



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-243-2-4	63 1/2	1613	20	508	7 1/2	191	41	1041	22	559	28 7/8	733	10	254	3 NPT	76
WS-244-2-4	75 1/2	1918	32	813	19 1/2	495	53	1346	22	559	28 7/8	733	10	254	3 NPT	76
WS-245-2-4	87 1/2	2223	42 1/4	1073	26 1/4	667	65	1651	23 1/2	597	31 3/8	797	12	305	4 FLG	102
WS-246-2-4	99 1/2	2527	54 1/4	1378	38 1/4	972	77	1956	23 1/2	597	31 3/8	797	12	305	4 FLG	102
WS-247-2-4	111 1/2	2832	65 1/4	1657	48 3/4	1238	89	2261	24 1/2	622	33	838	14	356	4 FLG	102
WS-248-2-4	123 1/2	3137	75	1905	56 1/2	1435	101	2565	25 3/4	654	35 1/4	895	16	406	6 FLG	152
WS-249-2-4	135 1/2	3442	87	2210	68 1/2	1740	113	2870	25 3/4	654	35 1/4	895	16	406	6 FLG	152
WS-2410-2-4	147 1/2	3747	99	2515	80 1/2	2045	125	3175	25 3/4	654	35 1/4	895	16	406	6 FLG	152
WS-2411-2-4	159 1/2	4051	109 1/4	2775	88 1/2	2248	137	3480	26 1/2	673	36 7/8	937	18	457	8 FLG	203
WS-2412-2-4	171 1/2	4356	121 1/4	3080	100 1/2	2248	149	3785	26 1/2	673	36 7/8	937	18	457	8 FLG	203
WS-2413-2-4	183 1/2	4661	132	3353	110 1/4	2800	161	4089	27 3/4	705	39 1/8	994	20	508	8 FLG	203
WS-2414-2-4	195 1/2	4966	144	3658	122 1/4	3105	173	4394	27 3/4	705	39 1/8	994	20	508	8 FLG	203
WS-2415-2-4	207 1/2	5271	156	3962	134 1/4	3410	185	4699	27 3/4	705	39 1/8	994	20	508	8 FLG	203

NOZZLE SCHEDULE				
SERVICE	MARK	SHELL SIDE	MARK	TUBE SIDE
INLET	(N1)	AS PER TABLE ANSI (RF) FLG	(N5)	10 (254) ANSI (RF) FLG
OUTLET	(N2)	AS PER TABLE ANSI (RF) FLG	(N6)	10 (254) ANSI (RF) FLG
DRAIN	(N3)	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 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.	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 150 LB. W SERIES HEAT EXCHANGERS	A R M S T R O N G				NUMBER	REV.
DATE :-SEP./15/99 BY :-AP/AG	TORONTO - CANADA	MONTREAL - CANADA	BUFFALO - N. Y.	COLCHESTER - U.K.	WS-24-2P-4	
	TEL : (416) 755-2291	TEL : (514) 421-2424	TEL: (716) 693-8813	TEL: (44) 120-657-9491		