

GOVERNMENT OF GOA

The Goa Economiser Rules, 1983

[Under the Boilers Act 1923 (Central Act 5 of 1923)]

The GoaEconomiser Rules, 1983

1. **The Goa, Daman and Diu Economiser Rules, 1983**, published in the OfficialGazette, Series I No. 38 (Extraordinary No. 2) dated 26-12-1983 and came into force at once.
2. **The Goa Economiser (1st Amendment) Rules, 2004**, published in the OfficialGazette, Series I No. 42 dated 15-1-2004 and came into force at once.
3. **The Goa Economiser (2nd Amendment) Rules, 2011**, published in the OfficialGazette, Series I No. 19 dated 11-8-2011 and came into force at once.
4. **The Goa Economiser (3rd Amendment) Rules, 2022**, published in the OfficialGazette, Series I No. 1 dated 07-4-2022 and came into force at once.

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CHAPTER I
Preliminary

1. Short title and commencement.—(1) These rules may be called the Goa Economiser Rules, 1983.

(2) They shall come into force at once.

2. Definitions.—In these rules, unless the context otherwise requires,—

(a) “Act” means the Boilers Act, 1923;

(b) “Regulations” mean the Indian Boiler Regulations, 1950;

(c) “section” means a section of the Act.

3. Payment of fees.—All fees payable under the Act and these rules shall be deposited by the payer in a Government Treasury in the State of Goa.

4. Registers.—(1) The Chief Inspector shall keep in his office—

(a) a register in Form AE of all economisers registered in the State of Goa;

(b) the registration books and Memorandum of Inspection books in respect of all economisers entered in such registers;

(c) a register of appeals;

(d) a register of accidents; and

(e) a register of fees received for registration and for the issue of renewal certificates.

(2) The register maintained under clause (a) of sub-rule (1) shall consist of two parts. In part I shall be entered the economisers registered in the State of Goa and in Part II shall be entered the economisers transferred from another State.

5. Inspection at special times.—No examination of an economiser shall be made by an Inspector for the purpose of registering or issuing a certificate for an economiser on a Sunday or on a gazetted public holiday or between the hours of sunset and sunrise without the specific orders of the Chief Inspector in each case. In such cases, an extra fee equal to the usual fee for the registration or inspection of the economiser, as the case may be, shall be charged and half of the extra fee paid to the Inspector.

CHAPTER II

Procedure for registration and Inspection

6. Receipt of application.—An application for registration under sub-section (1) of section 7 shall be made to the Inspector and shall be accompanied by a receipt for the payment of the fee prescribed in regulation 533 of the regulations.

7. Procedure on transfer.—Whenever an economiser is transferred to this State from any other State/Union territory the owner shall report such transfer to the Chief Inspector as required by clause (b) of section 6 and apply for the registration of the transfer; the economiser shall not be used until registration has been effected and communicated to the owner of the economiser. No fee shall be charged for recording such transfer.

8. Entry of transferred economiser unit in register.—(1) On receipt of the registration and Memorandum of Inspection books in respect of such transferred economiser, the Chief Inspector shall enter the economiser unit under its original number in Part II of the register in Form AE.

(2) When parts of two or more units are assembled to form one unit, the original number shall be cancelled and the newly built up unit shall be given a fresh number.

9. Note of transferred and dismantled economisers.—Whenever an economiser or part of an economiser has been transferred to another State or broken up, the fact shall be noted in the register. In the case of an economiser which has been condemned, the Registration Book and the Memorandum of Inspection Book shall contain an entry to that effect.

10. Entries in certificates.—In addition to the entries required to be made under regulation 530 in a certificate for an economiser, the Inspector shall state in the remarks column his requirements, if any, with regard to hydraulic test, removal of lagging brick work or other concealing part for the next inspection to enable the owner to have the same properly prepared at that time. He shall also state in the same place his requirements

regarding the repair or renewal of any part that may be considered fit only for the period of the certificate. In the repairs column shall be entered the year of repair and description of the repair effected. Only important repairs shall be noted.

