

Frame geometries

Stability verification of frames with web tapered members and slender sections

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1. Frame 1.2

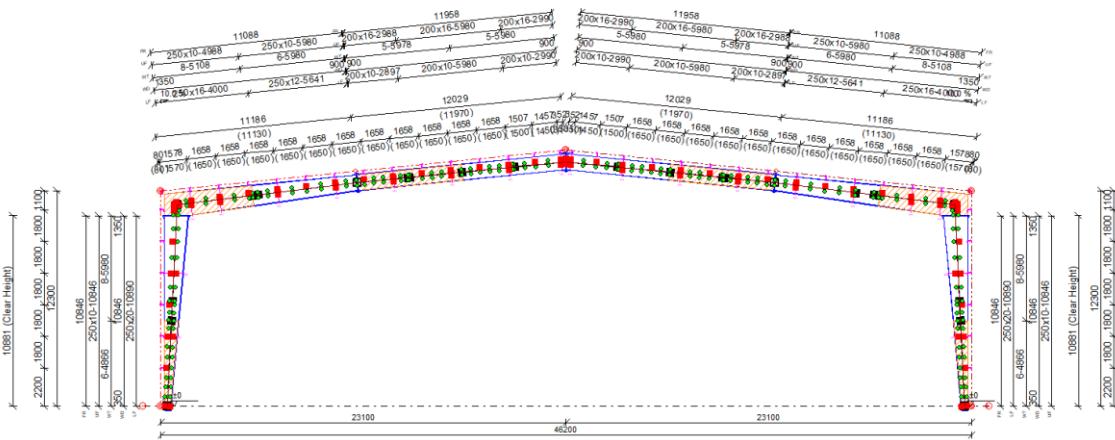


Figure 1 – Frame geometry 1.2.

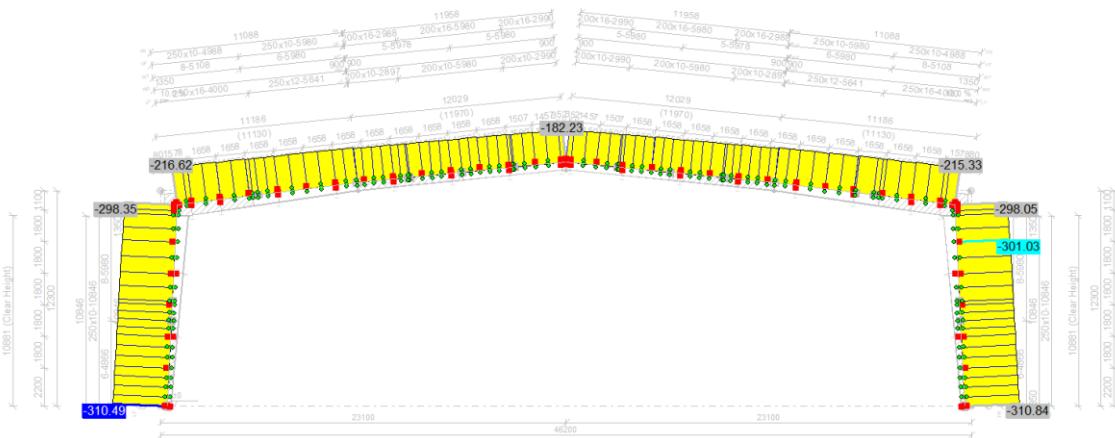


Figure 2 – Axial load for load case 1.

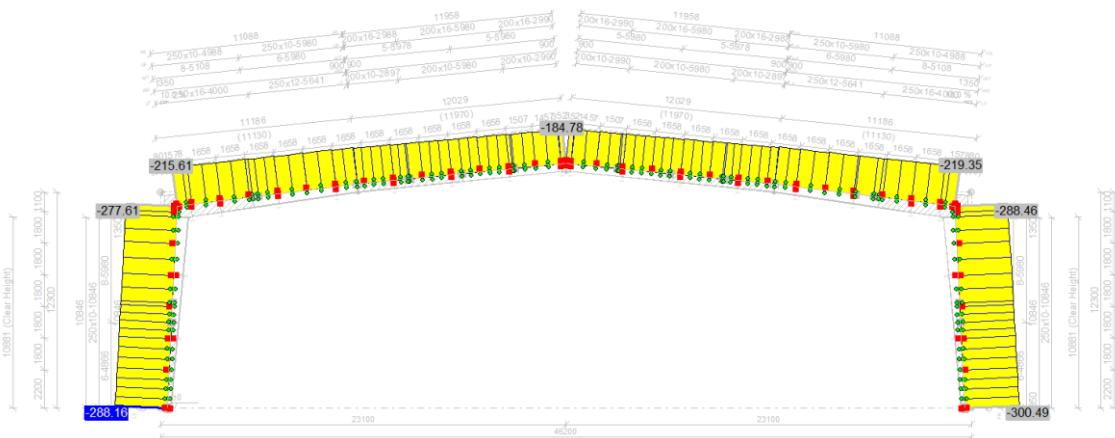


Figure 3 – Axial load for load case 2.

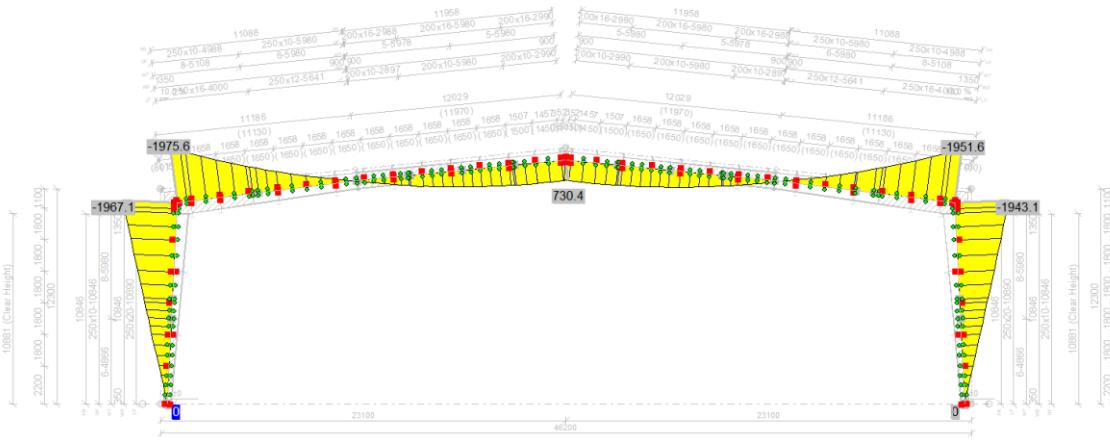


Figure 4 – Bending moment for load case 1.

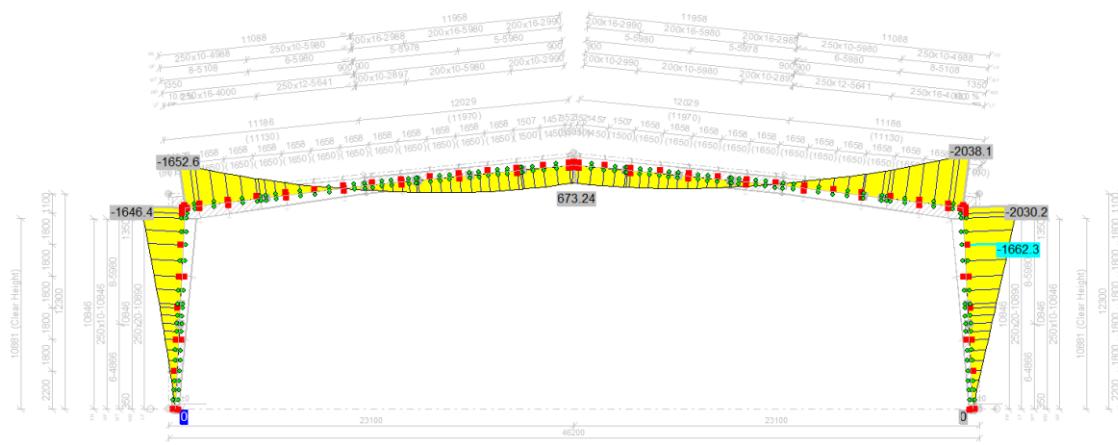


Figure 5 – Bending moment for load case 2.

2. Frame 1.4

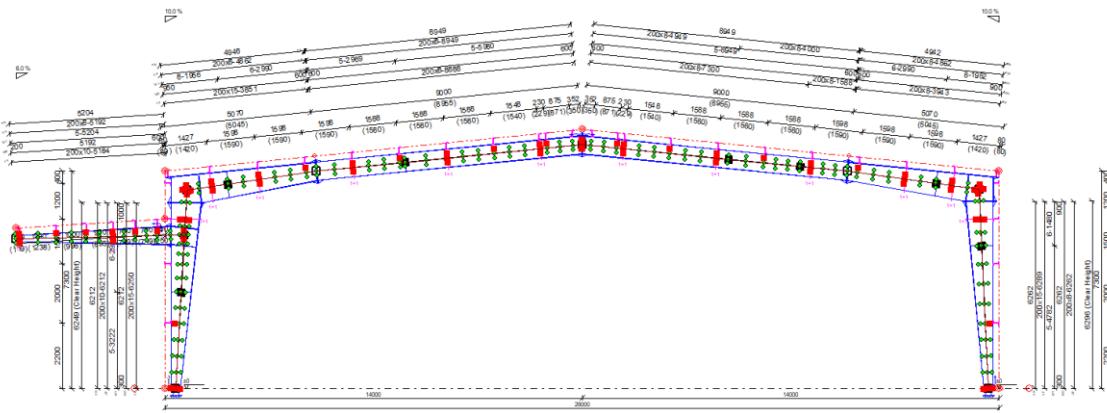


Figure 6 – Frame geometry 1.4.

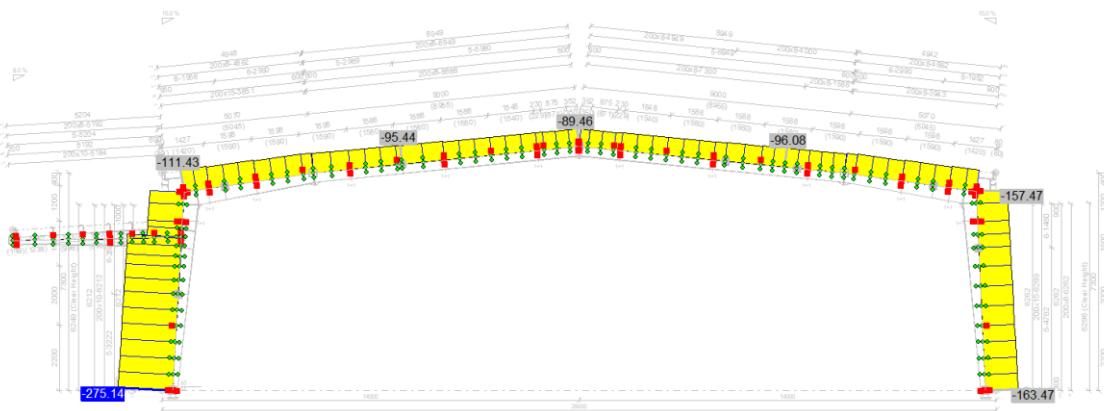


Figure 7 – Axial load for load case 1.

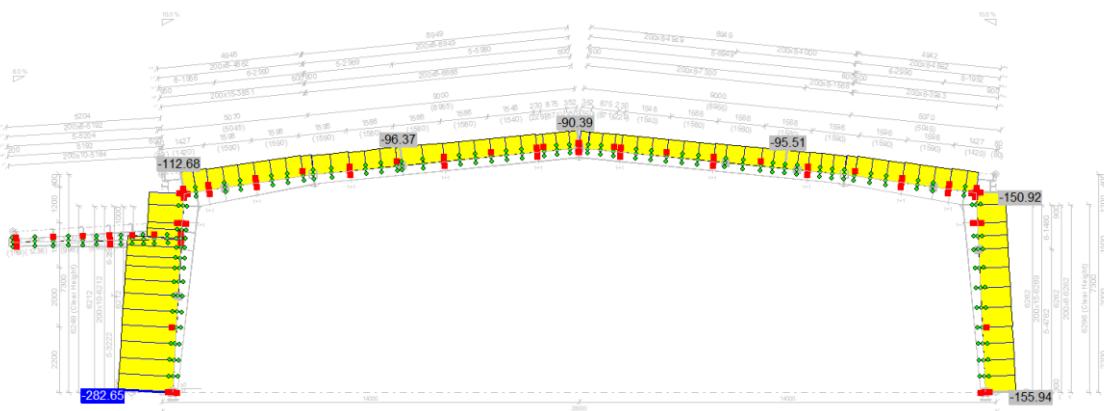


Figure 8 – Axial load for load case 2.

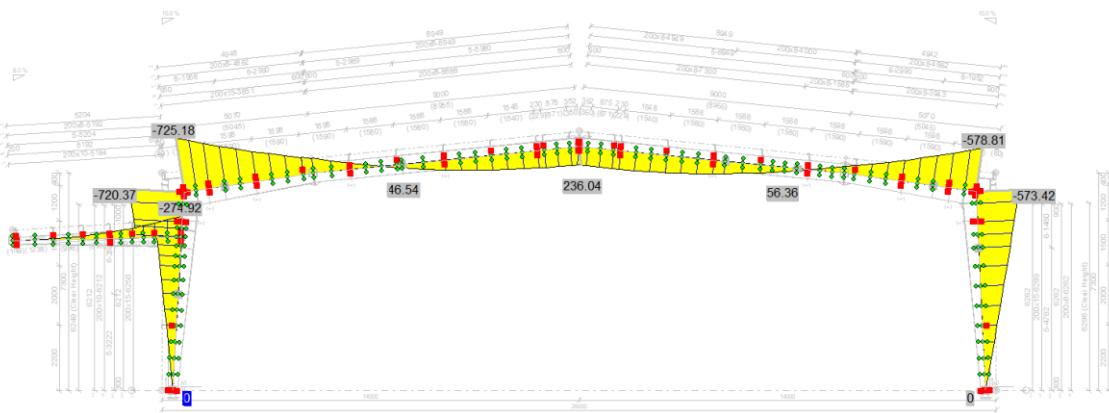


Figure 9 – Bending moment for load case 1.

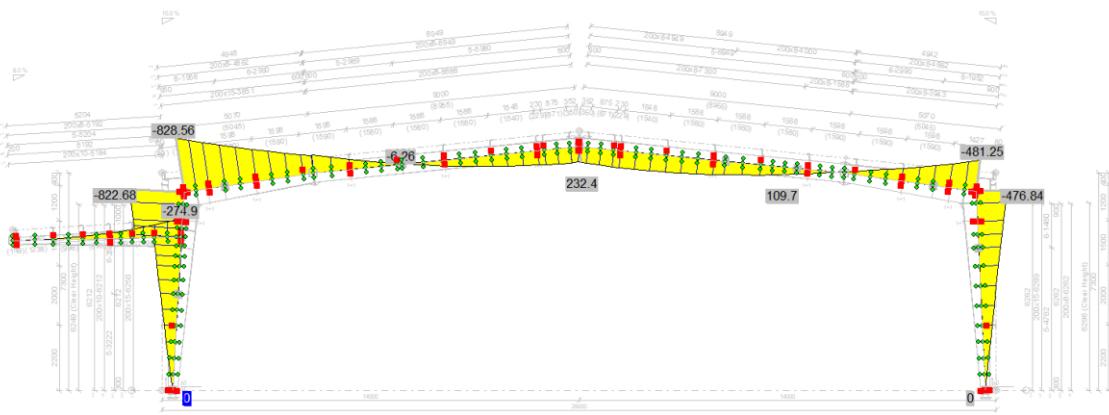


Figure 10 – Bending moment for load case 2.

3. Frame 1.5

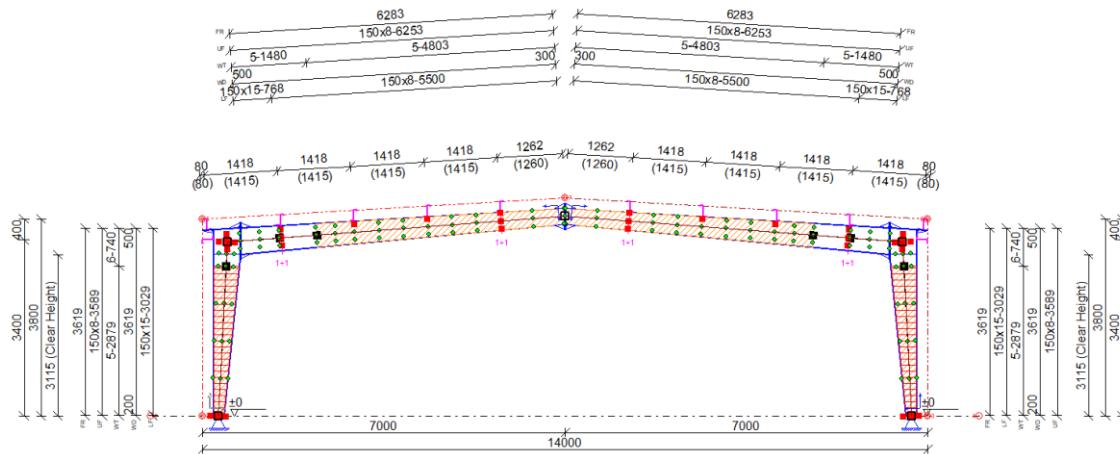


Figure 11 – Frame geometry 1.5.

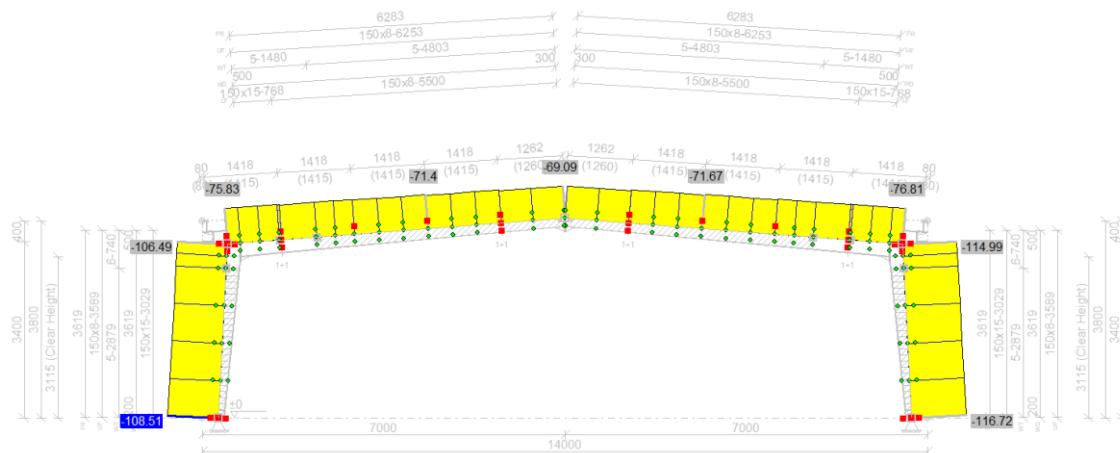


Figure 12 – Axial load for load case 1.

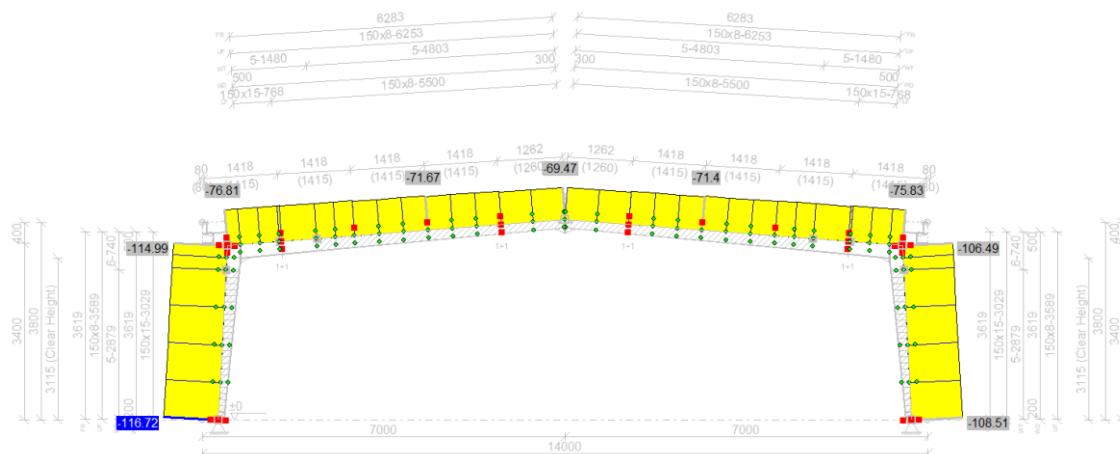


Figure 13 – Axial load for load case 2.

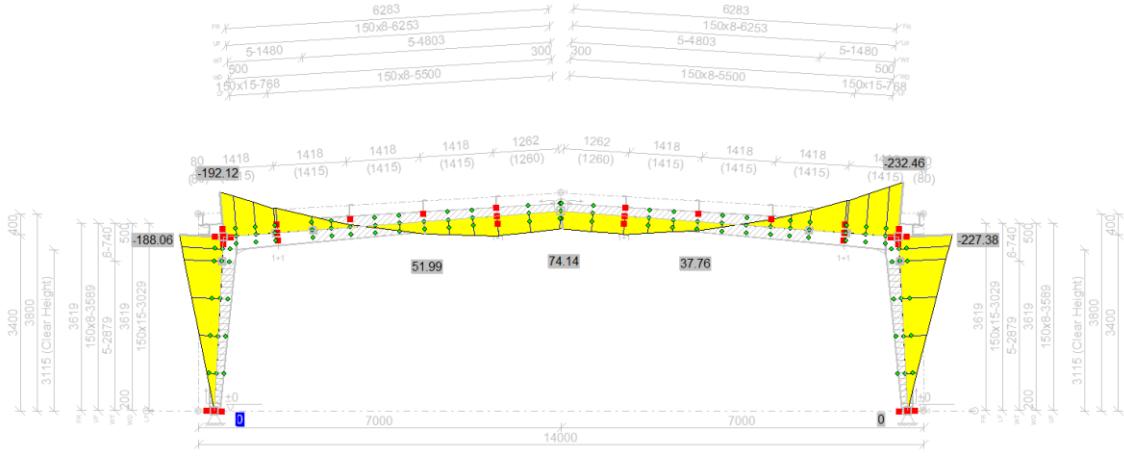


Figure 14 – Bending moment for load case 1.

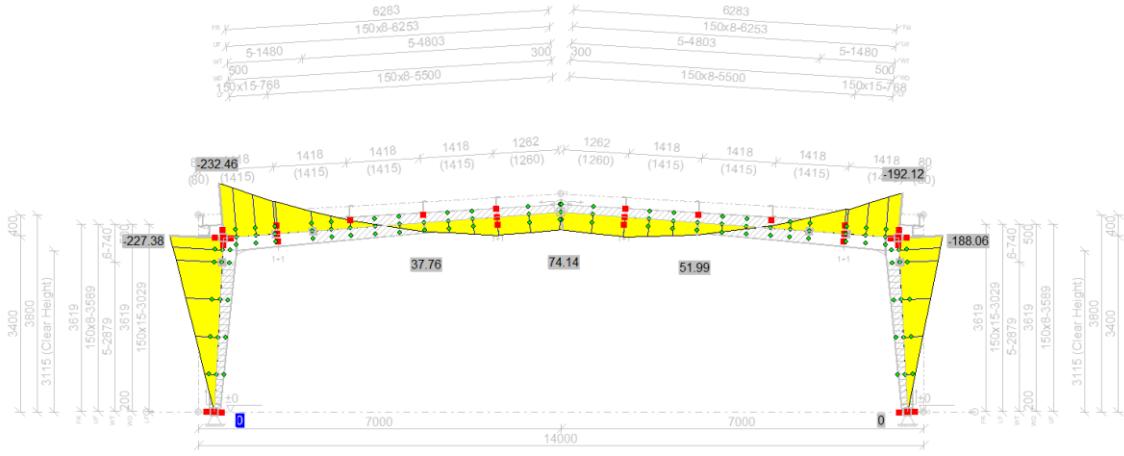


Figure 15 – Bending moment for load case 2.

4. Frame 2.1

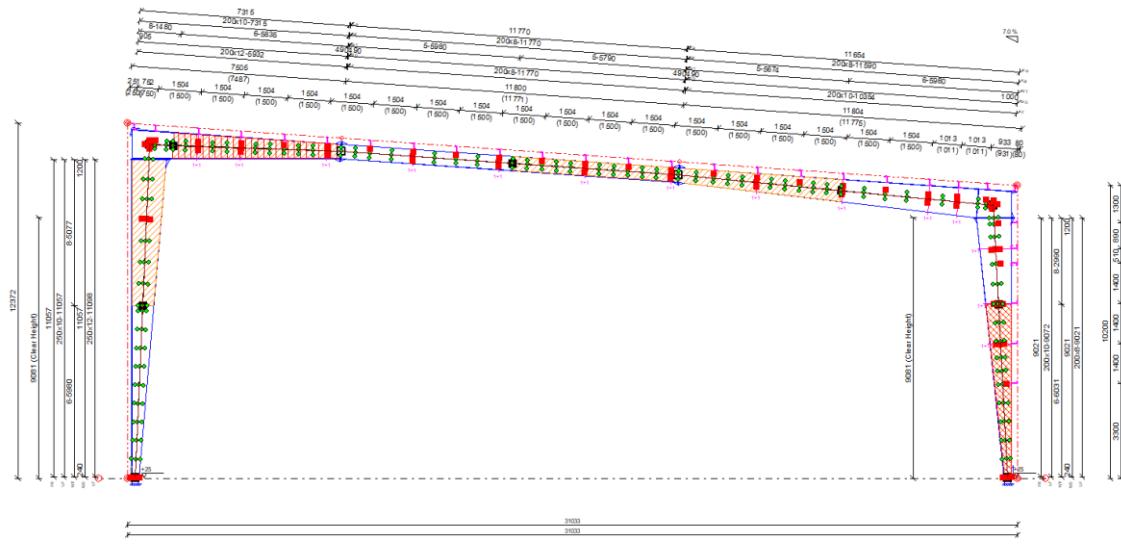


Figure 16 – Frame geometry 2.1.

