

Hersteller Initiative Software (HIS) Metrics

A set of metric thresholds from the Automotive Industry to ensure code quality

Five working groups from the Automotive manufacturer's Audi, BMW Group, DaimlerChrysler, Porsche and Volkswagen whose goal is the production of agreed standards within the areas of Standard software modules for networks, Development of process maturity, Software test, Software tools and Programming of ECU's.

Software Metrics are the basis for efficient project and quality management. With software Metrics statements can be made about the quality of the software product and the software development process.

In this document HIS specifies a fundamental set of Metrics to be used in the evaluation of software.

Checks

Check ID	Check Name	Supported
HIS_01	1. Comment Density (COMF)	Yes
HIS_02	2. Number of Paths (PATH)	Yes
HIS_03	3. Number of Goto Statements(GOTO)	Yes
HIS_04	4. Cyclomatic Complexity (v(G))	Yes
HIS_05	5. Calling Functions (CALLING)	Yes
HIS_06	6. Called Functions (CALLS)	Yes
HIS_07	7. Function Parameters (PARAM)	Yes
HIS_08	8. Number of Statements (STMT)	Yes
HIS_09	9. Number of call levels (LEVEL)	Yes
HIS_10	10. Number of return points (RETURN)	Yes
HIS_11	11. Language scope (VOCF)	Yes
HIS_12	12. Recursion (AP_CG_CYCLE)	Yes
HIS_13	13. Statements Changed (SCHG)	Yes
HIS_14	14. Statements Deleted (SDEL)	Yes
HIS_15	15. New Statements (SNEW)	Yes
HIS_16	16. Stability Index (S)	Yes
HIS_17	17. MISRA-HIS Violations (NOMV)	Yes
HIS_18	18. MISRA-HIS Violations per Rule (NOMVPR)	Yes