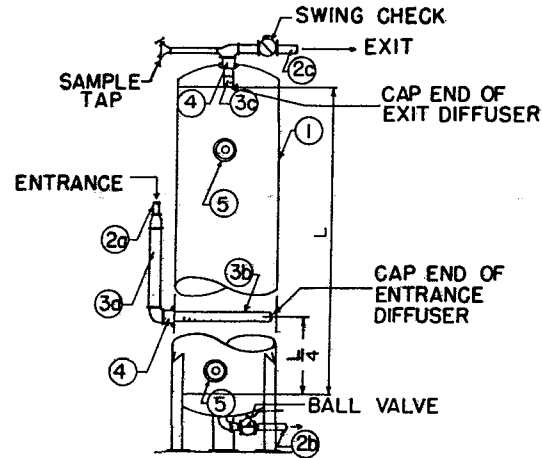


**DIFFUSER CONNECTION
DETAIL**

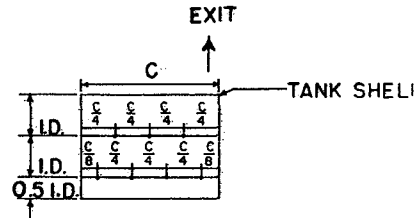


**SECTIONED TANK
ELEVATION**

L = TANK HEIGHT
EXCLUSIVE OF
END CAPS

**ENTRANCE DIFFUSER
DRILLING TEMPLATE**

C = OUTSIDE CIRCUMFERENCE
OF PIPE
ID = INSIDE DIAMETER OF PIPE
D = DIAMETER OF TANK
* = HOLE SPACING: $0.10 D =$
 $0.10 \times$ THE INSIDE
TANK DIAMETER



**EXIT DIFFUSER
DRILLING TEMPLATE**

NOTES:

1. PRESSURE TANK, VOLUME 10 TO 15 TIMES DESIGN FLOW RATE IN GALLONS PER MINUTE.
2. PIPE SIZED FOR DESIGN FLOW RATE VELOCITY NEAREST 4 FEET PER SECOND. (a) SUPPLY LINE, INJECT CHEMICALS AS FAR AHEAD OF TANK AS PRACTICAL, (b) TANK DRAIN, DRAIN LINE MUST HAVE AIR CAP ABOVE WASTE RECEIVING DRAIN, (c) DISCHARGE LINE TO FILTER(S) OR HYDROPNEUMATIC TANK.
3. PIPE SIZED FOR DESIGN FLOW RATE VELOCITY NEAREST 1 FOOT PER SECOND. (a) TRANSITION SECTION AT LEAST 10 INSIDE DIAMETER, 11 BOTTOM, 3 EACH ON OPPOSITE SIDES TO INDUCE RADIAL FLOW, (c) EXIT DIFFUSER, 9 HOLES, 0.14 OF PIPE INSIDE DIAMETER, 8 SIDE, 1 BOTTOM CENTER. LOW ENTRANCE VELOCITY 1 fps AND HIGH EXIT VELOCITY 6fps REQUIRED TO ESTABLISH PROPER FLOW PATTERN AND MINIMIZE SHORT CIRCUITING.
4. NIPPLE, SHORT OR LONGER, ONE SIZE LARGER THAN (3) SCHEDULE 40 OR 80 AS REQUIRED FOR BEST FIT.
5. EXTRA TANK FITTINGS AS DESIRED. TO FLUSH SEDIMENT FROM TANK, TURN OFF PUMP, OPEN SAMPLE TAP, OPEN TANK DRAIN VALVE; WHEN EMPTY TURN PUMP ON, RUN WATER TO WASTE UNTIL CLEAR, BLEED AIR TO WASTE THROUGH SAMPLE TAP UNTIL TANK IS FULL.

WARNING: AVOID USE OF SOLDER THAT CONTAINS LEAD.

DIFFUSER PIPE SIZES

FLOW RATE GPM	PIPE SIZE	O.D. INCHES	SCHEDULE 40 PIPE			INLET HOLES	EXIT HOLES	NIPPLE SIZE	
			I.D. INCHES	C INCHES	I.D. INCHES			(SCH 80)	
-5.5	1-1/4	1.660	1.380	5.22	11/32	3/16	1-1/2	1.500	
5.6-8.7	1-1/2	1.900	1.610	5.97	13/32	7/32	2	1.939	
8.8-12.9	2	2.375	2.067	7.46	1/2	9/32	2-1/2	2.323	
13.0-19.3	2-1/2	2.875	2.469	9.03	5/8	11/32	3	2.900	
19.4-30.0	3	3.500	3.068	11.00	3/4	7/16	3-1/2	3.364	

CHLORINE CONTACT TANK

FLOW RATE GPM	TANK SIZE*			10 MINUTE CONTACT TANK		DIFFUSERS			
	VOLUME GALLON	DIAMETER INCHES	HEIGHT INCHES	TOP & SIDES	DRAIN	PIPE SIZE	INLET HOLES	EXIT HOLES	.17 C
8	80	20	62	2	1-1/2	1-1/2	13/32	7/32	1.01
12	120	24	65	2-1/2	2	2	1/2	9/32	1.27
18	180	30	62	3	2	2-1/2	5/8	11/32	1.54
22	220	30	77	3-1/2	2	3	3/4	7/16	1.87
30	300	36	71	3-1/2	2	3	3/4	7/16	1.87

* NOMINAL - USE MANUFACTURERS DIMENSIONS.



MIXING - CONTACT - TIME
SEDIMENTATION TANK

Disclaimer

This site makes available conceptual plans that can be helpful in developing building layouts and selecting equipment for various agricultural applications. These plans do not necessarily represent the most current technology or construction codes. They are not construction plans and do not replace the need for competent design assistance in developing safe, legal and well-functioning agricultural building system. The LSU Agriculture Center, the Mid-West Plan Service, the United States Department of Agriculture and none of the cooperating land-grant universities warranty these plans.