



Title: Detection of Molybdenum in SS/AISI-316 Grade Stainless Steel

SOP No.:		Revision No.:	00
Effective Date:		Supersedes No.	Nil
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1.0 OBJECTIVE:

To lay down a procedure for Detection of Molybdenum in SS/AISI-316 Grade Stainless Steel.

2.0 SCOPE:

This SOP is applicable for the Testing of Stainless Steel for SS/AISI-316 Grade.

3.0 RESPONSIBILITY:

Officer / Executive-Engineering.

4.0 ACCOUNTABILITY:

Head- Engineering.

5.0 ABBREVIATIONS:

AISI	American Institute of Steel and Iron.
ER	Engineering
Ltd.	Limited
No.	Number
QA	Quality Assurance
SOP	Standard Operating Procedure
SS	Stainless Steel

6.0 PROCEDURE:

6.1 PRECAUTIONS:

6.1.1 Carry out detection on a neat, clean and smooth Stainless Steel surface.

6.1.2 If the reagent is directly exposed or in contact with any part of the body. Wash with water immediately.

6.1.3 Store the test kit (**MINI MOLY DETECTOR-KIT**) in a cool and dark place.

6.1.4 Use the Electrolytic solution within 8-10 weeks of bottle opening.

6.2 TEST PROCEDURES:

6.2.1 Clean the surface of the metal sample subjected for the test.

6.2.2 Place a drop of “Moly” electrolytic solution on Stainless steel metal sample.

6.2.3 Place the flat electrode of the portable power unit against the metal and carbon (pointed) electrode against the solution.



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6.2.4 Record the activity details of detection of Molybdenum in SS/AISI-316 Grade as per **Annexure-I'**.

6.3 INTERPRETATION OF RESULT:

6.3.1 The solution shall turn **PINKISH RED**, if Molybdenum presents, and retain it's color for 3-5 minutes.

6.3.2 Compare the colour thus obtained with that on the surface of known sample containing Molybdenum.

7.0 ANNEXURES:

ANNEXURE No.	TITLE OF ANNEXURE	FORMAT No.
Annexure-I	Log Book For Molybdenum Detection in SS/AISI-316 Grade	

ENCLOSURES: SOP Training Record.

8.0 DISTRIBUTION:

- Controlled Copy No. 01 Quality Assurance
- Controlled Copy No. 02 Engineering
- Master Copy Quality Assurance

9.0 REFERENCES:

Not Applicable.

10.0 REVISION HISTORY:

CHANGE HISTORY LOG

Revision No.	Change Control No.	Details of Changes	Reason for Change	Effective Date	Updated By

