

A-A-50494  
 16 April 1990  
 SUPERSEDING  
 MIL-E-18435C  
 16 April 1980

# COMMERCIAL ITEM DESCRIPTION

## EXHAUST HEAD, STEAM

The General Services Administration has authorized the use of this Commercial Item Description (CID) in preference to Military Specification MIL-E-18435C.

Abstract. This description covers exhaust heads made of cast iron or steel, for moisture and oil entrapment and discharge of exhaust steam into the atmosphere.

### Salient characteristics:

1. Sizes. Sizes shall be as specified in table I for the size of exhaust inlet required.

TABLE I. Sizes.

Size 1	-	1-inch inlet connection.
Size 1-1/2	-	1-1/2 inch inlet connection.
Size 2	-	2 inch inlet connection.
Size 2-1/2	-	2-1/2 inch inlet connection.
Size 3	-	3-inch inlet connection.
size 4	-	4-inch inlet connection.
Size 5	-	5-inch inlet connection.
Size 6	-	6-inch inlet connection.
Size 8	-	8-inch inlet connection.
Size 10	-	10-inch inlet connection.
Size 12	-	12-inch inlet connection.
Size 14	-	14-inch inlet connection.
Size 16	-	16-inch inlet connection.
Size 18	-	18-inch inlet connection,
Size 20	-	20-inch inlet connection.
Size 24	-	24-inch inlet connection.
Size 30	-	30-inch inlet connection.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commanding Officer (Code 156), Naval Construction Battalion Center, Port Hueneme, CA 93043-5000, by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

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2. Design and performance. Exhaust heads shall satisfactorily remove entrained moisture and oil from exhaust steam, and shall satisfactorily suppress exhaust noise. Removal of entrainment shall be affected by both deflection and expansion of steam. Means shall be provided within the exhaust head for collecting oil and moisture and preventing these liquids from rejoining and escaping with the steam. The volume of the receiver shall be adequate to allow rapid expansion of the steam for effective separation of entrainment. The area of the exhaust porting shall be as large or greater than the area of the inlet connection in order to minimize back pressure.

3. Rating. Recommend exhaust head ratings shall be not less than indicated in table II and steam discharged to atmosphere at this rating shall not contain more than 0.5 percent moisture at the exhaust opening.

Table II. Exhaust head ratings.

Inlet connections Size in inches	Recommended minimum rating in pounds of steam per hour at atmospheric pressure (14.7 PSIA)
1	160
1-1/2	340
2-1/2	900
3	1,800
4	2,400
5	3,600
6	5,400
8	9,500
10	14,000
12	22,000
14	31,000
16	44,000
18	52,000
20	66,000
24	94,000
30	145,000

4. Inlet connection. Exhaust heads in size 4 inch and smaller shall have taper pipe threaded connections. Exhaust heads in size 5 inch and larger shall be furnished with flange connection.

5. Drain connection. Drains shall be adequate to carry off all entrainment.

6. Material. The material used in the manufacturer of exhaust heads shall be steel or cast iron, suitable, for the purpose intended.

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Contractor certification. The contractor shall certify, and maintain substantiating evidence that the product offered meets the salient characteristics of this CID, and that the product conforms to the producer's own drawings, specifications, standards, and quality assurance practices. The Government reserves the right to require proof of such conformance prior to first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

Metric products. Products manufactured to metric dimensions will be considered on an equal basis with those manufactured using inch-pound units, provided they fall within specified tolerances using conversion tables contained in the latest revision of Federal Standard FED-STD-376, and all other requirements of this CID are met.

If a product is manufactured to metric dimensions and those dimensions exceed the tolerances specified in the inch/pound units, a request should be made to the contracting officer to determine if the product is acceptable.

The contracting officer has the option of accepting or rejecting the product.

Regulatory requirements. The offeror/contractor is encouraged to use recovered materials in accordance with Public Law 94-580 to the maximum extent practicable.

Preservation, packaging, packing and marking. Preservation, packaging, packing, labeling, and marking shall be as specified in the contract or order.

Notes. Purchaser should specify quantity and size of exhaust head required for a specific procurement.

Types I, and II of MIL-E-18435C are not used in this document. Steel or cast iron may be provided at suppliers option.

FED-STD-376 is available from the Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, PA 19120-5099.

MILITARY INTEREST:

PREPARING ACTIVITY:

Custodian

Navy - YD

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(Project 4730-1179)