



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-42-4E4	41	1041	23 1/4	591	16	406	26	660	2	51	1	25
WS-43-4E4	53	1346	35 1/4	895	28	711	38	965	2	51	1	25
WS-44-4E4	65	1651	47 1/4	1200	40	1016	50	1270	2	51	1	25
WS-45-4E4	77	1956	59 1/4	1505	52	1321	62	1575	2 1/2	64	1 1/4	32
WS-46-4E4	89	2261	71 1/4	1810	64	1626	74	1880	2 1/2	64	1 1/4	32
WS-47-4E4	101	2565	83 1/4	2115	76	1930	86	2184	2 1/2	64	1 1/4	32
WS-48-4E4	113	2870	95 1/4	2419	88	2235	98	2489	2 1/2	64	1 1/4	32
WS-49-4E4	125	3175	107 1/4	2724	100	2540	110	2794	2 1/2	64	1 1/4	32
WS-410-4E4	137	3480	119 1/4	3029	112	2845	122	3099	2 1/2	64	1 1/4	32
WS-411-4E4	149	3785	131 1/4	3334	124	3150	134	3404	2 1/2	64	1 1/4	32
WS-412-4E4	161	4089	143 1/4	3639	136	3454	146	3708	2 1/2	64	1 1/4	32

### NOZZLE SCHEDULE

SERVICE	MARK	SHELL SIDE	MARK	TUBE SIDE
INLET	N1	AS PER TABLE	N5	1 (25) FLG
OUTLET	N2	AS PER TABLE	N6	1 (25) FLG
DRAIN			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	
	PSIG	KPa	PSIG	KPa
DESIGN PRESSURE	150	1034	150	1034
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	1551	225	1551
CONTENTS	STEAM		WATER	

CUSTOMER:  
LOCATION:

ENGINEER:  
ORDER No.:  
PROJECT/JOB:  
LOCATION:

TAG: (QUOTE # )

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