

# ISO TC108/SC2 (기계·차량·구조물에 발생하는 기계진동과 충격의 측정/평가) 소개

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## 요약

ISO TC108/SC2에서 취급하는 기계, 차량 및 구조물에 발생하는 기계진동과 충격의 측정 및 평가 기준에 대하여 살펴보았다. SC2내에는 현재 7개의 Working Group(WG)이 23개 기준에 대하여 보완 및 개정작업을 지속하고 있다. 이들 기준의 적용대상은 회전기계, 선박, 철도차량, 자동차 및 건물로서 본문에서는 기준 내용을 요약하고 개정과정도 일부 소개한다.

## 1. SC2의 구성

현재 SC2 내의 7개 Working Group과 그 의장국 및 기관은 다음과 같다.

SC2 : Measurement and evaluation of mechanical vibration and shock as applied to machines, vehicles and structures  
독일 (DIN)

WG1 : Vibration of machines 영국 (BSI)

WG2 : Vibration of ships 스웨덴(SIS)

WG3 : Vibration of stationary structures  
영국 (BSI)

WG6 : Vibration of hydraulic machine sets  
독일 (DIN)

WG7 : Machines with active magnetic bearings  
일본 (JISC)

WG8 : Prediction of underground railway vibration  
독일 (DIN)

WG16: Vibration and shock resistance of sensitive equipment 스웨덴(SIS)

또한 SC2에서 취급하고있는 DIS이상 ISO기준은 23개로서 다음과 같다.

ISO 4866:1990 Mechanical vibration and shock -- Vibration of buildings -- Guidelines for the measurement of vibrations and evaluation of their effects on buildings

ISO 4867:1984 Code for the measurement and reporting of shipboard vibration data

ISO 4868:1984 Code for the measurement and reporting of local vibration data of ship structures and equipment

ISO 6954:1984 Mechanical vibration and shock -- Guidelines for the overall evaluation of vibration in merchant ships

ISO 7919-1:1996 Mechanical vibration of non-reciprocating machines -- Measurements on rotating shafts and evaluation criteria -- Part 1: General guidelines

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ISO 7919-2:1996 Mechanical vibration of non-reciprocating machines -- Measurements on rotating shafts and evaluation criteria -- Part 2: Large land-based steam turbine generator sets

ISO 7919-3:1996 Mechanical vibration of non-reciprocating machines -- Measurements on rotating shafts and evaluation criteria -- Part 3: Coupled industrial machines

ISO 7919-4:1996 Mechanical vibration of non-reciprocating machines -- Measurements on rotating shafts and evaluation criteria -- Part 4: Gas turbine sets

ISO 7919-5:1997 Mechanical vibration of non-reciprocating machines -- Measurements on rotating shafts and evaluation criteria -- Part 5: Machine sets in hydraulic power generating and pumping plants

ISO 8002:1986 Mechanical vibrations -- Land vehicles -- Method for reporting measured data

ISO 8569:1996 Mechanical vibration and shock -- Measurement and evaluation of shock and vibration effects on sensitive equipment in buildings

ISO 8608:1995 Mechanical vibration -- Road surface profiles -- Reporting of measured data

ISO/DIS 9629 Mechanical vibration -- Rail track geometry -- Reporting of measured data

ISO 10055:1996 Mechanical vibration -- Vibration testing requirements for shipboard equipment and machinery components

ISO/DIS 10056 Mechanical vibration -- Measurement and analyses of vibration to which passengers and crew are exposed in railway vehicles

ISO 10326-1:1992 Mechanical vibration -- Laboratory method for evaluating vehicle seat vibration -- Part 1: Basic requirements

ISO/DIS 10326-2 Mechanical vibration -- Laboratory method for evaluating vehicle seat vibration -- Part 2: Application to railway vehicles

ISO 10815:1996 Mechanical vibration -- Measurement of vibration generated internally in railway tunnels by the passage of trains

ISO 10816-1:1995 Mechanical vibration -- Evaluation of machine vibration by measurements on non-rotating parts -- Part 1: General guidelines

ISO 10816-2:1996 Mechanical vibration -- Evaluation of machine vibration by measurements on non-rotating parts -- Part 2: Large land-based steam turbine generator sets in excess of 50 MW

ISO/FDIS 10816-3 Mechanical vibration -- Evaluation of machine vibration by measurements on non-rotating parts -- Part 3: Industrial machines with nominal power above 15 kW and nominal speeds between 120 r/min and 15 000 r/min when measured in situ

ISO/FDIS 10816-4 Mechanical vibration -- Evaluation of machine vibration by measurements on non-rotating parts -- Part 4: Gas turbine driven sets excluding aircraft derivatives

ISO 10816-6:1995 Mechanical vibration -- Evaluation of machine vibration by measurements on non-rotating parts -- Part 6: Reciprocating machines with power ratings above 100 kW