



- MATERIAL SPECIFICATIONS FOR ASME:
S/S SHEET PLATE (SA-240), C/S SHEET OR PLATE (SA-36)
S/S ROD AND BAR (SA-479), C/S ROD AND BAR (SA-36)
S/S PIPE (SA-312), C/S PIPE (SA-53)
S/S TUBE (SA-213), C/S TUBE (SA-179)
S/S BOLLTS (SA-193), C/S BOLLTS (SA-307 GR. B)
S/S NUTS (SA-194 GR. B), C/S NUTS (SA-194 GR. 2H)
S/S WASHERS (SA-479), C/S WASHERS (SA-181, SA-105)
S/S COUPLINGS (UG-10 OR SA-182)
- IF POSSIBLE, NOZZLES AND MANHOLES SHALL NOT BE LOCATED IN ANY WELD SEAM.
- COMPLETE WELD PENETRATION IS REQUIRED FOR WELDS WHEN JOINING SIMILAR METALS, INCLUDING NOZZLES. WELDING ENGINEERING TO NOTE SPECIAL WELDING REQUIREMENTS IN ROSEMUND SPEC ESBITS.
- MATERIAL AND WELD FINISHES:
INTERIOR SURFACES (ABOVE FILTRATE PLATES):
#40 RA MATERIAL / #3 MEDIUM GRIND (50 RA MAX WELDS)
INTERIOR SURFACES (BELOW FILTRATE PLATES):
#40 RA MATERIAL / #3 MEDIUM GRIND (50 RA MAX WELDS)
EXTERIOR SURFACES (ABOVE TOP HEAD TO SEAM):
#40 RA MATERIAL / #3 MEDIUM GRIND (50 RA MAX WELDS)
EXTERIOR SURFACES (BELOW TOP HEAD TO SHELL SEAM):
#40 RA MATERIAL / #3 MEDIUM GRIND (50 RA MAX WELDS)
EXTERIOR MACHINED SURFACES: 125-250 RA UNLESS OTHERWISE SPECIFIED.
- SHELLS SHALL BE FABRICATED USING THE LARGEST SIZE AVAILABLE PLATE TO REDUCE THE NUMBER OF SEAMS REQUIRED. (5.0)
BUTT WELDS SHALL NOT BE ANY CLOSER THAN 18\"/>

NATIONAL BOARD		CERTIFIED BY PAUL MUELLER COMPANY	
VESSEL		VESSEL	
MAX. W.P.	60/FV	P.S.I. AT	370 °F
MMMT	-20	°F AT	60 P.S.I.
SERIAL NUMBER	197080		
HEAT TRANSFER SURFACE			
MAX. W.P.	150/FV	P.S.I. AT	370 °F
MMMT	-20	°F AT	150 P.S.I.

MATERIAL FINISHES	
INTERIOR	SEE NOTE #18
EXTERIOR	SEE NOTE #18

WELD FINISHES	
INTERIOR	SEE NOTE #18
EXTERIOR	SEE NOTE #18

SPECIFICATIONS VESSEL	
CODE ASME	
RADIOGRAPHY	
Top Head To Shell	FULL
Top Head To Shell	SPOT
Shell To Shell	FULL
Bottom Head To Shell	FULL
Bottom Head To Shell	NONE
HEAT TRANSFER	
CODE ASME	
RADIOGRAPHY	
Top Head To Shell	NONE
Top Head To Shell	NONE
Shell To Shell	NONE
Bottom Head To Shell	NONE
Bottom Head To Shell	NONE
SIZE (GALLONS) - MODEL	SERIAL NUMBER
10.0 m ² Z'	197080
VESSEL INFORMATION	
DESIGN PRESSURE	60/FV
DESIGN TEMP.	370 °F
HYDRO TEST PRESSURE	102
DESIGN HYDRO TEST	29.92 N HG.
HEAT TRANSFER INFORMATION	
DESIGN PRESSURE	150/FV
DESIGN TEMP.	370 °F
TEST PRESSURE	241
HEATING / COOLING	15.96 CU. FT.
MEDIUM	WATER / WATER
EST. EMPTY WEIGHT	27,375 W/O ITEM #61 LBS
SCALE	1"=24" (DO NOT SCALE THIS DRAWING)
DRAWN BY	TL MCKNABB DATE 5-8-97
REVIEWED BY	RON BENSON DATE 6-13-97
APPROVED BY	JEFF BRUNSON PC154 DATE 6-13-97
SOLD TO	ROSEMUND, INC.
ADDRESS	CHARLOTTE, NC
CUSTOMER ORDER NO.	6-13-97
TITLE	10.0 m ² SIDE DISCHARGE FILTER DRYER 304L S/S
QUANTITY	ONE

