

SERVICE OF UNIT DWO - M.P. STEAM HEAT EXCHANGER  
 SIZE 45 1/2" X 30 SEL TYPE AEU CONNECTED IN  
 SQ. FT. SURF./UNIT 6861\* SHELLS/UNIT ONE SQ. FT. SURF./SHELL 6861  
 (GROSS) PERFORMANCE OF ONE UNIT # (60-N) (GROSS)  
 \* OUTLET BEHIND BENDS

	SHELL SIDE		TUBE SIDE	
FLUID CIRCULATED	W.F.O & SOLVENT		M.P. STEAM.	
TOTAL FLUID ENTERING	245,600	LB/HR	43,796	LB/HR
VAPOR	—	LB/HR	—	LB/HR
LIQUID	245,600	LB/HR	—	LB/HR
STEAM	—	LB/HR	43,796	LB/HR
NON-CONDENSABLES	—	LB/HR	—	LB/HR
FLUID (VAPORIZED) (CONDENSED)	121,295	LB/HR	—	LB/HR
STEAM CONDENSED	—	LB/HR	43,796	LB/HR
GRAVITY LBS IN/OUT	.76 / .73			
VISCOSITY LBS CKS IN/OUT	.71 / .95			
MOLECULAR WEIGHT	77.5 OUT			
SPECIFIC HEAT		BTU/LB-°F		BTU/LB-°F
THERMAL CONDUCTIVITY		BTU/HR-FT-°F		BTU/HR-FT-°F
LATENT HEAT		BTU/LB		BTU/LB
TEMPERATURE IN	212 (BP@ 285°) (3)	°F	573	°F
TEMPERATURE OUT	350	°F	373	°F
OPERATING PRESSURE, INLET	40 (PSIG)		165 (PSIG)	
NO. PASSES PER SHELL	ONE		TWO	
VELOCITY		FT/SEC		FT/SEC
PRESSURE DROP - ALLOW. CALC'D.	5.0 PSI	5.0 PSI	NEGL. PSI	NEGL. PSI
FOULING RESISTANCE, MIN.	.002		.0005	
HEAT EXCHANGED - BTU/HR.	37,270,000	MTD 1000000	FWTD 57.45	170.12 ?
TRANSFER RATE - SERVICE	94.55	CLEAN		

#### CONSTRUCTION OF ONE SHELL

DESIGN PRESSURE	75	PSIG	225 ± 5V	PSIG
TEST PRESSURE	113	PSIG	333	PSIG
DESIGN TEMPERATURE	650	°F	650	°F
TYPES C-STL (W-CSTL) NO. 1666 POLES D. .75	BWG 14 (15)	LENGTH 20' SEL PITCH 15/16 TRI		
SHELL C-STL	I.D. 43 1/2"	SHELL COVER C-STL	(INTEG) (REMOV)	
CHANNEL C-STL		CHANNEL COVER C-STL		
TUBESHEET - STATIONARY C-STL		TUBESHEET - FLOATING		
BAFFLES - CROSS C-STL TYPE VERT DBL SEGS				
BAFFLES - LONG TYPE 24" P & 35% AREA				