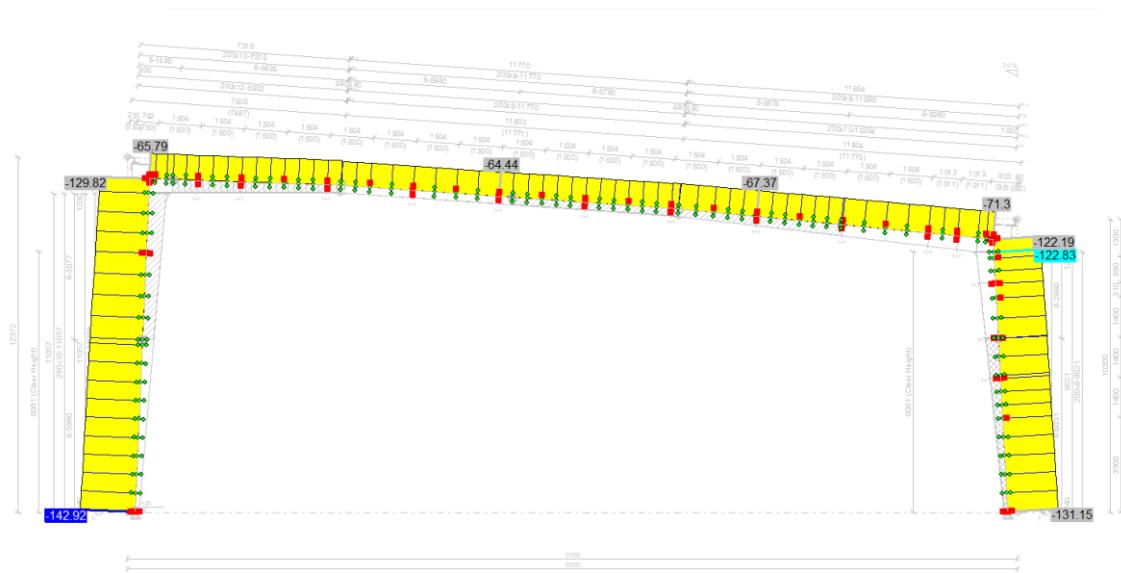


Figure 17 – Axial load for load case 1.

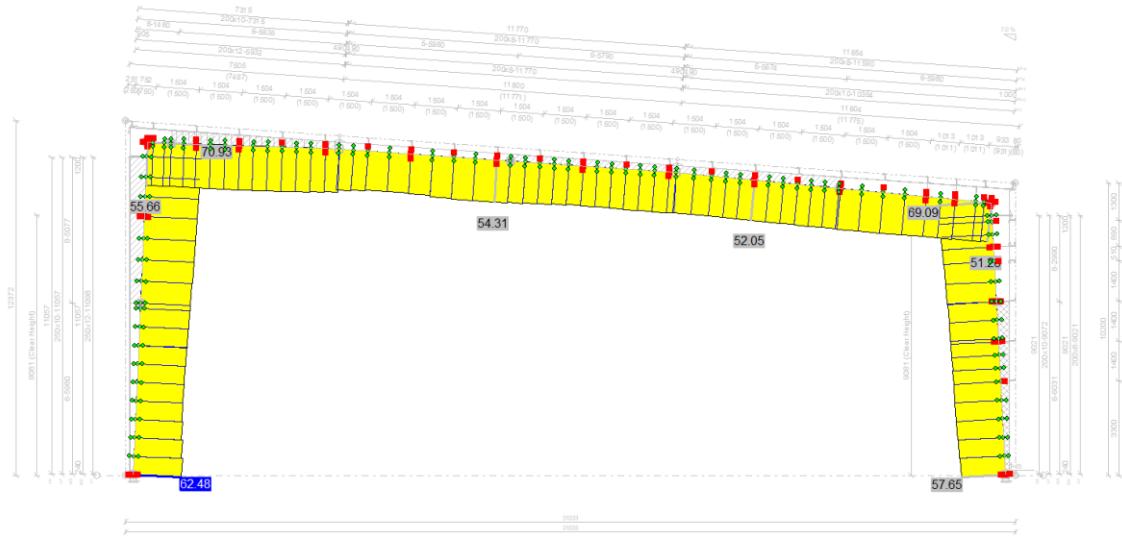


Figure 18 – Axial load for load case 2.

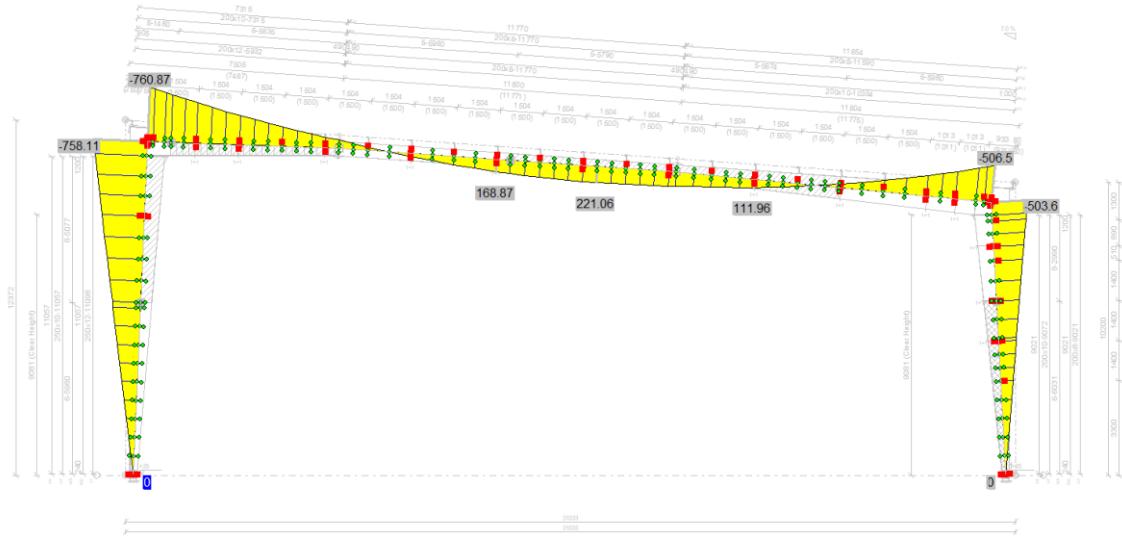


Figure 19 – Bending moment for load case 1.

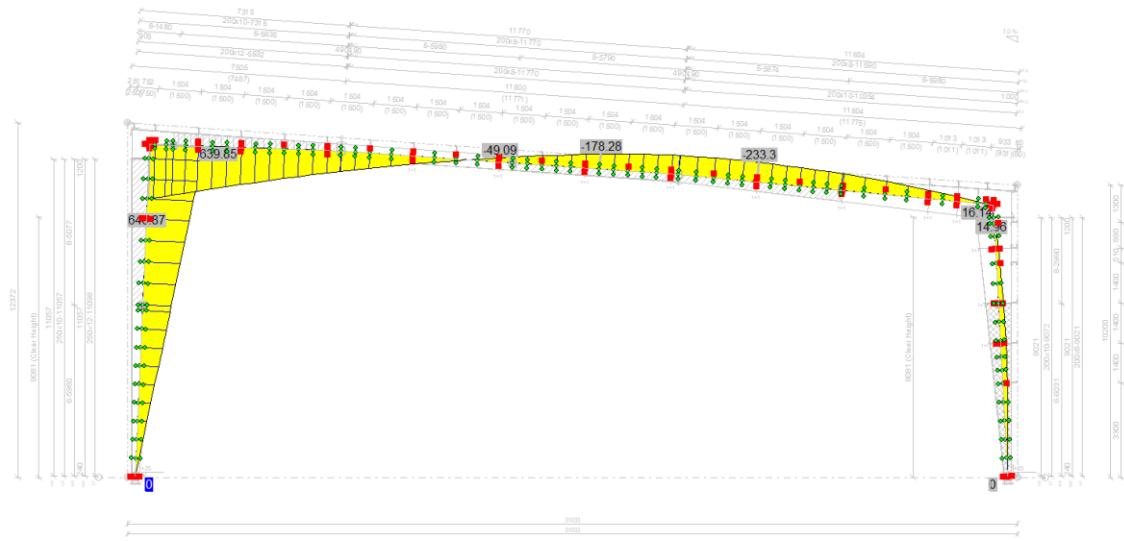


Figure 20 – Bending moment for load case 2.

5. Frame 2.2

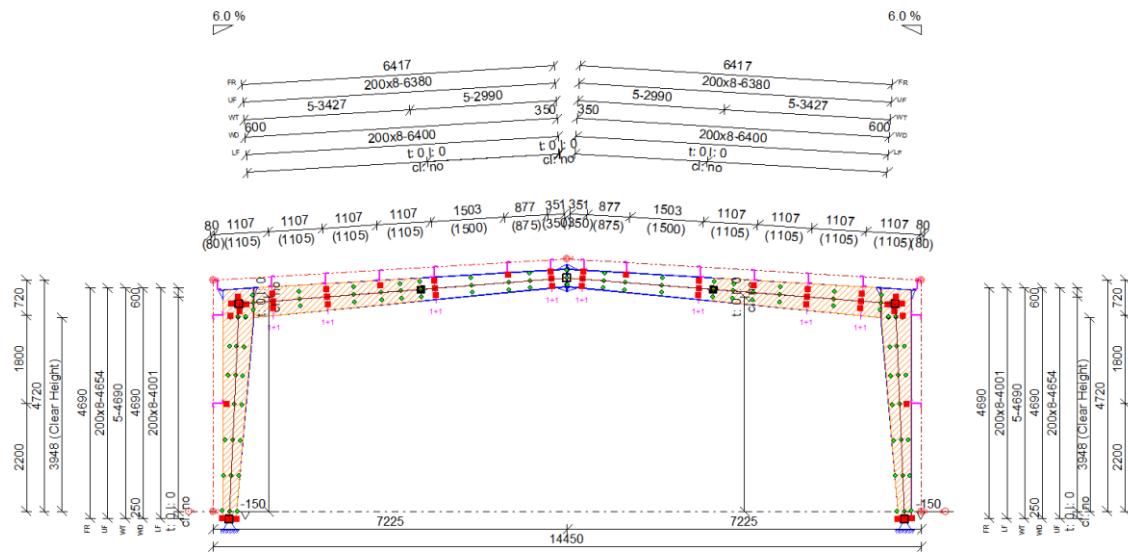


Figure 21 – Frame geometry 2.2.

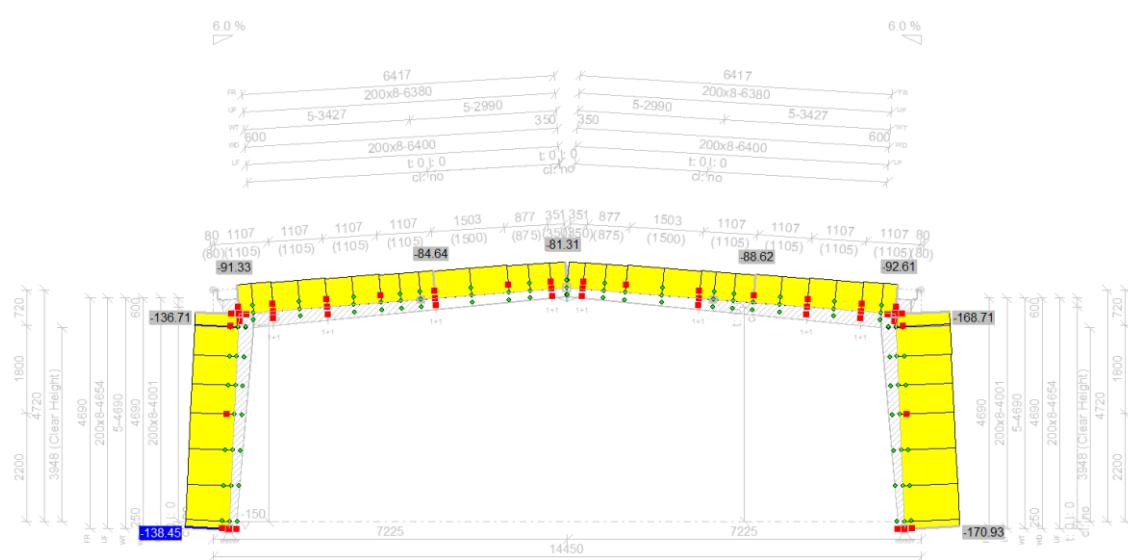


Figure 22 – Axial load for load case 1.

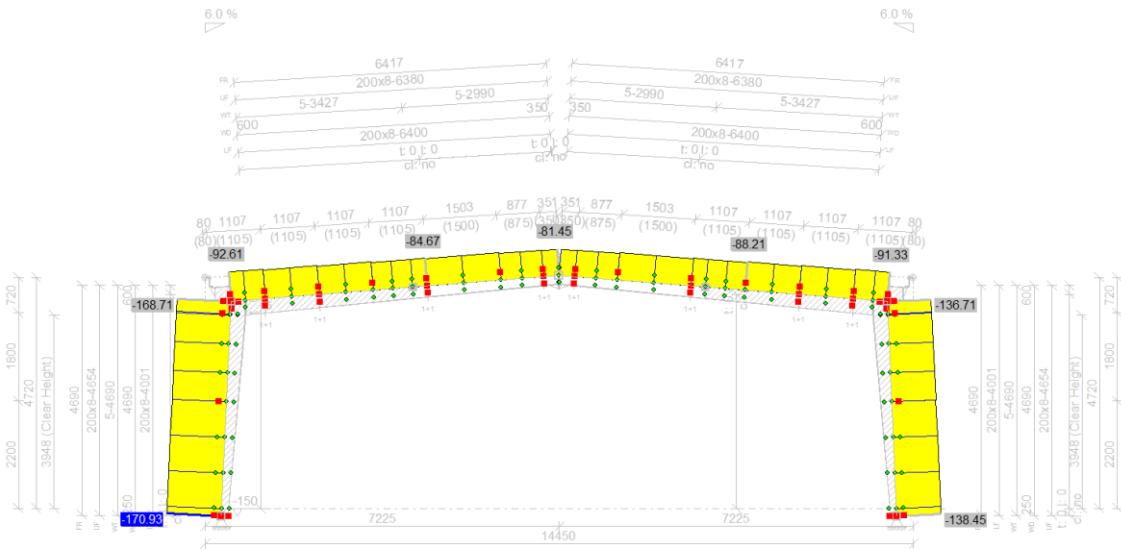


Figure 23 – Axial load for load case 2.

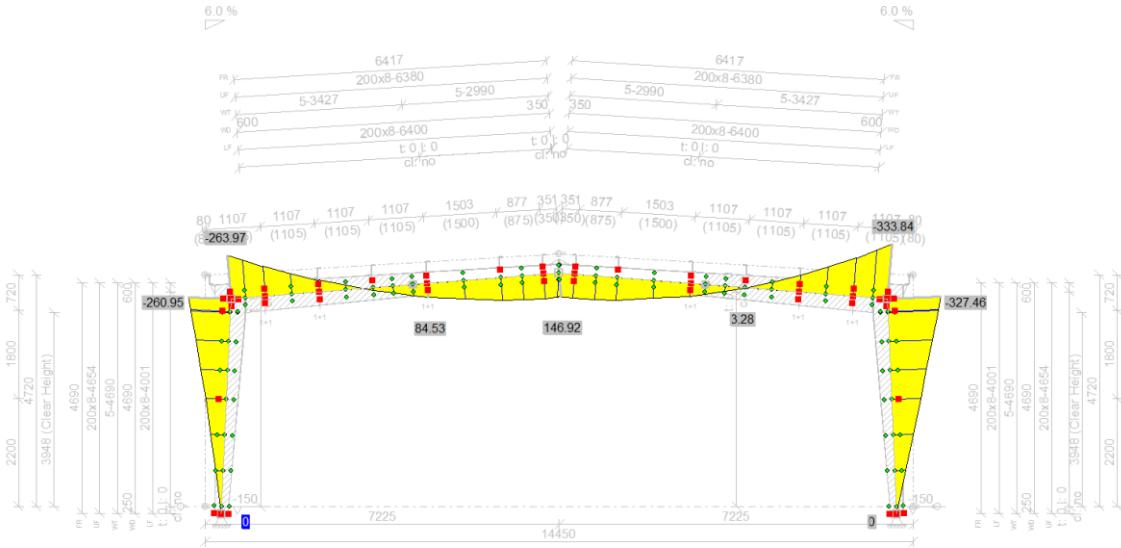


Figure 24 – Bending moment for load case 1.

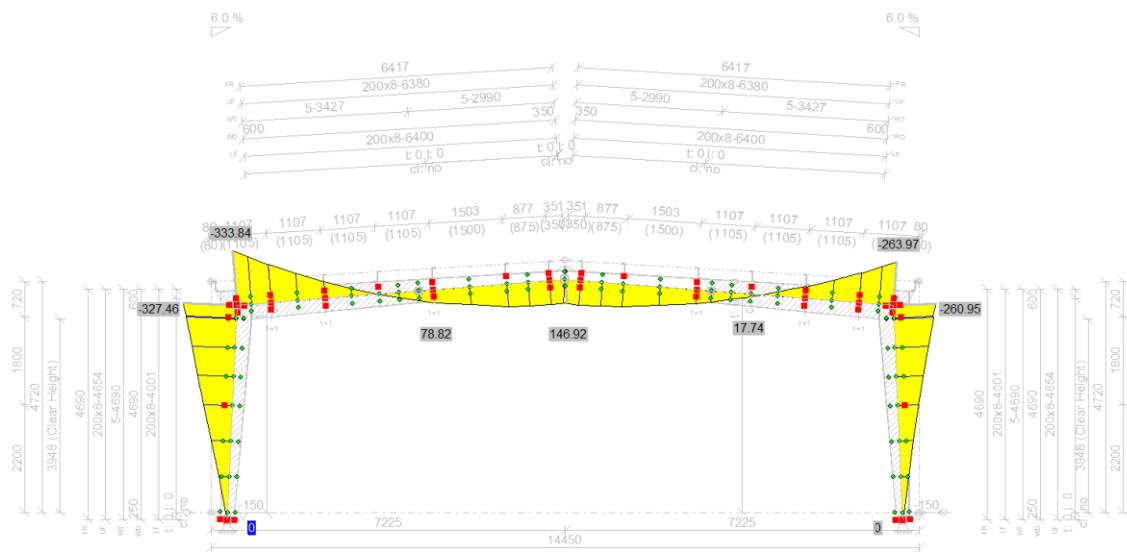


Figure 25 – Bending moment for load case 2.

6. Frame 2.3

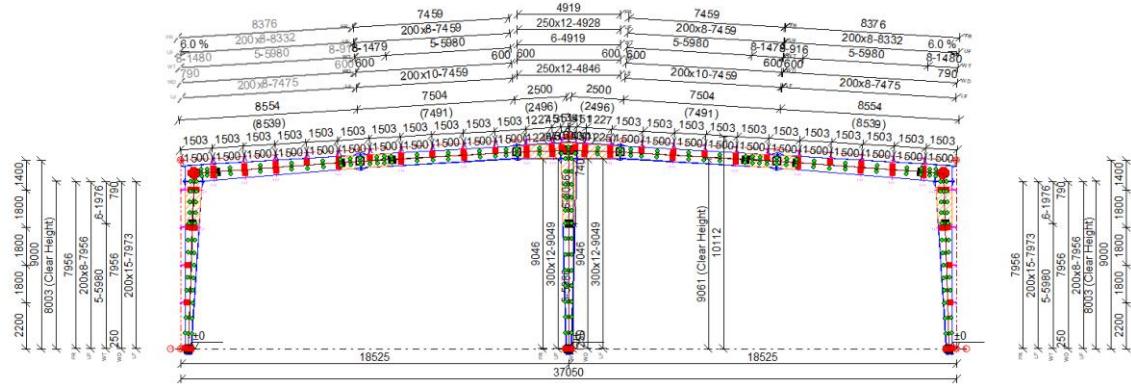


Figure 26 – Frame geometry 2.3.

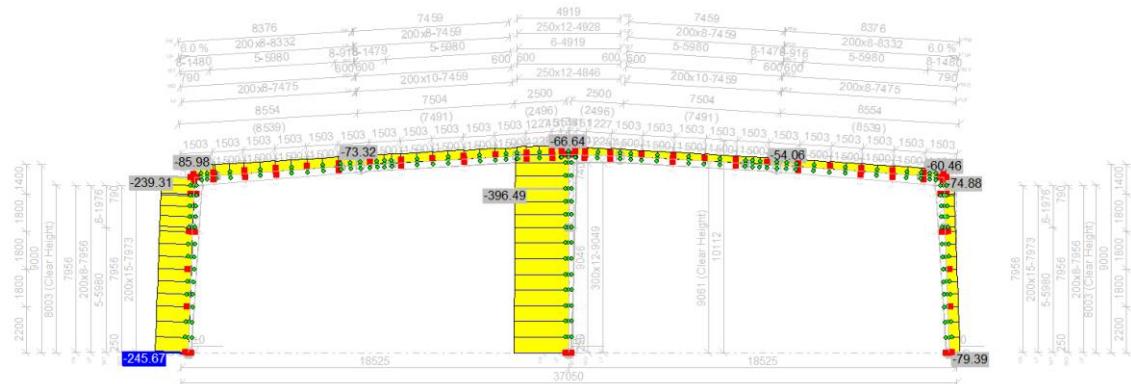


Figure 27 – Axial load for load case 1.

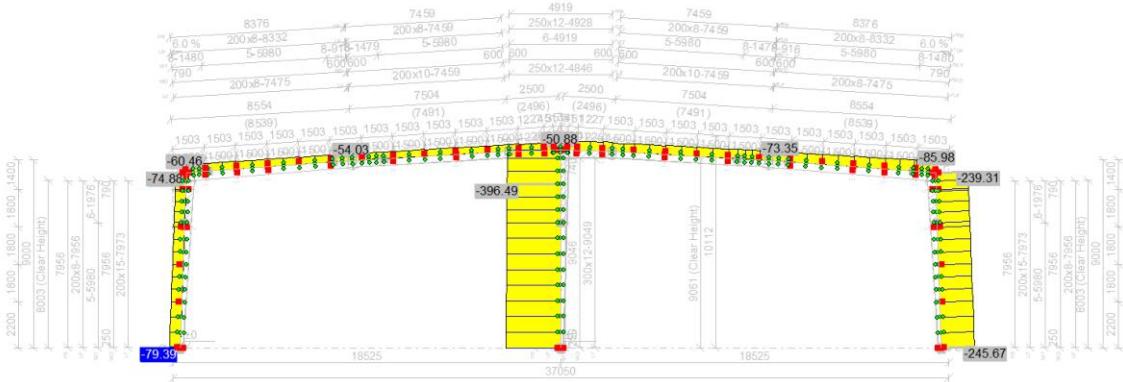


Figure 28 – Axial load for load case 2.

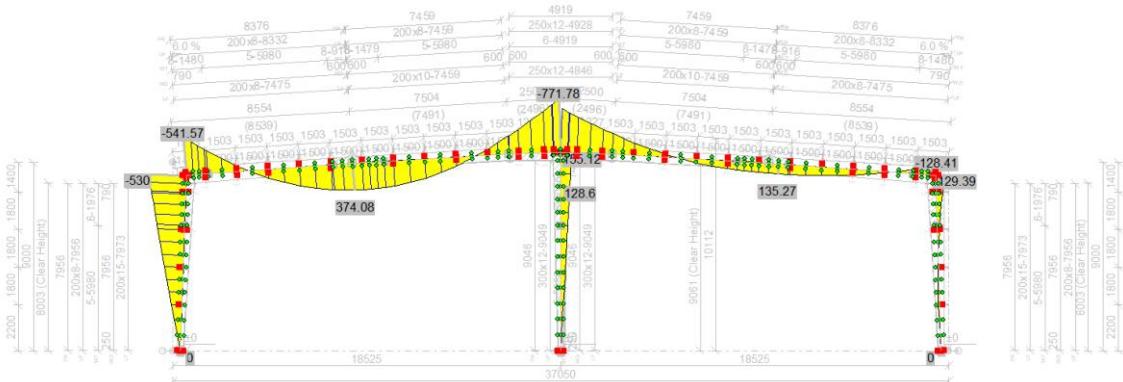


Figure 29 – Bending moment for load case 1.

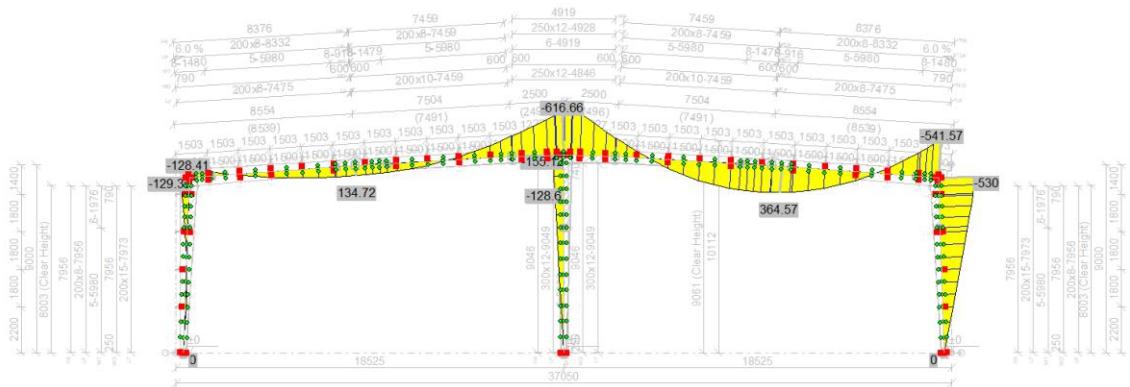


Figure 30 – Bending moment for load case 2.