CERTIFIED CORRECT AND RELEASED FOR FABRICATION	
THIS DRAWING INCORPORATES CHANGES REQUESTED ON APPROVAL DRAWINGS RETURNED BY YOU DATED FABRICATION WILL BE IN ACCORDANCE WITH THIS DRAWING	
ANY FURTHER CHANGES WILL BE REVIEWED FOR COST AND DELIVERY ADJUSTMENTS.	
PAUL MUELLER COMPANY	
Signed: J.L. McKnabb Date 11-24-97	

REV.	DATE	DESCRIPTION
80 23/32 WAS 71 20/32	53 WAS 43 15/16	TLM 11-22-97
102 1/4 WAS 93 3/8		TLM 10-31-97
REVISED EXTERIOR FINISH AT NOTE #18		TLM 10-31-97
LOCATED ITEMS #62 & 63 TO TOP VIEW		TLM 10-7-97
ADDED ITEM #77 & 78 AND NOTE #30		TLM 9-4-97
ADDED CUSTOMER TAG NO. & P.O. NO. TO DETAIL F		TLM 9-4-97
CORRECTED ITEM #43 BUBBLE & ADDED SEE DETAIL F TO ELEVATION VIEW		TLM 9-4-97
ADDED BELOW FILTRATE PLATES TO ELEVATION VIEW		TLM 9-4-97
ADDED ITEM #75/W & 76		TLM 9-4-97
ADDED NOTE #28 & 29		TLM 5-23-97
THRU 74A, REVISED ORIENTATION OF TOP VIEW		TLM 5-23-97
ADDED DETAIL H		TLM 5-23-97

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SEPA FROM DWG NO. PC09757 PC09742

D.F.P.P. PROJ. MPP C-87A

2. **Technical Data** (Based on scope of supply of original delivery)

Contents:

- 2.1 *General Data*
- 2.2 *Pressure Vessel Data*
- 2.3 *Drive and Agitator Data*
- 2.4 *Materials of Construction*
- 2.5 *Surface Treatment*
- 2.6 *Agreed Application*
- 2.7 *Summary of Modules*
- 2.8 *Copyrights*

2.1 General Data

Customer:	BASF Corporation
Machine Description:	10M² Side Discharge Filter-Dryer
Rosenmund Order No.:	97-RF-414
Machine No.:	RSD 10-951-97
Year of Manufacture:	1997
Weight of Equipment Empty:	40,000 pounds
Filtration Area:	10M²

Dimensional Drawing:	97-RF-414
Drive General Assembly Drawing:	301.00882
Side Discharge Valve Assembly Drawing:	301.00884
Hydraulic Diagram:	97-RF-414- H1 through H5

2.2 Pressure Vessel Data

Vessel Diameter:	145-11/16"
Maximum Working Volume:	3,382 gallons
Maximum Cake Volume:	1,689 gallons

	<u>Vessel</u>	<u>Jackets</u>	<u>Agitator</u>
Allowable Operating Pressure max/min psig:	60/FV	150/FV	145/0
Allowable Operating Temperature max/min °F:	-20/+370	-20/+370	-20/+370
Design, manufacture and testing according to:	ASME Section VIII		
National Board No.:	27524		

2.3 Drive and Agitator Data

Drive:	F-3
Nominal stroke of agitator:	600 mm
Shaft diameter:	220 mm
Agitator type:	3-arm, heated, S-blade
Maximum agitator torque:	50,000 Nm
Agitator speed:	2.5 - 7.5 RPM
Electric motor drive:	40 HP
Electric motor hydraulic pack:	5 HP

2.4 Material of Construction

All parts in contact with product or liquid:	T304L Stainless steel (DN1.4306), low moly
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Jackets:	T304L Stainless steel (DN1.4306)
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Rotary joint:	Brass
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Other non product-contact parts such as frame, drive parts, guards, etc.:	Carbon Steel
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Insulation material:	Customer Installed
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Seals:	
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Filter media:	Filter media - T304L stainless steel (low moly), 40 micron multi-layer Poremet Supporting screen - T304L stainless steel (low moly)
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Mechanical seal:	Product side seal - Kalrez Atmospheric - Viton Seat rings - ceramic to carbon
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Side discharge valve:	Vessel seat rings - T304L stainless steel Valve seat rings - Hastelloy Housing - T316L stainless steel
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2.5 Surface Treatment

Internal finish: **Mill**

External finish: **Glass bead**

Paints on carbon steel parts

Primer: **Sherwin Williams Polane, NoE65 A 4**

Finish: **Sherwin Williams Polane B, No.
F63BXL2270-4373, color blue**

2.6 Agreed Application

This machine is intended and designed for the following process steps:

- Filtration
- Re-slurrying
- Smoothing
- Washing (re-slurry, displacement washing)
- Drying (only for filter-dryers)
- Discharge

WARNING !



The filter is designed exclusively for the above described process steps. Any further use which is not mentioned above is assumed as being not agreed. Damage resulting from such use is not the responsibility of the manufacturer, the risk is carried entirely by the user.