



EXCHANGER SIZE	DIMENSIONS											
	A		B		C		D		N1		N2	
	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm
WS-85-2E4	83 3/8	2118	60 1/2	1537	57	1270	62	1575	4	102	1	25
WS-86-2E4	95 3/8	2423	72 1/2	1842	69	1575	74	1880	4	102	1 1/4	25
WS-87-2E4	107 3/8	2727	84 1/2	2146	81	1880	86	2184	4	102	1 1/4	32
WS-88-2E4	119 3/8	3032	96 1/2	2451	93	2184	98	2489	6	152	1 1/4	32
WS-89-2E4	131 3/8	3337	108 1/2	2756	105	2489	110	2794	6	152	1 1/4	32
WS-810-2E4	143 3/8	3642	120 1/2	3061	117	2794	122	3099	6	152	1 1/4	32
WS-811-2E4	155 3/8	3947	132 1/2	3366	129	3099	134	3404	6	152	1 1/4	32
WS-812-2E4	167 3/8	4505	144 1/2	3670	141	3404	146	3708	6	152	1 1/4	32
WS-813-2E4	179 3/8	4810	156 1/2	3975	153	3708	158	4013	6	152	1 1/4	32
WS-814-2E4	191 3/8	5115	168 1/2	4280	165	4013	170	4318	6	152	1 1/4	32
WS-815-2E4	203 3/8	5420	180 1/2	4585	177	4318	182	4623	6	152	1 1/4	32

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		
VENT	(N4)	3/4 (19) NPT		

NOTES: 1. SUPPORTS SUPPLIED ONLY IF SPECIFIED ON ORDER.
 2. NOZZLE SIZES SHOWN ARE RECOMMENDED FOR MAX. EXCHANGER LIFE, NO EXTERNAL FORCES APPLY.
 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.	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-8-2P-E4(6)	REV. A ECO #9218 FEB. 20/04 J.R.
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		