



MATERIALS OF CONSTRUCTION FOR AMMONIA PUMPS

ITEM	MATERIAL	ASTM SPECIFICATION
PUMP HOUSING:		
PUMP CASTINGS	ALUMINUM ALLOY A356-T6	B-26
IMPELLER(S)	ALUMINUM ALLOY A356-T6	B-26
INDUCER	ALUMINUM ALLOY A356-T6	B-26
BEARINGS	STAINLESS STEEL	
HOUSING WEAR RINGS	STAINLESS STEEL	
PUMP/MOTOR SHAFT	STAINLESS STEEL	15-5 PH
MOTOR HOUSING:		
STATOR	ELECTRICAL STEEL LAMINATIONS WITH COPPER WINDINGS AND DOUBLE VPI TREATMENT	
ROTOR	ELECTRICAL STEEL LAMINATIONS WITH ALUMINUM ROTOR BARS	
BEARINGS	BALL BEARINGS 6300 SERIES	
MOTOR SHAFT	STAINLESS STEEL	15-5 PH
SUCTION VALVE:		
VALVE BODY	ALUMINUM ALLOY A356-T6	B-26
VALVE PLATE	ALUMINUM ALLOY 6061-T6	B-209
VALVE SPRINGS	STAINLESS STEEL	A 312, TYPE 304
VALVE SEAL	UHMW POLYETHYLENE	
VALVE RODS	STAINLESS STEEL	TYPE 304
HEADPLATE:		
HEADPLATE	STAINLESS STEEL	A 182, TYPE F304
FLANGES	STAINLESS STEEL	A 182, TYPE F304

ALL CASTINGS TO BE PER CRYODYNAMICS PROCEDURE SPECIFICATION PS-4013, ALUMINUM ALLOY SAND CASTING AND ALUMINUM ASSOCIATION STANDARD AA-CS-M5-85, QUALITY LEVEL III, FREQUENCY LEVEL 2 FOR PRESSURE CASTINGS AND QUALITY LEVEL V, FREQUENCY LEVEL 2 FOR NON-PRESSURE CASTINGS.