

Minimum Performance Criteria for Falling Object Protective Structure (FOPS)

Foreword—This Document has not changed other than to put it into the new SAE Technical Standards Board Format.

1. Scope—This Recommended Practice applies only to machines covered by SAE J1040c (ROPS). The evaluations are for resistance to localized penetration. The performance requirements, of a representative specimen within the manufacturer's specifications, are based on the performance of experience proven structures under the laboratory evaluation procedure. It is intended that all portions of this Recommended Practice shall be reviewed and revised as additional knowledge of FOPS performance becomes available.

1.1 Objective—This SAE Recommended Practice establishes a consistently repeatable laboratory evaluation procedure and performance requirements in that evaluation for structures intended to provide operators with reasonable protection from such falling objects as trees and rocks.

2. References

2.1 Applicable Publications—The following publications form a part of the specification to the extent specified herein. Unless otherwise indicated, the latest revision of SAE publications shall apply.

2.1.1 SAE PUBLICATIONS—Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

SAE J397b—Deflection Limiting Volume—ROPS/FOPS Laboratory Evaluation

SAE J1040c—Performance Criteria for Rollover Protective Structures (ROPS) for Construction, Earthmoving, Forestry, and Mining Machines

SAE J1119—Steel Products for Rollover Protective Structures (ROPS) and Falling Object Protective Structures (FOPS)

2.1.2 ASTM PUBLICATION—Available from ASTM, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

ASTM A 370—Standard Methods and Devinitions for Mechanical Testing of Steel Products

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3. Facilities and Apparatus

3.1 Facilities

3.1.1 A standard laboratory drop test object, made of steel, as shown in Figure 1.

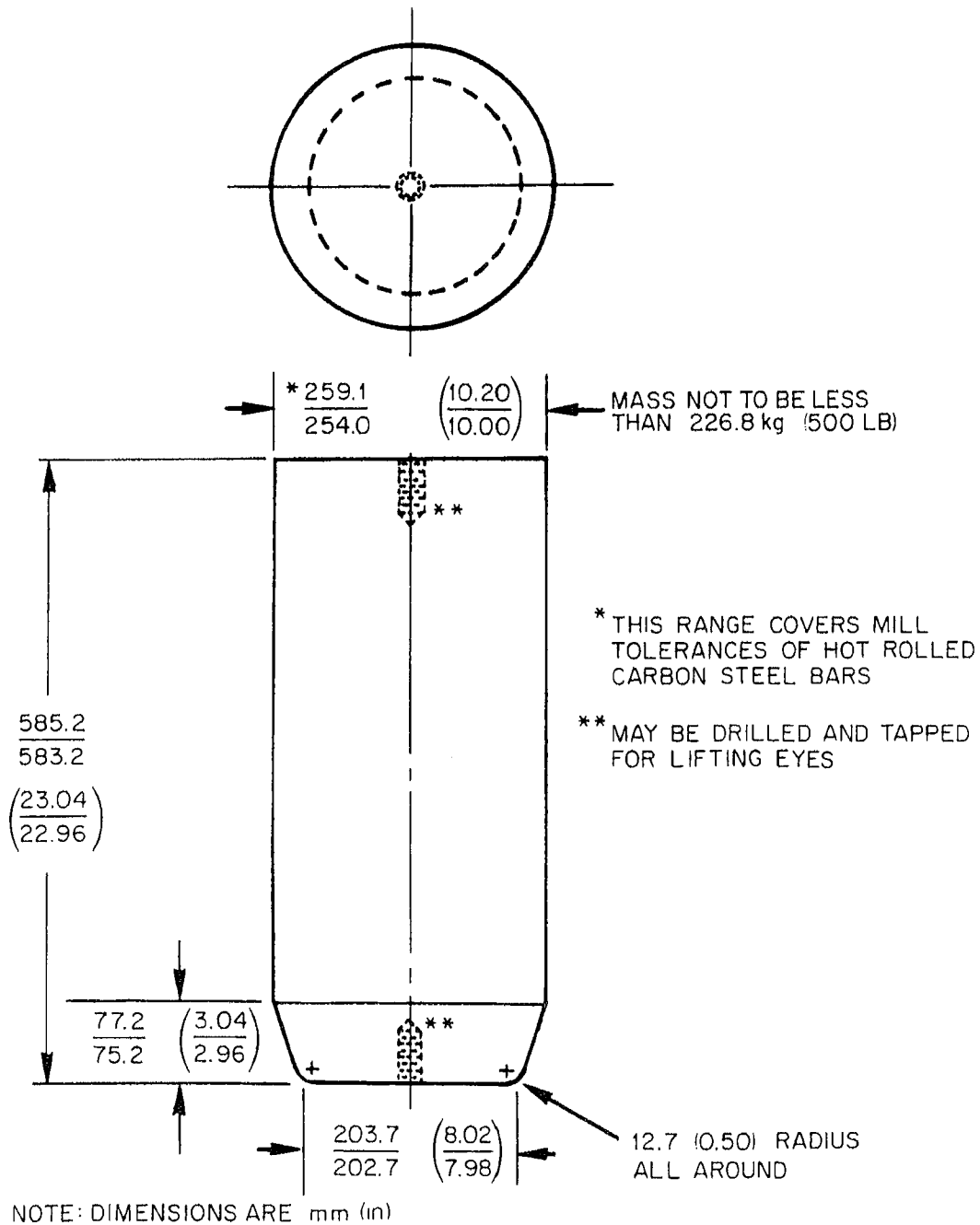


Figure 1—