



Steam inlet pressure not to exceed 30 psig.
For higher steam pressure, use Extended shell.

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-42-2-2	29 1/2	749	15 3/4	400	9 1/2	241	26	660	2	51	1	25
WS-43-2-2	41 1/2	1054	27 3/4	705	21 1/2	546	38	965	2	51	1	25
WS-44-2-2	53 1/2	1359	39 3/4	1010	33 1/2	851	50	1270	2	51	1	25
WS-45-2-2	65 1/2	1664	51 3/4	1314	45 1/2	1156	62	1575	2 1/2	64	1 1/4	32
WS-46-2-2	77 1/2	1969	63 3/4	1619	57 1/2	1461	74	1880	2 1/2	64	1 1/4	32
WS-47-2-2	89 1/2	2273	75 3/4	1924	69 1/2	1765	86	2184	2 1/2	64	1 1/4	32
WS-48-2-2	101 1/2	2578	87 3/4	2229	81 1/2	2070	98	2489	2 1/2	64	1 1/4	32
WS-49-2-2	113 1/2	2883	99 3/4	2534	93 1/2	2375	110	2794	2 1/2	64	1 1/4	32
WS-410-2-2	125 1/2	3188	111 3/4	2838	105 1/2	2680	122	3099	2 1/2	64	1 1/4	32
WS-411-2-2	137 1/2	3493	123 3/4	3143	117 1/2	2985	134	3404	2 1/2	64	1 1/4	32
WS-412-2-2	149 1/2	3797	135 3/4	3448	129 1/2	3289	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 1/4 (32) NPT
OUTLET	N2	AS PER TABLE	N6	1 1/4 (32) 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 $\pm 1/8$ (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	300 PSIG	2068 KPa
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-4-2P-2	
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		