

**GETRAG**

Production Part Approval

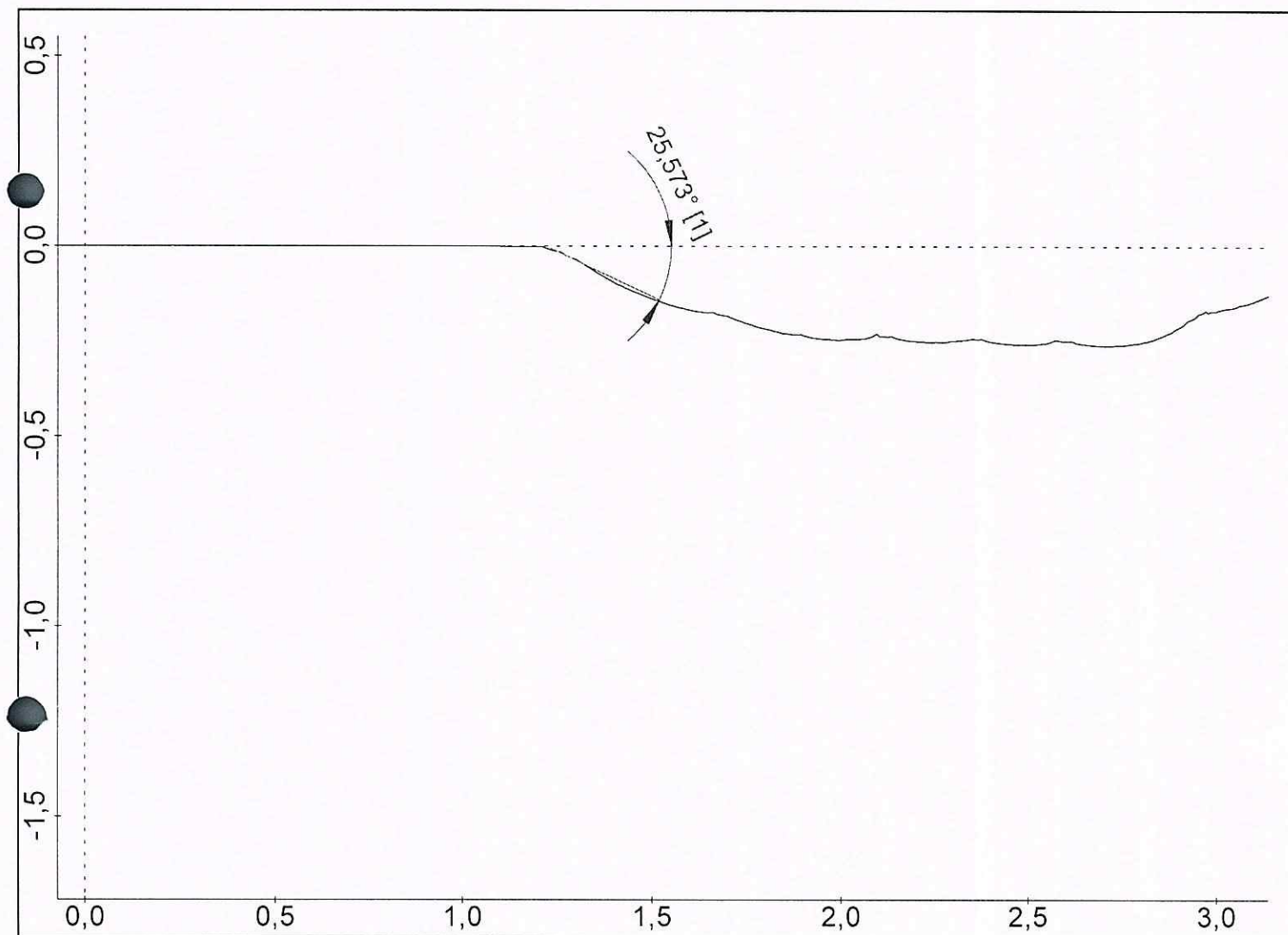
DIMENSIONAL TEST RESULTS

372756

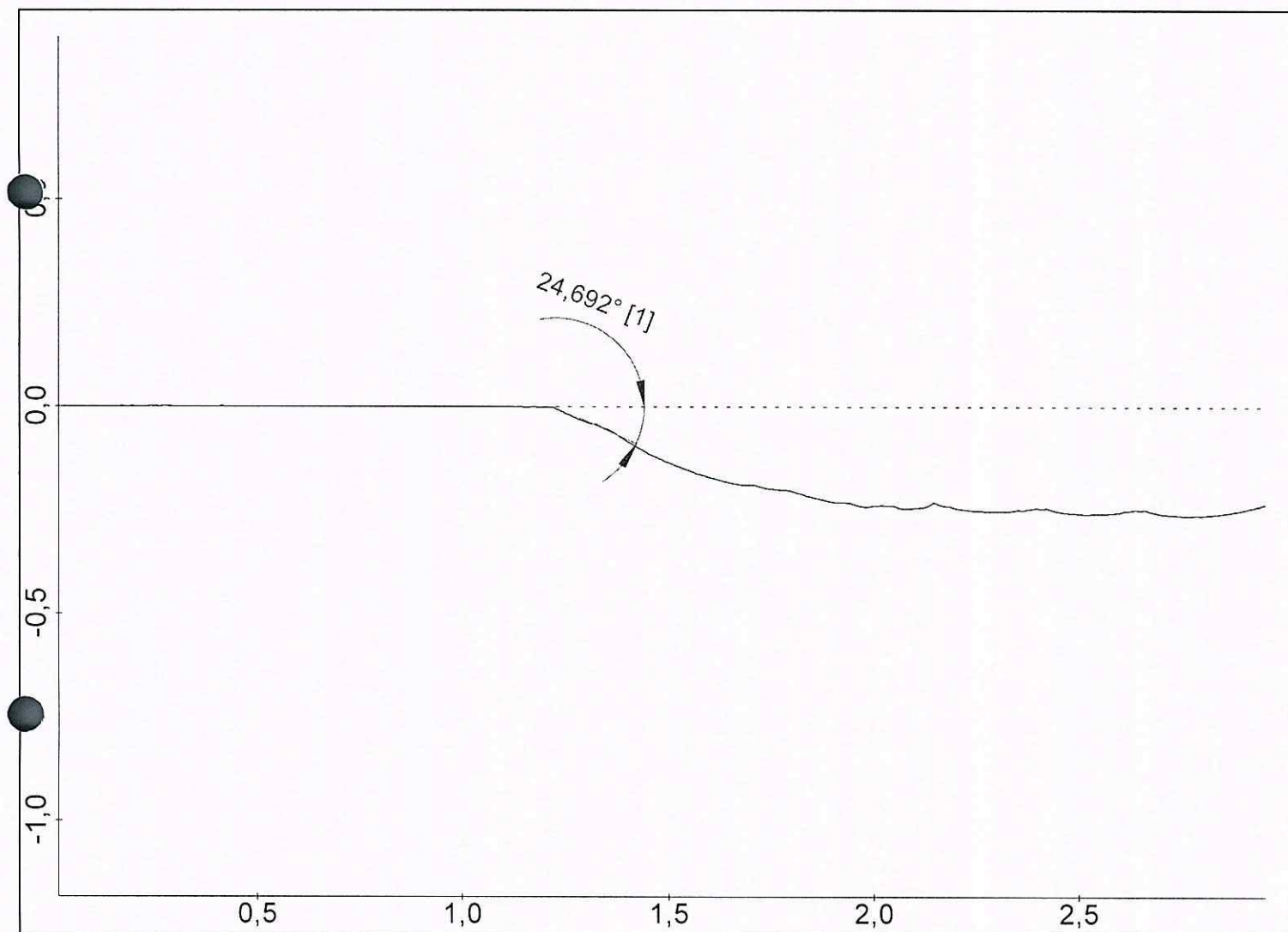
Organization: GETRAG					Part Number: 250.6.3974.35								
Supplier/Vendor Code: GETRAG Modugno					Part Name: Output Shaft 1								
INSPECTION FACILITY:					Design Record Change Level: F Index (b) 29/Luglio/2014								
NA					Engineering Change Documents:								
Organization Measurement Results (Data)													
Item	Dimension/Specification	Specification / Limits		Test Date	Qty. Tested	1	2	3	4	5	Test distruttivo	Ok	Not Ok
1	Index "a" of 25/07/2014 : NEW Note	-	-		-	-	-	-	-	-			
2	Angolo 25°±3° diventa 25°± 2°	23°	27°		5	25,573°	24,692°	24,103°	24,687°	26.651°		ok	
3	New Note	-	-		-	-	-	-	-	-			
						SIGNATURE			TITLE			DATE	
						G. Cicirelli			QPE			12/11/2014	

