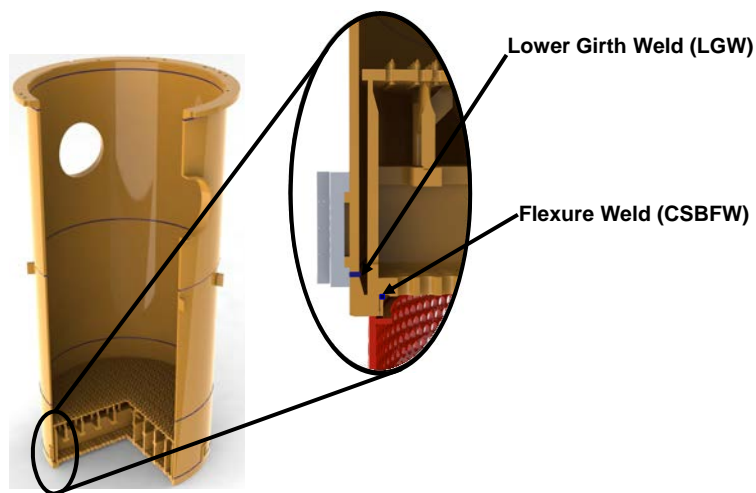


27

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**Core Support Barrel Assembly CSB Flexure Weld (CSBFW) (Figure 22)**

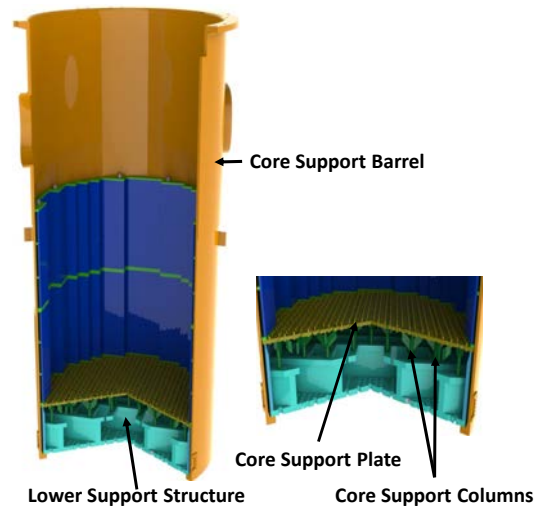


28

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**Lower Support Structure: Core support plate,  
Core support column welds, Core support beam (Figure 23)**

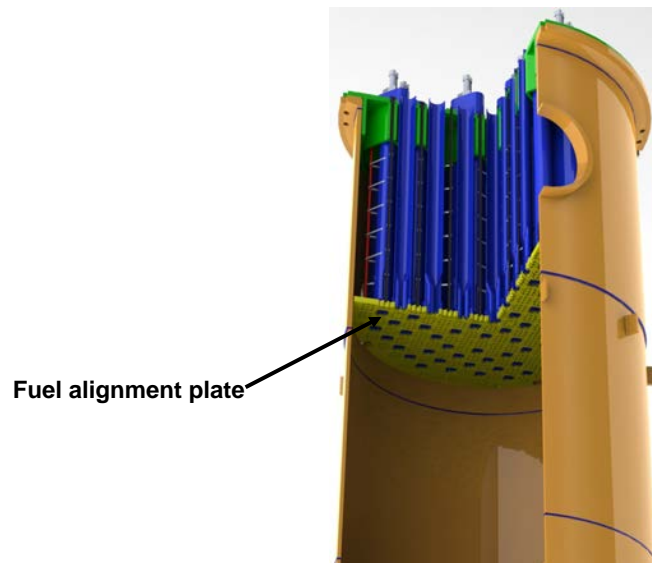


29

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**Upper Internals Assembly  
Fuel alignment plate (Figure 24)**

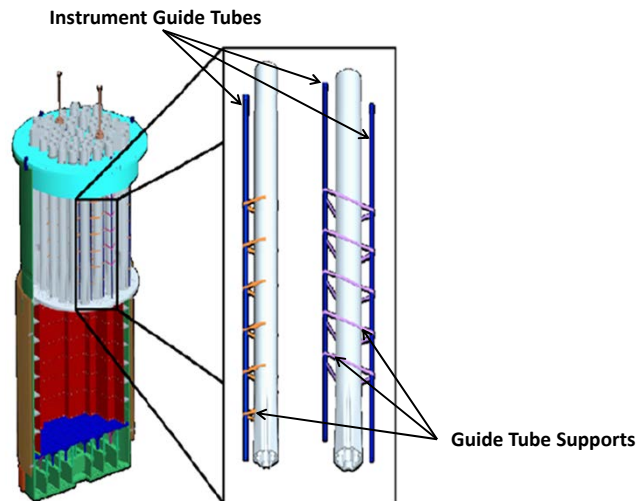


30

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### Control Element Assembly Instrument guide tubes (Figure 25)

