





MANUFACTURER: WASHINGTON  
 TURBINES FOR 1000 T/D ANNONIA PLANT  
 CONTINENTAL Oil Co. PROJECT

SINGLE STAGE GENERAL PURPOSE  
 STEAM TURBINE DATA SHEET  
 LOCATION: BLYTHEVILLE, ARK. SPECIFICATION NO. 1KT-401

REQ. NO. 1K-1

SERVICE - DRIVER FOR:		FLOW DIAGRAM NO.	PLANT EQUIPMENT NO.
CONTINUOUS OR STAND BY SERVICE		1RA	1KT-401
SPEED	RPM	5875	100% SPEED
H.P. RATING (BASIS FOR BID)	BHP	4185	
ROTATION (FROM GOV END)	CW OR CCW	PSIG	150
STEAM SUPPLY PRESSURE	%		
TOTAL TEMPERATURE	PSIG	450	
EXHAUST PRESSURE	PSIA		
STEAM RATE AT TURBINE RATING - LB/BHP-HR	HG ABS.	4.0	
1/2 RATING - LB/BHP-HR		11.2	
EROTION HP		36	
HAND VALVES RECD.			
MAX HP WITH 1 VALVE CLOSED			
MAX HP WITH 2 VALVES			
<b>CAPABILITY AND LIMITS, MAXIMUM HP 10,100</b>			
OBTAINABLE WITH NEW NOZZLES ETC FOR REID INSTALL			
MAX HP LIMITED BY DESIGN (LOADS) (SEE CAPABILITY SHEET)			
MAX. NO. OF HAND VALVES AVAILABLE	PSIG/°F	600/750	
MAX. EXHAUST PRESSURE ON CASE	PSIG	10	
MAX. ALLOWABLE SPEED	RPM	6,175	
GOVERNOR - TYPE (MECH (RELAY) (HYDRAULIC) ETC)			
N.E.M.A. CLASS (IF CLASS A, MAX. REGULATION 8%)			
OVERSPEED TRIP SET AT: (15% ABOVE NORMAL)		6,756	
SPEED ADJ. WHILE RUNNING - % ABOVE NORMAL		6,175	
- 25% BELOW NORMAL		4,380	
TYPE OF SPEED CHANGER (MANUAL/ELECTRIC/MEDIAN)			
AUXILIARY PRESSURE (PREMATIC) GOVERNOR			
RPM AT 3 PSI / RPM @ 15 PSI		4380/6175	
<b>CONNECTIONS</b>			
STEAM INLET	SIZE	12"	
EXHAUST	RATING & FACING	300 RE	
DRAINS - (1/2" MIN.)	SIZE	60 (EQUIV)	
GEAR (IF SUPPLIED) - MAKE	RATING & FACING	150 EF	
TYPE & SIZE		2"	
INTERNAL OR COUPLED			
RATED HP OF GEAR - MECH/THERMAL			
GEAR RATIO / SINGLE OR DOUBLE REDUCTION			
OUTPUT SPEED	RPM		
ROTATION OF OUTPUT SHAFT (VIEWED FROM TURB)			
GEAR LUBRICATION (SELF/TURB. SYSTEM) (ETC)			
<b>TEST &amp; INSPECTION - (MFRS STD TESTS RECD)</b>			
INSPECTION BY PURCHASER	TYPE		
CERTIFIED PERFORMANCE DATA RECD.			
WITNESS PERFORMANCE TEST RECD.			
<b>CONSTRUCTION: MFRS TYPE &amp; SIZE</b>			
STEAM CHEST MTL.		3060V2	
CASE MTL		STEEL	
CASE SPLIT HORIZONTAL OR VERTICAL			
CASE SUPPORTED AT CENTERLINE			
COVER REMOVABLE WITHOUT REMOVING PIPING			
SEPARATE NOZZLES OR SECTIONAL NOZZLE BLOCK			
NOZZLE LOCATION (BOT/CASE) (TOP CASE)		SEP	
TYPE SHAFT SEALS - (COM/WH) (LABYRINTH)		BATH	
NO. OF RINGS		13	
WATER RECD FOR SEALS - CLAND. GRM		3.5	
SHAFT MTL / DIAM.		3.5	
SHAFT PROTECTION AT SEALS		1.0	
GOVERNOR VALVE SINGLE SEAT / TRIM		1.5	
SEPARATE OVERSPEED VALVE - TYPE SINGLE SEAT		STEEL/1.5	
STEAM STRAINER	MATERIAL	57L 57L	
NO. ROWS OF BLADES		7	
PITCH DIAMETER		71.74	
COUPLING GUARD, TYPE & MTL.		RY CLARK	
INTERCHANGEABLE PARTS		ROTOR & ALL WEARABLE PARTS INTERCHANGEABLE WITH 1KT-101	
BEARINGS - RADIAL, TYPE		STEEL - ANTI WHIP	
THRUST TYPE		LABY	
LUBRICATION - RADIAL		BRG	
OIL LEVEL INDICATOR		"	
AUXILIARY OIL PUMP RECD			
BEARING HOUSINGS WATER COOLED			
TOTAL COOLING WATER RECD (INCL. GEAR)			
GASE INSULATION - TYPE		EAGLE - DICER ENLISHING CENTER	
PROTECTIVE JACKET		STEEL JACKET	
<b>BASIC PRICE DATA</b>			
BID PRICE, TURBINE AS SPECIFIED, EACH			
PRICE OF GEAR UNIT & COUPLINGS			
CHARGES INCLUDED IN ABOVE FOR HAND VALVES			
CHARGES INCL. FOR SPECIAL GOV & CONTROLS			
* * * OTHER. (EXPLAIN)			
<b>EXTRAS NOT INCLUDED - OPTIONAL</b>			
CERTIFIED PERFORMANCE DATA (NO WITNESS)			
WITNESS TESTS & CERTIFIED DATA			
OTHER (EXPLAIN)			
<b>WEIGHTS - TURBINE &amp; ACCESSORIES</b>			
BASE		63 000	
TOTAL SHIPPING WT.			
TOTAL PRICE INCL. SPEC. EXTRAS			
(FOB) (FAS) (FRT ALLOWED)			
SHIPMENT - WKS FROM RCPT OF ORDER			
POINTS OF SHIPMENT			
CONTINENTAL OIL COMPANY			
1000 T/D ANNONIA PLANT			
BLYTHEVILLE, ARKANSAS			
JOB NO. 4915			
DS-1KT-401			
REV. 1			

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