

CONN.	SIZE	DESCRIPTION	TYPE
A	2 1/2"	SLURRY AND WASH INLET	ANSI B16.5 150LB R.F.
B	1/2"	N2 TO SOLIDS HSG.	ANSI B16.5 150LB R.F.
C	ø600mm	SOLIDS OUTLET	SEE DETAIL-A
D	6"	FILTRATE OUTLET	ANSI B16.5 150LB R.F.
E	1/2"	N2 TO FILTRATE HSG.	ANSI B16.5 150LB R.F.
F	7"	AIR RECIRCULATION	TRI-CLAMP
G	7"	AIR RECIRCULATION	TRI-CLAMP
H	2"	VENT	ANSI B16.5 150LB R.F.
J	1/2"	BACK BOWL CIP NOZZ.	ANSI B16.5 150LB R.F.
K	1/4"	N2 TO LABYRINTH	N.P.T.
L	1/4"	N2 TO BEARING HSG.	N.P.T.
M	1/8"	N2 PRES. MEASRM.	N.P.T.
N	1/4"	CONTROL AIR TO BRAKE	N.P.T.
P	1/2"	FILTRATE HSG. CIP NOZZ.	ANSI B16.5 150LB R.F.
Q	1/2"	SOLIDS HSG. CIP NOZZ.	ANSI B16.5 150LB R.F.

* THESE CONNECTIONS ARE SUPPLIED WITH S.S. BLIND FLANGES AND TEFLON GASKETS

MAIN ROTATIONAL MOTOR
 HP 100
 RPM 1800
 FRAME 444T
 FREQ 10-60Hz
 460 VAC
 EX. PROOF
 CL. 1, DIV. 1, GP. C&D
 MFG.: SIEMENS

AXIAL MOVEMENT MOTOR
 HP 15
 RPM 1200
 FRAME 286TC
 FREQ 10-60Hz
 460 VAC
 EX. PROOF
 CL. 1, DIV. 1, GP. C&D
 MFG.: SIEMENS

PAC MOTOR
 HP 3
 RPM 1800
 FRAME 184TC
 FREQ 10-60Hz
 460 VAC
 EX. PROOF
 CL. 1, DIV. 1, GP. C&D
 MFG.: SIEMENS

- NOTES:
- CONSTRUCTION: GASTIGHT PER GERMAN DIN 24400
 - MACHINE WEIGHT W/BASE & PANELS: APPROX. 7983 Kg (17600 Lbs)
 - MACHINE WEIGHT: APPROX. 7075 Kg (15600 Lbs)
 - BASE: APPROX. 635 Kg (1400 Lbs)
 - PAC PANEL: APPROX. 91 Kg (200 Lbs)
 - OPERATOR PANEL: APPROX. 91 Kg (200 Lbs)
 - NITROGEN PANEL: APPROX. 68 Kg (150 LBS)
 - OXYGEN PANEL: APPROX. 23 Kg (50 LBS)
 - MAX. DRUM VOLUME: 201 LITERS
 - MAX. DRUM WEIGHT: 251 Kg (553 Lbs)
 - MATERIALS OF CONSTRUCTION:
 - PRODUCT CONTACTED PARTS: HC 22 (HASTELLOY)
 - PRODUCT CONTACTED SEALS: FEP/PFA
 - BACK END OF MACHINE: DIN 1.4571 (316Ti S.S.)
 - UNBALANCED LOAD = 1870 Kg. CALCULATED WITH 2.5 Kg AT MAX RPM OF 1273. ONLY 5% OF THE LOAD IS TRANSMITTED TO THE PLANT STRUCTURE. 95% IS ABSORBED WITHIN THE MACHINE CONSTRUCTION.
 - PAINT (INTERNAL CARBON STEEL PARTS)
 PRIMER - 2 COATS OF MAGRALON DD (POLYURETHANE BASED)
 FINISH - 2 COATS OF MAGRALON DD (POLYURETHANE BASED)
 COLOR - RAL 5007 BRILLIANT BLUE
 - MACHINE FINISHES:
 INTERNAL - 180/240 GRIT ON ALL SOLIDS CONTACTED PARTS
 BOWL INSERT WELDS - GROUND SMOOTH
 - PREPARED SPRAY NOZZLES IN SOLIDS AND FILTRATE HOUSINGS
 - AIR CIRCULATION PIPE: HC 22 (HASTELLOY)
 - ALL CONNECTIONS TO THE MACHINE MUST BE FLEXIBLE
 - ALL DIMENSIONS SHOWN IN MILLIMETERS WITH U.S. INCH EQUIVALENTS
 - IMPORTANT: USE ONLY KLUBER NBU15 ISOFLEX GREASE FOR BEARINGS
 - 3000 LB. HOIST REQUIRED OVER THE MACHINE RUNNING THE LENGTH OF THE SHAFT.