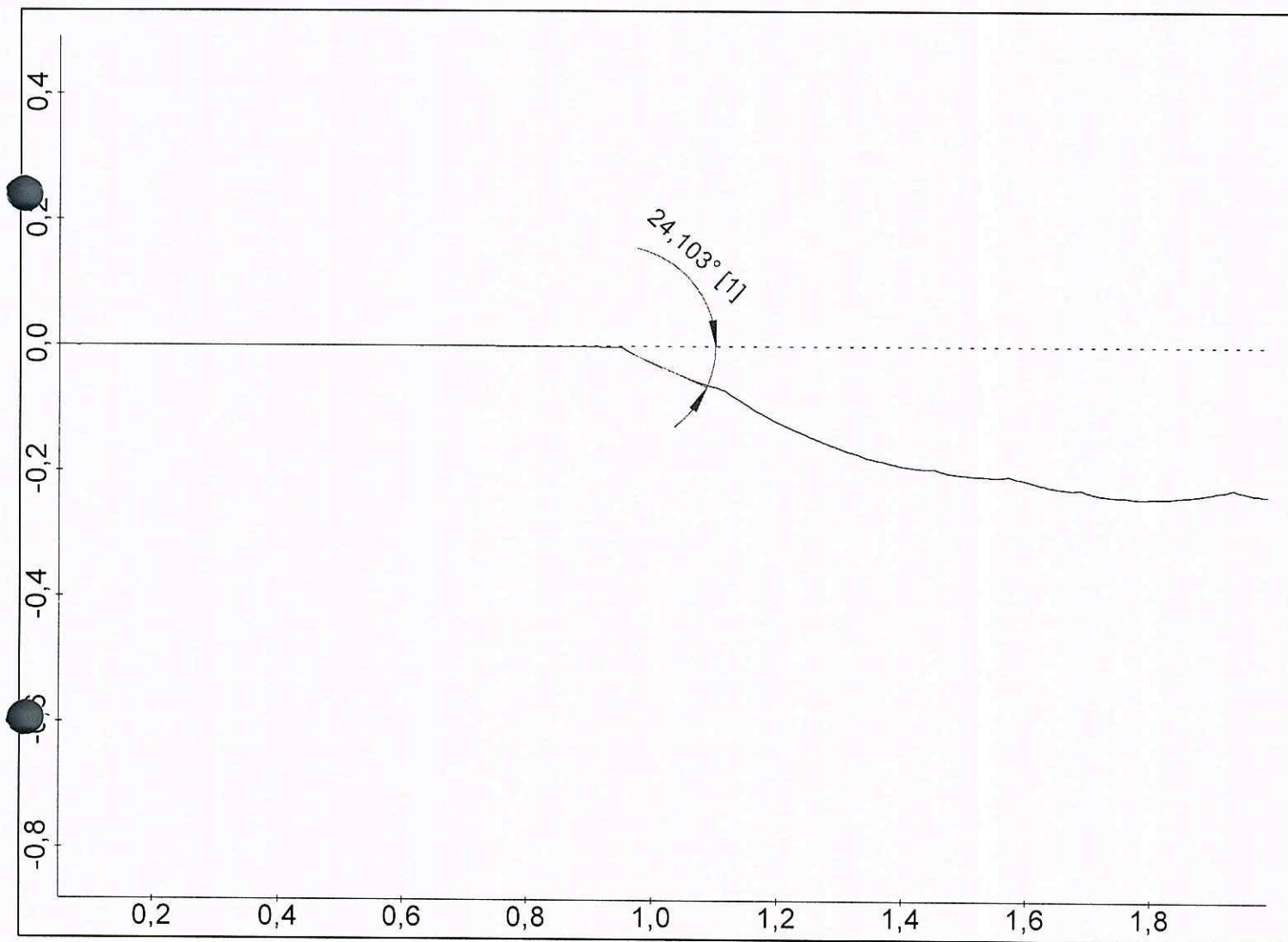
Oggetto: OS1
Numero: 3974 Pz. 1
Operatore: TURNO A
Data, ora: 12.11.2014, 09:26
Nota: PARTICOLARE T
Tastatore: PCV 350 / 33 mm

