

		CODE OF PRACTICE			
		RAS AND SAS PUMPING STATION RAS Pump Specification		Rev: 01	Page:4
				Feb 2009	
GENERAL INFORMATION			PUMPED LIQUID INFORMATION		
P&I CODE	13PAX0101-13PAX0204		TYPE OF FLUID	Activated Sludge	
PLANT LOCATION	RAS & SAS Pumping Station		SOLIDS CONTENT	1	[%]
PUMP TYPE	Submersible Axial Flow		TEMPERATURE	25	[°C]
MANUFACTURER			NUMBER OF DUTY UNITS/PUMPING STATION	3	[item]
MODEL			NUMBER OF STAND-BY/PUMPING STATION	1	[item]
NUMBER OF PUMPING STATION	2	[item]	TOTAL NUMBER OF INSTALLED UNITS	8	[item]
OPERATING DATA					
MAX FLOW RATE	6030	[m ³ /h]	NPSH AVAILABLE	-	[m]
MIN FLOW RATE	3600	[m ³ /h]	PUMP NPSH	4,88	[m]
TOTAL HEAD max	4,5	[m]	PUMP SPEED ROTATION	580	[rpm]
TOTAL HEAD min	2,4	[m]	HYDRAULIC EFFICIENCY	85	[%]
TOTAL EFFICIENCY	76	[%]	ABSORBED POWER AT THE SHAFT	76,9	[kW]
PUMP EXECUTION					
FLOW TYPE	Axial		FLANGE STANDART		
ORIENTATION	Vertical		IMPELLER TYPE	Open Axial Propeller in ECB version 17°	
SUCTION NOMINAL DIA DN	~800	DN	IMPELLER DIAMETER	700	[mm]
SUCTION NOMINAL PRESSURE PN		PN	FREE PASSAGE	140	[mm]
SUCTION POSITION	Vertical		SHAFT SEALS TYPE	Mechanical seal	
DISCHARGE NOMINAL DIA DN	1.000	DN	DIRECTION ROTATION	CW	
DISCHARGE PRESSURE PN	10	PN	BEARING TYPE	Antifriction, grease	
DISCHARGE POSITION	Horizontal				
DRIVERS					
DRIVER TYPE	3 Phase Asynchronous		STARTING CURRENT	1070	[A]
MAKE	KSB		INSULATION CLASS	F	
FREQUENCY	50	[Hz]	MOTOR ENCLOSURE	IP68	
OPERATING VOLTAGE	400	[V]	Cosφ at 4/4 Load	0,74	
RATED POWER	120	[kW]	MOISTURE SENSOR	Yes	
RATED CURRENT	261	[A]	NUMBER OF POLES	10	
MOTOR EFFICIENCY	89,4	[%]	STARTING MODE	F.C	
NOMINAL MOTOR SPEED	580	[rpm]	MOTOR COOLING METHOD	ambient fluid	
DRIVE RATIO	N/A		CABLE TYPE	S1BN8-F	
OUTPUT SPEED	N/A	[rpm]	CABLE LENGTH	15	m
MATERIALS					
DIFFUSER CASING	Grey Cast Iron EN - JL1030		BEARING SIDE MECHANICAL SEAL	SiC / SiC	
CASING WEAR RING	Stainless Steel EN-1.4571		PUMP SIDE MECHANICAL SEAL	SiC / SiC	
INLET NOZZLE	Grey Cast Iron JL1030		MOTOR CABLE	Waterproof synthetic rubber compound	
SHAFT	Stainless Steel 1.4021+QT800		O-RING	Nitrile Rubber NBR	
PROPELLER	Duplex stainless steel EN-1.4517		HEXAGON SOCKETHEAD CAP SCREW	A4	
BEARING HOUSING	Grey Cast Iron EN JL1040		FINAL COATING	2-Component epoxy resin, RAL 5002, 190µm	
BEARING COVER	Grey Cast Iron EN JL1030		LIFTING EQUIPMENT (CABLE CARRIER WIRE)	1,4401 / Rubber	
			WEIGHT	2100	Kg
MONITORING					
WINDING TEMPERATURE	ONE LIMITING CIRCUIT				
	PUMP SIDE PT100				
MOISTURE	MOISTURE ELECTRODE IN MOTOR CHAMBER				
	FLOAT SWITCH IN LEAKAGE AREA				