#93643

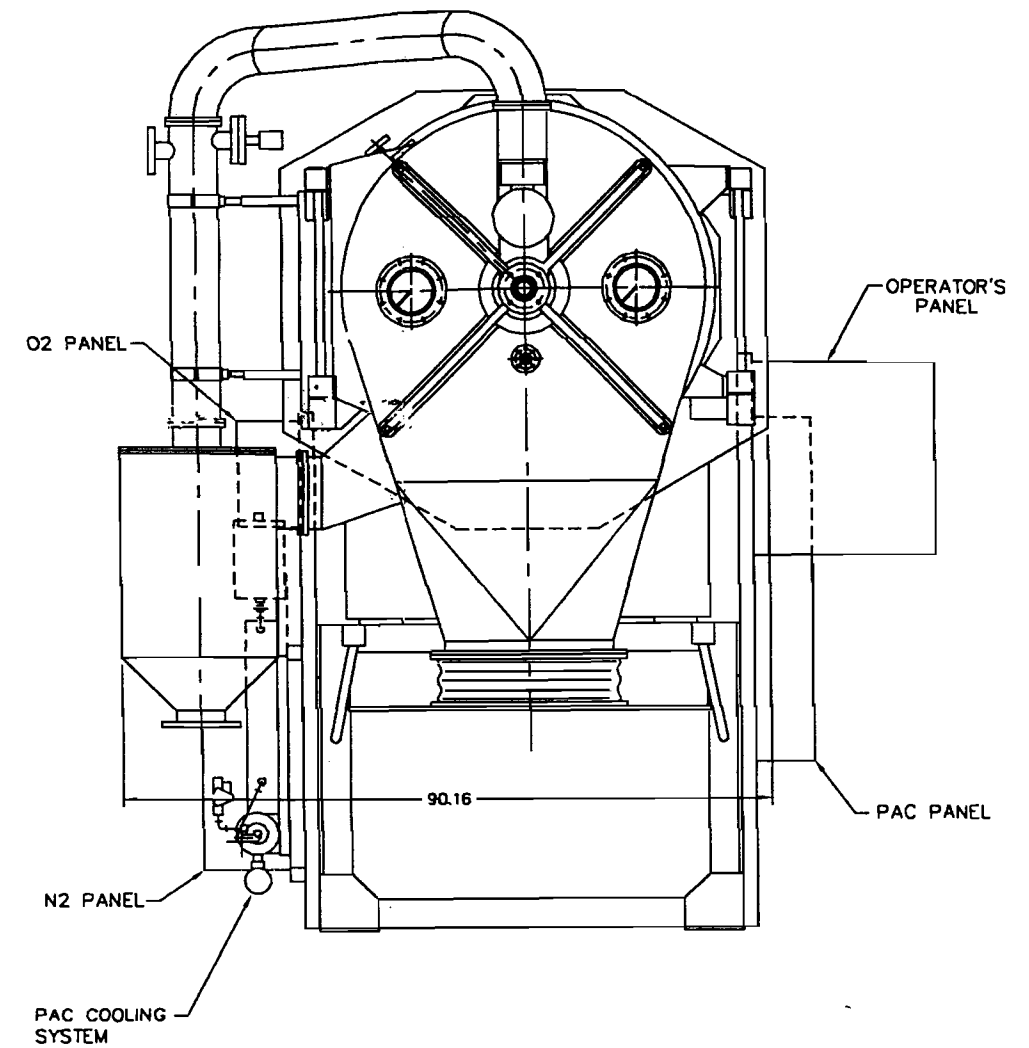
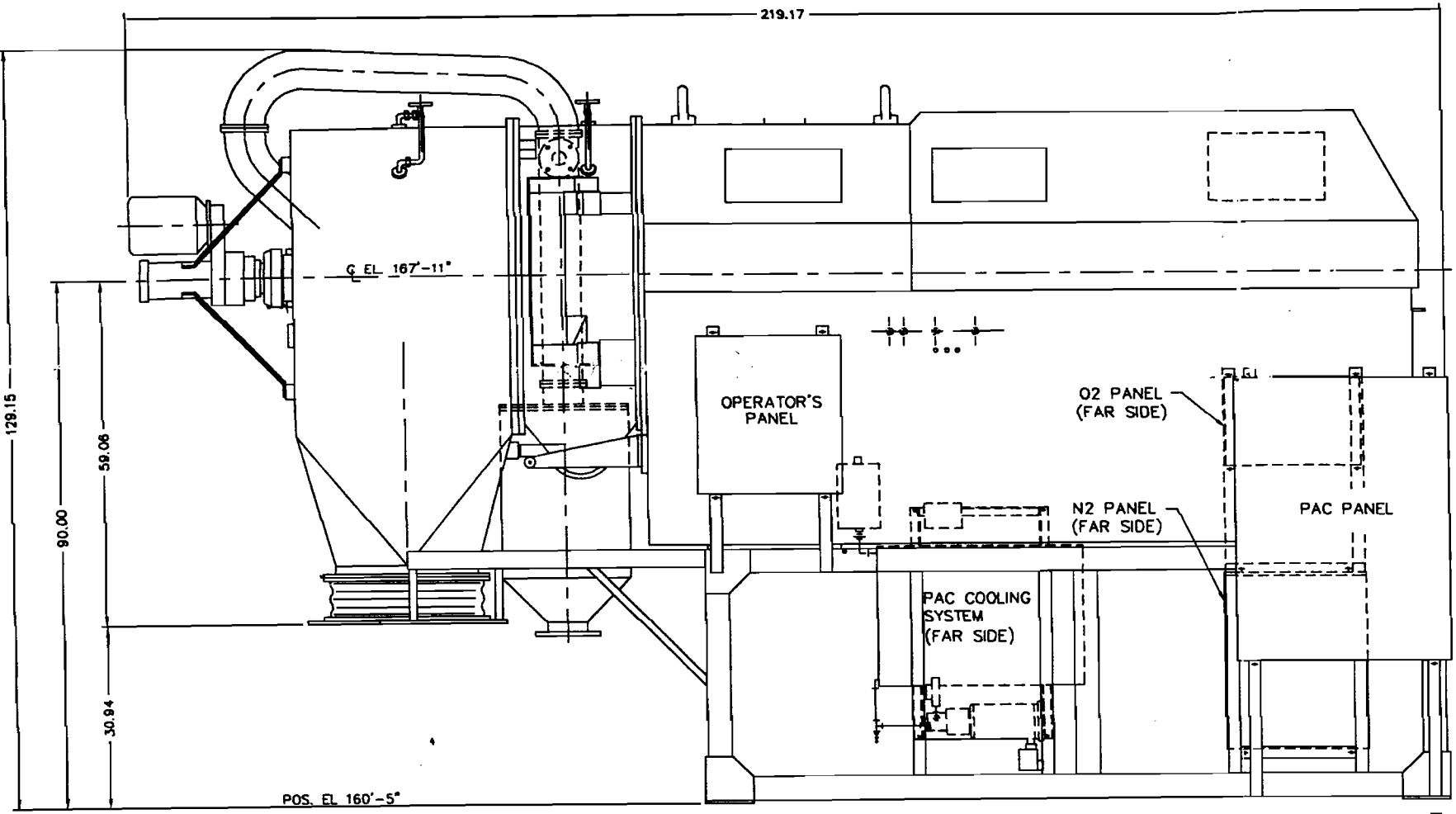
CLIENT: FMC CORP.
 BALTIMORE, MD
 P. O. NO.: 44005247

