Annexure 1

FUZZY RULES FOR MODELLING DEFLECTION

1. If (VDF is low) and (Initial_deflection is Very_good) and (MSN is low) then (deflection is Very good) (1)
2. If (VDF is low) and (Initial_deflection is Very_good) and (MSN is medium) then (deflection is Very good) (1)
3. If (VDF is low) and (Initial_deflection is Very_good) and (MSN is high) then (deflection is Very good) (1)
4. If (VDF is low) and (Initial_deflection is Good) and (MSN is low) then (deflection is Fair) (1)
5. If (VDF is low) and (Initial_deflection is Good) and (MSN is medium) then (deflection is Good) (1)
6. If (VDF is low) and (Initial_deflection is Good) and (MSN is high) then (deflection is Good) (1)
7. If (VDF is low) and (Initial_deflection is Fair) and (MSN is low) then (deflection is Fair) (1)
8. If (VDF is low) and (Initial_deflection is Fair) and (MSN is medium) then (deflection is Good) (1)
9. If (VDF is low) and (Initial_deflection is Fair) and (MSN is high) then (deflection is Good) (1)
10. If (VDF is low) and (Initial_deflection is Poor) and (MSN is low) then (deflection is Poor) (1)
11. If (VDF is low) and (Initial_deflection is Poor) and (MSN is medium) then (deflection is Fair) (1)
12. If (VDF is low) and (Initial_deflection is Poor) and (MSN is high) then (deflection is Good) (1)
13. If (VDF is low) and (Initial_deflection is Very_poor) and (MSN is low) then (deflection is Very poor) (1)
14. If (VDF is low) and (Initial_deflection is Very_poor) and (MSN is medium) then (deflection is Fair) (1)
15. If (VDF is low) and (Initial_deflection is Very_poor) and (MSN is high) then (deflection is Good) (1)
16. If (VDF is medium) and (Initial_deflection is Very_good) and (MSN is low) then (deflection is Very good) (1)
17. If (VDF is medium) and (Initial_deflection is Very_good) and (MSN is medium) then (deflection is Very good) (1)
18. If (VDF is medium) and (Initial_deflection is Very_good) and (MSN is high) then (deflection is Very good) (1)
19. If (VDF is medium) and (Initial_deflection is Good) and (MSN is low) then (deflection is Fair) (1)
20. If (VDF is medium) and (Initial_deflection is Good) and (MSN is medium) then (deflection is Fair) (1)
21. If (VDF is medium) and (Initial_deflection is Good) and (MSN is high) then (deflection is Good) (1)
22. If (VDF is medium) and (Initial_deflection is Fair) and (MSN is low) then (deflection is Poor) (1)
23. If (VDF is medium) and (Initial_deflection is Fair) and (MSN is medium) then (deflection is Fair) (1)
24. If (VDF is medium) and (Initial_deflection is Fair) and (MSN is high) then (deflection is Good) (1)
25. If (VDF is medium) and (Initial_deflection is Poor) and (MSN is low) then (deflection is Poor) (1)
26. If (VDF is medium) and (Initial_deflection is Poor) and (MSN is medium) then (deflection is Good) (1)
27. If (VDF is medium) and (Initial_deflection is Poor) and (MSN is high) then (deflection is Very good) (1)
28. If (VDF is medium) and (Initial_deflection is Very_poor) and (MSN is low) then (deflection is Very poor) (1)
29. If (VDF is medium) and (Initial_deflection is Very_poor) and (MSN is medium) then (deflection is Fair) (1)
30. If (VDF is medium) and (Initial_deflection is Very_poor) and (MSN is high) then (deflection is Fair) (1)
31. If (VDF is high) and (Initial_deflection is Very_good) and (MSN is low) then (deflection is Very good) (1)
32. If (VDF is high) and (Initial_deflection is Very_good) and (MSN is medium) then (deflection is Very good) (1)
33. If (VDF is high) and (Initial_deflection is Very_good) and (MSN is high) then (deflection is Very good) (1)
34. If (VDF is high) and (Initial_deflection is Good) and (MSN is low) then (deflection is Poor) (1)
35. If (VDF is high) and (Initial_deflection is Good) and (MSN is medium) then (deflection is Fair) (1)
36. If (VDF is high) and (Initial_deflection is Good) and (MSN is high) then (deflection is Good) (1)
37. If (VDF is high) and (Initial_deflection is Fair) and (MSN is low) then (deflection is Poor) (1)
38. If (VDF is high) and (Initial_deflection is Fair) and (MSN is medium) then (deflection is Fair) (1)
39. If (VDF is high) and (Initial_deflection is Fair) and (MSN is high) then (deflection is Good) (1)
40. If (VDF is high) and (Initial_deflection is Poor) and (MSN is low) then (deflection is Very poor) (1)
41. If (VDF is high) and (Initial_deflection is Poor) and (MSN is medium) then (deflection is Fair) (1)
42. If (VDF is high) and (Initial_deflection is Poor) and (MSN is high) then (deflection is Good) (1)
43. If (VDF is high) and (Initial_deflection is Very_poor) and (MSN is low) then (deflection is Very poor) (1)
44. If (VDF is high) and (Initial_deflection is Very_poor) and (MSN is medium) then (deflection is Very poor) (1)
45. If (VDF is high) and (Initial_deflection is Very_poor) and (MSN is high) then (deflection is Good) (1)

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