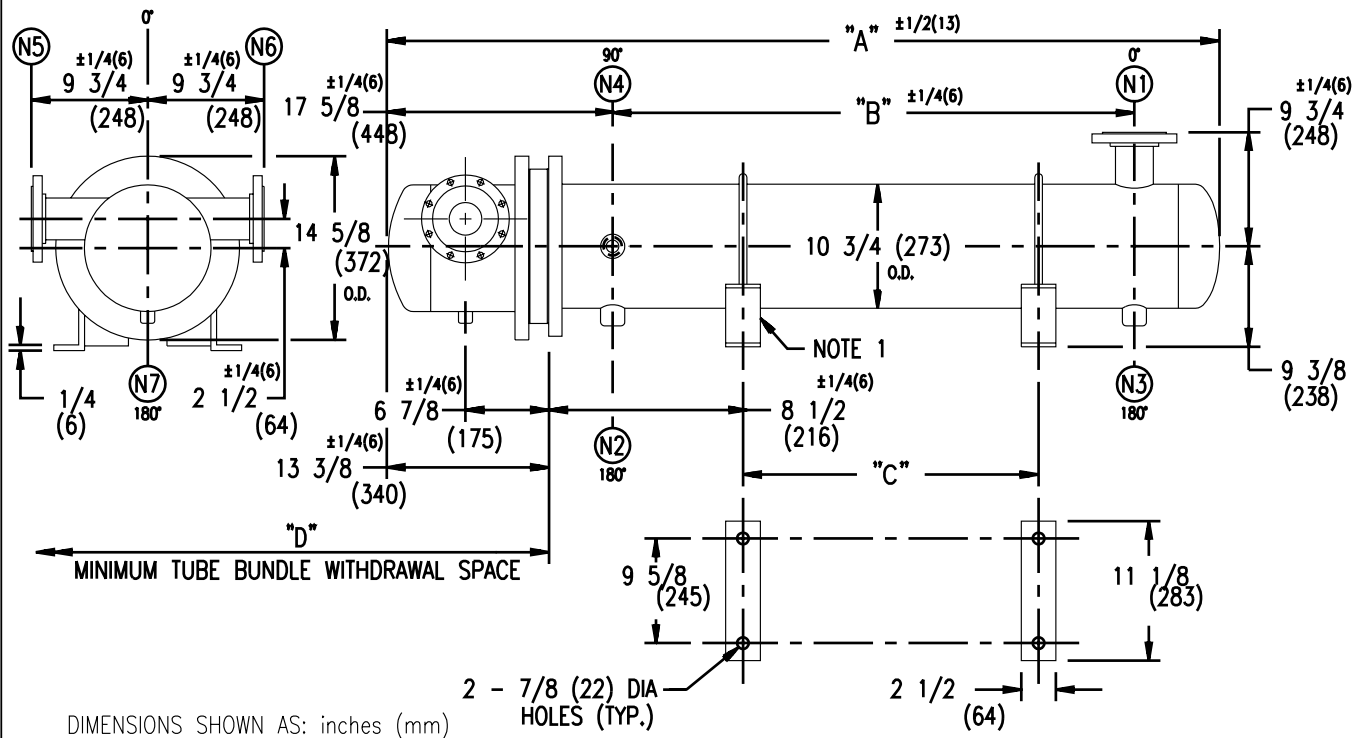


ARMSTRONG®



DIMENSIONS SHOWN AS: inches (mm)

EXCHANGER SIZE	DIMENSIONS											
	A		B		C		D		N1		N2	
	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm
WS-102-4E4	50 1/8	1273	24 1/2	622	15 1/4	387	26	660	4	102	1 1/2	38
WS-103-4E4	62 1/8	1578	36 1/2	927	27 1/4	692	38	965	4	102	1 1/2	38
WS-104-4E4	74 1/8	1883	48 1/2	1232	39 1/4	997	50	1270	6	152	2	51
WS-105-4E4	86 1/8	2187	60 1/2	1537	51 1/4	1302	62	1575	6	152	2	51
WS-106-4E4	98 1/8	2492	72 1/2	1842	63 1/4	1607	74	1880	6	152	2	51
WS-107-4E4	110 1/8	2797	84 1/2	2146	75 1/4	1911	86	2184	6	152	2	51
WS-108-4E4	122 1/8	3102	96 1/2	2451	87 1/4	2216	98	2489	6	152	2	51
WS-109-4E4	134 1/8	3407	108 1/2	2756	99 1/4	2521	110	2794	6	152	2	51
WS-1010-4E4	146 1/8	3711	120 1/2	3061	111 1/4	2826	122	3099	6	152	2	51
WS-1011-4E4	158 1/8	4016	132 1/2	3366	123 1/4	3131	134	3404	6	152	2	51
WS-1012-4E4	170 1/8	4321	144 1/2	3670	135 1/4	3435	146	3708	6	152	2	51
WS-1013-4E4	182 1/8	4626	156 1/2	3975	147 1/4	3740	158	4013	6	152	2	51
WS-1014-4E4	194 1/8	4931	168 1/2	4280	159 1/4	4045	170	4318	6	152	2	51
WS-1015-4E4	206 1/8	5235	180 1/2	4585	171 1/4	4350	182	4623	6	152	2	51

NOZZLE SCHEDULE				
SERVICE	MARK	SHELL SIDE	MARK	TUBE SIDE
INLET	N1	AS PER TABLE	N5	3 (76) FLG
OUTLET	N2	AS PER TABLE	N6	3 (76) FLG
DRAIN	N3	1/2 (13) NPT	N7	1/2 (13) NPT
VENT	N4	3/4 (19) NPT		

- NOTES:
1. SUPPORTS SUPPLIED ONLY IF SPECIFIED ON ORDER.
 2. NOZZLE SIZES SHOWN ARE RECOMMENDED FOR MAXIMUM EXCHANGER LIFE.
 3. FABRICATED TO ASME CODE SECTION VIII DIVISION 1 AND LATEST ADDENDA.
 4. DRAWING IS NOT TO SCALE.
 5. ALL DIMN'S ±1/8 (3) UNLESS OTHERWISE SHOWN.

DESIGN CONDITIONS				
	SHELL		TUBES	
DESIGN PRESSURE	150 PSIG	1034 KPa	150 PSIG	1034 KPa
DESIGN TEMPERATURE	375 °F	191 °C	375 °F	191 °C
MIN. DESIGN METAL TEMP.	35 °F	1.7 °C	35 °F	1.7 °C
HYDRO. TEST PRESSURE	225 PSIG	1551 KPa	225 PSIG	1551 KPa
CONTENTS	STEAM		WATER	

CUSTOMER: _____
 LOCATION: _____
 ENGINEER: _____
 ORDER No.: _____
 PROJECT/JOB: _____
 LOCATION: _____
 TAG: _____ (QUOTE # _____)

TITLE G.A. 150 LB. WS SERIES HEAT EXCHANGERS	A R M S T R O N G				NUMBER WS-10-4P-E4	REV.
DATE: 12 / 01 / 94 BY: D.C.R.	TORONTO - CANADA TEL : (416) 755-2291	MONTREAL - CANADA TEL : (514) 421-2424	BUFFALO - N. Y. TEL: (716) 693-8813	COLCHESTER - U.K. TEL: (44) 120-657-9491		