



EXCHANGER SIZE	DIMENSIONS											
	A		B		C		D		N1		N2	
	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm
WS-203-2-1	45 1/2	1156	13 1/2	343	N/A	N/A	39	991	12	305	4	102
WS-204-2-1	57 1/2	1461	25 1/2	648	10 1/2	267	51	1295	12	305	4	102
WS-205-2-1	69 1/2	1765	37 1/2	953	22 1/2	572	63	1600	12	305	4	102
WS-206-2-1	81 1/2	2070	49 1/2	1257	34 1/2	876	75	1905	12	305	4	102
WS-207-2-1	93 1/2	2375	61 1/2	1562	46 1/2	1181	87	2210	12	305	4	102
WS-208-2-1	105 1/2	2680	73 1/2	1867	58 1/2	1486	99	2515	12	305	4	102
WS-209-2-1	117 1/2	2985	85 1/2	2172	70 1/2	1791	111	2819	12	305	4	102
WS-2010-2-1	129 1/2	3289	97 1/2	2477	82 1/2	2096	123	3124	12	305	4	102
WS-2011-2-1	141 1/2	3594	109 1/2	2781	94 1/2	2400	135	3429	12	305	4	102
WS-2012-2-1	153 1/2	3899	121 1/2	3086	106 1/2	2705	147	3734	12	305	4	102
WS-2013-2-1	165 1/2	4204	133 1/2	3391	118 1/2	3010	159	4039	12	305	4	102
WS-2014-2-1	177 1/2	4509	145 1/2	3696	130 1/2	3315	171	4343	12	305	4	102
WS-2015-2-1	189 1/2	4813	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)	8 (203) NPT
OUTLET	(N2)	AS PER TABLE	(N6)	8 (203) NPT
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	125 PSIG	862 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	250 PSIG	1723 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-20-2P-1	REV.	
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		