

**INSTITUTE OF
ENVIRONMENTAL
SCIENCES AND
TECHNOLOGY**

**Contamination Control Division
Recommended Practice 026.2**

IEST-RP-CC026.2

Cleanroom Operations

INSTITUTE OF ENVIRONMENTAL SCIENCES AND TECHNOLOGY

1827 Walden Office Square, Suite 400 |
Schaumburg, IL 60173 USA
Phone: (847) 981-0100 • Fax: (847) 981-4130
E-mail: iest@iest.org • Web: www.iest.org



COPYING IS ILLEGAL
Currently in preview, click buy full version

This Recommended Practice is published by the INSTITUTE OF ENVIRONMENTAL SCIENCES AND TECHNOLOGY to advance the technical and engineering sciences. Its use is entirely voluntary, and determination of its applicability and suitability for any particular use is solely the responsibility of the user.

This Recommended Practice was prepared by and is under the jurisdiction of Working Group C26 of the IEST Contamination Control Division.

Copyright © 2004 by the **INSTITUTE OF ENVIRONMENTAL SCIENCES AND TECHNOLOGY**

Third printing, July 2017

Validated August 2008

ISBN 978-1-877862-97-7

PROPOSAL FOR IMPROVEMENT: The Working Groups of the INSTITUTE OF ENVIRONMENTAL SCIENCES AND TECHNOLOGY are continually working on improvements to their Recommended Practices and Reference Documents. Suggestions from those who use these documents are welcome. If you have a suggestion regarding this document, please use the online Proposal for Improvement form found on the IEST website at www.iest.org/proposal/form.html.

INSTITUTE OF ENVIRONMENTAL SCIENCES AND TECHNOLOGY

1827 Walden Office Square, Suite 400 | Schaumburg, IL 60173 USA

Phone: (847) 981-0100 • Fax: (847) 981-4130

E-mail: iest@iest.org • Web: www.iest.org

COPYING IS ILLEGAL
Currently in preview, click buy full version

Cleanroom Operations

IEST-RP-CC026.2

CONTENTS

SECTION

1	SCOPE AND LIMITATIONS.....	7
2	REFERENCES	7
3	TERMS AND DEFINITIONS.....	8
4	BACKGROUND AND PURPOSE.....	8
5	ANCILLARY OPERATIONS.....	9
6	METHODS FOR VERIFYING CLEANLINESS.....	13

FIGURE

1	CONTINUOUS FLOWING DUCT METHOD.....	15
2	TEST CHAMBER SCHEMATIC FOR RESERVOIR METHOD.....	17
3	RELATIVE PARTICLE CONCENTRATION IN THE RESERVOIR DURING THE RESERVOIR TEST METHOD.....	17

APPENDIX

A	BIBLIOGRAPHY.....	23
---	-------------------	----

COPYING IS ILLEGAL
Currently in preview, click buy full version

Cleanroom Operations

IEST-RP-CC026.2

1 SCOPE AND LIMITATIONS

This Recommended Practice (RP) provides guidance for maintaining the integrity of the cleanroom during ancillary operations.

1.1 Scope

Ancillary operations include:

- Preparation of supplies and materials
- Modification of the facility
- Installation and repair of equipment

Procedures are given for verifying the cleanliness of the equipment, the workstation, and the area, following these ancillary operations.

1.2 Limitations

This Recommended Practice does not address the effect of contamination from the equipment or facility upon the product under manufacture, nor does it specify limits of acceptance for operational conditions. It does, however, recommend standard terminology for specifying desired limits.

2 REFERENCES

The following documents are incorporated into this Recommended Practice to the extent specified herein. Users should apply the most recent editions of the references.

2.1 Standards and recommended practices

ASTM-D3154-00 Standard Test Method for Average Velocity in a Duct (Pitot Tube Method)

ASTM-F24: Standard Method for Measuring and Counting Particulate Contamination on Surfaces

IEST-RP-CC003: Garmen System Considerations for Cleanrooms and Other Controlled Environments

IEST-RP-CC004: Evaluating Wiping Materials Used in Cleanrooms and Other Controlled Environments

IEST-RP-CC005: Gloves and Finger Cots Used in Cleanrooms and Other Controlled Environments

IEST-RP-CC012: Considerations in Cleanroom Design

IEST-RP-CC018: Cleanroom Housekeeping—Operating and Monitoring Procedures

ISO 14644-1 Cleanrooms and associated controlled environments—Part 1: Classification of air cleanliness

2.2 Sources

ASTM

American Society for Testing and Materials
100 Barr Harbor Drive
West Conshohocken, Pennsylvania 19428-2959 USA
www.astm.org

IEST

Institute of Environmental Sciences and Technology
1827 Walden Office Square, Suite 400 |
Schaumburg, IL 60173 USA
www.iest.org

ISO

U.S. Member Body for document orders:
IEST
1827 Walden Office Square, Suite 400 |
Schaumburg, IL 60173 USA
www.iest.org