Macchina: MOA 416120 002



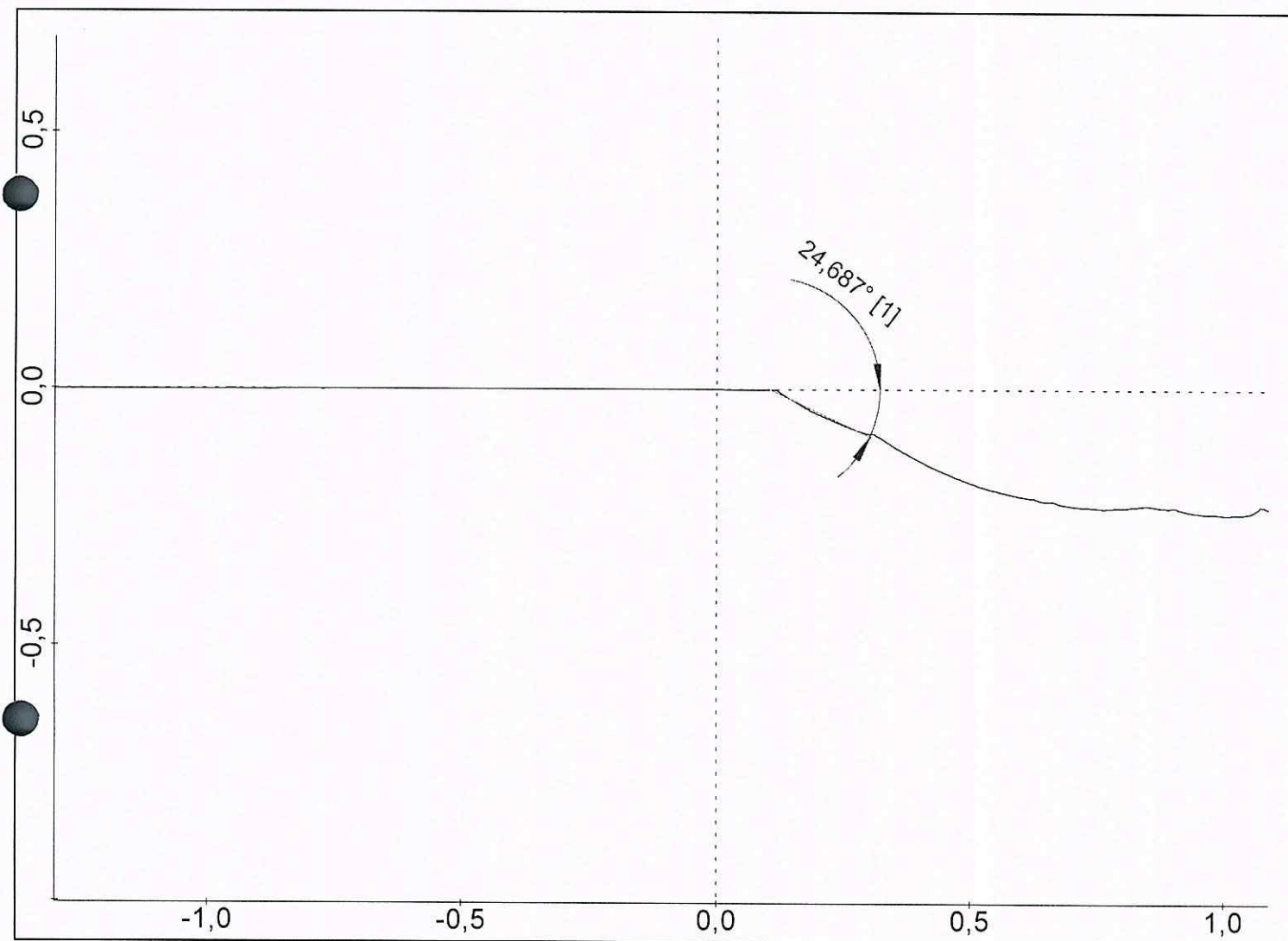
PERTHOMETER CONCEPT



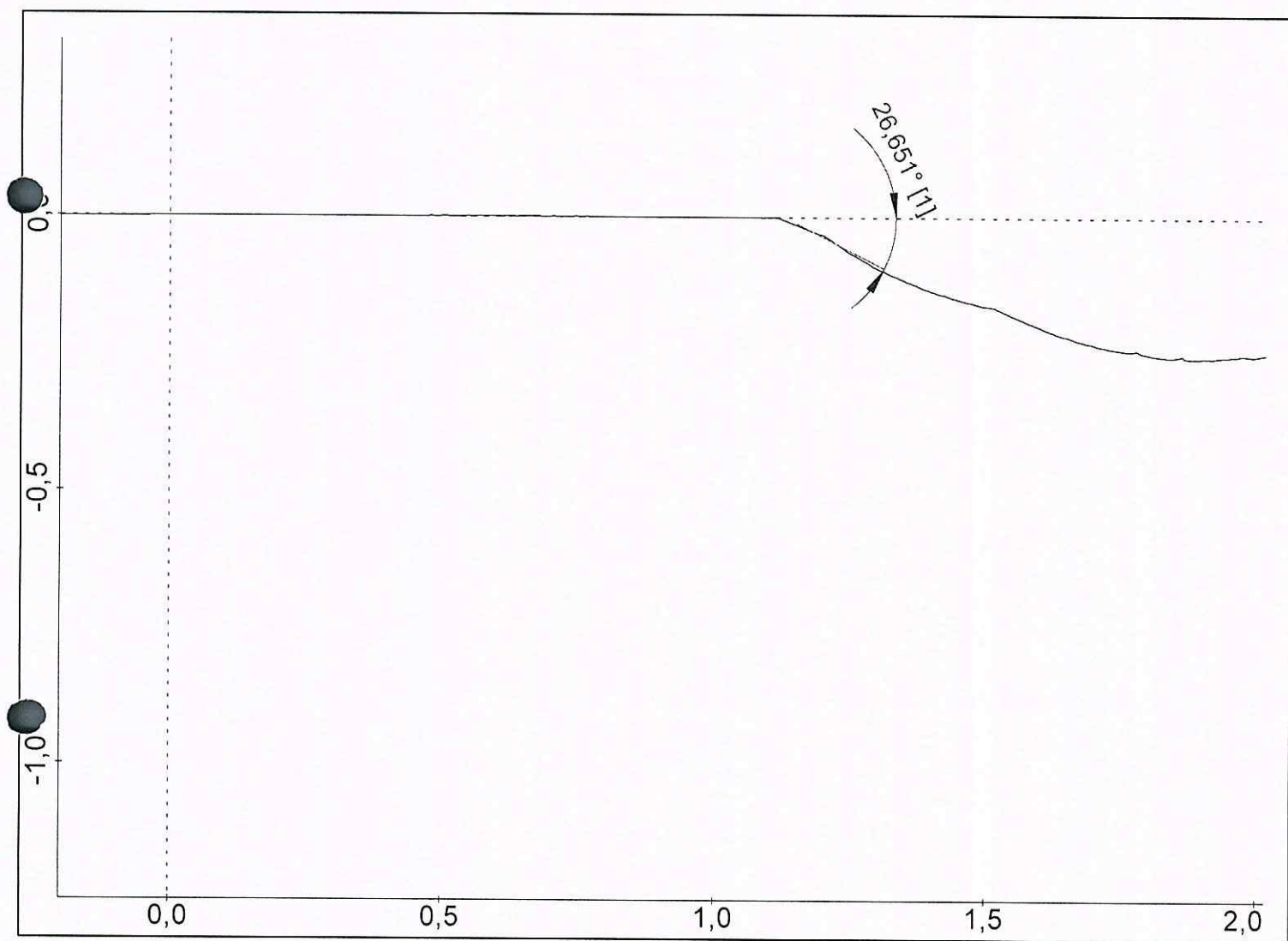


Oggetto: OS1
Numero: 3974 Pz. 4
Operatore: TURNO A
Data, ora: 12.11.2014, 09:29
Nota: PARTICOLARE T
Tastatore: PCV 350 / 33 mm