REV.	DATE	DESCRIPTION	APPROVED
D	11-11-97	REVISED CUSTOMERS ELEVATION DIMENSIONS	
C	9-25-97	CORRECTED WEIGHTS IN NOTE-2	
B	7-22-97	REVISED AS REQUESTED	
A		ORIGINAL ISSUE	

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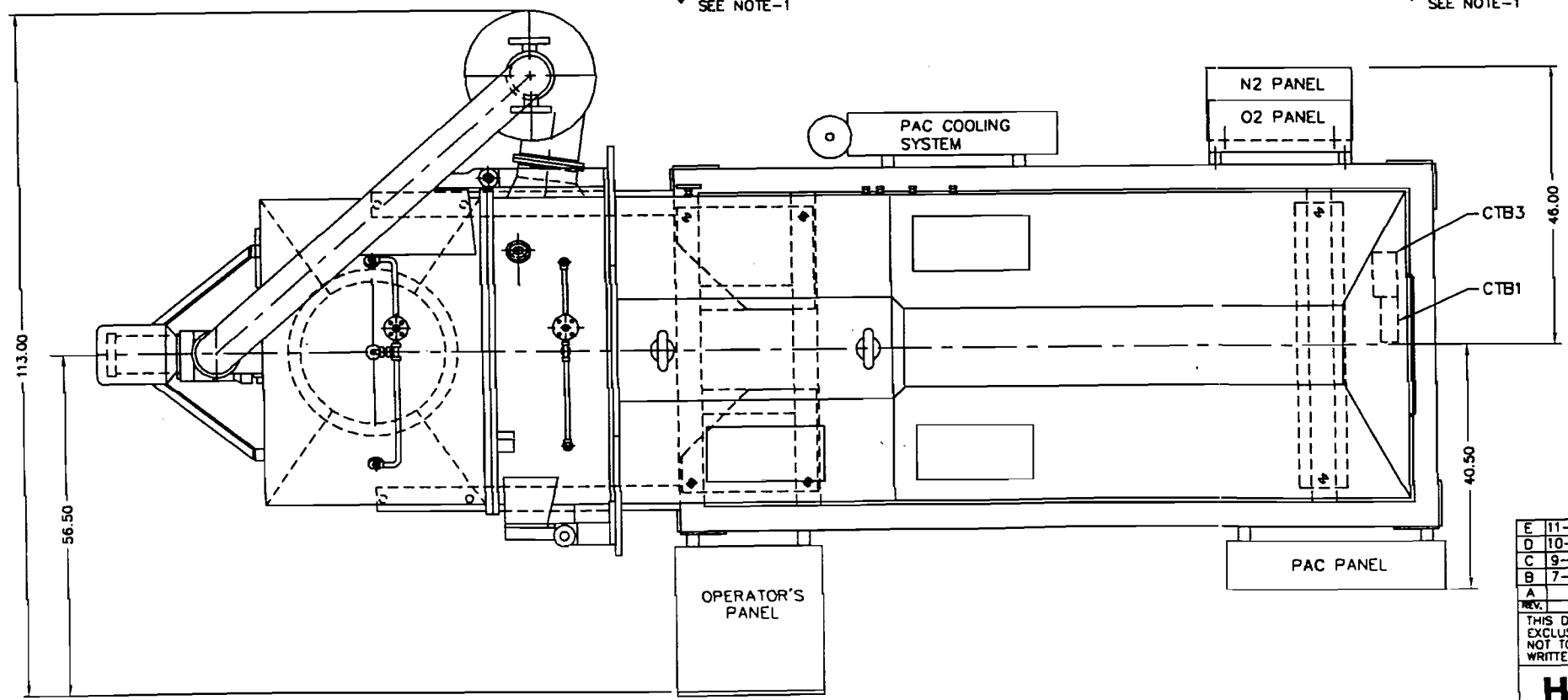
HEINKEL FILTERING SYSTEMS, INC.
 520 Sharptown Rd., P.O. Box 513
 Bridgeport, NJ 08014

