

Speciality Sintered Products Pvt.Ltd - Chakan-Pune

INSPECTION REPORT

Report No.:- 41579 -
Dated:-

CUSTOMER :- ENDURANCE Technologies Limited.		SSPL PART NO. :- 41498	W/O.NO. :-
PART NO. :- 53BJF00302 (XB / 31.10.2014)		INV. NO/ DATE :-	PDIR NO:-
PART NAME :- PISTON (Ø 18)		SUPPLY QTY :-	SAMPLE SIZE :- 100 Nos
ENGG LEVEL & DATE :- XB / 31.10.2014		SSPL ENGG LEVEL&DATE:-	
DIMENSION	MATERIAL	FUNCTION	PROTOTYPE
			SUPPLIER CODE 100117

S.No	Parameters	Specification	MIN	MAX	Mesurement Method	OBSERVATIONS					OK / NG	Remarks	
						X1	X2	X3	X4	X5			
DIMENSIONAL CHARACTERISTICS													
1	Total Length	11	10.85	11.15	DI							Ok	
2	Groove Distance	5	4.85	5.15	DVC / DHG							Ok	
3	Groove Width	2.06 + 0.1	2.06	2.16	DVC / Gauge							Ok	
4	Outer Ring Height	2	1.85	2.15	DI							Ok	
5	Outer Ring Inside Height	1.5	1.35	1.65	DI							Ok	
6	OD		17.923	17.943	Micrometer / 100% Ring Gauge.							Ok	
7	Run out W.r.t.A		0.06 Max	0.060	Betw.C,Mandriel,DG							Ok	
8	OD	17.2 ± 0.1	17.10	17.30	Blade Micrometer							Ok	
9	Ring ID	16	15.85	16.15	DVC / VMS							Ok	
10	Tip OD	11.2 + 0.2	11.20	11.40	VMS / Contour							Ok	
11	Tip ID < SC >	8 + 0.1	8.00	8.10	VMS							Ok	
12	ID PLAN A	6 + 0.018	6.000	6.018	P.P.Gauge							Ok	
13	Angle Ring Inner	10° ± 2°	8°	12°	VMS / Contour							Ok	
14	Angle Tip Outer	15° ± 2°	8°	12°	VMS / Contour							Ok	
15	Angle Tip Inner	10° ± 2°	8°	12°	VMS / Contour							Ok	
16	Ring Depth < SC >	2 - 0.1	1.90	2.00	DI							Ok	
17	Perpendicularity W.r.t. A	0.10 Max		0.100	Betw.C,Mandriel,LD							Ok	
18	Depth Ring & Tip < SC >	0.5 - 0.03	0.47	0.50	DI							Ok	
19	Flatness Ring Face	0.01 Max		0.01	Flatness Tester / Cmm							Ok	
20	Radius	0.20	0.05	0.35	VMS / Contour							Ok	
21	Groove Radius 4X	0.2 Max		0.20	VMS / Contour							Ok	
22	Groove OD	15.5 + 0.1	15.50	15.60	Blade Micrometer / Snap Gauge							Ok	

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DIMENSION <input type="checkbox"/>	MATERIAL <input type="checkbox"/>	FUNCTION <input type="checkbox"/>
PROTOTYPE <input type="checkbox"/>		SUPPLIER CODE 100117

S.No	Parameters	Specification	MIN	MAX	Mesurement Method	OBSERVATIONS					OK / NG	Remarks
						X1	X2	X3	X4	X5		
23	Run out Groove OD W.r.t.A	0.06 Max		0.060	Betw.C,Mandriel,LD						Ok	
24	ID Chamfer Both Side	0.2 X 30°	0.05 X 28°	0.35 X 32°	VMS / Contour						Ok	
25	OD Chamfer Bottom	0.3 X 30°	0.15 X 28°	0.45 X 32°	VMS / Contour						Ok	
26	OD Angle	5°± 2°	3°	7°	VMS / Contour						Ok	
27	OD Angle Height	1 ± 0.3	0.70	1.30	VMS / Contour						Ok	
28	ID 8X	1.8	1.65	1.95	P.P.Gauge / DVC						Ok	
29	PCD	13	12.85	13.15	PCD Gauge / VMS						Ok	
30	Unspecified Radius	0.2 Note	0.05	0.35	VMS / Contour						Ok	

MATERIAL PROPERTIES

31	Material Sintered Iron	As Per Drawing	C - 0.3 ~ 0.8 % Cu - 1.0 ~ 5.0 % Other - 1.0 Max Fe - Base	Refer Supplier Tc							
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PHYSICAL PROPERTIES

32	Density Gm / cc	Table-1	6.40		Density Meter						
33	Hardness HRB	Table-1	55	75	Hardness Tester						
34	Breaking Load Kgf < SC >	2000 Kgf Min	2000		UTM, Fixture						

APPEARANCE

35	Ring This face shall be perfectly flat & no dent marks/nick mark on these faces < SC >	Note	Not Allowed	Visual							
36	No Burr	Note	Not Allowed	Visual							
37	Must Be Clean & Free From Burr,Crack,Chips,Dent, Dammage,Brokan,Ext.	Note	Not Allowed	Visual							
38	Rust Preventive Oil	Note	Enklo 100 Rustoff / DWX 30 Rustoff	Visual							

OBSERVATIONS :- **OK**

STATUS : **ACCEPTED** REJECTED ACCEPTED UNDER DEVIATION

INSPECTED BY : Mr.Sunil Shejwal Date:- QA Head Mr.Ganesh Padwalkar D&D I/C Mr.Sandip Gaikwad