7. Frame 2.4

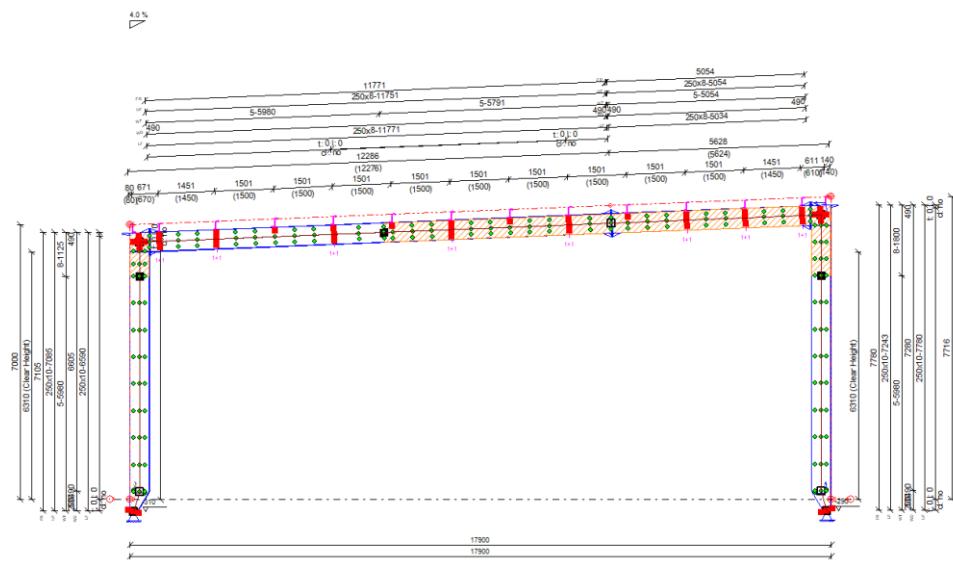


Figure 31 – Frame geometry 2.4.

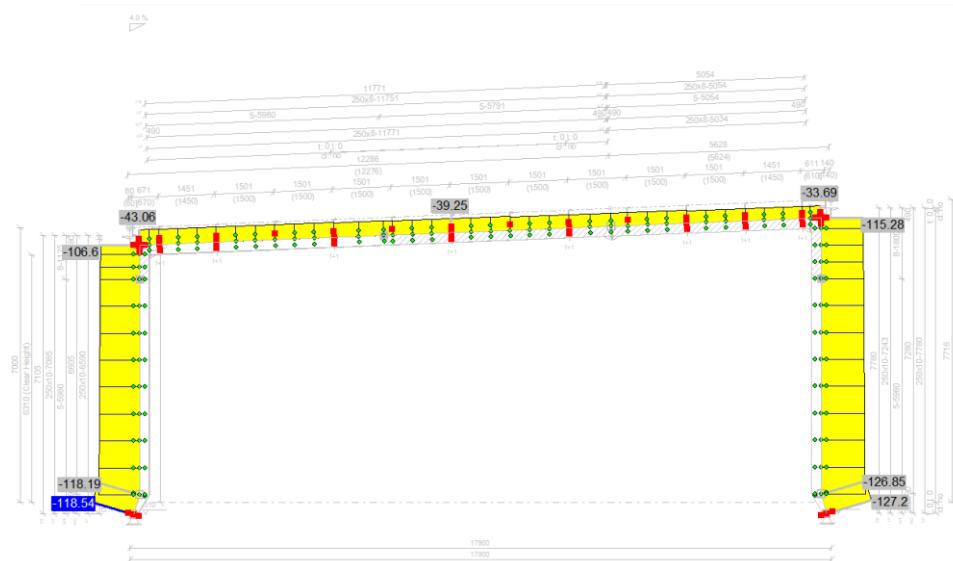


Figure 32 – Axial load for load case 1.

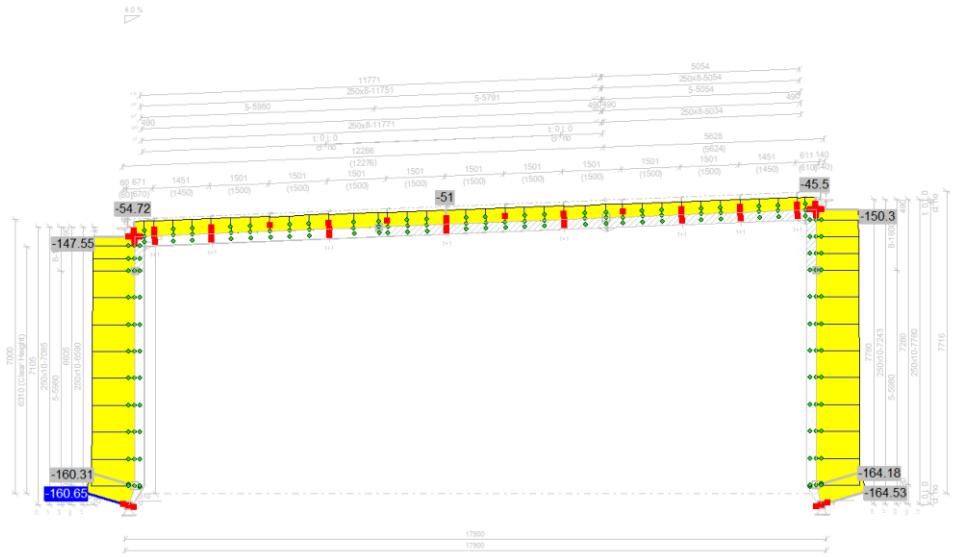


Figure 33 – Axial load for load case 2.

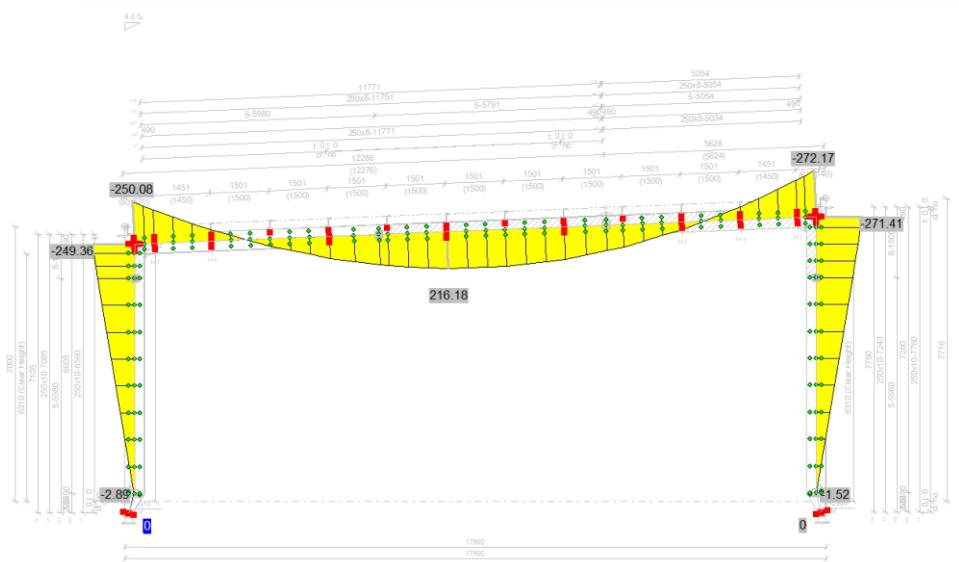


Figure 34 – Bending moment for load case 1.

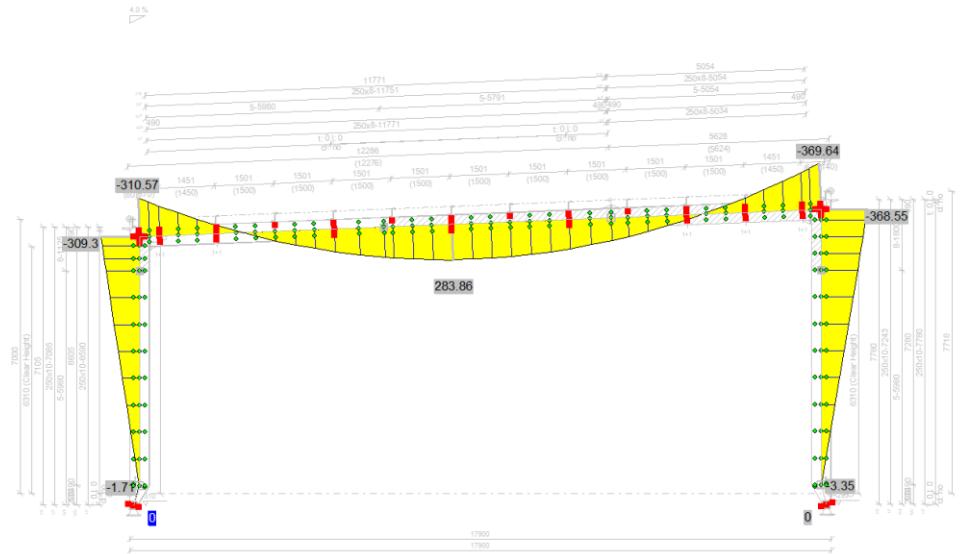


Figure 35 – Bending moment for load case 2.

8. Frame 2.6

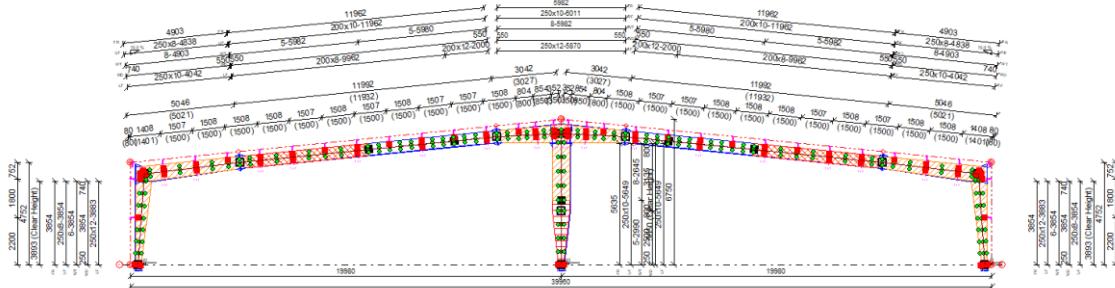


Figure 36 – Frame geometry 2.6.

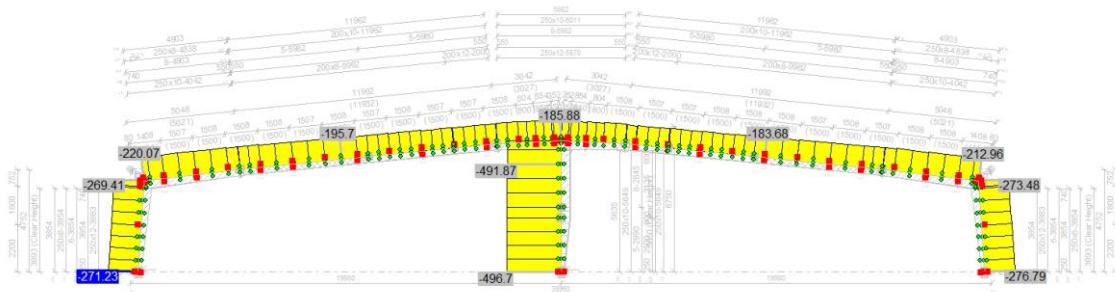


Figure 37 – Axial load for load case 1.

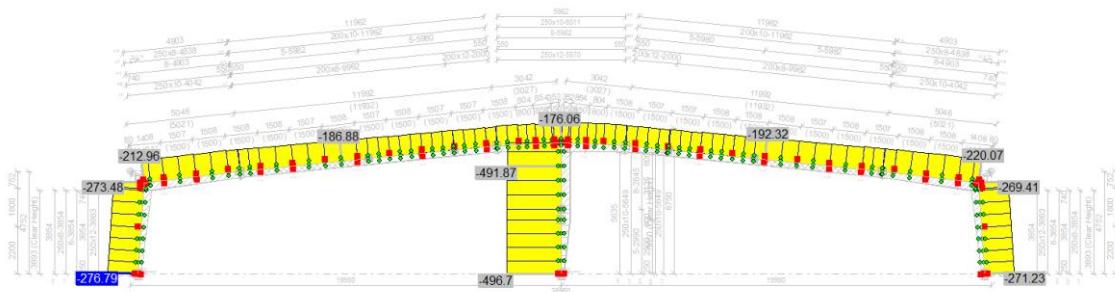


Figure 38 – Axial load for load case 2.

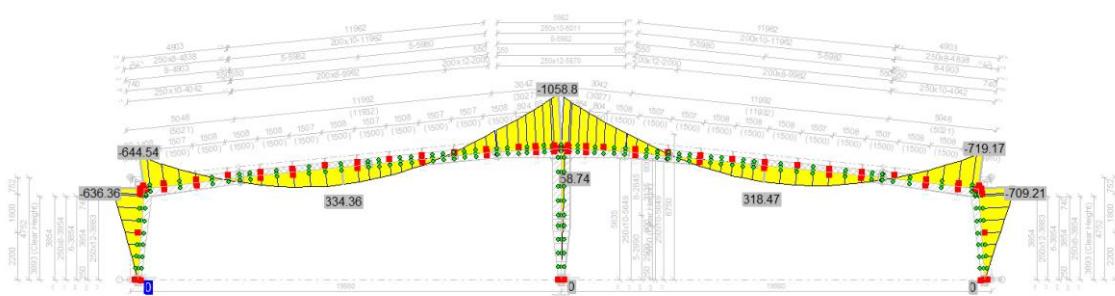


Figure 39 – Bending moment for load case 1.

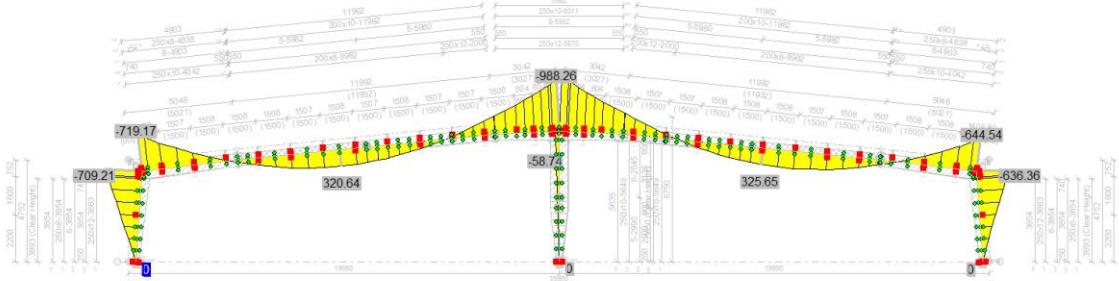


Figure 40 – Bending moment for load case 2.

9. Frame 3.6

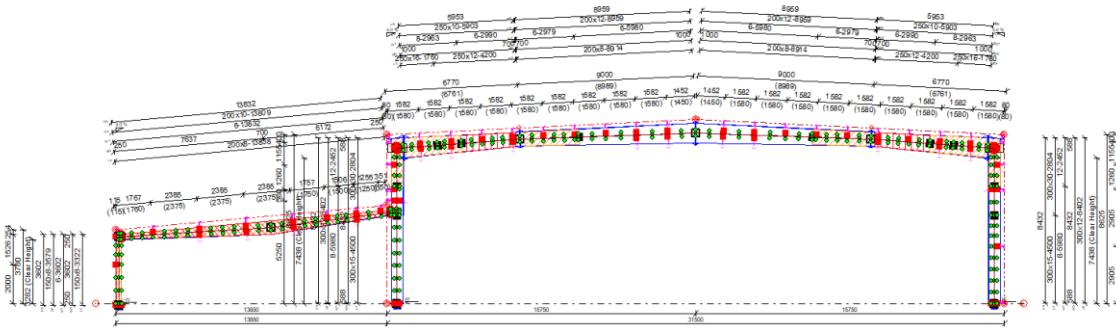


Figure 41 – Frame geometry 3.6.

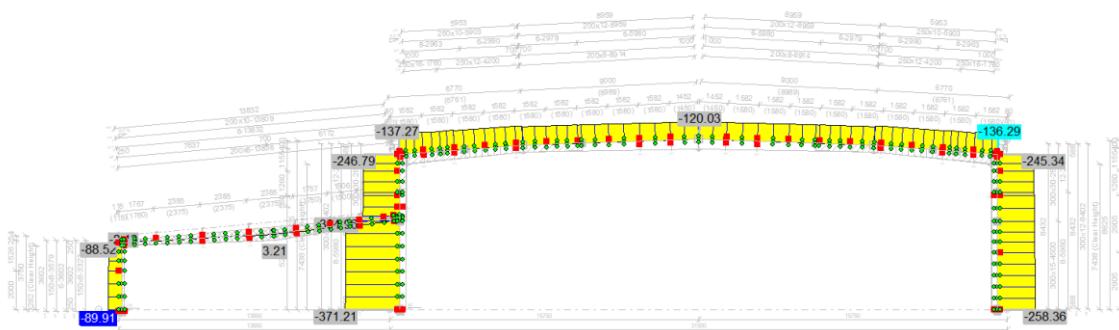


Figure 42 – Axial load for load case 1.

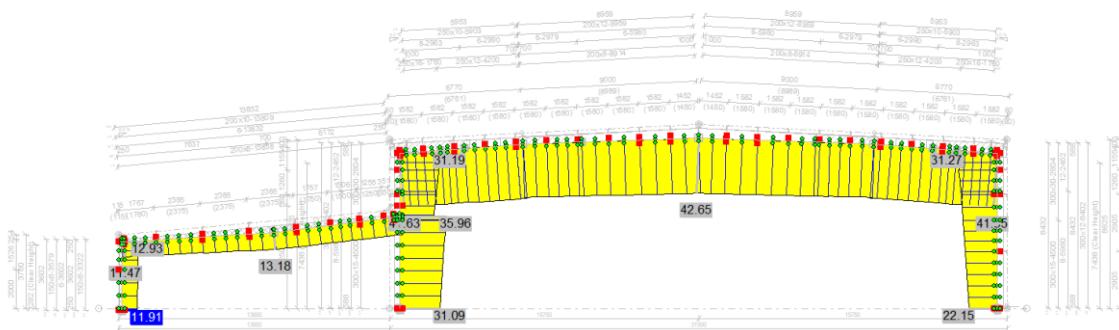


Figure 43 – Axial load for load case 2.

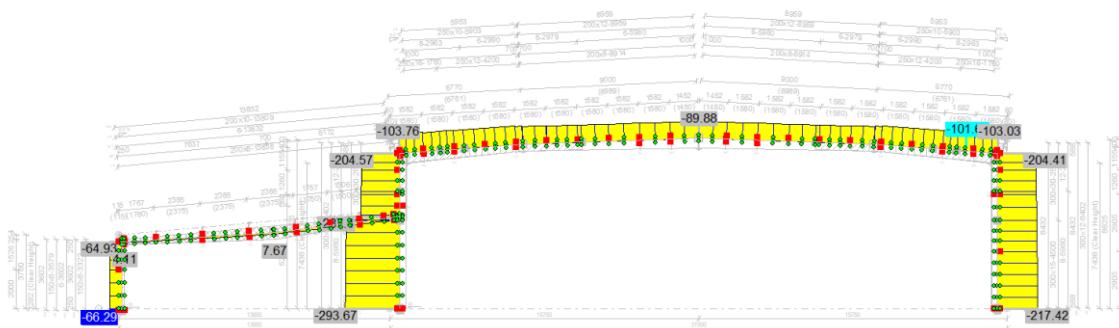


Figure 44 – Axial load for load case 3.

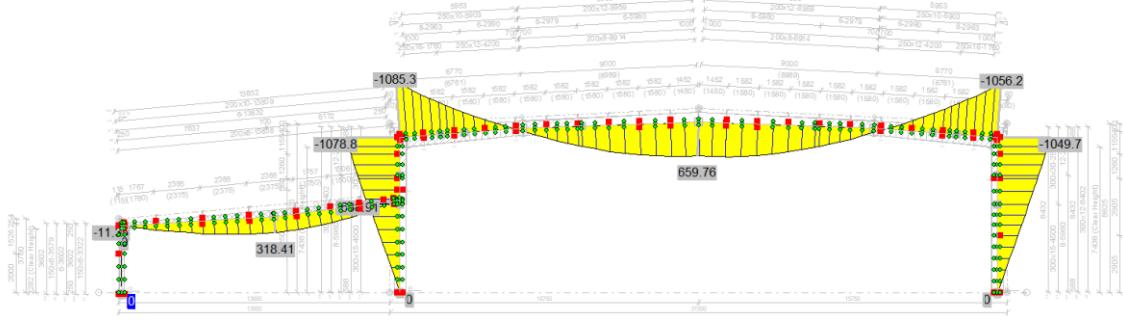


Figure 45 – Bending moment for load case 1.

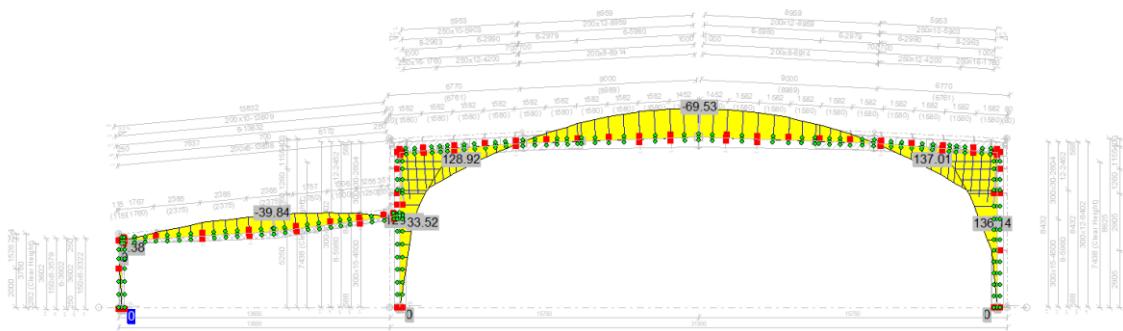


Figure 46 – Bending moment for load case 2.

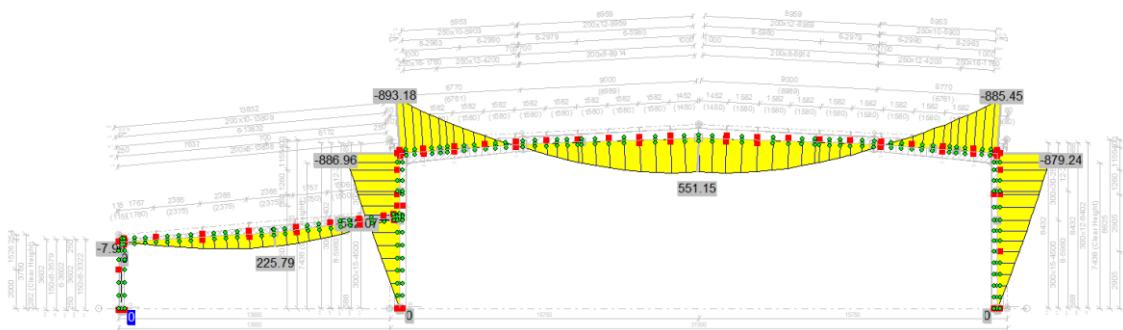


Figure 47 – Bending moment for load case 3.

10. Frame 3.7

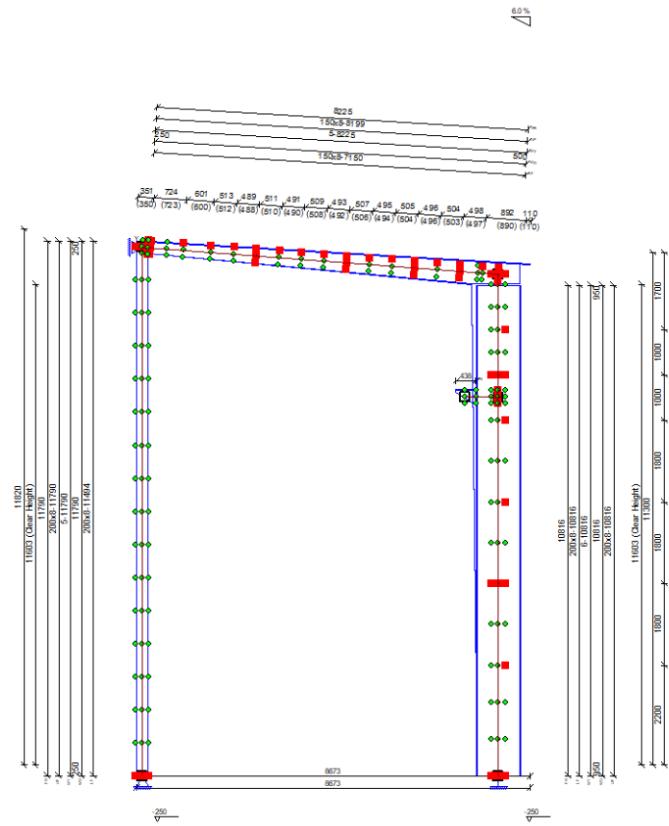


Figure 48 – Frame geometry 3.7.

