



EXCHANGER SIZE	DIMENSIONS											
	A		B		C		D		N1		N2	
	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm
WS-203-4-4	55 7/8	1419	13 1/2	343	N/A	N/A	39	991	12	305	4	102
WS-204-4-4	67 7/8	1724	25 1/2	648	10 1/2	267	51	1295	12	305	4	102
WS-205-4-4	79 7/8	2029	37 1/2	953	22 1/2	572	63	1600	12	305	4	102
WS-206-4-4	91 7/8	2334	49 1/2	1257	34 1/2	876	75	1905	12	305	4	102
WS-207-4-4	103 7/8	2638	61 1/2	1562	46 1/2	1181	87	2210	12	305	4	102
WS-208-4-4	115 7/8	2943	73 1/2	1867	58 1/2	1486	99	2515	12	305	4	102
WS-209-4-4	127 7/8	3248	85 1/2	2172	70 1/2	1791	111	2819	12	305	4	102
WS-210-4-4	139 7/8	3553	97 1/2	2477	82 1/2	2096	123	3124	12	305	4	102
WS-211-4-4	151 7/8	3858	109 1/2	2781	94 1/2	2400	135	3429	12	305	4	102
WS-212-4-4	163 7/8	4162	121 1/2	3086	106 1/2	2705	147	3734	12	305	4	102
WS-213-4-4	175 7/8	4467	133 1/2	3391	118 1/2	3010	159	4039	12	305	4	102
WS-214-4-4	187 7/8	4772	145 1/2	3696	130 1/2	3315	171	4343	12	305	4	102
WS-215-4-4	199 7/8	5077	157 1/2	4001	142 1/2	3620	183	4648	12	305	4	102

NOZZLE SCHEDULE				
SERVICE	MARK	SHELL SIDE	MARK	TUBE SIDE
INLET	N1	AS PER TABLE	N5	6 (152) FLG
OUTLET	N2	AS PER TABLE	N6	6 (152) FLG
DRAIN	N3	3/4 (19) NPT	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 DIM'S ±1/8 (3) UNLESS OTHERWISE SHOWN.

DESIGN CONDITIONS				
	SHELL		TUBES	
DESIGN PRESSURE	150 PSIG	1034 KP ₀	150 PSIG	1034 KP ₀
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 KP ₀	225 PSIG	1551 KP ₀
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-20-4P-4	
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	