11. Engraving of registry number.—Paper slips of the proper size bearing the registry number allotted for the economiser shall be supplied by the Chief Inspector. The engraving of the registry number shall be made as prescribed in regulation 534.

12. Issue of certificate and provisional order.—In cases in which the Inspector is empowered to issue a certificate under section 8 without further reference, the certificate shall ordinarily be issued within 48 hours of the completion of the inspection. Where the Inspector proposes to issue a provisional order under section 9 pending the issue or refusal of the certificate, he shall satisfy himself that the economiser is fit to be worked at the minimum pressure and for the period entered in the provisional order. The fact of the issue of a provisional order shall be reported immediately to the Chief Inspector.

13. Forms of provisional orders and certificates.—Provisional orders and certificates are prescribed in Forms X and XI, respectively, of the Regulations. The period specified in any provisional order or certificate shall begin on the day on which the thorough inspection or hydraulic test is completed. Where a certificate supersedes a provisional order during the period of its currency, the period of the certificate shall be retrospective and shall begin from the same date as that of the provisional order.

14. Duplicate certificate.—A duplicate of a certificate under section 7 or renewed certificate under section 8 or a provisional order granted under section 9 which, for the time being is in force, shall be granted by the Chief Inspector on an application by the owner of the economiser, if the Chief Inspector is satisfied that the duplicate is required for a bonafide purpose and a fee of ¹[Rs. 150/- (Rupees one hundred fifty only)] is paid.

15. Registration fees.—Fees for registration shall be such as are prescribed in regulation 533 of the Regulations.

16. Inspection fees for renewal of certificates.—Fees for inspection of economiser for renewal of its certificate shall be levied in accordance with the following Schedule:—

²[SCHEDULE

Economiser rating	Amount
Not exceeding 46.5 sq. mts.	Rs. 900/-
Exceeding 46.5 sq. mts. but not exceeding 93 sq. mts.	Rs. 1200/-
Exceeding 93 sq. mts. but not exceeding 139.5 sq. mts.	Rs. 1500/-
Exceeding 139.5 sq. mts. but not exceeding 196 sq. mts.	Rs. 1800/-
Exceeding 196 sq. mts. but not exceeding 232.5 sq. mts.	Rs. 2100/-
Exceeding 232.5 sq. mts. but not exceeding 279 sq. mts.	Rs. 2400/-
Exceeding 279 sq. mts. but not exceeding 334 sq. mts.	Rs. 2850/-
Exceeding 334 sq. mts. but not exceeding 372 sq. mts.	Rs. 3150/-

¹ Substituted by the 2nd Amendment, 2011 against the 1st Amendment Rules 2004 .

² Substituted by the 2nd Amendment, 2011 against the 1st Amendment Rules 2004.

Exceeding 372 sq. mts. but not exceeding 418.5 sq. mts.	Rs. 3600/-
Exceeding 418.5 sq. mts. but not exceeding 465 sq. mts.	Rs. 4050/-
Exceeding 465 sq. mts. but not exceeding 558 sq. mts.	Rs. 4500/-
Exceeding 558 sq. mts. but not exceeding 650.5 sq. mts.	Rs. 4950/-
Exceeding 650.5 sq. mts. but not exceeding 744 sq. mts.	Rs. 5400/-
Exceeding 744 sq. mts. but not exceeding 836.5 sq. mts.	Rs. 5850/-
Exceeding 836.5 sq. mts. but not exceeding 930 sq. mts.	Rs. 6300/-

For an economiser rating exceeding 930 sq. mts. an additional fee of Rs. 1350/- shall be charged for every 186 sq. mts. or part thereof in excess of 930 sq. mts.]

Provided that when any owner is willing to accept a renewed certificate for less than 24 months in order to approximate the date of the annual inspection to the date on which other economisers in the locality are inspected, a certificate for such shorter period as may be necessary for such approximation may be granted at a reduced fee to be calculated at the rate of one twenty-fourth of the ordinary fees for each full month, section of a month not being reckoned for such calculation.

17. Special fee for inspection out of season.—(1) For inspection carried out on application made before the date of expiry of a certificate, no travelling and halting charges of the Inspector and staff shall be leviable.