INVERTING FILTER CENTRIFUGE MODEL HF-1000.1 GENERAL ARRANGEMENT		
PROJECT NO.: 397.211.5728	DRAWN BY: D. STETSER	CHECKED BY:
DATE: 10/16/15	DATE: 6-26-97	SCALE: 3/4" = 10"
DRAWING NO. MA5728A1		D



NOTE:
1- THESE POINT LOADS ARE APPROXIMATE

93643



6469Kg
14263 Lbs
SEE NOTE-1

1514 Kg
3339 Lbs
SEE NOTE-1

CLIENT: FMC CORP.
BALTIMORE, MD
P.O. NO: 44005247

GENERAL ARRANGEMENT
MODEL HF-1000.1 AND SKID

E	11-11-97	REVISED ELEVATION DIMENSIONS AS REQUESTED	
D	10-16-97	ADDED PAC COOLING LOOP	
C	9-25-97	ADDED APPROX. POINT LOADS	
B	7-22-97	REVISED AS REQUESTED	
A		ORIGINAL ISSUE	

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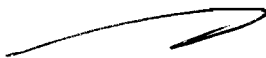
HEINKEL FILTERING SYSTEMS, INC.
520 Sharptown Rd., P.O. Box 513
Bridgeport, NJ 08014

PROJECT NO:	397.211.5728	DRAWN BY:	J. BRISTOW	CHECKED BY:	
MACHINE NO:	1016/15	DATE:	7-3-97	SCALE:	3/4"=10"
DRAWING NO. BA5728A2			E		

HEINKEL FILTERING SYSTEMS, INC.

HF INVERTING FILTER CENTRIFUGE

INSTRUCTION MANUAL

93643


COMPANY:	<u>FMC CORPORATION</u>
JOB NO.:	<u>397.211.5728</u>
MACH. TYPE:	<u>HF-1000.1</u>
MACH. NO.:	<u>1016/15</u>

Date: 12/97
IMTC5728MAN

Transport weights in kg:

	HF 300.1	HF 450.1	HF 600.1	HF 800.1	HF 1000.1	HF 1300.1
bowl	32	124	165	310	470	710
drum insert	18	90	120	265	450	650

#93643

9.4. Dismantling of shaft assembly

#93642

- Proceed as described in para. 9.1, steps 1-8.
- Remove bowl and drum insert as described in para. 9.3.
- Remove machine covers.
- Remove the axial drive and pulleys.
- Remove the pins located on each side of the bearing housing with the appropriate slide hammer and thread adaptor.
- Take off the V-belts from main drive and disconnect all electrical connections at the terminal box.
- The shaft assembly may be supported from the two eye hook connections provided. Carefully push the shaft back by approx. 10 cm and then remove it from above.
- The complete shaft assembly removed may now be disassembled in a suitable workshop.

Shaft assembly weights in kg:

HF 300.1	HF 450.1	HF 600.1	HF 800.1	HF 1000.1	HF 1300.1
140	400	400	800	1200	1600

HF-Inverting Filter Centrifuges

Instruction manual

HEINKEL

93642

f
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2. Description

The HEINKEL HF-Inverting Filter Centrifuge is used for separating crystalline, granular, fibrous and amorphous solids from suspensions.

The machine is of simple and sturdy construction, easy to clean and requires little maintenance.