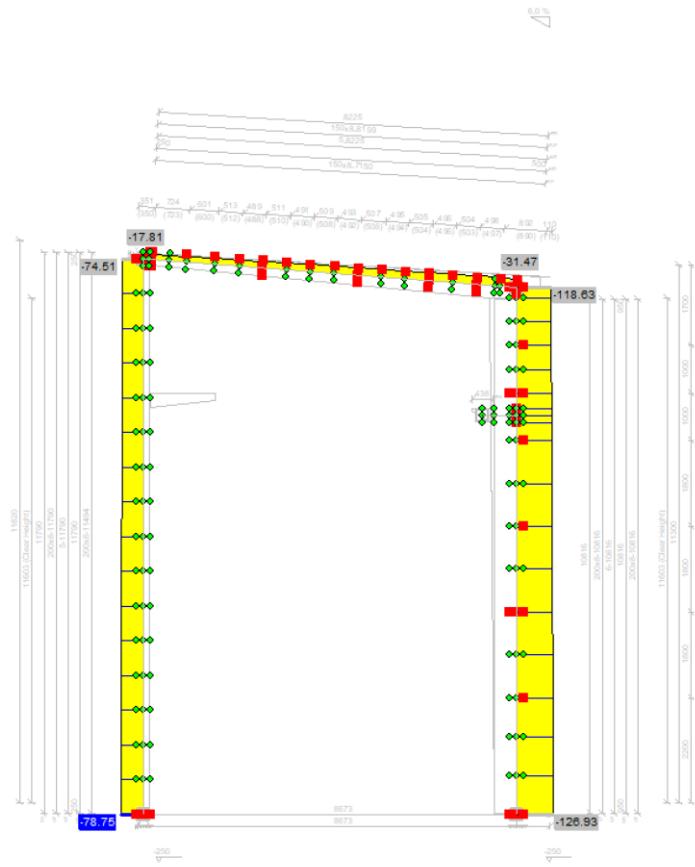


Figure 49 – Axial load for load case 1.

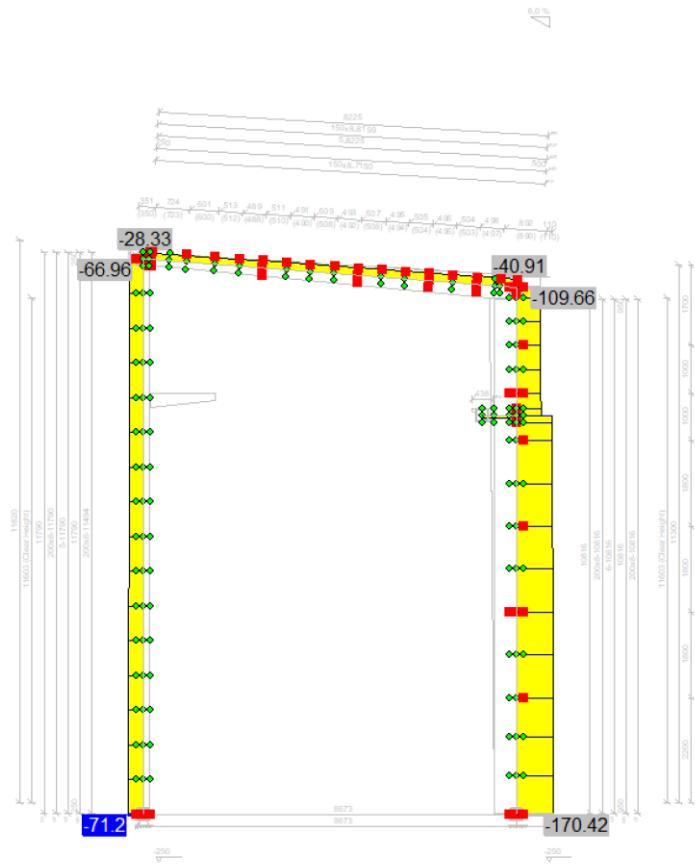


Figure 50 – Axial load for load case 2.

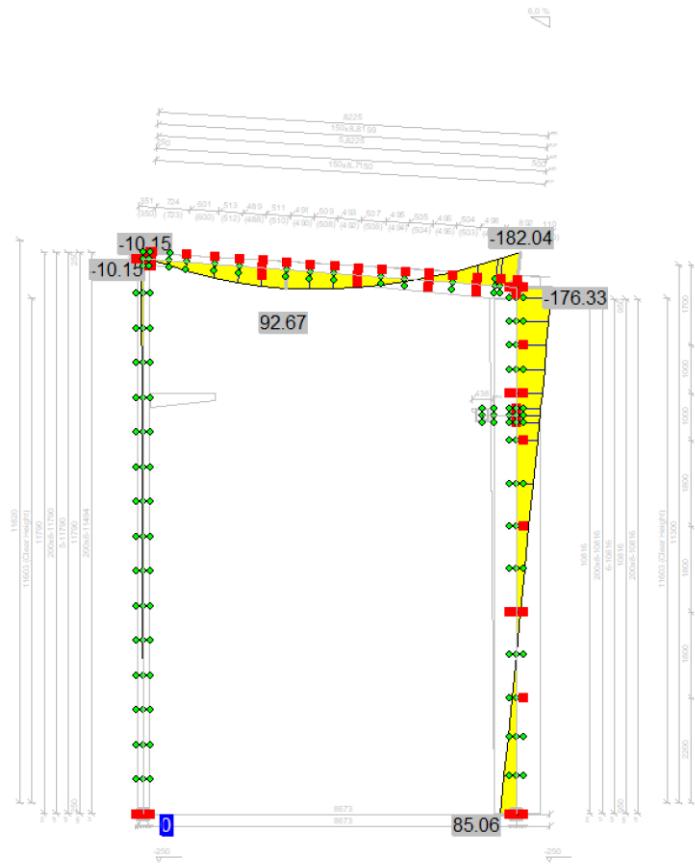


Figure 51 – Bending moment for load case 1.

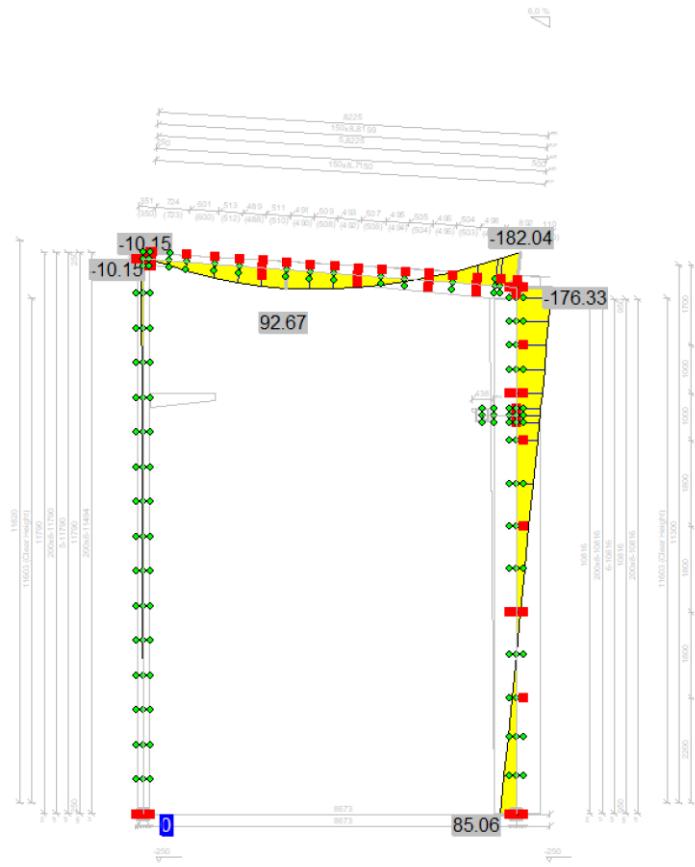


Figure 52 – Bending moment for load case 2.

11. Frame 3.9

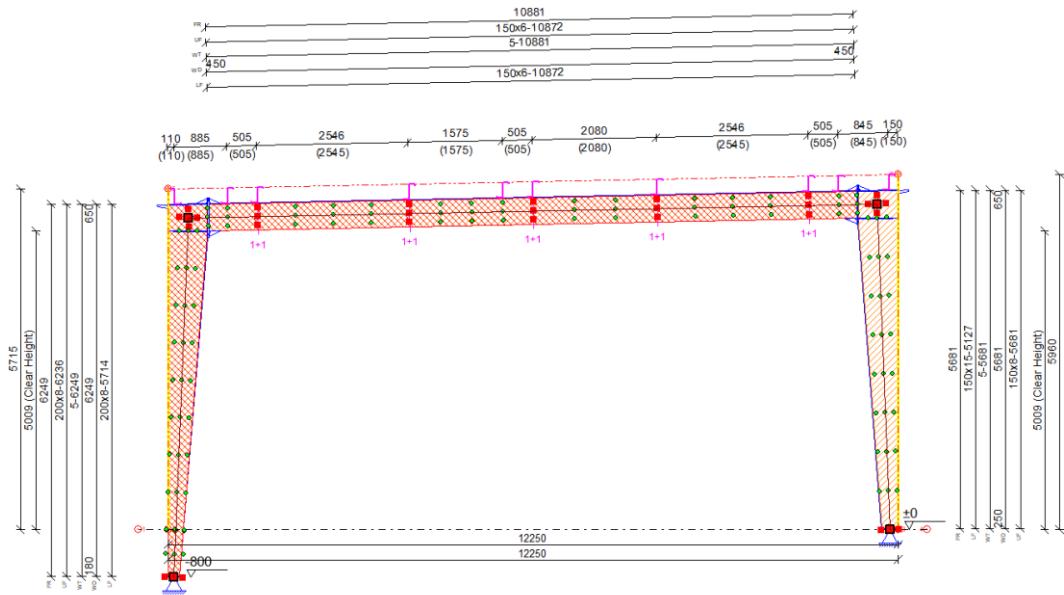


Figure 53 – Frame geometry 3.9.

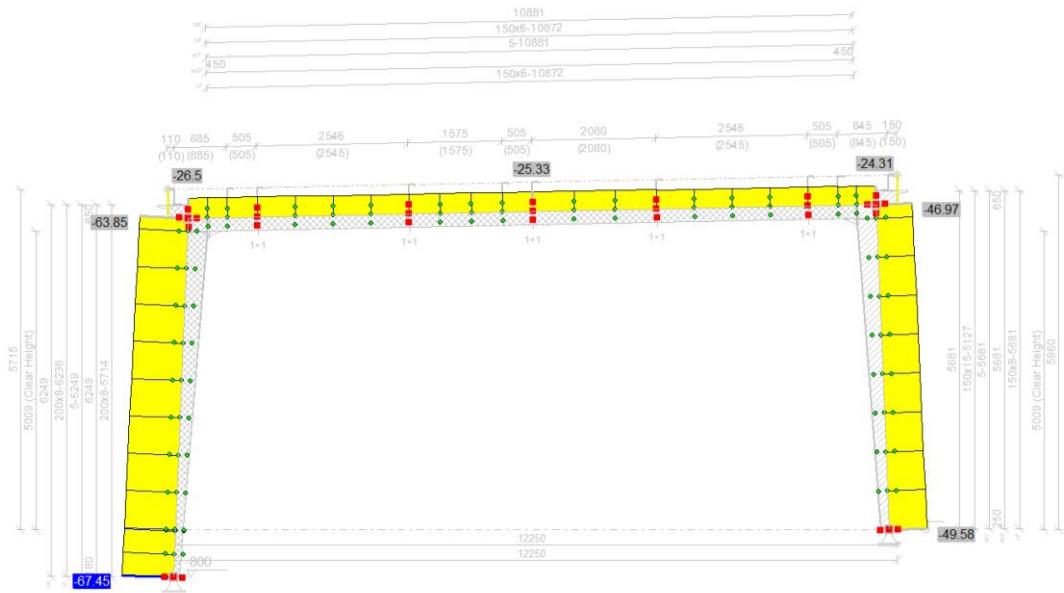


Figure 54 – Axial load for load case 1.

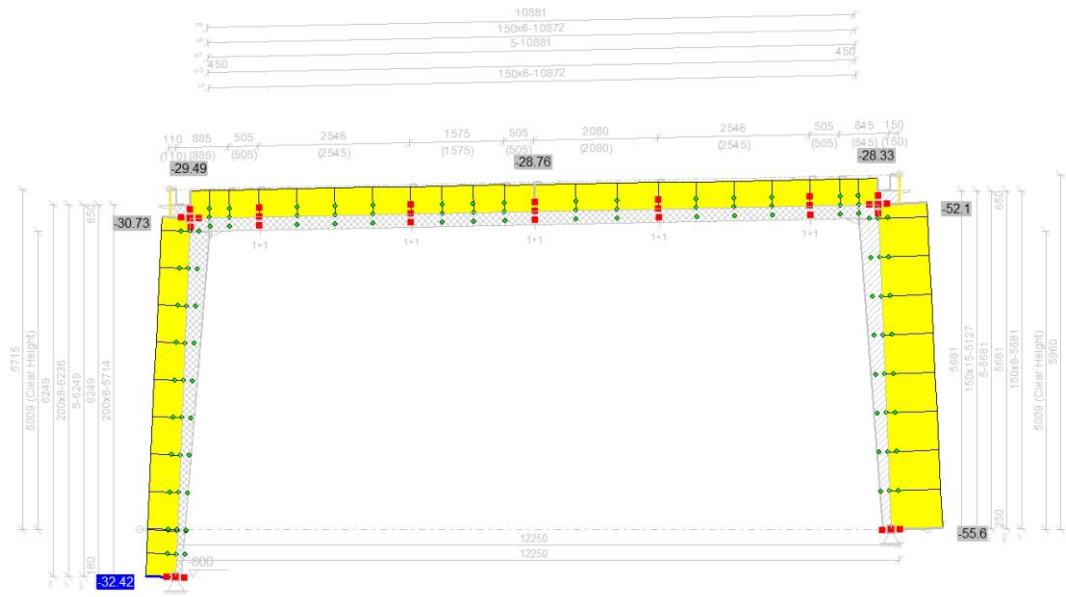


Figure 55 – Axial load for load case 2.

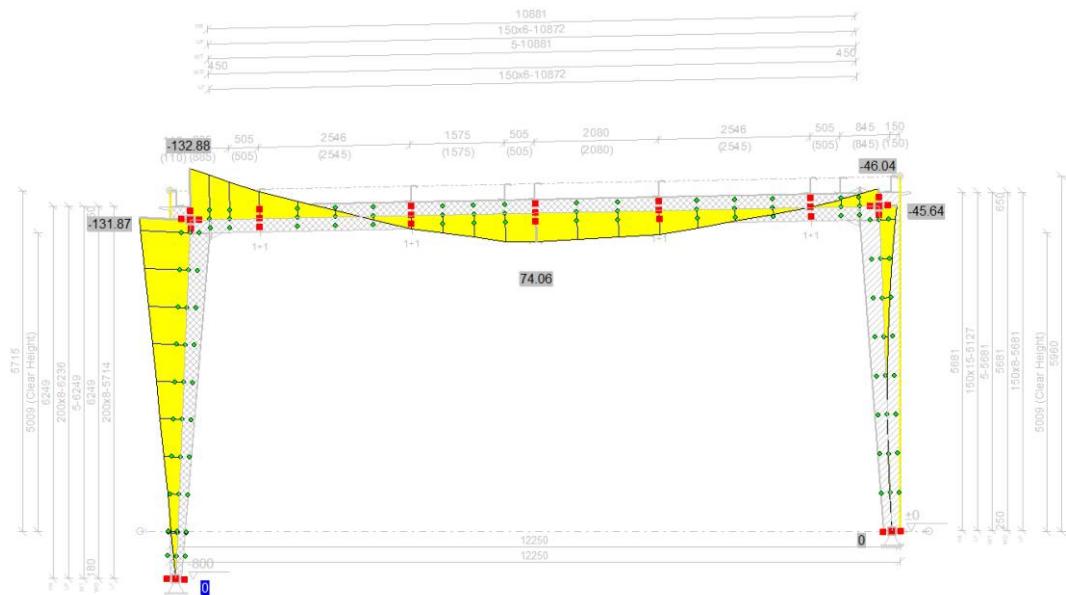


Figure 56 – Bending moment for load case 1.

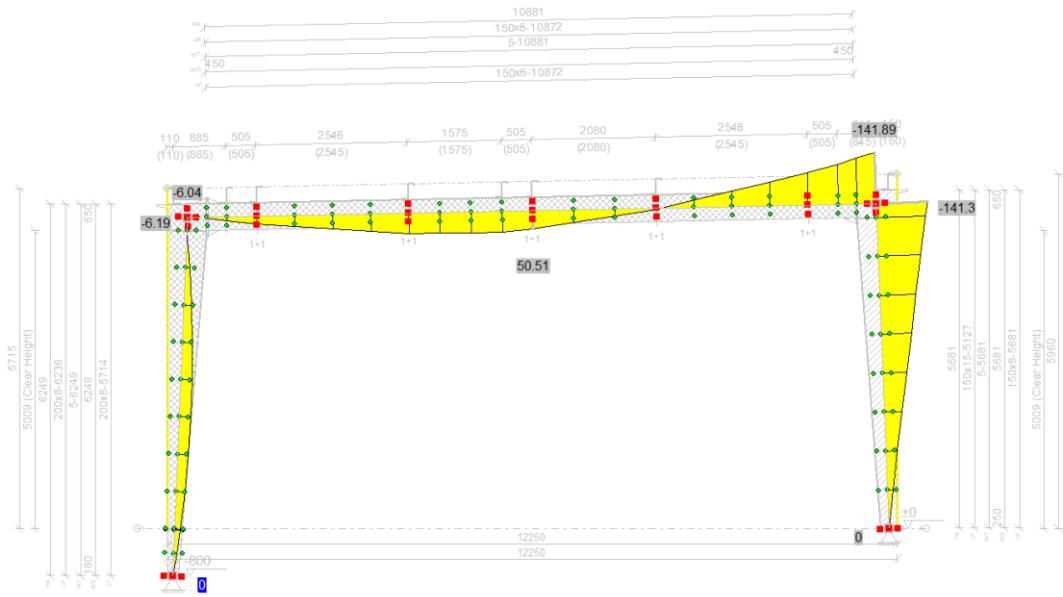


Figure 57 – Bending moment for load case 2.

12. Frame 3.10

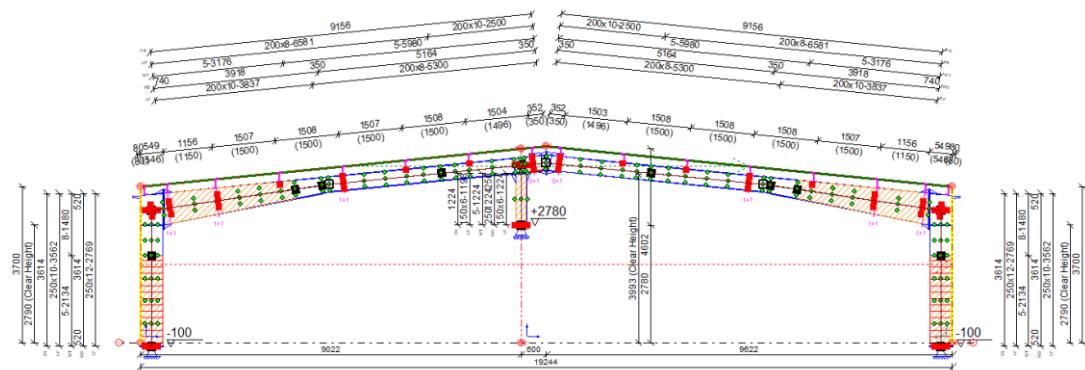


Figure 58 – Frame geometry 3.10.

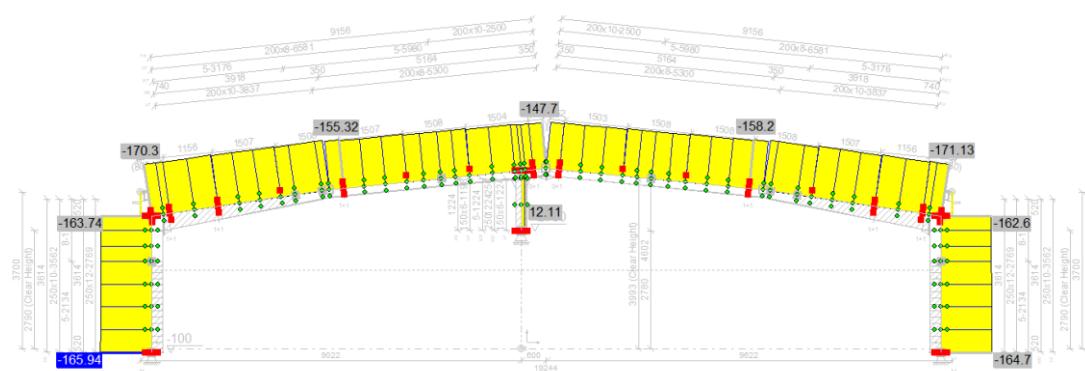


Figure 59 – Axial load for load case 2.

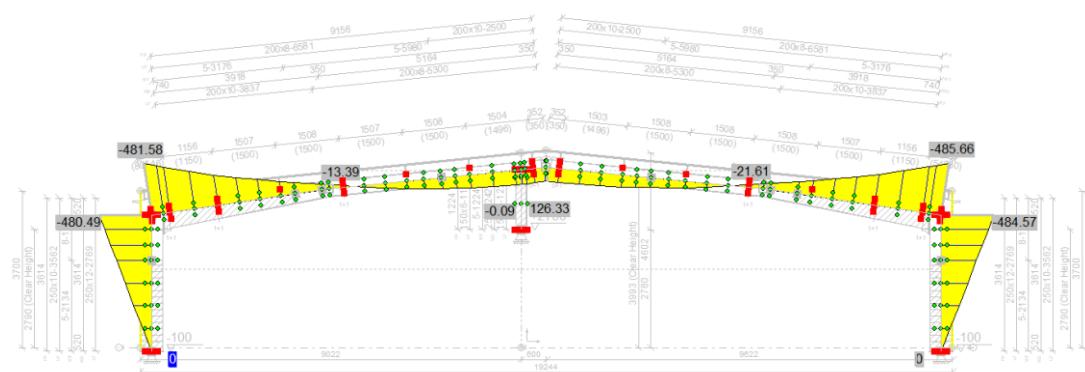


Figure 60 – Bending moment for load case 2.

13. Frame 3.11

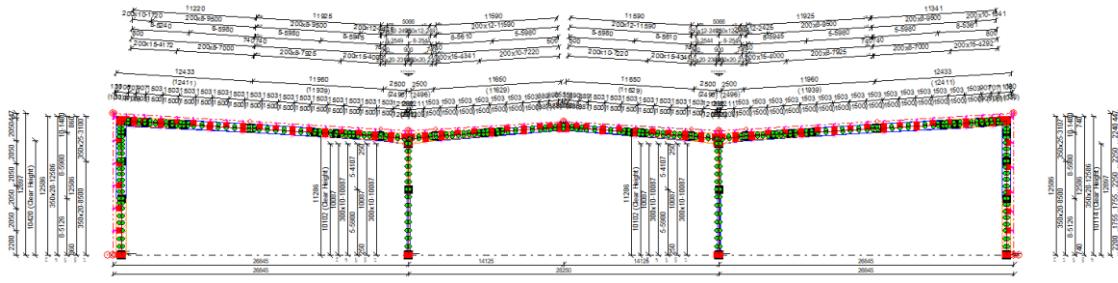


Figure 61 – Frame geometry 3.11.

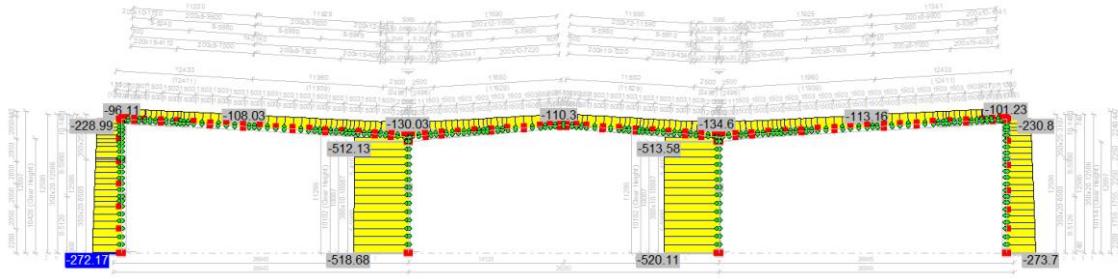


Figure 62 – Axial load for load case 1.

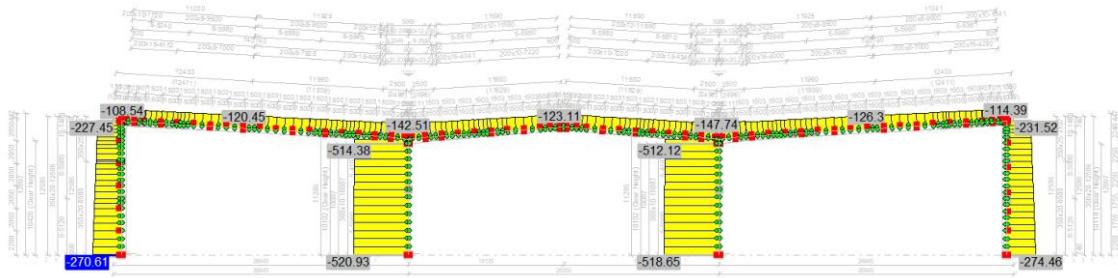


Figure 63 – Axial load for load case 2.

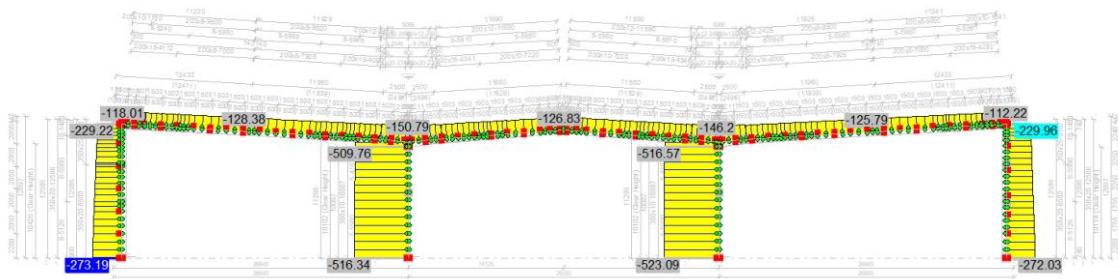


Figure 64 – Axial load for load case 3.

