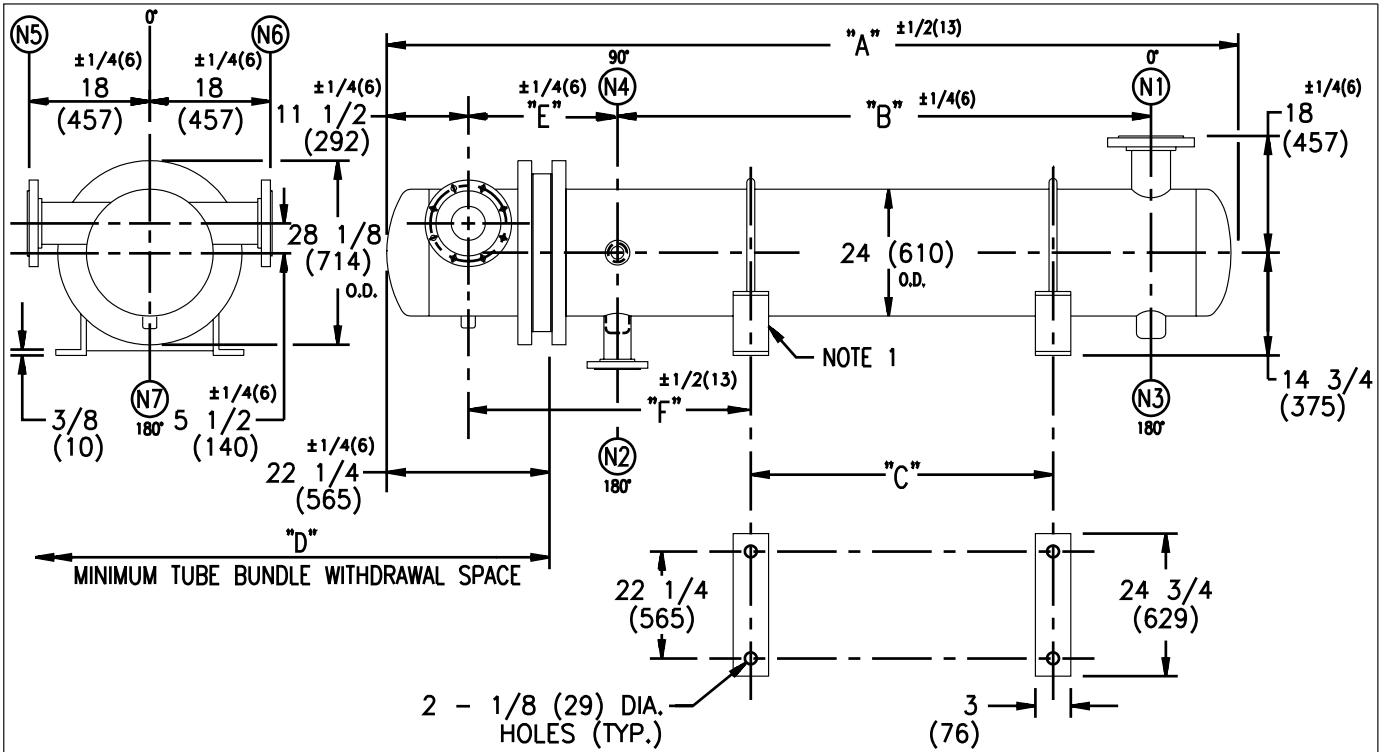


ARMSTRONG®



EXCHANGER SIZE	DIMENSIONS															
	A		B		C		D		E		F		N1		N2	
	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm
WS-243-4E4	73	1870	32 1/2	826	19 3/4	502	41	1041	17 1/4	438	23 1/8	587	10	254	3 NPT	76
WS-244-4E4	85	2175	44 1/2	1130	31 3/4	806	53	1346	17 1/4	438	23 1/8	587	10	254	3 NPT	76
WS-245-4E4	99	2530	57 1/2	1461	41 1/2	1054	65	1651	17 1/4	438	25 3/8	645	12	305	4 FLG	102
WS-246-4E4	111	2835	69 1/2	1765	53 1/2	1359	77	1956	17 1/4	438	25 3/8	645	12	305	4 FLG	102
WS-247-4E4	125	3175	82 1/4	2089	65 1/2	1664	89	2261	17 1/4	438	25 1/2	648	14	356	4 FLG	102
WS-248-4E4	139	3531	94 1/4	2394	75 1/2	1918	101	2565	18 1/4	464	27 1/2	699	16	406	6 FLG	152
WS-249-4E4	151	3835	106 1/4	2699	87 1/2	2223	113	2870	18 1/4	464	27 1/2	699	16	406	6 FLG	152
WS-2410-4E4	163	4140	118 1/4	3004	99 3/4	2534	125	3175	18 1/4	464	27 1/4	692	16	406	6 FLG	152
WS-2411-4E4	177	4496	130	3302	109 1/4	2775	137	3480	19 1/2	495	29 3/4	756	18	457	8 FLG	203
WS-2412-4E4	189	4801	142	3607	121 1/4	3080	149	3785	19 1/2	495	29 3/4	756	18	457	8 FLG	203
WS-2413-4E4	203	5156	155	3937	133 1/4	3385	161	4089	19 1/2	495	29 3/4	756	20	508	8 FLG	203
WS-2414-4E4	215	5461	167	4242	145 1/4	3689	173	4394	19 1/2	495	29 3/4	756	20	508	8 FLG	203
WS-2415-4E4	227	5766	179	4547	157 1/4	3994	185	4699	19 1/2	495	29 3/4	756	20	508	8 FLG	203

NOZZLE SCHEDULE				
SERVICE	MARK	SHELL SIDE	MARK	TUBE SIDE
INLET	(N1)	AS PER TABLE ANSI (RF) FLG	(N5)	8 (203) ANSI (RF) FLG
OUTLET	(N2)	AS PER TABLE ANSI (RF) FLG	(N6)	8 (203) ANSI (RF) FLG
DRAIN	(N3)	3/4 (19) NPT	(N7)	3/4 (19) 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 DIM'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.	40 °F (4.4°C)	40 °F (4.4°C)
HYDRO. TEST PRESSURE	225 PSIG (1551 kpa)	225 PSIG (1551 kpa)
CONTENTS	STEAM	WATER

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

TITLE	A R M S T R O N G				NUMBER	REV.
150 LB. W SERIES HEAT EXCHANGERS	TORONTO - CANADA	MONTREAL - CANADA	BUFFALO - N. Y.	COLCHESTER - U.K.	WS-24-4P-E4	
DATE :-SEP./15/99 BY :- AP/AG	TEL : (416) 755-2291	TEL : (514) 421-2424	TEL: (716) 693-8813	TEL: (44) 120-657-9491		