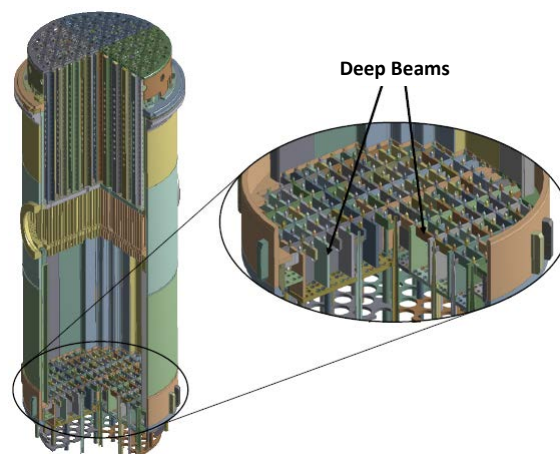


31

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### Lower Support Structure Deep beams (Figure 26)



32

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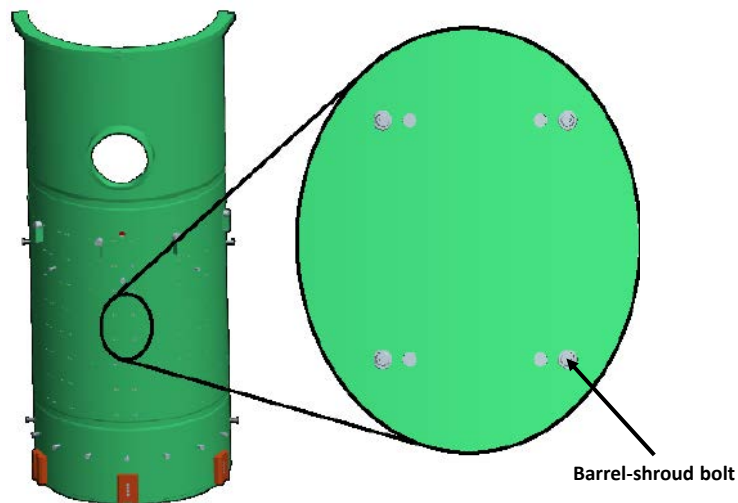
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33

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### Core Shroud Assembly (Bolted) Barrel-shroud bolts (Figure 27)

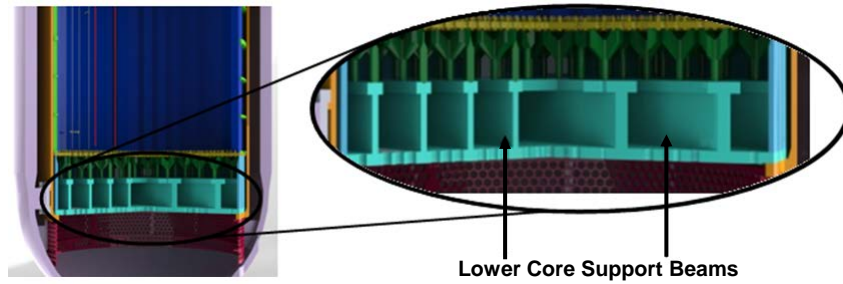


34

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### Lower Support Structure Lower core support beams (Figure 28)

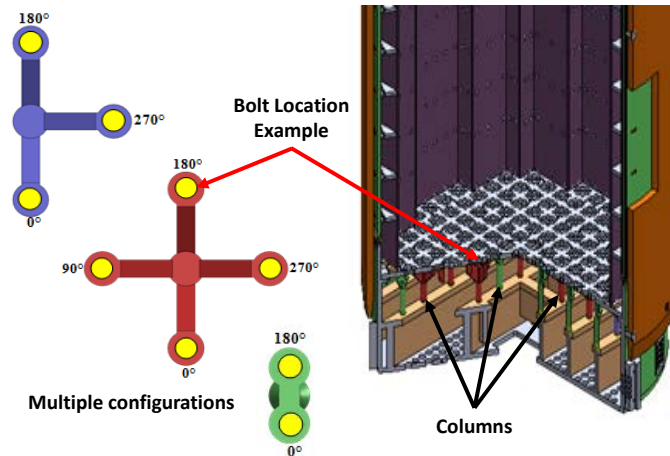


35

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### Core Shroud Assembly (Bolted) Core support column bolts (Figure 29)

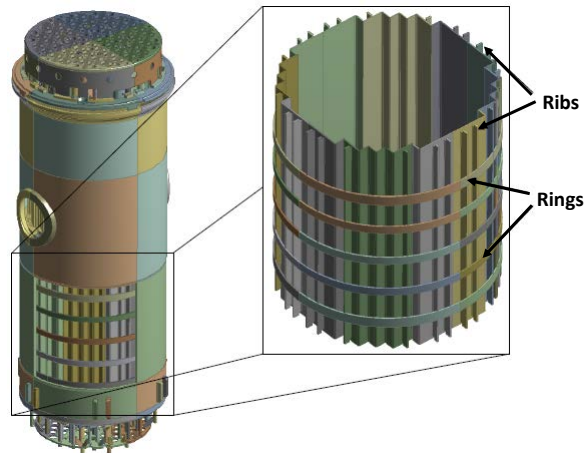


36

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**Core Shroud Assembly (Welded)  
Remaining axial welds, Ribs and rings (Figure 30)**



37

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38

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