Macchina: MOA 416120 002



PERTHOMETER CONCEPT



PERTHOMETER CONCEPT

**GETRAG**

Production Part Approval

DIMENSIONAL TEST RESULTS

Organization: GETRAG					Part Number: 250.6.3974.35								
Supplier/Vendor Cod GETRAG Modugno					Part Name: Output Shaft 1								
INSPECTION FACILITY:					Design Record Change Level: F Index (-) 09/Dicembre/2013								
NA					Engineering Change Documents:								
					Organization Measurement Results (Data)								
Item	Dimension/Specification	Specification / Limits		Test Date	Qty. Tested	1	2	3	4	5	Test distruttivo	Ok	Not Ok
1	Distanza 243,44 ± 0,6	242,84	244,04		5	243,289	243,384	243,426	243,252	243,524		ok	
2	Distanza 226,09 ± 0,3	225,79	226,39		5	226,020	226,160	226,160	226,027	226,162		ok	
3	Distanza 201,47 ± 0,05	201,42	201,52		5	201,458	201,435	201,462	201,436	201,436		ok	
4	Distanza 164,555 ± 0,05	164,505	164,605		5	164,535	164,539	164,536	164,539	164,537		ok	
4bis	Distanza 163,17 ± 0,07	163,1	163,24		5	163,156	163,160	163,157	163,160	163,155		ok	
5	Distanza 128,23 ± 0,07	128,16	128,3		5	128,26	128,28	128,27	128,20	128,19		ok	
6	Distanza 124,93 ± 0,025	124,905	124,955		5	124,927	124,922	124,926	124,925	124,923		ok	
7	Distanza 104,43 ± 0,1	104,33	104,53		5	104,423	104,426	104,428	104,431	104,428		ok	
8	Distanza 68,75 ± 0,025	68,725	68,775		5	68,735	68,736	68,737	68,737	68,738		ok	
9	Distanza 44,68 ± 0,1	44,58	44,78		5	44,672	44,686	44,684	44,682	44,683		ok	
10	Distanza 42,88 ± 0,025	42,855	42,905		5	42,882	42,880	42,881	42,882	42,880		ok	
11	Distanza 25,08 ± 0,1	24,98	25,18		5	24,969	25,049	25,036	25,03	25,043		ok	
12	Distanza 22,26 ± 0,025	22,235	22,285		5	22,278	22,275	22,274	22,274	22,273		ok	
12 bis	Distanza 3,5 ± 0,025	3,475	3,525		5	3,510	3,506	3,507	3,507	3,505		ok	
13	Tip diameter 39,89-0,25	39,64	39,89		5	39,800	39,830	39,85	39,78	39,75		ok	
14	Root diameter 37,8-0,59	37,21	37,8		5	37,312	37,313	37,312	37,309	37,309		ok	
15	Diametro 40 h6 (-0,016)	39,984	40		5	39,994	39,994	39,995	39,994	39,993		ok	
16	Diametro 40 h6(-0,016)	39,984	40		5	39,992	39,991	39,995	39,991	39,991		ok	
17	Diametro 43,8 (-0,2)	43,6	43,8		5	43,680	43,780	43,785	43,685	43,775		ok	
18	Tip diameter 43,89 -0,25	43,64	43,89		5	43,711	43,745	43,744	43,695	43,688		ok	
19	Root diameter 41,8 -0,59	41,21	41,80		5	41,338	41,331	41,331	41,334	41,340		ok	
20	Diametro 45,7 (±0,1)	45,6	45,8		5	45,630	45,700	45,640	45,620	45,620		ok	
21	Diametro 40 h6 (-0,016)	39,984	40		5	39,944	39,991	39,991	39,991	39,990		ok	
22	Diametro 37 h6 (-0,016)	36,984	37		5	36,996	36,997	36,996	36,997	36,995		ok	
23	Diametro 25 m6 (+0,021/+0,008)	25,008	25,021		5	25,015	25,016	25,016	25,0160	25,014		ok	
24	Diametro 15 ± 0,3	14,7	15,3		5	14,87	15,01	14,95	15,02	15,15		ok	
25	Diametro 41,89 (±0,1)	41,79	41,99		5	41,82	41,85	41,87	41,80	41,82		ok	
26	Distanza 15,79 ± (0,025)	15,765	15,815		5	15,778	15,799	15,794	15,801	15,798		ok	
27	Distanza 17,46 ± (0,025)	17,435	17,485		5	17,474	17,479	17,475	17,474	17,465		ok	
28	Distanza 15,25 ± (0,3)	15,22	15,28		5	15,350	15,370	15,365	15,350	15,330		ok	
29	Distanza 17,35 ± (0,3)	17,05	17,65		5	17,269	17,224	17,266	17,225	17,362		ok	
30	Diametro 18,3 ± 0,4	17,9	18,7		5	18,28	18,32	18,27	18,30	18,29		ok	
30 Bis	Angolo 0,07° +0,015° -0,020°	0,050°	0,085°		5	0,075°	0,072°	0,072°	0,074°	0,075°		ok	
31	Diametro 39 ± 0,1	38,9	39,1		5	39,03	39,03	39,06	39,08	39,08		ok	
31 bis	Ø 35,5 +0,012 +0,028	35,512	35,528		5	35,522	35,518	35,518	35,519	35,517		ok	
32	Root Diameter 43,6 -0,45	43,15	43,6		5	43,475	43,497	43,518	43,504	43,500		ok	
33	Tip Diameter 56,3 -0,26	56,04	56,30		5	56,199	56,228	56,229	56,212	56,198		ok	
34	Distanza 209,4 ± 1	208,4	210,4		5	209,65	209,78	209,67	209,84	209,54		ok	
35	Distanza 188,9 ± 0,3	188,6	189,2		5	189,086	189,065	189,064	189,095	189,083		ok	
36	Distanza 154,75 ± 0,3	154,450	155,05		5	154,791	154,746	154,749	154,785	154,787		ok	
37	Distanza 113,1 ± 0,3	112,8	113,4		5	113,229	113,195	113,196	113,231	113,226		ok	
38	Distanza 55 ± 0,3	54,7	55,3		5	55,264	55,241	55,241	55,296	55,258		ok	
39	Diametro Ø 3 ± 0,2	2,8	3,2		5	2,997	2,984	2,988	2,969	2,998		ok	
39/1	Diametro Ø 3 ± 0,2	2,8	3,2		5	2,993	2,992	2,990	2,973	2,995		ok	
39/2	Diametro Ø 3 ± 0,2	2,8	3,2		5	2,988	3,016	3,018	2,976	2,993		ok	
39/3	Diametro Ø 3 ± 0,2	2,8	3,2		5	2,995	2,994	2,995	2,966	2,994		ok	
40	Rz 16 Rullatura IIIB e IIIA	-	16 µ		5	2,70	3,24	2,92	4,39	1,96		ok	