(2) In cases where the owner requires the inspection at any date prior to the expiry of the certificate, the Chief Inspector may, in addition to the inspection fee, charge the travelling and halting charges from the owner of the economiser. If an owner applies for inspection after the expiry of his certificate he shall be liable to pay the travelling allowance and halting allowance of the Inspector at the discretion of the Chief Inspector.

(3) If the inspection is carried out at the request of the owner on a date other than the one specified by the Inspector, to suit the convenience of the owner, the travelling charges of the Inspector shall be realised from the owner.

18. Refund of fees.—Any fee paid in excess and any fee paid for an inspection which, for any reason (such reason not due to any fault or omission on the part of the owner of the economiser) has not been made, shall be refunded or adjusted, if an application therefor is made within one year from the date of payment.

CHAPTER III

Procedure for Inspection

19. Internal inspection of economiser chamber.—Detailed instructions for the inspections of economisers are contained in Chapter XI of the Regulations. The following general procedure at inspection shall be observed, namely:—

(a) At a thorough inspection of an economiser, the Inspector shall, wherever possible, have either the steel casing doors opened or the brick-work completely removed on the outside of the economiser chamber to enable him to make a thorough examination of the external surfaces of the tubes. But before doing so, he shall satisfy himself that proper provisions have been made to isolate the economiser on the gas

side as well as on the water connections of the boiler and from any other working economiser.

(b) Should the Inspector find that the economiser has not been disconnected on the feed line or is not sufficiently sealed on the gas side or is unreasonably or not properly cleaned or sealed, he shall decline to proceed with the inspection and report the facts to the Chief Inspector for orders under sub-section (2) of section 14.

(c) When an economiser chamber is of such a size or its construction is such that the Inspector cannot go inside it, reasonable provision shall then be made for the external examination of the principal parts. If for any reason the Inspector cannot examine it, he shall report the facts to the Chief Inspector for orders.

20. Preparation for hydraulic test.—(a) The test of all mountings, subject to the water pressure, shall be in place and shut tight or blank flanged. The relief valve shall, either be secured or removed, and the chest opening blank flanged. The attachment for the Inspector's pressure gauge and the nipple connecting the Inspector's test pump hose shall be in order. All caps shall be properly fitted and tightened up. The economiser shall be completely filled with water, care being taken to allow all air to escape and, if possible, a preliminary test not exceeding the working pressure of the economiser shall be taken before the Inspector visits to test the tightness of the joint. When an economiser is hydraulically tested it shall be offered entirely bare.

(b) Hydraulic tests of economisers shall be made after the inspection. The test pressure to be applied to economisers at such subsequent examinations shall be from one and a quarter to one and a half times the working pressure of the economiser: Provided that the Chief Inspector may, at his discretion, waive the requirement of hydraulic test of an economiser if he deems fit.

21. External inspection of economiser.—(a) After the economiser has been cleaned, the Inspector shall make a thorough examination so far as its construction permits. The external condition of the tubes shall be carefully noted for wasting especially at the feed inlet end and all accessible tubes shall be calipered. The internal surfaces of cast iron tubes shall be calipered as far as possible and shall be closely observed for graphitic wasting. In the event of any failure, these shall be broken up for scrutiny, so that the general internal condition of the other tubes may be estimated.

(b) Where tubes or other parts are wasted, the strength shall be recalculated.

(c) The scraper gear shall be examined to note if any parts are missing, if the length of travel is adequate and if the scrapers are correctly adjusted.

(d) All cap bolts are to be inspected, also the condition and position of the dampers and baffles.

(e) The record of each inspection and calculation shall be entered in the Memorandum of Inspection Book.

22. Casual inspections.—The Inspector shall note if the economiser is working satisfactorily and especially in accordance with the regulation 531 of the regulations. Particular note shall be taken of the satisfactory working of the scrapers and of the water temperature to see that the maximum outlet water temperature of the economiser shall be at least 40 °F below the saturated steam temperature in the boiler.

23. Proposal for reduction of pressure.—When the Inspector decides that an economiser in one or more of its parts is no longer fit for the pressure approved for it, he shall without delay, report his proposals for reducing the pressure to the Chief Inspector.

