GETRAG Production Part Approval

3/2866

DIMENSIONAL TEST RESULTS

Organization:	GETRAG	Part Number:	250.1.3644.37
Supplier/Vendor Code:	GETRAG Modugno	Part Name:	SR5
INSPECTION FACILITY:		Design Record Change Level:	35622 16 Gen 2013
NA		Engineering Change Documents:	

Item	Dimension/Specification	Specification / Limits		Test Date	Qty. Tested	Organization Measurement Results (Data) 1	2	3	4	5	controllo distruttivo	Ok	Not Ok
1	Bore diameter 45	45,025	45,009		5	45,014	45,013	45,013	45,014	45,013		ok	
2	Roughness bore	0,003	--		5	0,0013	0,0015	0,0014	0,0013	0,0013		ok	
3	Axial runout on kk	0,100	--		5	0,059	0,067	0,071	0,070	0,070		ok	
4	Radial runout kk	0,100	--		5	0,036	0,047	0,027	0,038	0,052		ok	
5	Roughness on top surface	6,3	--		5	0,002	0,002	0,002	0,002	0,002		ok	
6	Axial runout on top surface	0,03	--		5	0,013	0,003	0,003	0,004	0,004		ok	
7	Total height 25,7	0,03	-0,03		5	25,702	25,699	25,700	25,701	25,700		ok	
8	Axial runout on bottom surface	0,03	--		5	0,027	0,027	0,030	0,030	0,030		ok	
9	Roughness on bottom surface	6,3	--		5	0,002	0,002	0,002	0,002	0,002		ok	
10	kk height 23,44	0,180	-0,080		5	23,522	23,519	23,521	23,520	23,521		ok	
11	Height 19,04	0,04	-0,04		5	19,037	19,032	19,035	19,034	19,037		ok	
12	Bore parallelism	0,007	--		5	0,003	0,002	0,003	0,002	0,003		ok	
13	Bore roundness	0,006	--		5	0,002	0,002	0,002	0,003	0,002		ok	
14	Bore straitghness	0,004	--		5	0,001	0,002	0,002	0,001	0,001		ok	
15	Particular Z	--	--		5	ok	ok	ok	ok	ok		ok	
16	Outside diameter 79,6	0,00	-0,26		5	79,4	79,5	79,4	79,4	79,5		ok	
17	Root diameter 69	0,00	-0,45		5	68,8	68,8	68,8	68,8	68,8		ok	
18	Roughness tooth	0,004	0,000		5	0,0009	0,0011	0,0010	0,0010	0,0009		ok	
19	Teeth runout	0,032	--		5	0,012	0,012	0,012	0,012	0,011		ok	
20	MDK	77,077	76,990		5	77,052	77,041	77,059	77,033	77,057		ok	
21	M1 CASE HARDNESS	83,0	80,5		1						81,50	ok	
22	M2 CHD (Eht) 550	0,9	0,5		1						0,8700	ok	
23	M3 CHD (Eht) 550	0,3 min	-		1						0,7500	ok	
24	M4 inside base of tooth	min 300HV	-		1						448,0	ok	
25	Weld bead stand off	0,5	--		1						0,1	ok	
26	Particular X	--	--		5	ok	ok	ok	ok	ok		ok	
27	Microgeometry	--	--		5	ok	ok	ok	ok	ok		ok	
28	Cleanliness	ok	nok		5	ok	ok	ok	ok	ok		ok	
29	Welding full penetration	ok	nok		1						ok	ok	
30	Welding angle 360°+2°	ok	nok		5	ok	ok	ok	ok	ok		ok	
31	Longitudinal microcracks 2%	ok	nok		5	ok	ok	ok	ok	ok		ok	
32	Angle 30° (+/-3°)	ok	nok		5	ok	ok	ok	ok	ok		ok	
33	Chamfer	0,3	-0,5		5	0,007	0,018	0,009	0,009	0,011		ok	

SIGNATURE	TITLE	DATE
G. Russo	QPE	21/08/2014

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Supplier/Vendor Code:	GETRAG Modugno	Part Name:	SR5
INSPECTION FACILITY:		Design Record Change Level:	35622 16 Gen 2013
NA		Engineering Change Documents:	

Organization Measurement Results (Data)

Item	Dimension/Specification	Specification / Limits		Test Date	Qty. Tested	1	2	3	4	5	controllo distruttivo	Ok	Not Ok
34	Chamfer	0,300	-0,500		5	0,021	0,019	0,027	0,020	0,022		ok	
35	Chamfer	0,300	-0,500		5	0,0130	0,0070	0,0060	0,0060	0,013		ok	
36	Chamfer	0,300	-0,500		5	0,007	0,043	0,034	0,011	0,038		ok	
37	Tickness 14,5	14,600	14,40		5	14,411	14,404	14,415	14,417	14,409		ok	
38	Chamfer 0,7	1,1	0,30		5	0,787	0,762	0,789	0,773	0,731		ok	
39	Chamfer 0,7	1,10	0,30		5	0,737	0,502	0,514	0,690	0,751		ok	
40	Chamfer 1	1,50	0,50		5	0,781	0,777	0,779	0,782	0,794		ok	
41	Chamfer 1	1,50	0,5		5	0,716	0,684	0,792	0,730	0,714		ok	
42	Angle 5°	ok	nok		5	ok	ok	ok	ok	ok		ok	
43	Diameter 57	57,500	56,500		5	57,1	57,1	57,2	57,1	57,2		ok	
44	Diameter 57,065	57,08	57,05		5	57,066	57,059	57,055	57,059	57,068		ok	
45	Tickness 1,5	1,800	1,2		5	1,288	1,227	1,211	1,222	1,232		ok	
46	Tickness 14,9	15,000	14,80		5	14,881	14,872	14,891	14,875	14,880		ok	
47	Axial runout	0,020	0,00		5	0,010	0,009	0,010	0,003	0,010		ok	
48	Radial runout	0,03	0,00		5	0,008	0,004	0,006	0,002	0,002		ok	
49	Roughness Rz 16	0,016	0,000		5	0,0064	0,0027	0,0025	0,0036	0,0065		ok	
50	Roughness Rz 25	0,025	0,000		5	0,0014	0,0013	0,0014	0,0012	0,0014		ok	
51	Ray 1,5	2	1		5	1,5	1,6	1,4	1,6	1,5		ok	

SIGNATURE	TITLE	DATE
G. Russo	QPE	21/08/2014