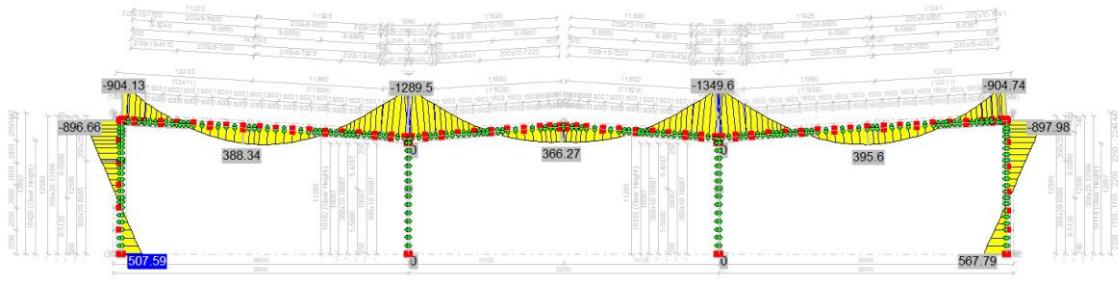


Figure 65 – Bending moment for load case 1.

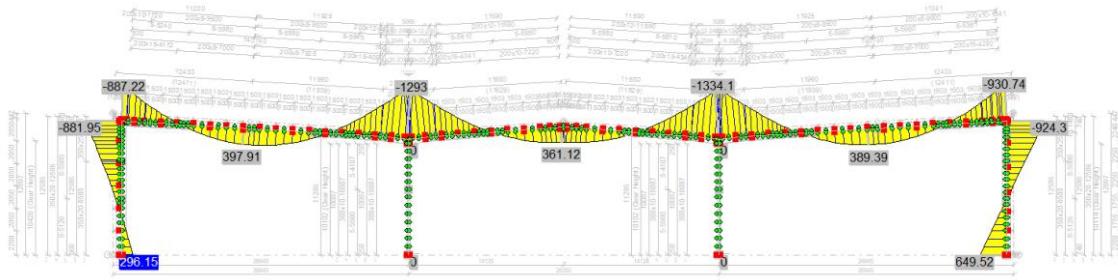


Figure 66 – Bending moment for load case 2.

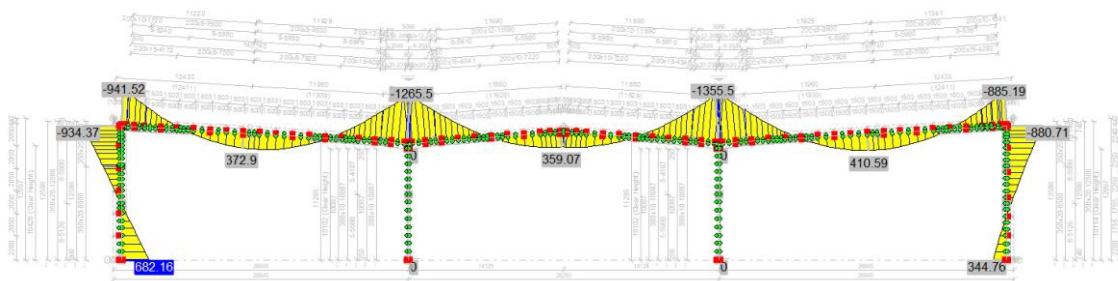


Figure 67 – Bending moment for load case 3.

14. Frame 3.13

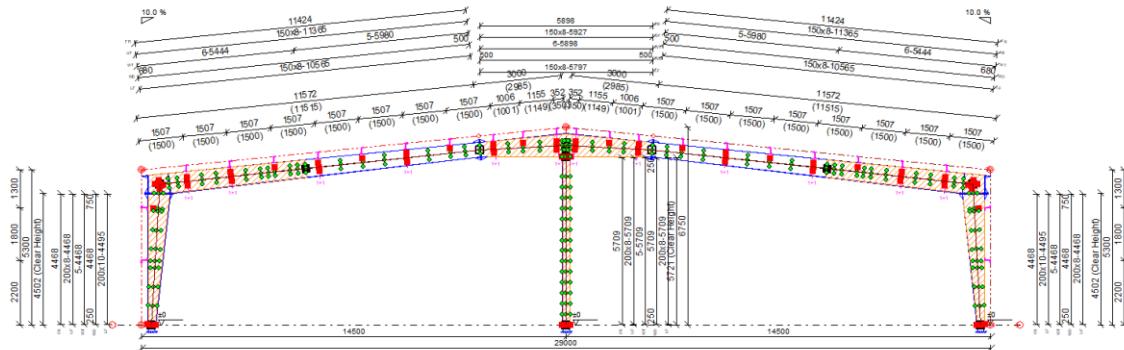


Figure 68 – Frame geometry 3.13.

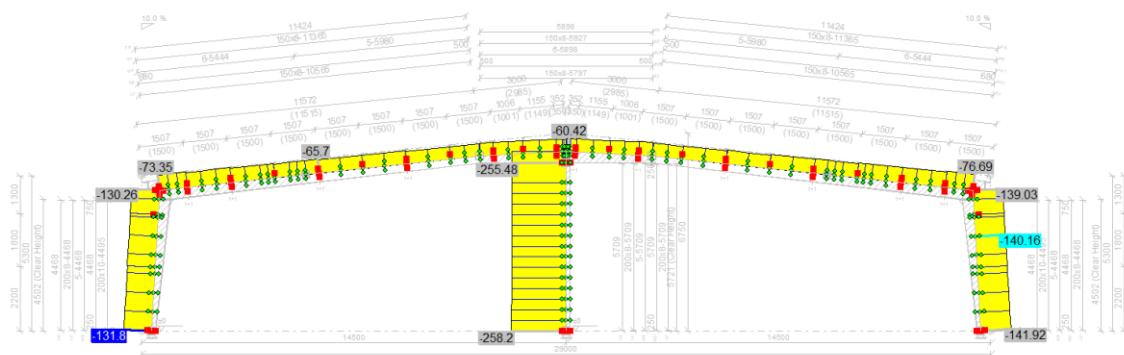


Figure 69 – Axial load for load case 1.

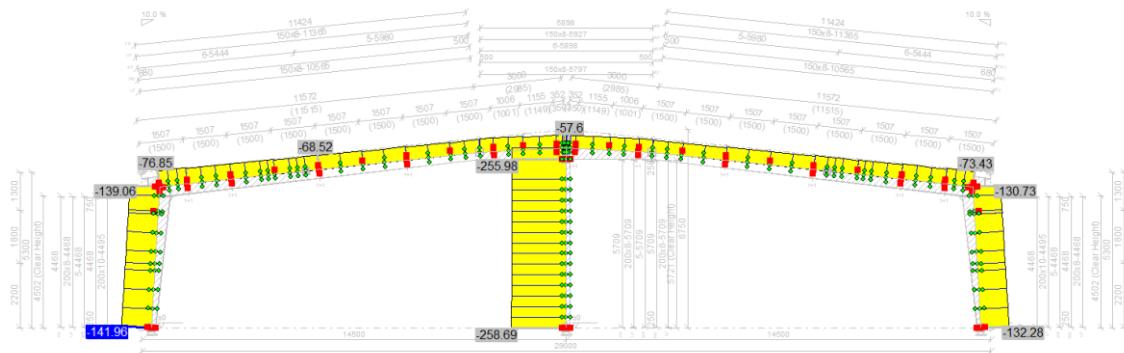


Figure 70 – Axial load for load case 2.

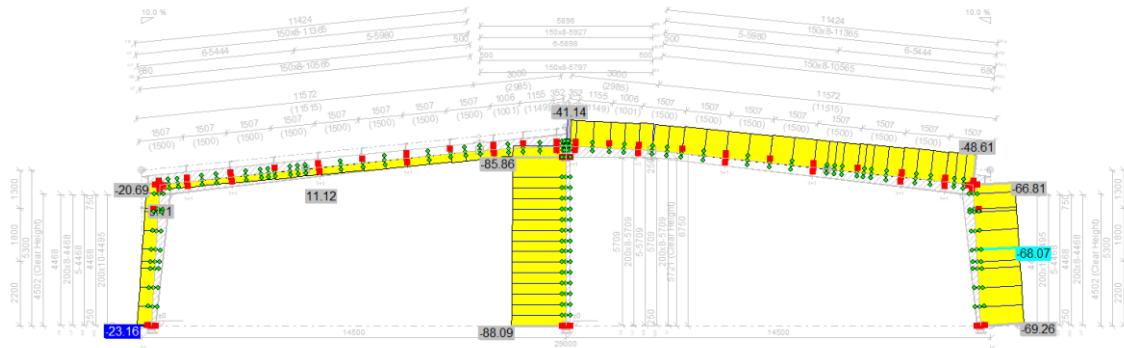


Figure 71 – Axial load for load case 3.

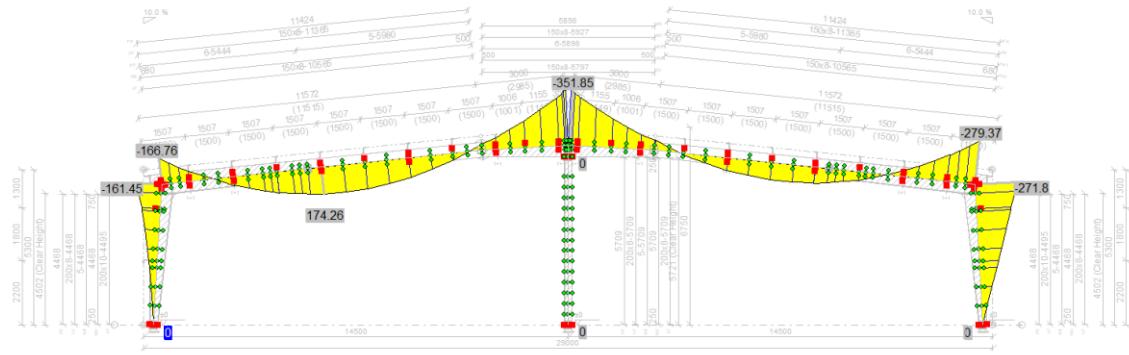


Figure 72 – Bending moment for load case 1.

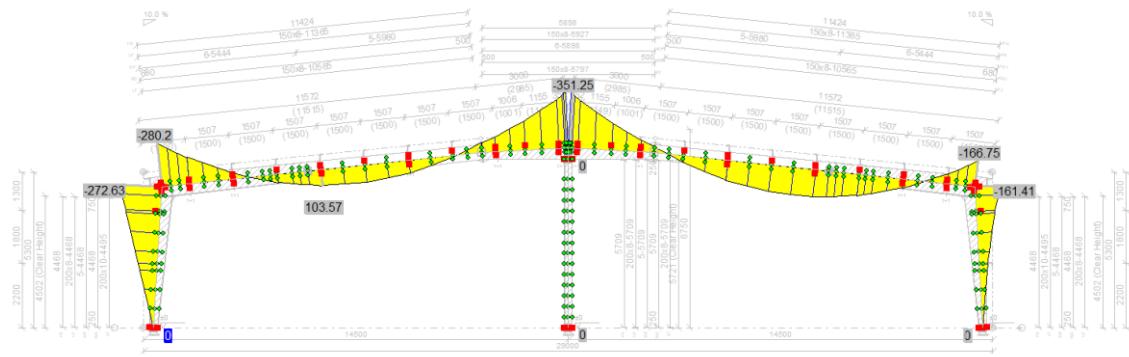


Figure 73 – Bending moment for load case 2.

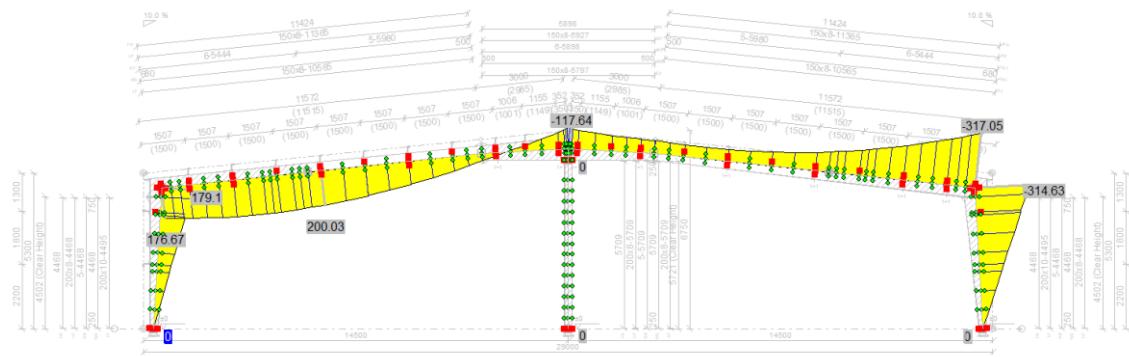


Figure 74 – Bending moment for load case 3.

15. Frame 3.19

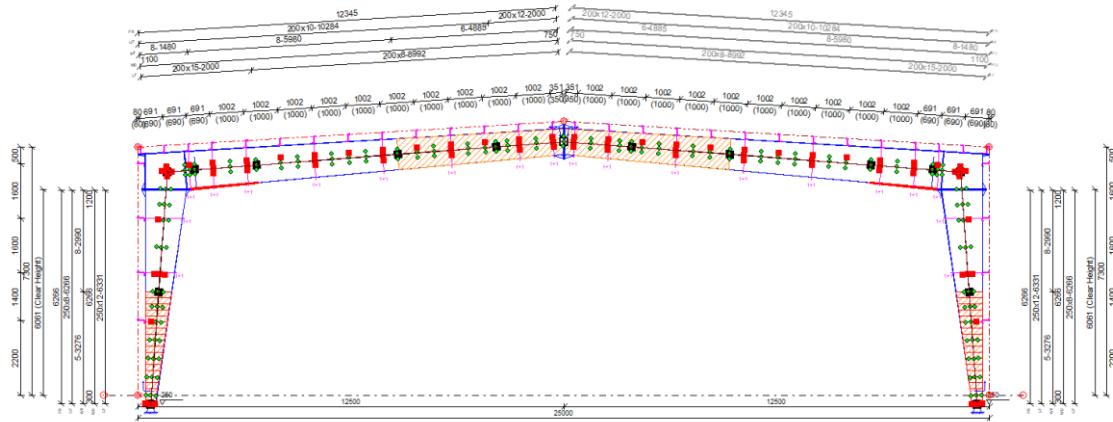


Figure 75 – Frame geometry 3.19.

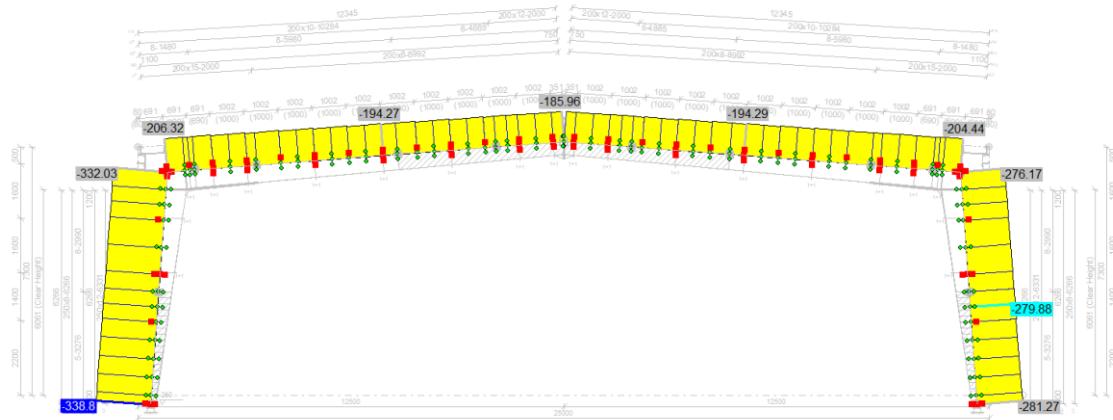


Figure 76 – Axial load for load case 1.

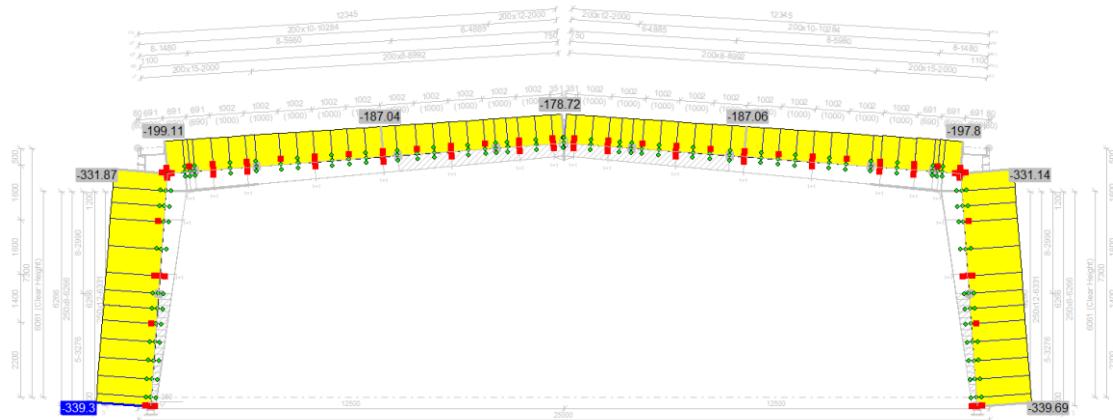


Figure 77 – Axial load for load case 2.

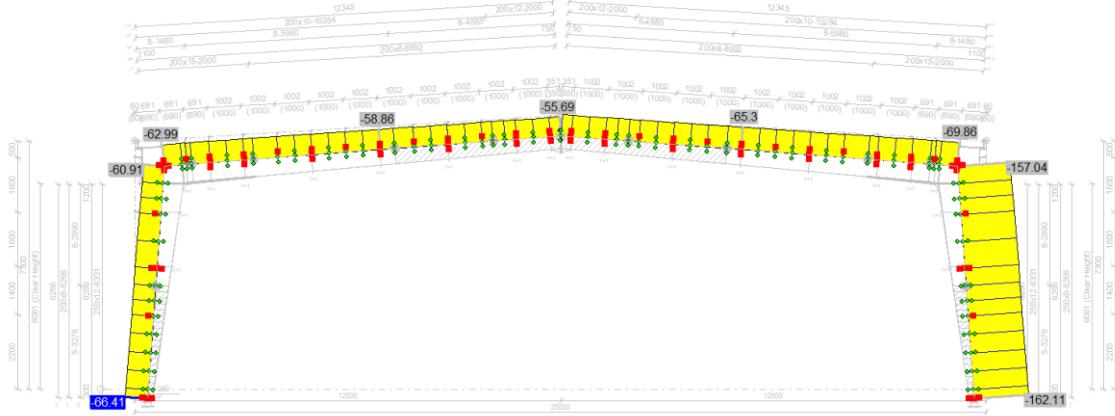


Figure 78 – Axial load for load case 3.

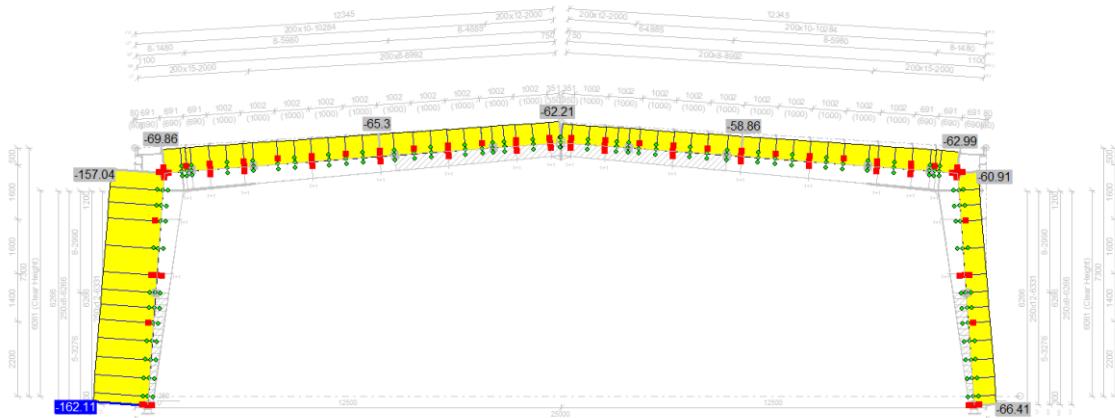


Figure 79 – Axial load for load case 4.

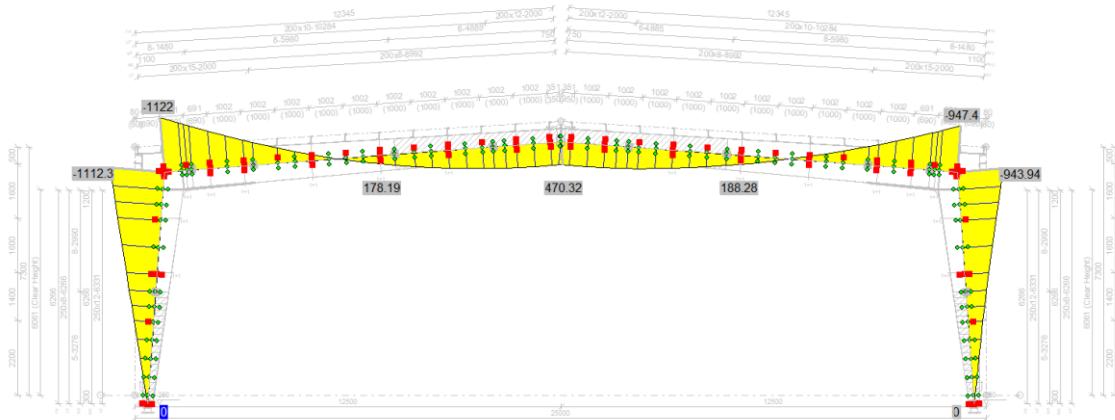


Figure 80 – Bending moment for load case 1.

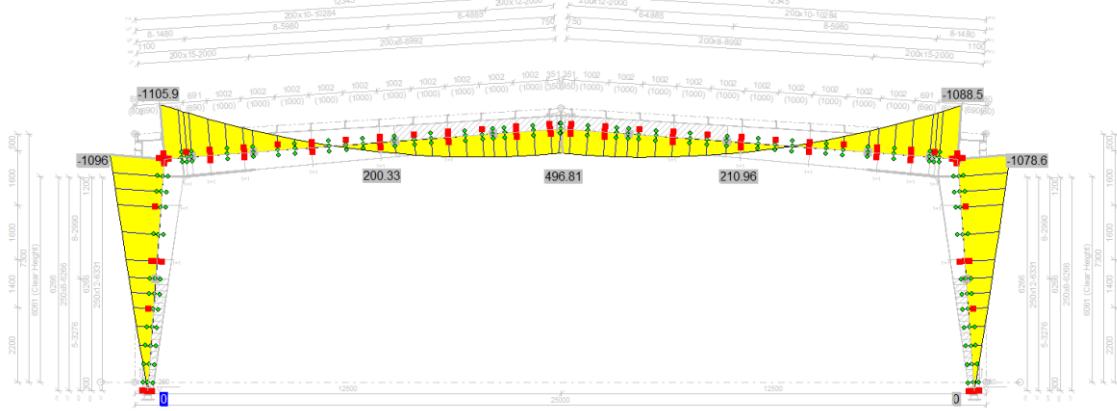


Figure 81 – Bending moment for load case 2.

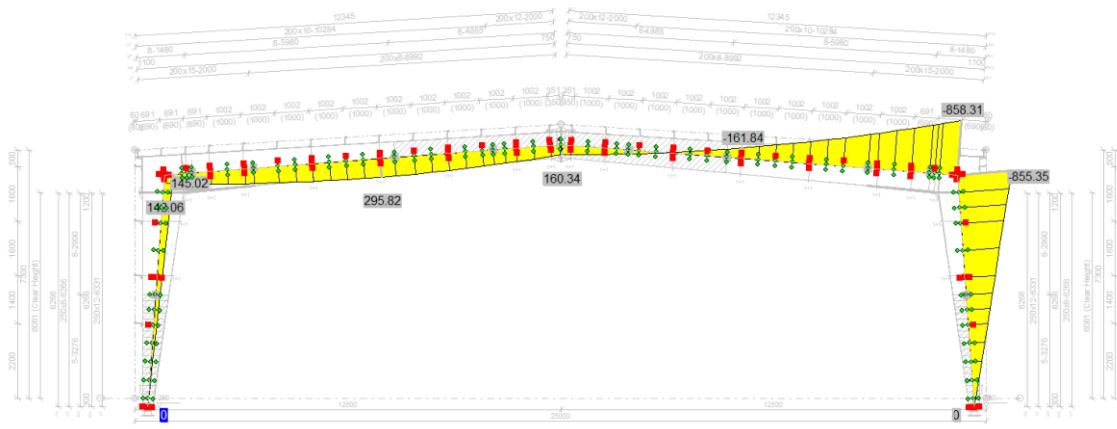


Figure 82 – Bending moment for load case 3.