24. Reports to economisers.—(1) No pressure parts in a cast iron economiser shall be permitted to be repaired by welding.

(2) Castings shall not be repaired or welded without the specific sanction of the Inspecting Officer. If required, the castings shall be suitably reheat-treated to remove internal stresses. Should a defect impair the strength of the casting, repair by welding or otherwise shall not be permitted.

25. Entries in Memorandum of Inspection Book.—(1) The Inspector shall, after an inspection, make the necessary entries in the Memorandum of Inspection Book for the economiser and submit the Book to the Chief Inspector.

(2) Inspection notes shall briefly state the following facts, namely:—

(a) The extent to which economisers were cleared of brick-work, lagging or concealing parts;

(b) The general condition of the economisers; and

(c) Parts requiring attention or repair and if special preparation is required at the next inspection.

(3) The Inspector shall also note in the Memorandum of Inspection Book all casual visits for inspection of feed pipes, visits for inspection or repairs, enquiry into accidents and other like matters.

26. Arranging for inspections.—In arranging for inspection and hydraulic test, a written notice of not less than 30 days shall be given to the owner concerned.

27. Fee to cover inspection and test.—A fee paid for the inspection of an economiser shall cover thorough inspection and hydraulic test subject to the provision of subsection

(2) of section 14.

28. A second fee in default.—A second fee shall be leviable for re-inspection in any case where the inspection of an economiser is begun, but owing to the fault or neglect of the person-in-charge is not completed within the period of six months from the date of commencement of the inspection:

Provided that no extra fee shall be levied except with the sanction of the Chief Inspector.

29. Fee for copy of registration Book.—The fee for copy of Registration Book, excluding inspection notes and calculations, shall be³[rupees one hundred fifty].

³Substituted by the 2nd Amendment, 2011 against the 1st Amendment Rules 2004.

CHAPTER IV

Accidents

30. Investigation of accidents.—On receipt of a report, of an accident to an economiser or feed pipe under section 18 the Inspector shall with the least possible delay proceed to the place to investigate the accident. If the report is received by the Chief Inspector, he shall forward it at once to the Inspector within whose jurisdiction the accident has occurred for necessary action.

31. Procedure during enquiry.—The Inspector shall make a careful examination of the damaged parts and shall take such measurements and make such sketches for the purpose of his report, as he may deem necessary. He shall enquire into the circumstances attending the accident and not the time of its occurrence, its nature and extent, any injury caused to persons and damage done to the property. The report shall be in Form CE and shall be sent forthwith to the Chief Inspector. If the Chief Inspector is satisfied with the investigation, he will record the facts in the register of accidents and enter a brief account of the accident in the Registration Book. If, however, the accident is of a serious nature and in all cases in which an explosion has occurred, the Chief Inspector, if he deems fit after receipt of the Inspector's report, may proceed to investigate the accident personally.

32. Power to hold enquiry in writing.—Inspectors are authorised to take written statements of witnesses and all persons immediately concerned with the accident. In order to comply with the provisions of sub-section (2) of section 18, the Inspector shall present to the owner or person-in charge of the economiser a series of written questions on all points that are material to the enquiry.

33. Use of economiser after accident.—The Inspector shall decide whether the use of the economiser may be permitted at the same or at a lower pressure without repairs or pending the completion of any repairs or alterations that he may order. In no case shall he issue a provisional order renewed certificate, until his orders have been carried out.

34. Reference in annual report.—A brief account of all accidents, their causes and remedial measures taken shall be included in the Chief Inspector's annual report.

35. Unreported accidents.— If in the course of an inspection or at any other time, the Inspector discovers damage which comes within the definition of an accident, but which has not been reported, he shall report the facts at once to the Chief Inspector for such action as he deems fit.

CHAPTER V

Appeals

36. Constitution of Appellate Authority.—(1) The Appellate Authority to be constituted under section 20 shall consist of a President and six assessors appointed by the Government.

(2) The President and assessors shall hold office for such period as the Government may specify in this behalf.