SIGNATURE
G. Cicirelli

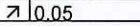
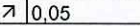
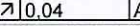
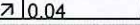
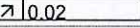
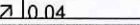
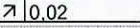
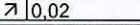
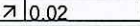
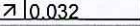
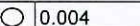
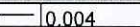
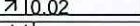
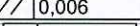
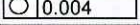
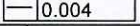
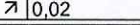
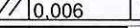
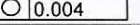
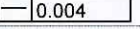
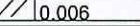
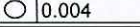
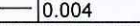
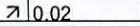
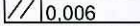
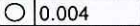
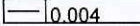
TITLE
QPE

DATE
06/06/2014

**GETRAG**

Production Part Approval

DIMENSIONAL TEST RESULTS

Organization: GETRAG							Part Number: 250.6.3974.35								
Supplier/Vendor Code: GETRAG Modugno							Part Name: Output Shaft 1								
INSPECTION FACILITY:							Design Record Change Level: F Index (-) 09/Dicembre/2013								
NA							Engineering Change Documents:								
Organization Measurement Results (Data)															
Item	Dimension/Specification			Specification / Limits		Test Date	Qty. Tested	1	2	3	4	5	Test distruttivo	Ok	Not Ok
41	 0,05	A - B	Rullatura III a e IIlb	-	50 µ		5	36	22	22	28	33		ok	
42	Rz 16 Rullatura IIb e IIa			-	16 µ		5	2,05	3,41	2,68	2,62	1,94		ok	
43	 0,05	A - B	Rullatura IIa e IIb	-	50 µ		5	37	38	42	39	37		ok	
44	 0,4	A - B	Ø 15±0,3	-	0,4 mm		5	0,120	0,205	0,157	0,200	0,173		ok	
45	Rz 6,3 Ø 25 m6			-	6,3 µ		5	1,70	1,55	1,61	2,05	1,71		ok	
46	Rz 25 spallamento Ø 25			-	25 µ		5	1,89	2,03	1,61	1,63	1,47		ok	
47	 0,04	A - B	Oisill R	-	40 µ		5	1,9	1,7	2,0	1,4	1,8		ok	
48	 0,04	A - B	Oscill U	-	40 µ		5	2,1	1,4	2,2	1,7	2,0		ok	
49	 0,02	A - B	Gola V_S	-	20 µ		5	2,7	2,2	2,6	1,9	2,1		ok	
50	 0,04	A - B	Oscill X	-	40 µ		5	2,3	2,1	2,3	2,1	2,3		ok	
51	 0,02	A - B	Gola V_I	-	20 µ		5	1,3	1,1	1,6	1,1	1,4		ok	
52	 0,02	A - B	spallamento dentatura	-	20 µ		5	15	11	8	18	9		ok	
53	Rz 6,3 spallamento dentatura			-	6,3 µ		5	1,42	1,26	1,51	1,49	1,49		ok	
54	 0,02	A - B	Oscillazione Z	-	20 µ		5	11	9	11	11	11		ok	
	 0,032	A - B	dentatura	-	32 µ		5	6	7	6	6	6		ok	
	Rz 4 dentatura			-	4 µ		5	2,78	2,96	2,82	2,27	2,68		ok	
	Rmax 8 dentatura			-	8 µ		5	3,42	3,74	4,05	2,69	3,47		ok	