The main assemblies of the machine are (see illustration 1):

- | | |
|--|------------------------------|
| (1) Machine frame | (6) Feedpipe/P-A-C-system |
| (2) Shaft assembly | (7) Rotational drive |
| (3) Filtrate housing and solids housing | (8) Drive for axial movement |
| (4) Bowl with drum insert | (9) feed control |
| (5) Filtrate/air separator with air circulation pipe | |

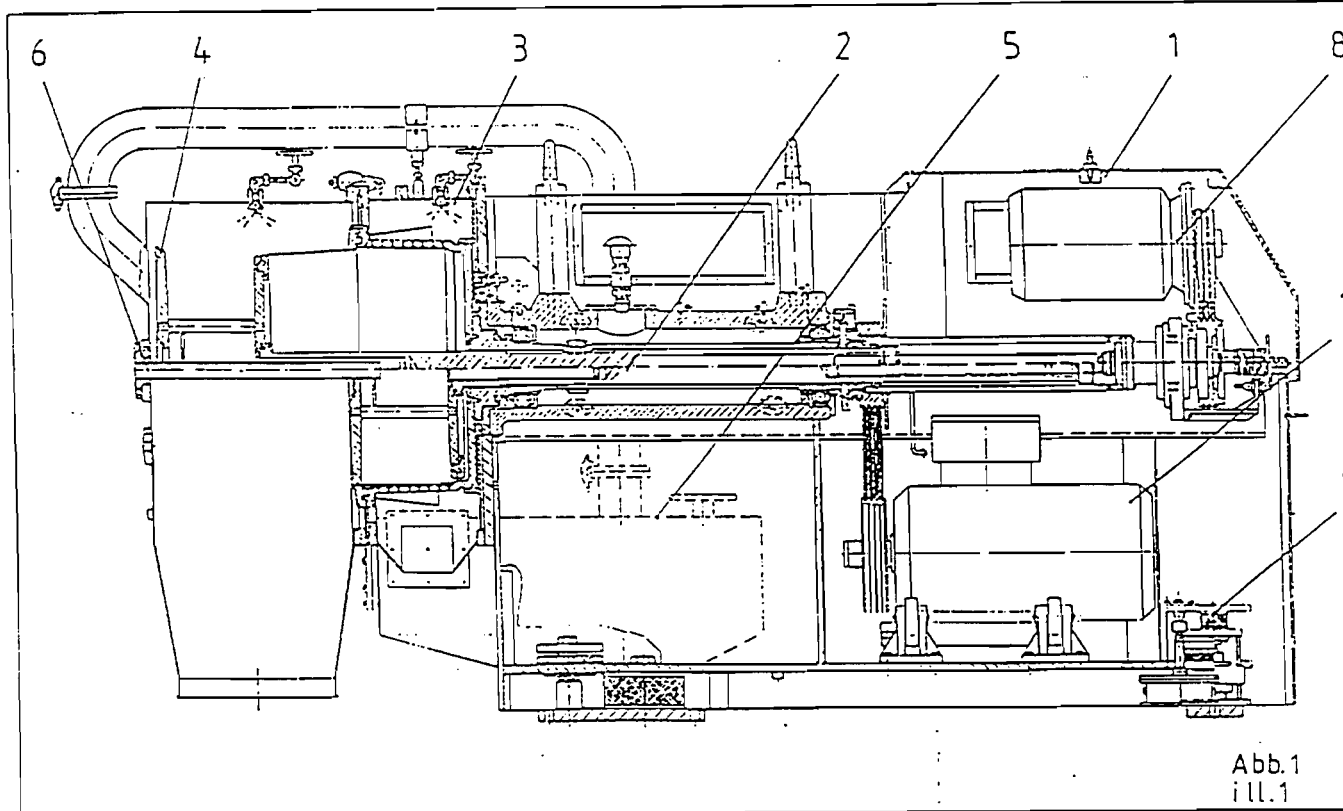


Abb. 1
ill. 1