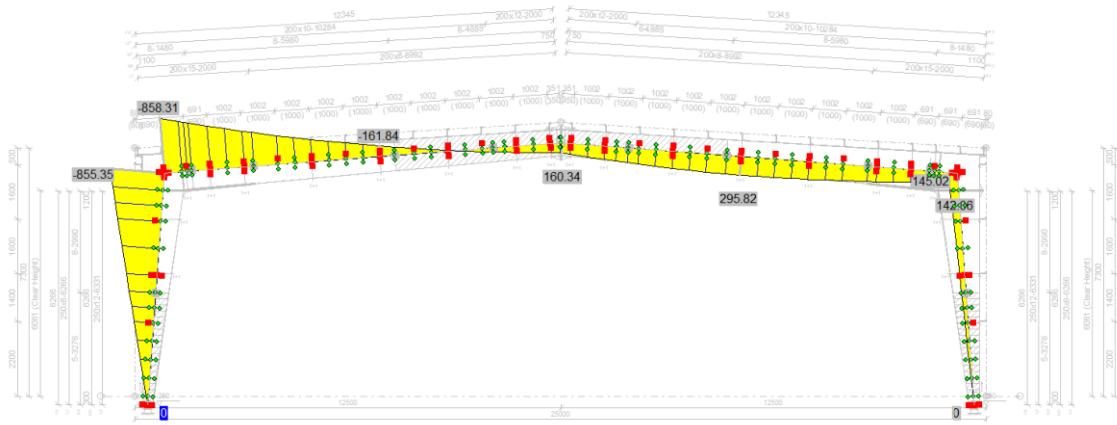


Figure 83 – Bending moment for load case 4.

16. Frame 3.24

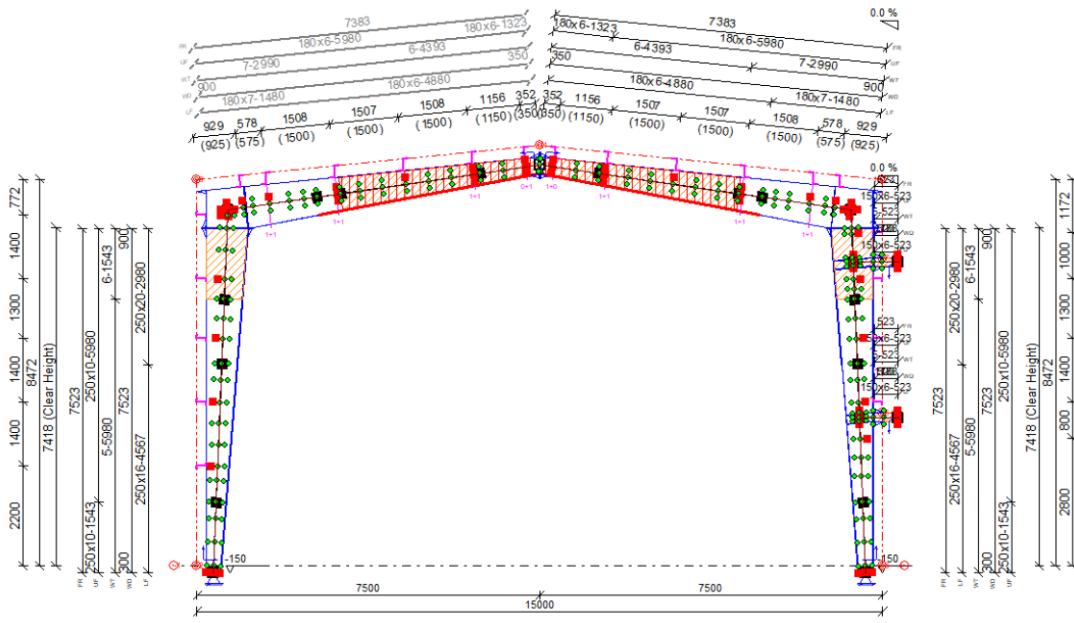


Figure 84 – Frame geometry 3.24.

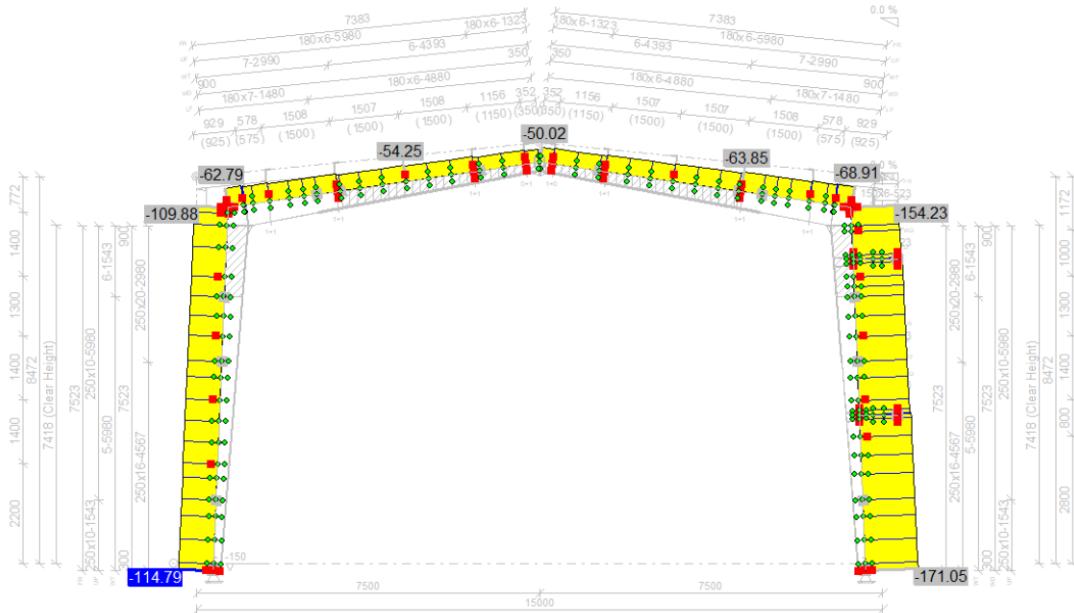


Figure 85 – Axial load for load case 1.

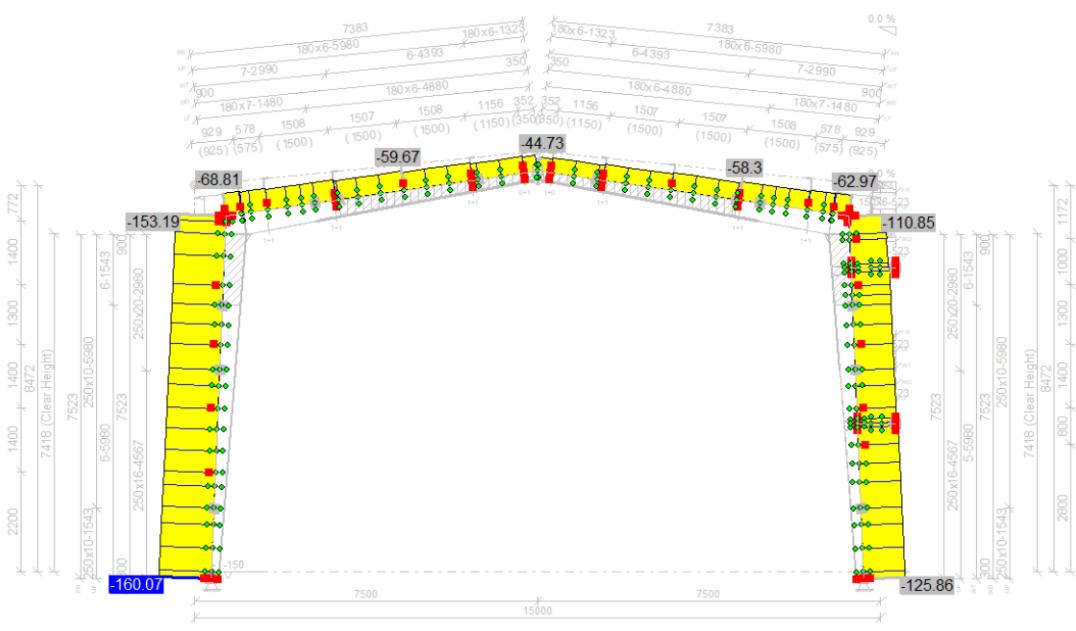


Figure 86 – Axial load for load case 2.

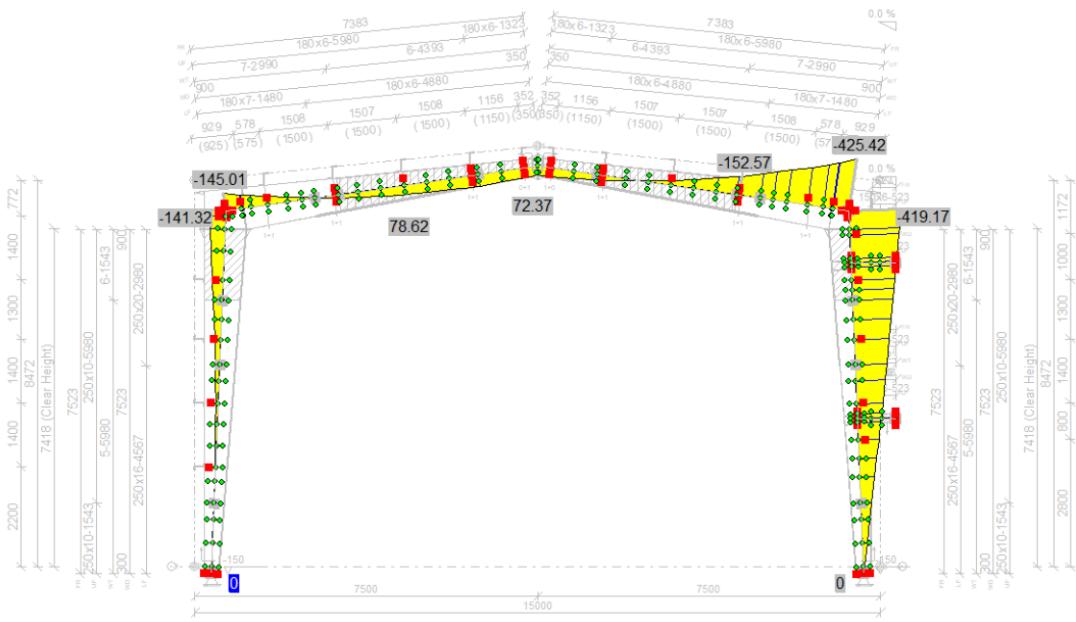


Figure 87 – Bending moment for load case 1.

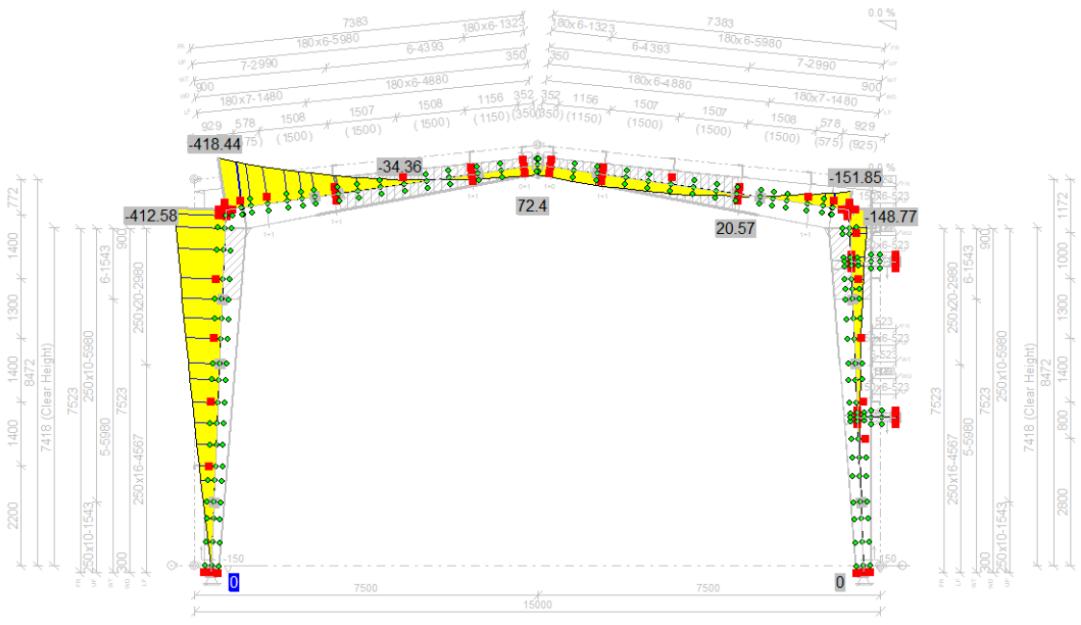


Figure 88 – Bending moment for load case 2.

17. Frame 3.26

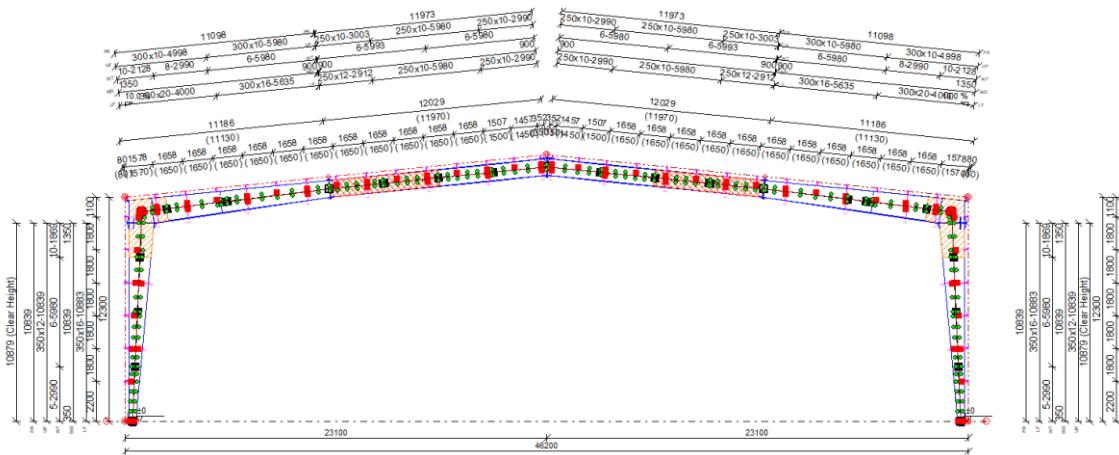


Figure 89 – Frame geometry 3.26.

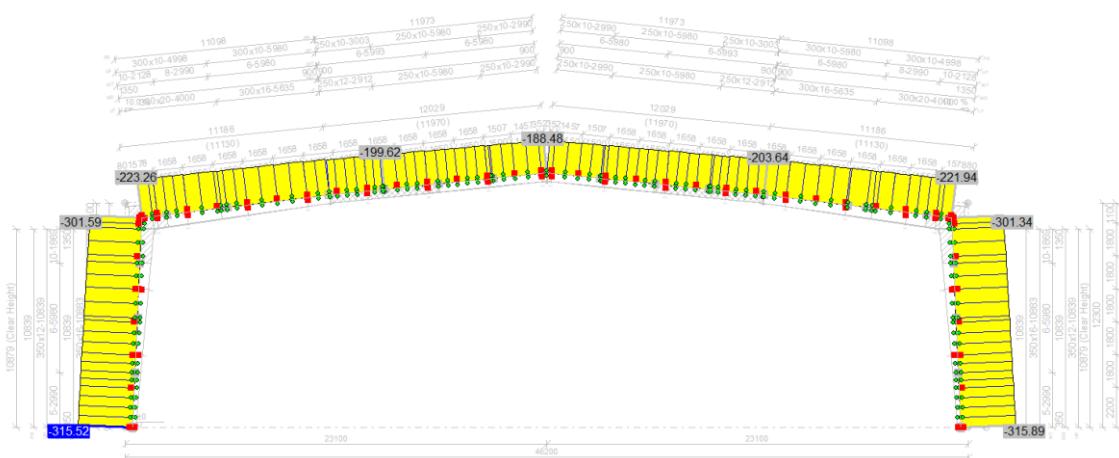


Figure 90 – Axial load for load case 1.

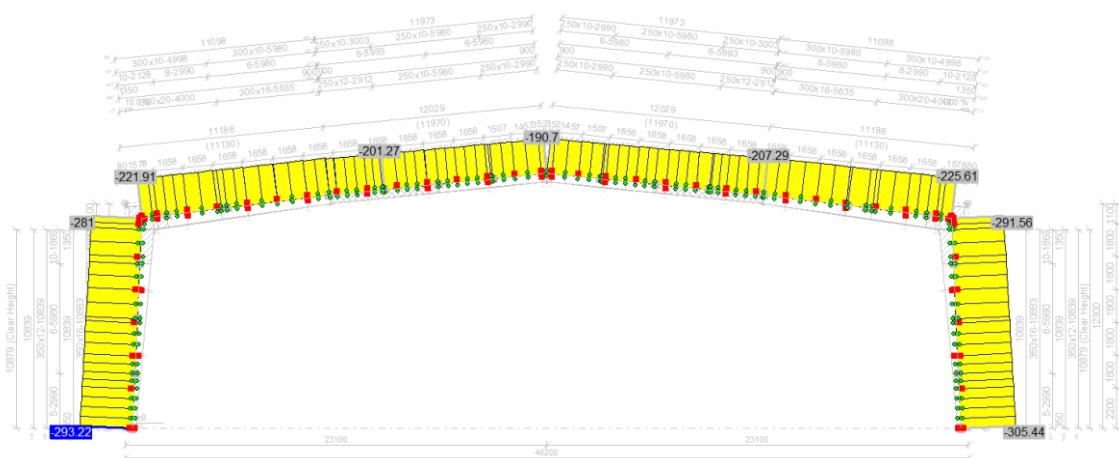


Figure 91 – Axial load for load case 2.

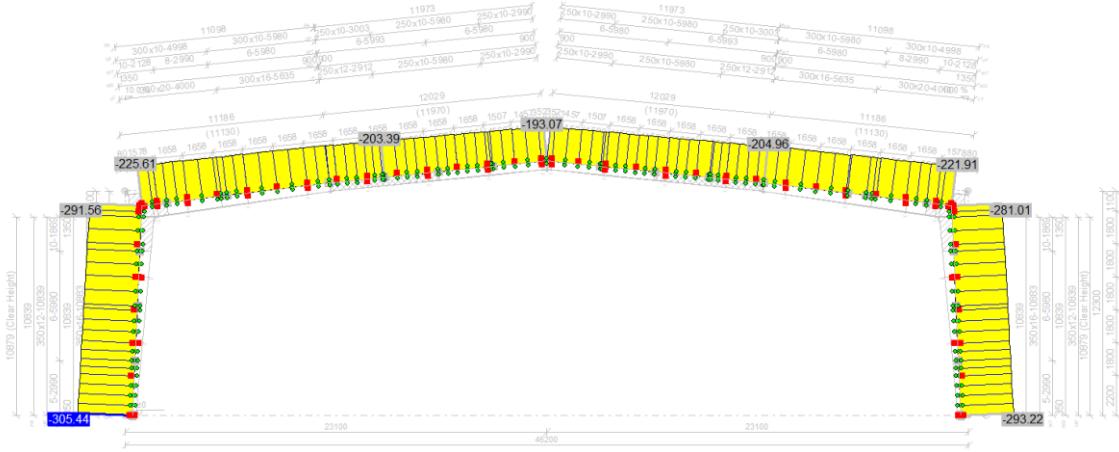


Figure 92 – Axial load for load case 3.

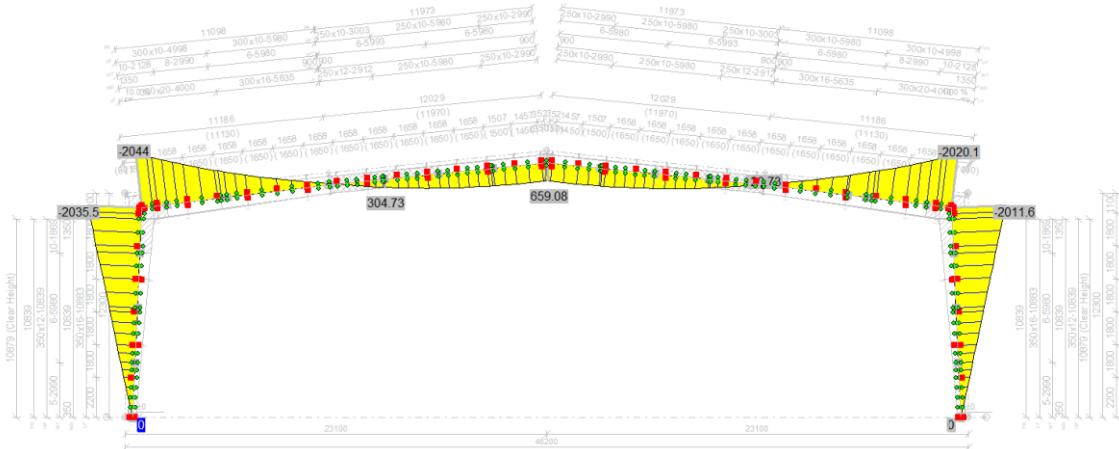


Figure 93 – Bending moment for load case 1.

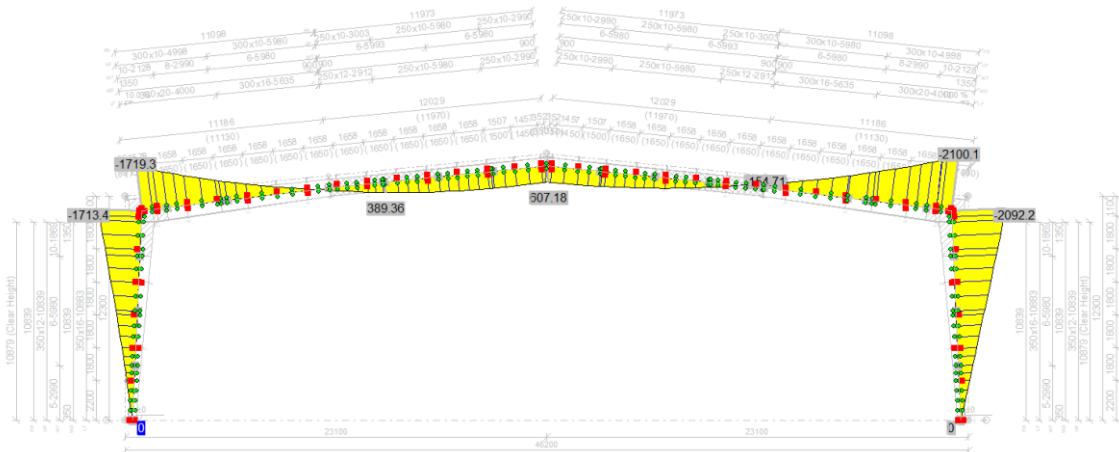


Figure 94 – Bending moment for load case 2.

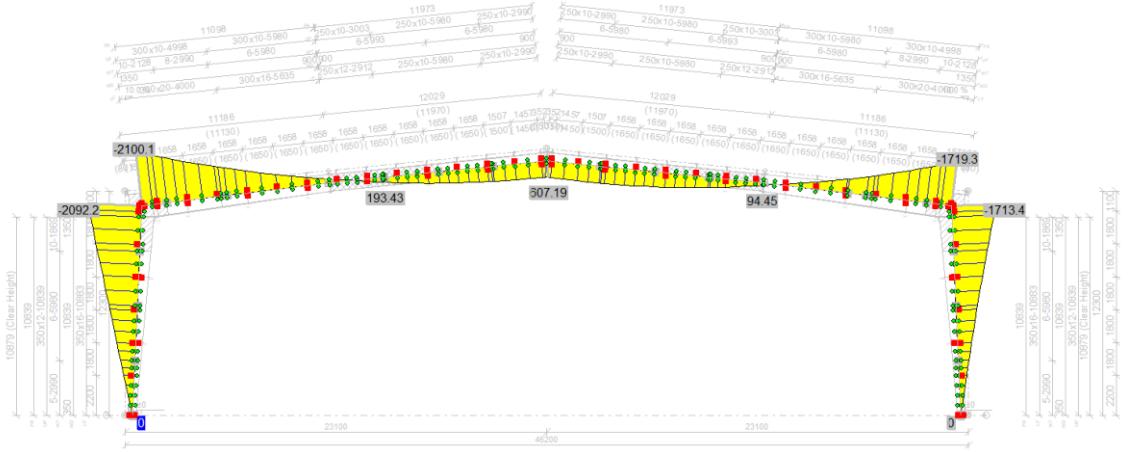


Figure 95 – Bending moment for load case 3.

18. Frame 3.27

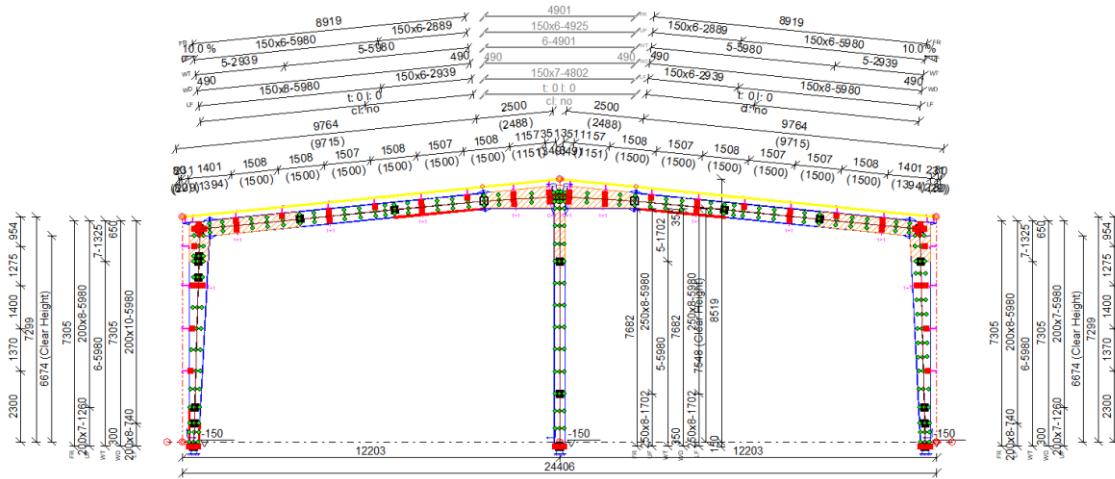


Figure 96 – Frame geometry 3.27.