37. Qualification of President and assessors.—(1) A person to be appointed as the President of the Appellate Authority shall be one-

- (i) who is holding or has held any judicial office not lower in rank than that of a Civil Judge of Junior Division or First Class Judicial Magistrate or any office which, in the opinion of the Government, is an equivalent office; or
- (ii) who is an advocate enrolled under the relevant statute; or
- (iii) an Attorney of. a High Court.

(2) A person to be appointed as an assessor shall be a fully qualified mechanical engineer.

38. Remuneration of assessors.—An assessor shall be paid —

- (a) the fees as the Government may, from time to time, determine; and
- (b) the travelling expenses actually incurred by him for attending an enquiry under these rules.

39. Attendance of assessors.—Where a date for an appeal before the Appellate Authority has been fixed, the Chief Inspector shall under the orders of the President of the Appellate Authority, arrange for the attendance of all the assessors.

40. Filing of appeals.—Every appeal shall be made to the Chief Inspector in writing in English.

41. Presentation of appeal.—The petition of appeal accompanied by the original order, notice or report appealed against or by a certified copy thereof, or where no such order, notice or report has been made in writing, by a clear statement of the facts appealed against, the grounds of appeal and section under which the appeal is made, may be presented either personally or sent by registered post, to the Chief Inspector.

42. Procedure before hearing.—When the date for hearing has been fixed, the Chief Inspector shall at once issue a notice to the appellant stating the date for hearing and informing him that if he wishes to be heard in support of the appeal or to produce evidence, he shall be present, either in person or by an authorized agent, with his evidence on the date fixed. The notice shall be sent by registered post to such address as is entered in the petition of appeal.

43. Attendance of Inspectors during hearing of appeals.—(1) In an appeal to the Chief Inspector he shall decide whether the presence of the Inspector is necessary and shall issue orders accordingly.

(2) Under orders of the Chief Inspector, Inspectors shall attend before the Appellate Authority, during the hearing of appeals with regard to economisers under their charge.

44. Attendance of witnesses before Appellate Authority.—The Appellate Authority shall have power to secure the attendance of witnesses and to make local enquiries under the provisions of the Civil Procedure Code, 1908.

45. Ex-parte decision.—In any appeal, if the appellant is not present on the date fixed, the appeal may be decided ex-parte.

46. Costs in appeals to Appellate Authority.—(1) Where an appeal is dismissed, the Appellate Authority may fix the costs of the appeal which shall be payable by the appellant.

(2) In any appeal where a local inspection is required, the appellant shall deposit in advance, full costs of such inspection as determined by the President of the Appellate Authority.

CHAPTER VI

General

47. The owner of an economiser shall not use or permit it to be used unless the competent person in charge of the boiler is placed in charge of such economiser.

48. Penalty.—Any person contravening any of these rules shall be punishable, in the case of a first offence, with fine which may extend to two hundred and fifty rupees and in the case of any subsequent offence, with fine which may extend to ⁴[ten thousand rupees].

FORM AE

Goa Economiser Inspection Department

Register of Economisers

(See rules 4 and 8)

Registry No.	Type of economiser	Economiser rating	Name of manufacturer	Year and place of construction
1	2	3	4	5

Date of registration	Name of owner	Place where in use	Remarks, transfers etc.
6	7	8	9

⁴ Substituted by the 1st Amendment Rules 2004

FORM CE

(See rule 31)

Report into the investigation of the accident to Economiser No.

To

Chief Inspector of Boilers,

Sir,

In accordance With instructions, I have held preliminary inquiry into the* accident and the circumstances attending it to Economiser No.... and now make the following reports:—

- (1) Date and place of accident
- (2) Date of investigation
- (3) Name and address of Owner(s)
- (4) Person killed and/or injured
- (5) Name of makers of Economisers or steam pipe
- (6) Age of Economiser or steam pipe
- (7) Particulars of previous repairs with dates
- (8) Nature of accident
- (9) Cause of accident
- (10) General remarks.

Inspector of Boilers

Remarks by the Chief Inspector.

By order and in the name of the Lieutenant Governor of Goa, Daman and Diu.

S. D. Sadhale, Under Secretary (Industries and Labour).

Panaji, 15th December, 1983.