



EXCHANGER SIZE	DIMENSIONS											
	A		B		C		D		N1		N2	
	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm
WS-85-2-4	72	1829	49	1245	40 3/4	1035	62	1575	4	102	1	25
WS-86-2-4	84	2134	61	1549	52 3/4	1340	74	1880	4	102	1 1/4	32
WS-87-2-4	96	2438	73	1854	64 3/4	1645	86	2184	4	102	1 1/4	32
WS-88-2-4	108	2743	85	2159	76 3/4	1949	98	2489	6	152	1 1/4	32
WS-89-2-4	120	3048	97	2464	88 3/4	2254	110	2794	6	152	1 1/4	32
WS-810-2-4	132	3353	109	2769	100 3/4	2559	122	3099	6	152	1 1/4	32
WS-811-2-4	144	3658	121	3073	112 3/4	2864	134	3404	6	152	1 1/4	32
WS-812-2-4	156	3962	133	3378	124 3/4	3169	146	3708	6	152	1 1/4	32
WS-813-2-4	168	4267	145	3683	136 3/4	3473	158	4013	6	152	1 1/4	32
WS-814-2-4	180	4572	157	3988	148 3/4	3778	170	4318	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
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	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-4-(6)	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