

Inspection & Test Plan (I.T.P) For sealgasmega & Seal Gas Compressor_DRI_II							
Row	SCOPE	Stage or Frequency	REQUIREMENT	INSPECTION			Remarks
				M.I	P.I	T.P.I	
1	Basic						
1/1	PIM (Pre-Inspection Meeting)	100%	Manufacturer, Purchacer, Third-party Inspector	H	H	H	
1/2	DWG	100%	Based on original brand "AERZEN" and similar equipment and available in the employer factory	H	R.A	R	
1/3	sub vendor list	100%	According to technical offer	H	H	R.A	
2	Material Control						
2/1	Material certificate	100%	Original Material Supplier Certificate	H	H	H	
2/2	Material Control	50%	According to reference standard / NDT / Mill certificate, chemical analysis / hardness test/ impact test	H	R.A	H	
2/3	Lamination Test	100%	All Material Plate	H	R.A	H	
2/4	Heat treatment	100%	According to drawing / NDT	H	R.A	H	
2/5	standard Part	100%	According to reference standard / DWG	H	R.A	H	
3	Gear box						
3/1	Gear Hardness	100%	Based on manufacturer’s calculations	H	R.A	H	
3/2	Dimensional Inspection	100%	Before and after assembly dimensional verification	H	W	H	
3/3	Functional testing	100%	Gear Contact Test / Backlash & Clearance Test / Oil Leakage Test /Lubrication System Check / Performance Test (No Load) / Noise and Vibration Test / Temperature Rise Test / According to reference standard AGMA and ETC.	H	W	H	Location: Manufacturer’s Workshop
4	Fabrication of comprssor block						
4/1	Cutting/Rolling/Bending Dimensional Inspection	100%	Detail & Shape Drawing	H	R.A	W.A	
4/2	Machining dimentional inespction	100%	Detail & Shape Drawing	H	R.A	W.A	
4/3	Balancing Test for Rotors	100%	***	H	H	H	
4/4	WPS&PQR&QCP	100%	ASME SEC.VIII/WELD MAP	H	R.A	H	
4/5	Welder Qualification Test	100%	ASME Sec. IX	H	R	H	
4/6	Fit Up	100%	Drawings & W.P.S/WELD GAGE	H	R.A	H	

4/6	Welding	100%	WPS&PQR/VT	H	R	W.A	
5	NDT Examinatio						
5/1	UT	30%	All Welding Random Check	H	R.A	H	
5/2	Test VSR	100%	JB/T5926	H	W.A	H	
5/3	PT	100%	All Welding After VSR	H	W.A	H	
6	Overall Test						
6/1	Round water Clogging Test	100%	Passage of water fluid according to nominal flow	H	R.A	H	
6/2	Round water Leak Test	100%	Water Hydrostatic Test 1.5* (Nominal Pressure)	H	R.A	H	
6/3	Penumatic Test	100%	Air Pressure Test 1.5* (Nominal Pressure)	H	R.A	H	
6/4	Insaid & Outside Cleaning/Couting/Painting	100%	Refer To Atachment Painting Procedure No.1	H	R.A	H	
7	FAINAL INSPECTION						
7/1	Final Dimentional Inspection	100%	Drawing/DT Reports	H	H.W	H	
7/2	Storage, lift & Packaging	100%	Refer To Attachment Procedure No.2	H	R	H	
7/3	Delivering	100%	At Purchaser Wearhouse	H	H	R	
7/4	Performance Test (Under Load)	100%	10 days operation under actual load at site	H	H	R.A	Location: Purchaser's Site (Rolling Mill)
7/5	Noise and Vibration Test	100%	Noise level and vibration measurement within limits	H	H	R.A	
7/6	Temperature Rise Test	100%	Temperature of bearing, oil, and housing after test	H	H	R.A	
7/7	Functional Test After Delivering	100%	Air Pressure Test 1.5* (Nominal Pressure) At Purchaser planet	H	H	R	
7/8	Final Book		All Abow Report	H	H	H	

M.I = Manufacturer Inspector;
P.I = Purchaser Inspector;
T.P.I = Third-party inspector;
H: Hold Point = Hold on the production till Client and TPI Inspector performs inspection and supervise the required test
W: Witness Point = Manufacture shall notify client and TPI Inspector but there is no hold on the production;Client can waive this inspection based on his discretion and informs TPI Inspector accordingly.
R: Document Review = Review means Review document, which includes of material test certificates,WPS, PQR, NDT Procedures and etc.
A: Approval
SW: Spot Witness = for items with spot witness manufacture shall notify Client and TPI inspector as fulfilling the monitoring.