

(PREVIEW)

IS : 8108 (Part 2) - 1984

Indian Standard

TEST CODE FOR GRAIN DRYERS

PART 2 METHOD OF TESTS FOR CONTINUOUS DRYERS

1. SCOPE

1.1 This standard (Part 2) prescribes the methods of testing of continuous grain and seed dryers to evaluate their performance.

FOREWORD

0.1 This Indian Standard (Part 2) was adopted by the Indian Standards Institution on 31 July 1984, after the draft finalized by the Agricultural Produce Processing Equipment Sectional Committee had been approved by the Agricultural and Food Products Division Council.

0.2 It is well known that if the crop having low moisture content is harvested, the shattering loss is more and if it is harvested at high moisture content, the storability and quality of the grain is very much reduced. In order to have a compromise between these two extreme situations, it is desirable to harvest the crop at a comparatively high moisture content and dry the grain to the required moisture content suitable for its storage and quality maintenance. Drying may be done in sun or by mechanical process. Sun drying is time consuming and a non-uniform process. Moreover in some grains such as paddy, the quality of the grain is reduced if it is dried in the sun. It is, therefore, advisable to employ mechanical dryers. This would ensure the increased manufacture and use of the grain dryers by processing industry in the country.

0.3 Although the function of the grain dryer is to remove excess moisture from grain without loss of quality, the evaluation of its performance is very complex due to a wide variety of designs and sizes to cover the diverse requirements for drying capacity and cost. This code is, therefore, being issued to provide a procedure for evaluating the performance of the dryers which should be of practical use to both the users and the manufacturers.

0.4 This standard is being issued in three parts. This part (Part 2) covers methods of tests for continuous dryers. Other parts of the standard are as under:

Part 1 Selection and preparation for test.

Part 3 Method of tests for insilo dryers.

0.5 In the preparation of this standard, assistance has been derived from the following:

BS 3986 : 1966 Methods of test for agricultural grain dryers.

British Standards Institution.

ASAE S 248 : 2-1976 Construction and rating of equipment for drying farm crops. American Society of Agricultural Engineers.

0.6 In reporting the result of a test or analysis made in accordance with this standard, if the final value, observed or calculated, is to be rounded off, it shall be done in accordance with IS : 2-1960*.

*Rules for rounding off numerical values (*revised*).