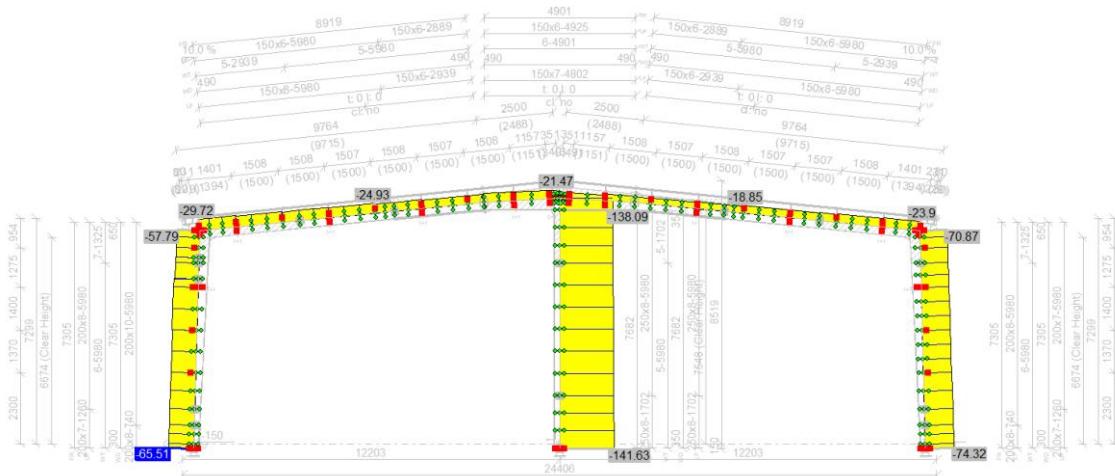


Figure 97 – Axial load for load case 1.

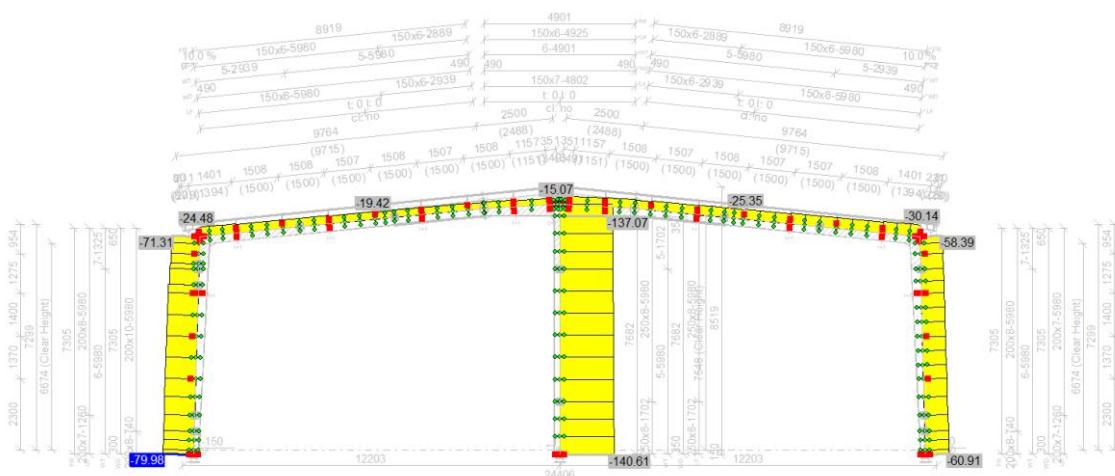


Figure 98 – Axial load for load case 2.

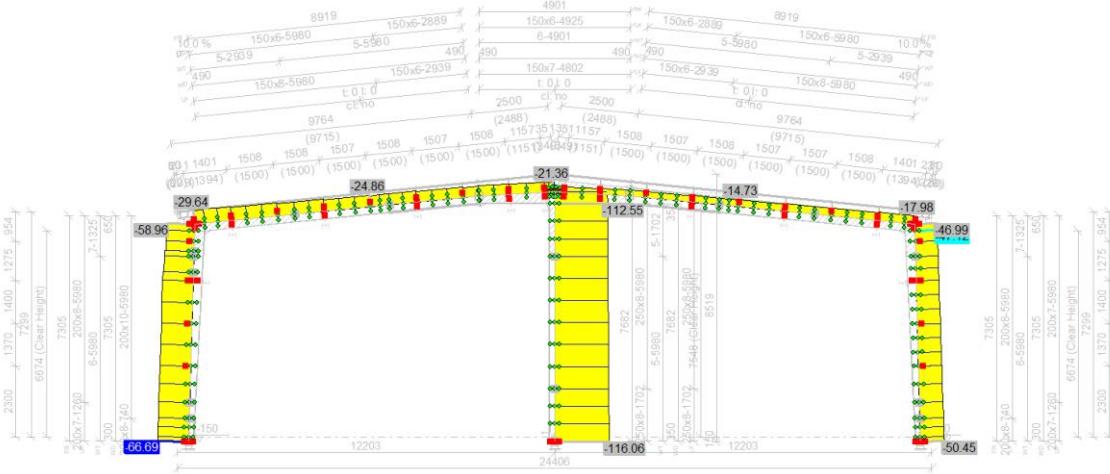


Figure 99 – Axial load for load case 3.

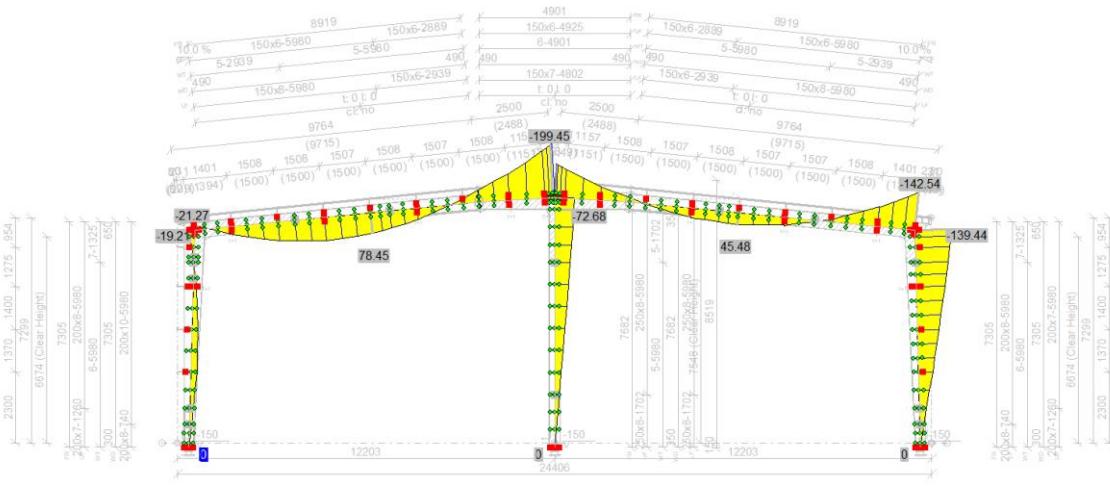


Figure 100 – Bending moment for load case 1.

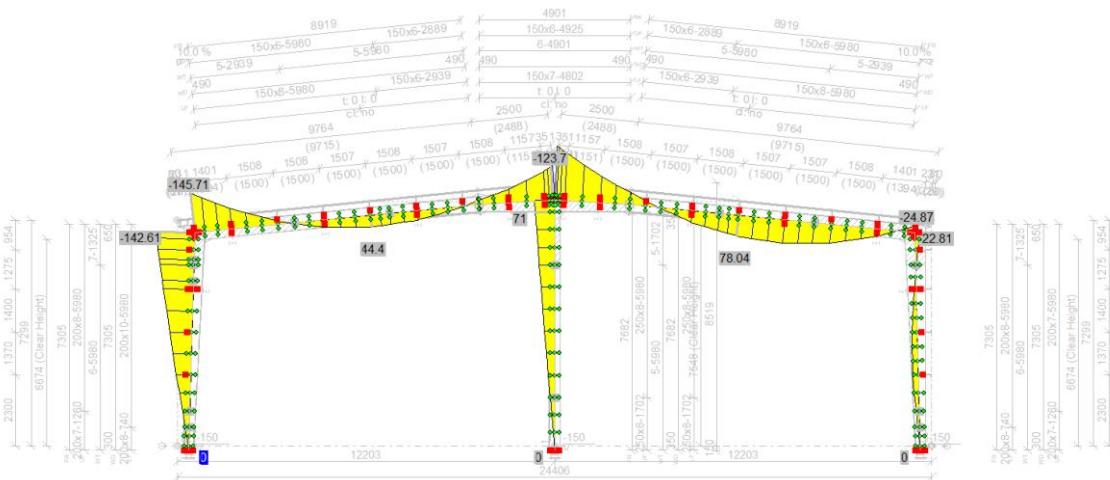


Figure 101 – Bending moment for load case 2.

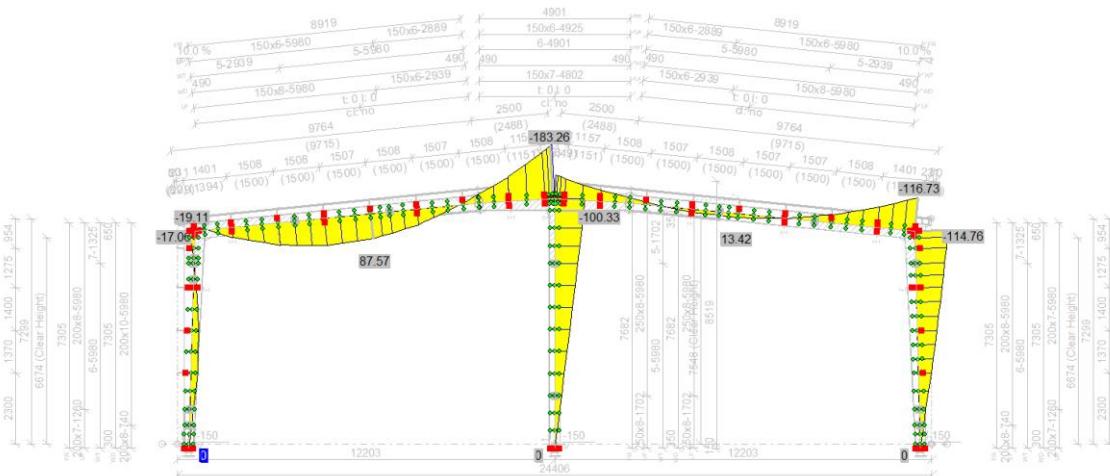


Figure 102 – Bending moment for load case 3.

19. Frame 4.1

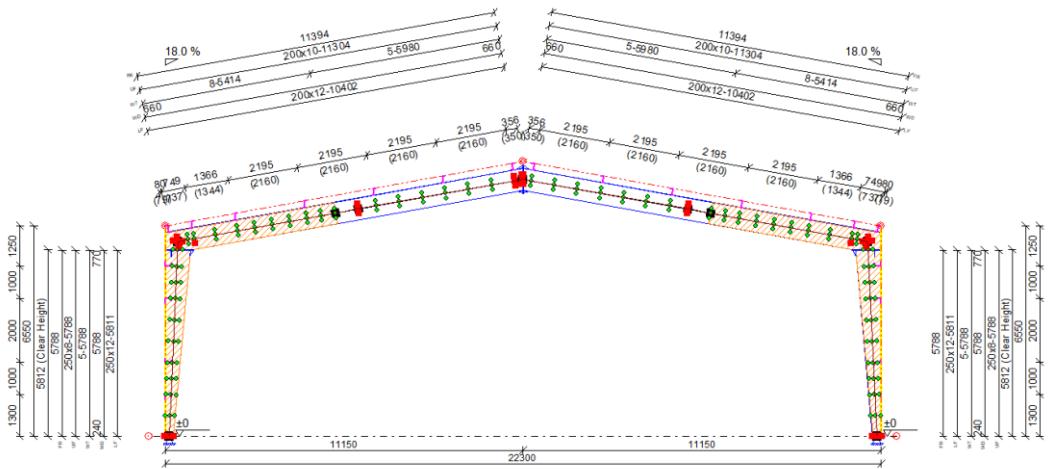


Figure 103 – Frame geometry 4.1.

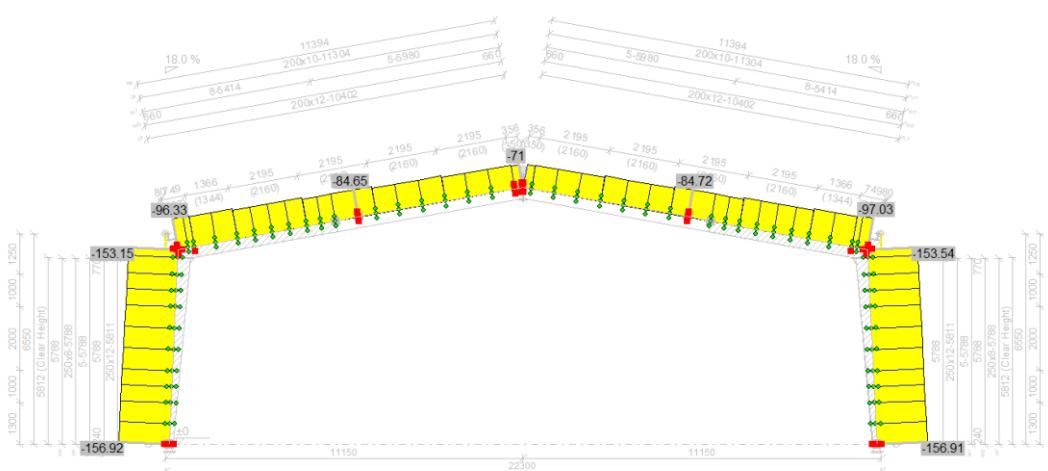


Figure 104 – Axial load for load case 2.

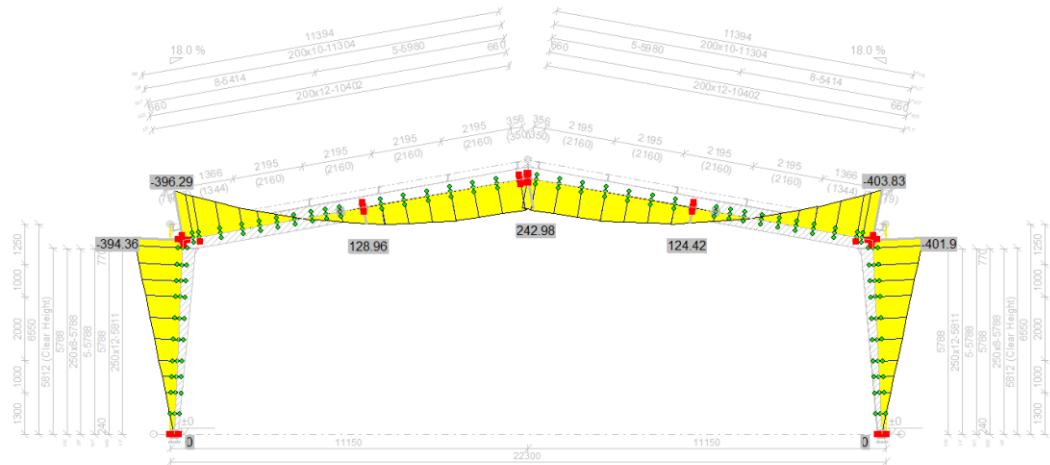


Figure 105 – Bending moment for load case 2.

20. Frame 4.3

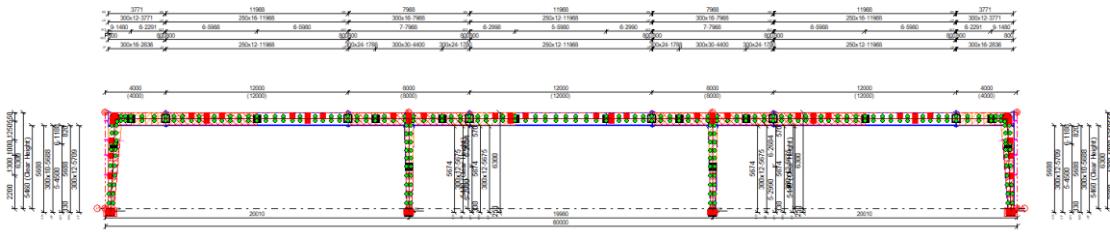


Figure 106 – Frame geometry 4.3.

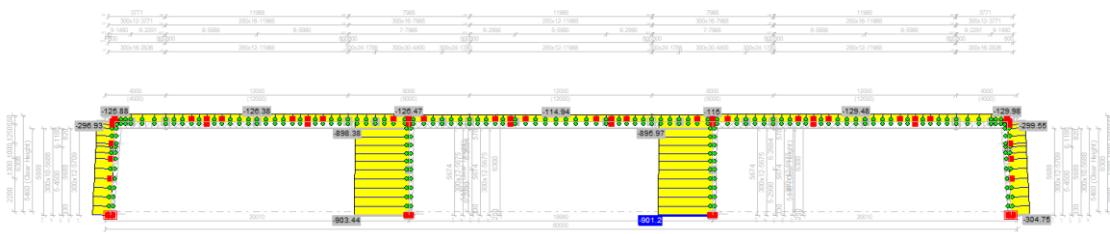


Figure 107 – Axial load for load case 1.

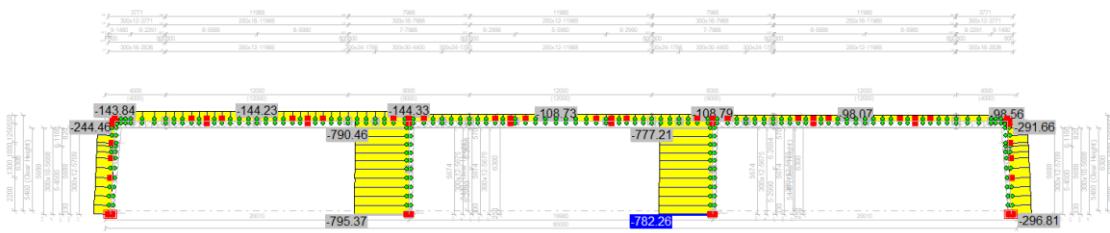


Figure 108 – Axial load for load case 2.

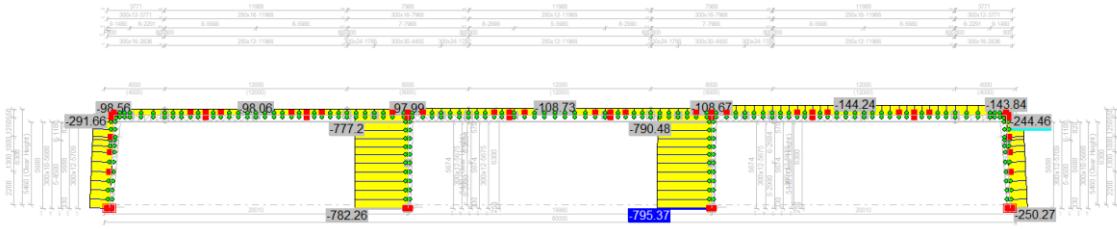


Figure 109 – Axial load for load case 3.

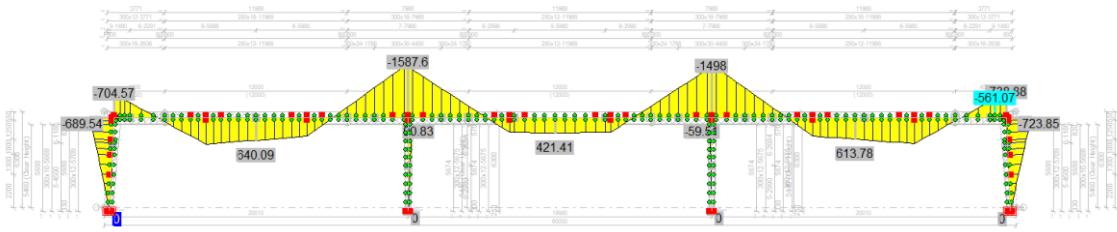


Figure 110 – Bending moment for load case 1.

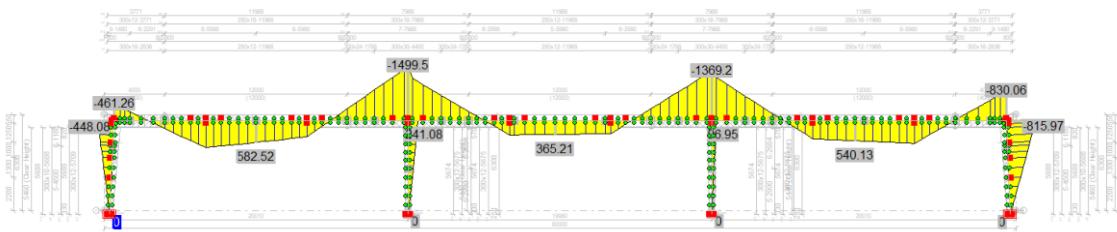


Figure 111 – Bending moment for load case 2.

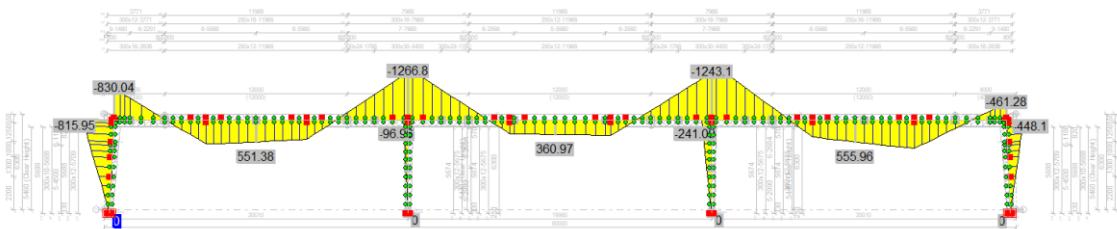
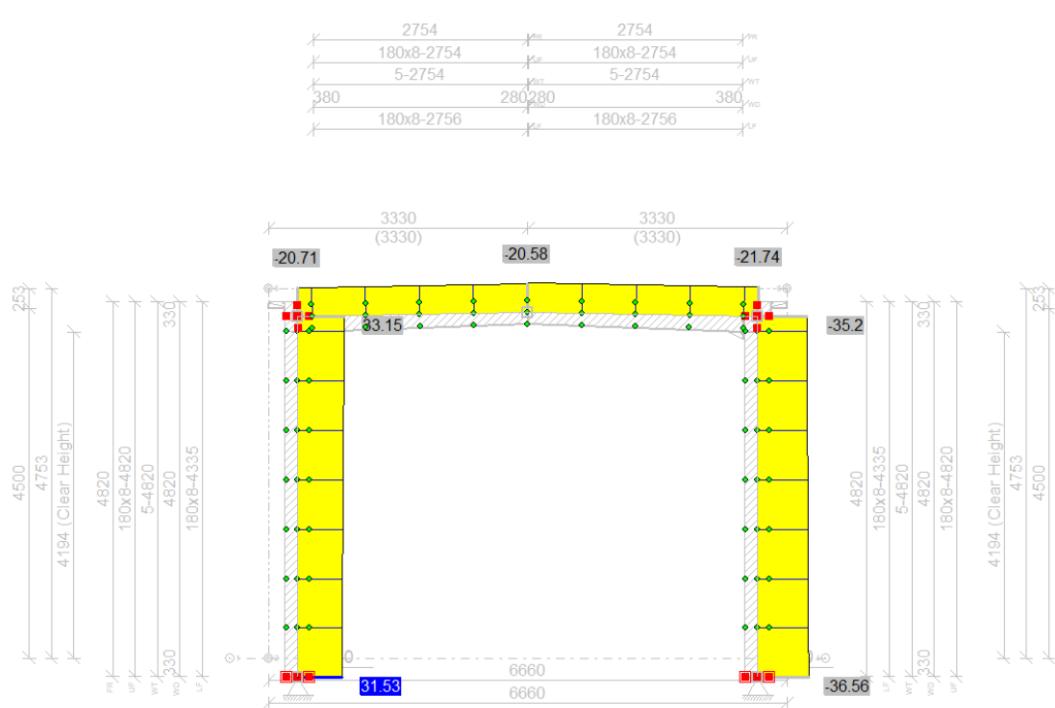
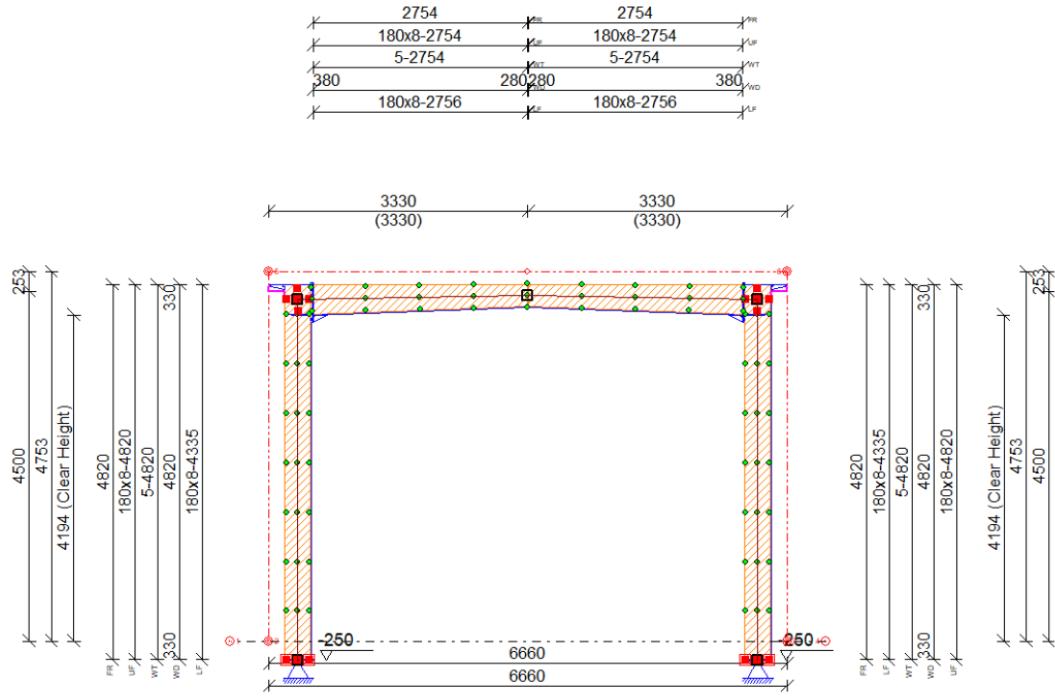


Figure 112 – Bending moment for load case 3.

