

# ISO 4254-13:2023-04 (E)

## Agricultural machinery - Safety - Part 13: Large rotary mowers

---

<b>Contents</b>		<b>Page</b>
Foreword .....		v
Introduction .....		vii
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Normative references .....</b>	<b>2</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>2</b>
<b>3.1</b>	<b>Rotary mowers .....</b>	<b>2</b>
<b>3.2</b>	<b>Cutting elements .....</b>	<b>3</b>
<b>3.3</b>	<b>Thrown-object testing .....</b>	<b>3</b>
<b>4</b>	<b>Safety requirements and/or protective/risk reduction measures .....</b>	<b>4</b>
<b>4.1</b>	<b>General .....</b>	<b>4</b>
<b>4.2</b>	<b>Protection against thrown objects .....</b>	<b>4</b>
<b>4.3</b>	<b>Protection against inadvertent contact with the cutting elements .....</b>	<b>4</b>
<b>4.4</b>	<b>Rotating power component guarding and shielding .....</b>	<b>5</b>
<b>4.5</b>	<b>Overrunning clutch or freewheel device .....</b>	<b>5</b>
<b>4.6</b>	<b>Attachment means for trailed mowers .....</b>	<b>5</b>
<b>4.7</b>	<b>Attachment means for mounted and semi-mounted mowers .....</b>	<b>5</b>
<b>4.8</b>	<b>Cutting elements .....</b>	<b>5</b>
<b>4.9</b>	<b>Impact of the cutting-element assemblies .....</b>	<b>5</b>
<b>4.10</b>	<b>Unbalance .....</b>	<b>6</b>
<b>4.11</b>	<b>Structural integrity .....</b>	<b>6</b>
<b>5</b>	<b>Verification of safety requirements and/or protective/risk reduction measures .....</b>	<b>6</b>
<b>5.1</b>	<b>Test conditions -- General .....</b>	<b>6</b>
<b>5.1.1</b>	<b>Assembly .....</b>	<b>6</b>
<b>5.1.2</b>	<b>Mower position .....</b>	<b>6</b>
<b>5.1.3</b>	<b>Test speed .....</b>	<b>6</b>
<b>5.1.4</b>	<b>Number of tests .....</b>	<b>6</b>
<b>5.2</b>	<b>Foot-probe test .....</b>	<b>6</b>
<b>5.2.1</b>	<b>Foot-probe test equipment .....</b>	<b>6</b>
<b>5.2.2</b>	<b>Test conditions .....</b>	<b>8</b>
<b>5.2.3</b>	<b>Test procedure .....</b>	<b>9</b>
<b>5.2.4</b>	<b>Test acceptance .....</b>	<b>9</b>
<b>5.3</b>	<b>Impact test for cutting-element assemblies .....</b>	<b>9</b>
<b>5.3.1</b>	<b>Test equipment .....</b>	<b>9</b>
<b>5.3.2</b>	<b>Test conditions .....</b>	<b>9</b>
<b>5.3.3</b>	<b>Test procedure .....</b>	<b>9</b>
<b>5.3.4</b>	<b>Test acceptance .....</b>	<b>12</b>
<b>5.4</b>	<b>Unbalance test for cutting-element assemblies .....</b>	<b>12</b>
<b>5.4.1</b>	<b>Test equipment .....</b>	<b>12</b>
<b>5.4.2</b>	<b>Test conditions -- Multi-piece cutting element assembly .....</b>	<b>12</b>
<b>5.4.3</b>	<b>Test conditions -- One-piece cutting element construction .....</b>	<b>12</b>
<b>5.4.4</b>	<b>Test procedure .....</b>	<b>12</b>
<b>5.4.5</b>	<b>Test acceptance .....</b>	<b>12</b>
<b>5.5</b>	<b>Structural integrity test .....</b>	<b>12</b>
<b>5.5.1</b>	<b>Test equipment .....</b>	<b>12</b>
<b>5.5.2</b>	<b>Test conditions .....</b>	<b>13</b>
<b>5.5.3</b>	<b>Test procedure .....</b>	<b>13</b>

5.5.4	Test acceptance .....	13
5.6	Thrown object test .....	13
5.6.1	Operator zone .....	13
5.6.2	Test equipment .....	16
5.6.3	Test conditions .....	17
5.6.4	Test procedure .....	18
5.6.5	Scoring .....	19
5.6.6	Test acceptance .....	19
6	Information for use .....	20
6.1	Operator's manual .....	20
7	Marking and safety signs .....	21
7.1	Marking .....	21
7.2	Safety signs .....	21
Annex A (informative) List of significant hazards .....		22
Annex B (informative) Example of test recording forms .....		24
Annex C (informative) Example illustrations of mowers .....		27
Annex D (normative) Corrugated fibreboard penetration tests .....		30
Bibliography .....		32