21. Frame 4.4



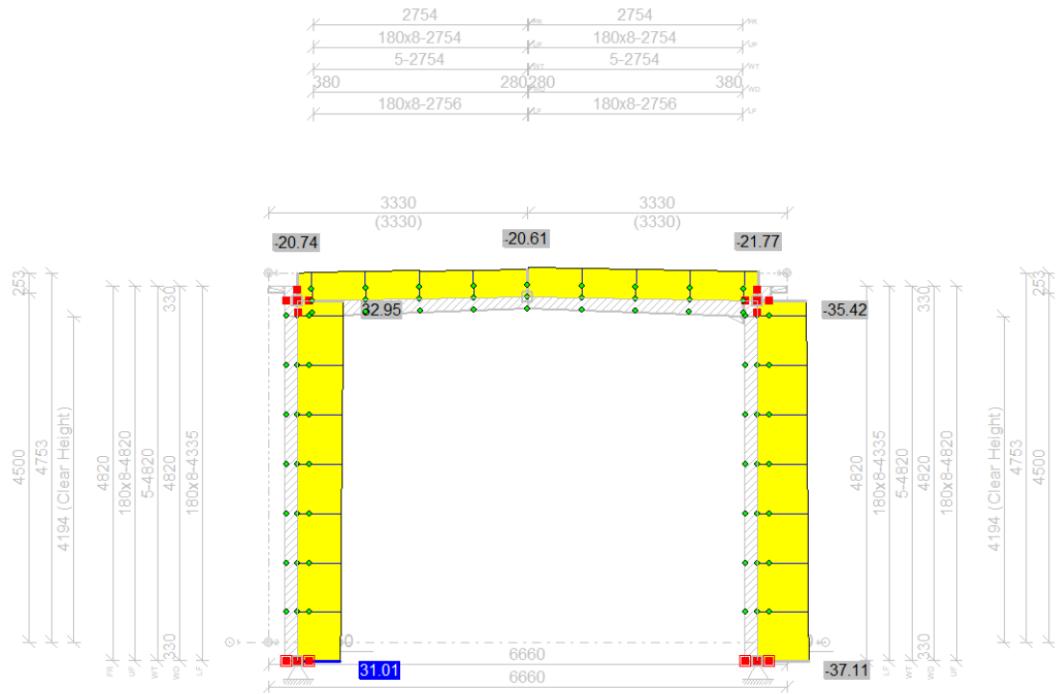


Figure 115 – Axial load for load case 2.

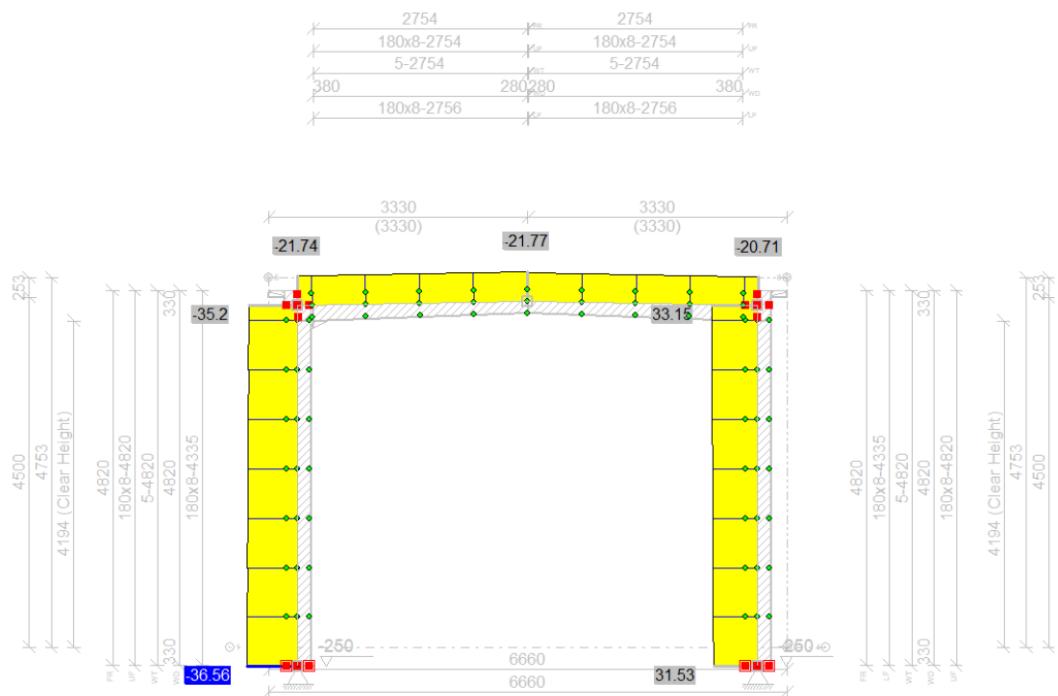


Figure 116 – Axial load for load case 3.

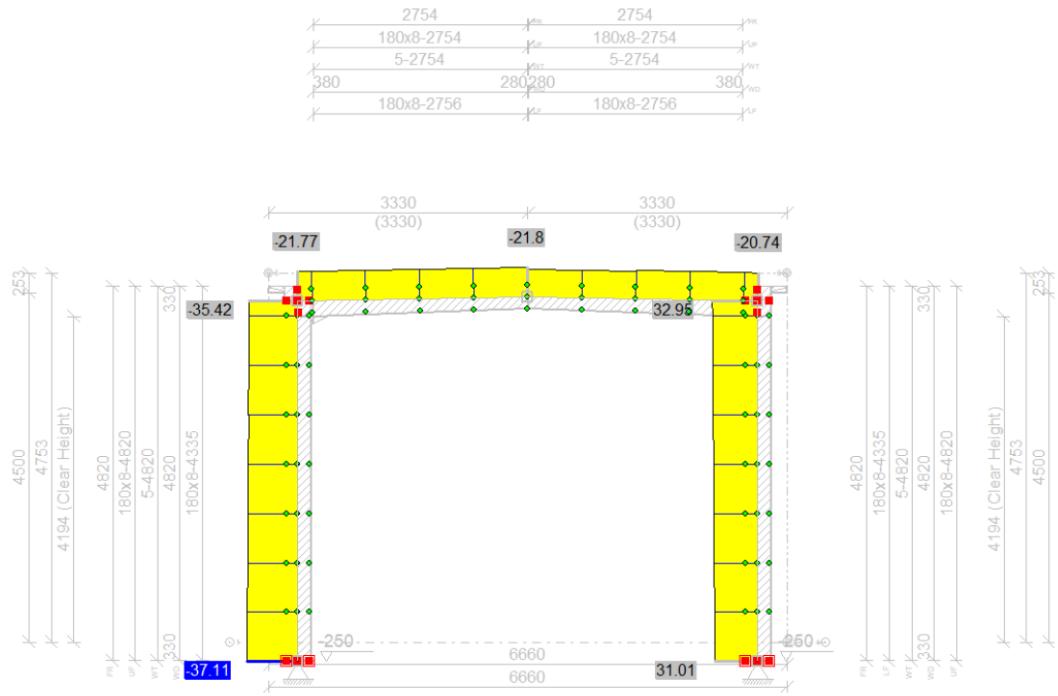


Figure 117 – Axial load for load case 4.

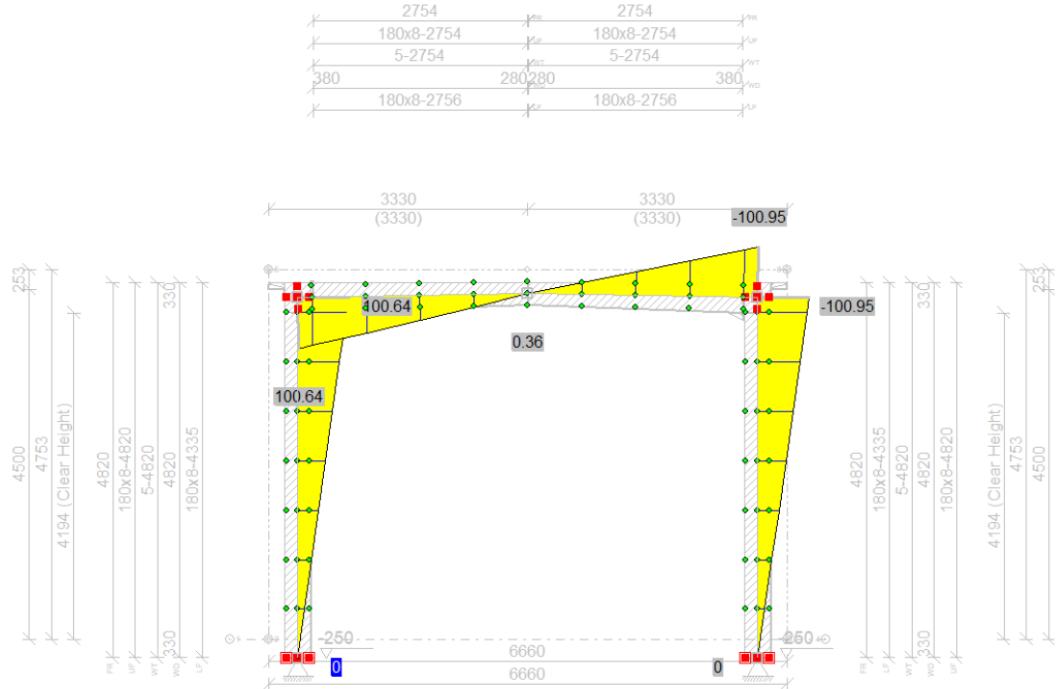


Figure 118 – Bending moment for load case 1.

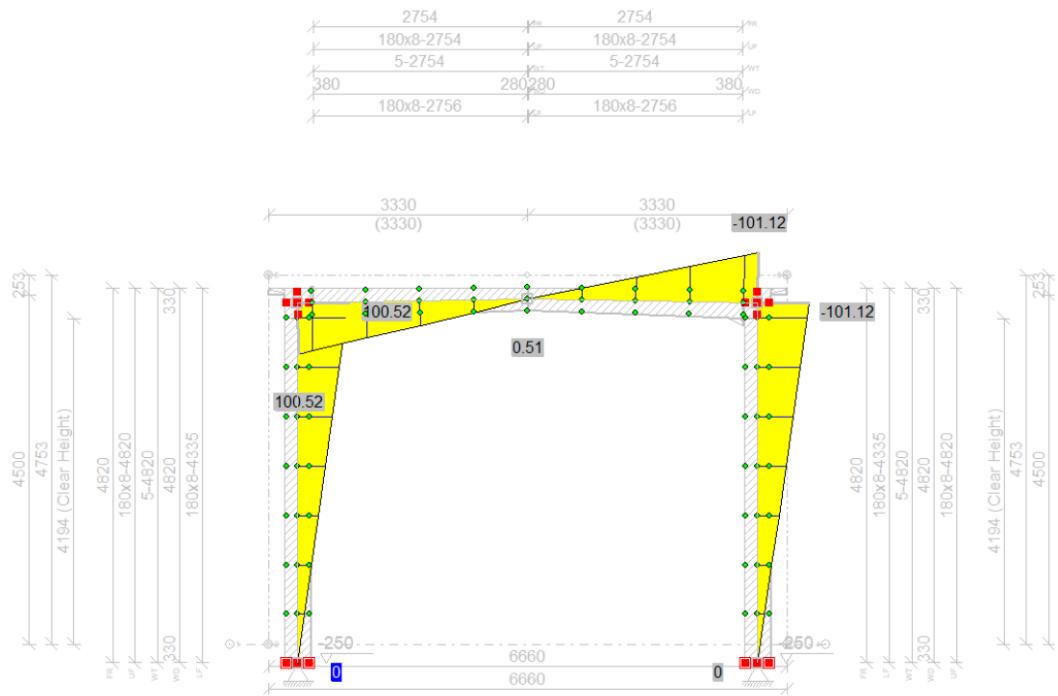


Figure 119 – Bending moment for load case 2.

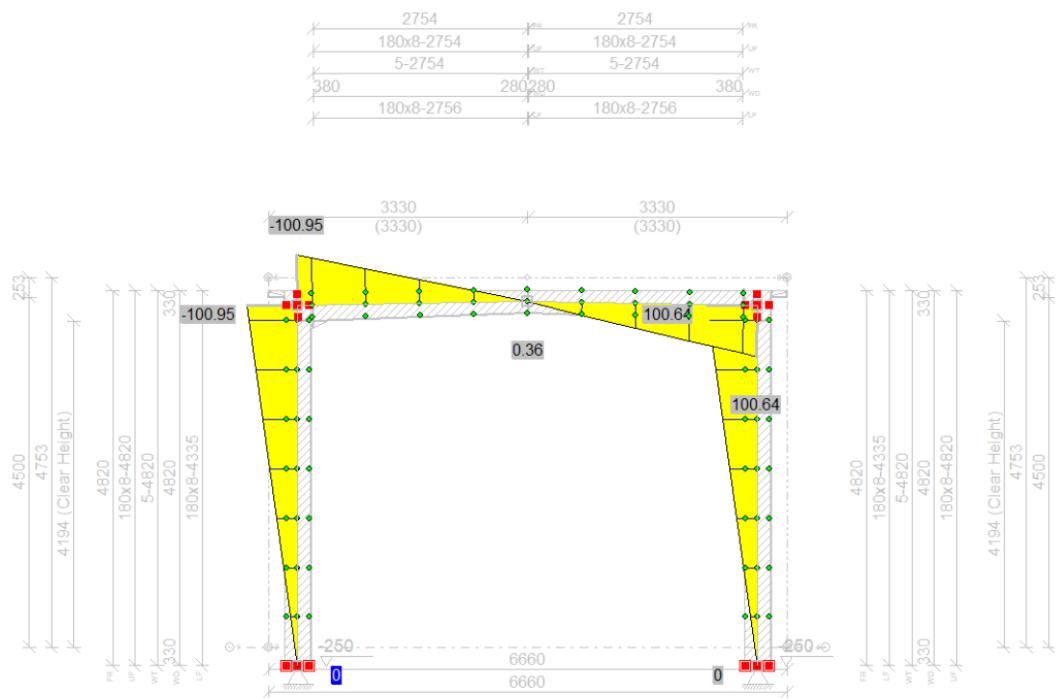


Figure 120 – Bending moment for load case 3.

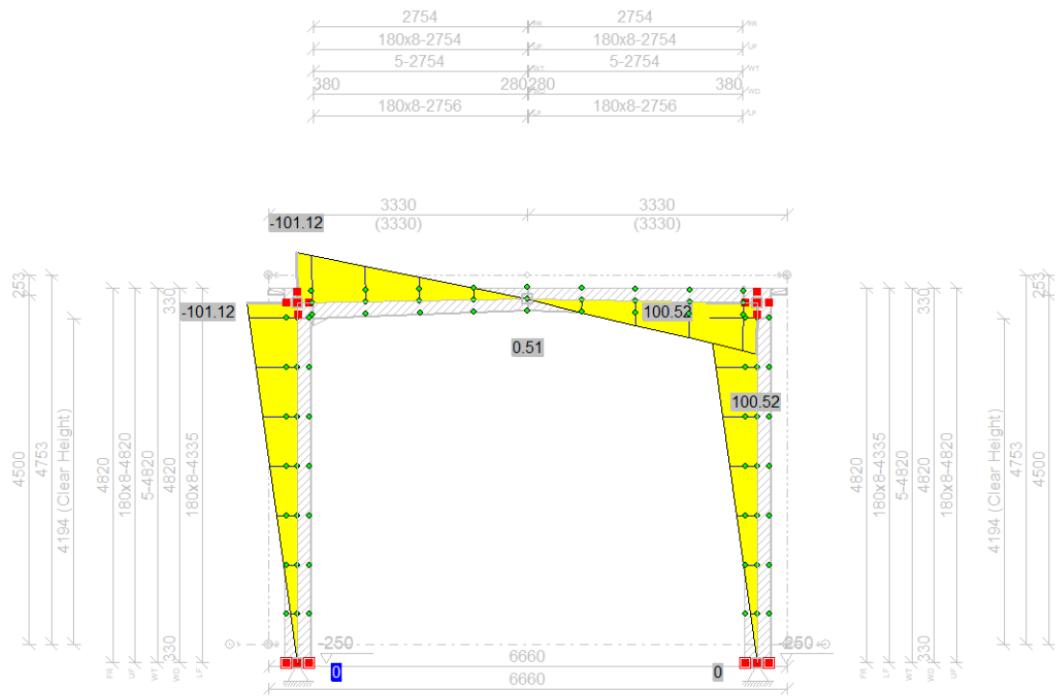


Figure 121 – Bending moment for load case 4.

22. Frame 4.6

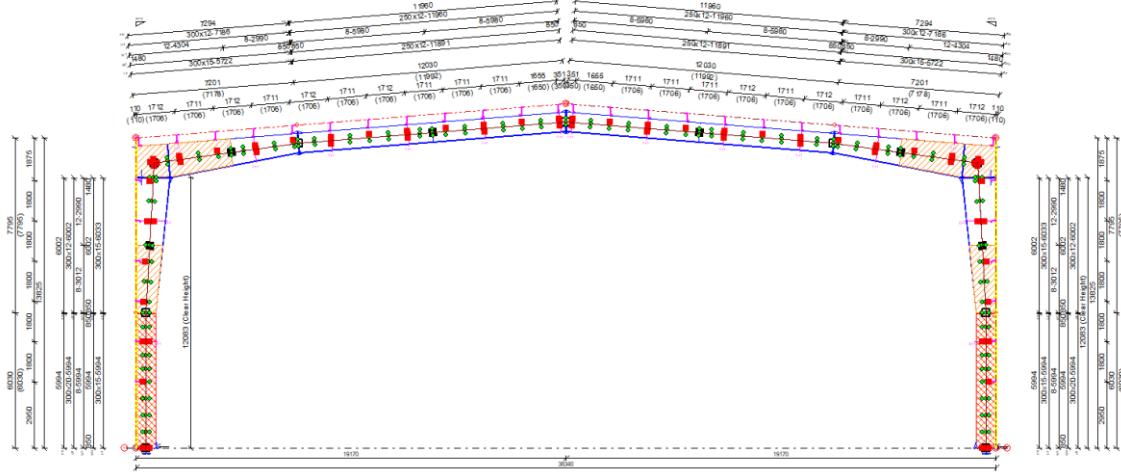


Figure 122 – Frame geometry 4.6.

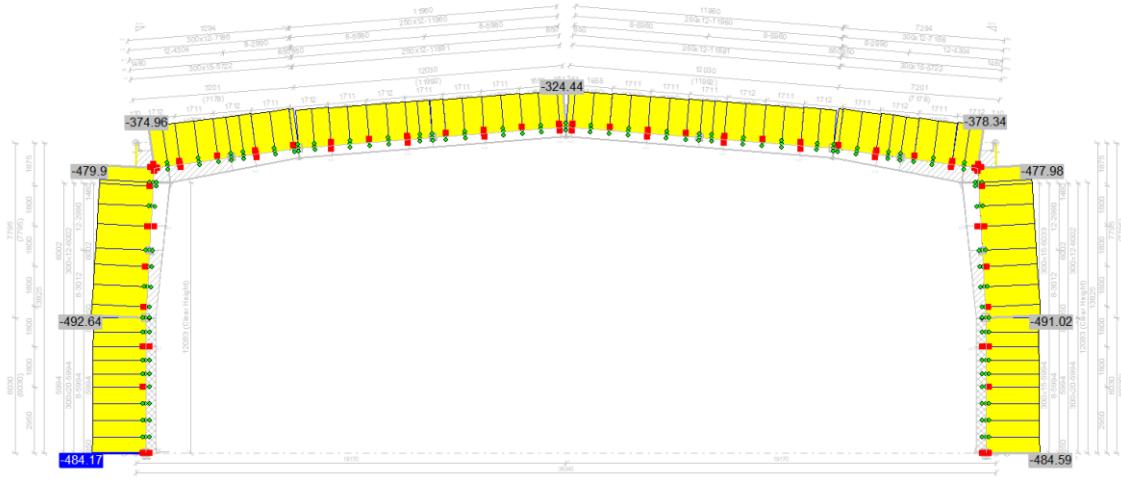


Figure 123 – Axial load for load case 1.

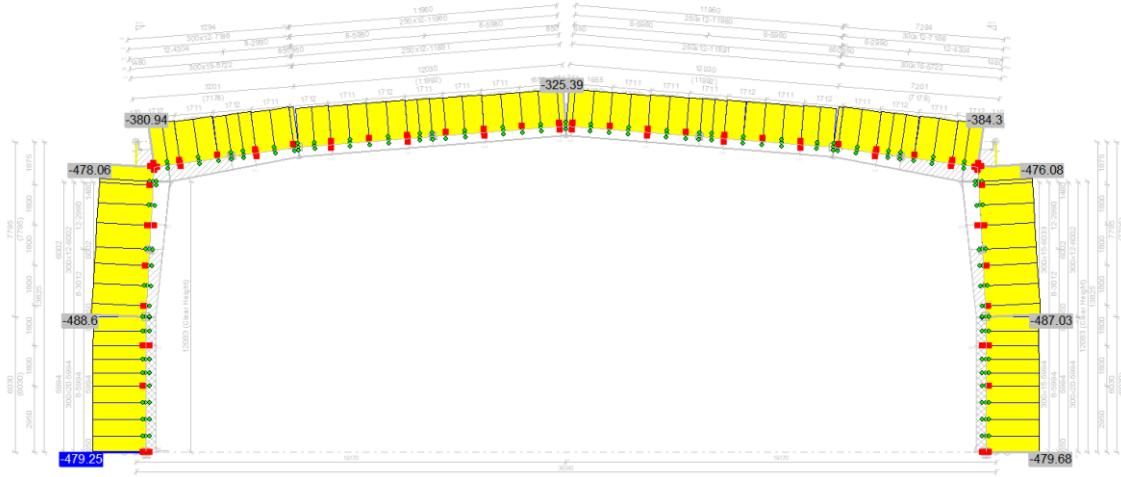


Figure 124 – Axial load for load case 2.

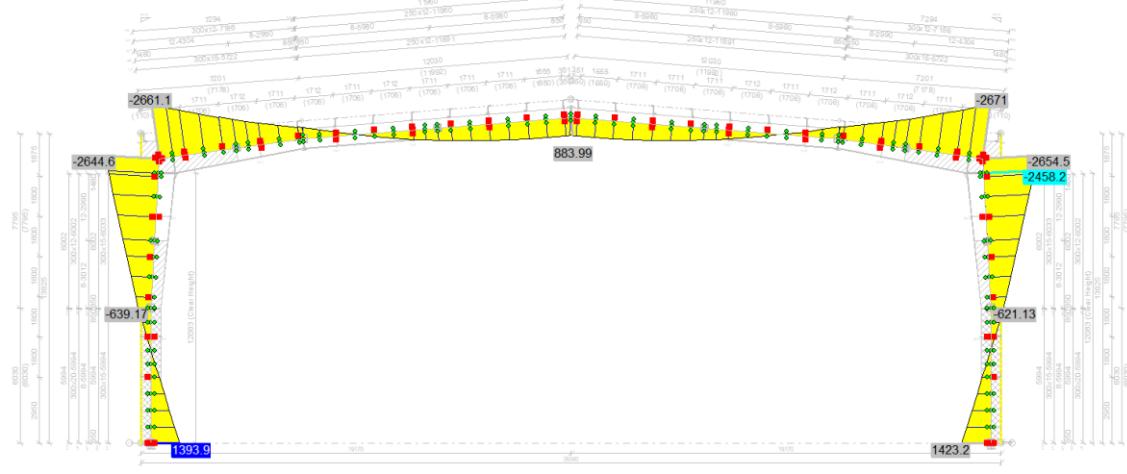


Figure 125 – Bending moment for load case 1.

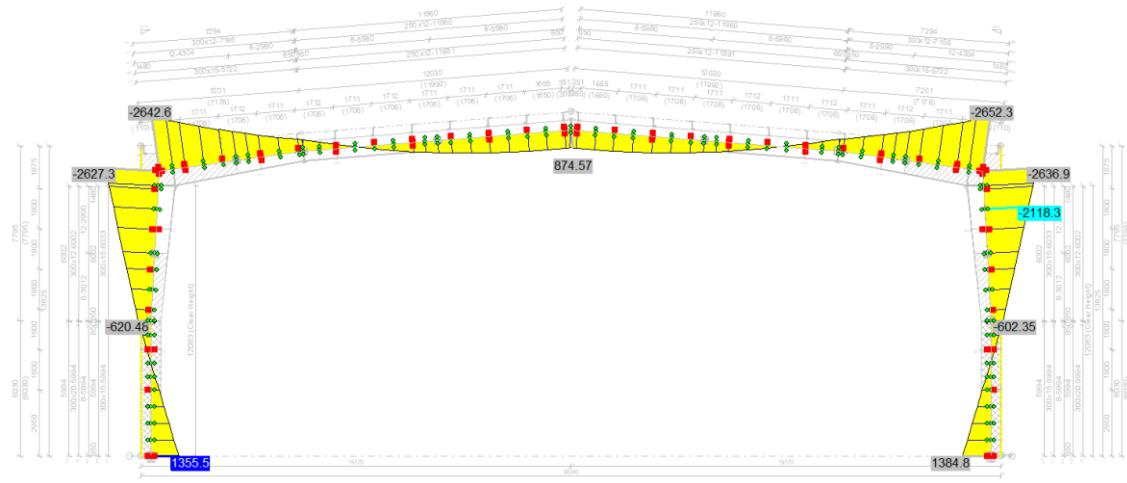


Figure 126 – Bending moment for load case 2.