57	 0,4	A - B	Ø 18.3±0,4	-	0,4		5	0,20	0,21	0,20	0,17	0,22		ok	
58	Rz 63 Ø 18.3±0,4			-	63 µ		5	15,1	13,8	25,6	29,1	27,2		ok	
	Rmax 80 Ø 18.3±0,4			-	80 µ		5	32,7	25,5	41,6	50,2	42,9		ok	
59	Rz 2 Ø 35,5			-	2 µ		5	0,46	0,57	0,51	0,52	0,63		ok	
	Rmax 3,2 Ø 35,5			-	3,2 µ		5	0,59	1,19	0,56	0,62	0,79		ok	
	SW 0,001 max	Filter 15-150 µm	Ø 35,5	-	1 µ		5	0,24	0,68	0,37	0,2	0,41		ok	
60	 0.004		Ø 35,5	-	4 µ		5	3,18	1,51	2,04	2,98	2,19		ok	
61	 0.004		Ø 35,5	-	4 µ		5	0,61	0,90	0,48	0,64	0,93		ok	
62	Rz 2 Ø 40 F			-	2 µ		5	1,06	0,95	1,08	1,12	0,52		ok	
	Rmax 3,2 Ø 40 F			-	3,2 µ		5	1,58	3,10	1,42	1,22	0,76		ok	
	SW 0,001 max	Filter 15-150 µm	Ø 40 F	-	1 µ		5	0,17	0,24	0,23	0,15	0,19		ok	
63	 0,02	A - B	Ø 40 F	-	20 µ		5	4,72	1,37	2,34	3,10	2,32		ok	
64	 0,006	F	Ø 40 F	-	6 µ		5	4,18	0,95	1,97	4,26	2,66		ok	
65	 0.004		Ø 40 F	-	4 µ		5	1,93	0,60	1,11	1,87	1,34		ok	
66	 0.004		Ø 40 F	-	4 µ		5	1,46	0,87	1,42	1,48	0,72		ok	
67	 0,02	A - B	Ø 40 E	-	20 µ		5	3,24	1,22	2,20	2,53	1,64		ok	
	 0,006	E	Ø 40 E	-	6 µ		5	1,91	0,71	0,89	1,91	2,15		ok	
69	 0.004		Ø 40 E	-	4 µ		5	1,62	1,00	1,08	1,73	1,38		ok	
70	 0.004		Ø 40 E	-	4 µ		5	0,87	0,7	0,77	0,95	1,20		ok	
71	Rz 3 Ø 40 h6			-	3 µ		5	2,71	1,78	2,11	2,69	2,97		ok	
	Rmax 4 Ø 40 h6			-	4 µ		5	3,29	1,99	2,31	3,01	3,58		ok	
	SW 0,001 max	Filter 15-150 µm	Ø 35,5	-	1 µ		5	0,63	0,88	0,68	0,68	0,66		ok	
72	 0,02	A - B	Ø 40 D	-	20 µ		5	2,28	1,79	2,20	1,78	1,18		ok	
73	 0,006	D	Ø 40 D	-	6 µ		5	0,76	0,90	0,41	0,74	0,85		ok	
74	 0.004		Ø 40 D	-	4 µ		5	1,44	1,69	1,27	1,44	1,11		ok	
75	 0.004		Ø 40 D	-	4 µ		1	0,59	0,47	0,40	0,40	1		ok	
76	 0,02	A - B	Ø 37 h6	-	20 µ		1	1,13	1,79	1,95	0,94	1,99		ok	
77	 0,006	C	Ø 37 h6	-	6 µ		1	1,43	1,04	1,66	1,49	1,74		ok	
78	 0.004		Ø 37 h6	-	4 µ		1	0,56	1,24	1,33	45,00	1,18		ok	
79	 0.004		Ø 37 h6		4 µ		5	0,85	0,95	0,68	0,84	0,63		ok	
80	Rz 3 Ø 37 h6			-	3 µ		5	0,29	0,30	0,31	0,27	0,27		ok	
	Rmax 4 Ø 37 h6			-	4 µ		5	0,34	0,35	0,41	0,39	0,32		ok	
	SW 0,001 max	Filter 15-150 µm	Ø 37 h6	-	1 µ		5	0,37	0,91	0,22	0,14	0,70		ok	
81	Rz 3 Ø 40 E			-	3 µ		5	2,90	1,89	2,24	2,54	2,74		ok	
	Rmax 4 Ø 40E			-	4 µ		5	3,48	2,70	2,89	2,81	3,14		ok	
	SW 0,001 max	Filter 15-150 µm	Ø 40E	-	1 µ		5	0,80	0,64	0,58	0,75	0,78		ok	

SIGNATURE

G. Cicirelli

TITLE

QPE

DATE

06/06/2014

**GETRAG**

Production Part Approval

DIMENSIONAL TEST RESULTS

Organization:				GETRAG		Part Number: 250.6.3974.35									
Supplier/Vendor Code:				GETRAG Modugno		Part Name: Output Shaft 1									
INSPECTION FACILITY:						Design Record Change Level: F Index (-) 09/Dicembre/2013									
NA						Engineering Change Documents:									
Organization Measurement Results (Data)															
Item	Dimension/Specification			Specification / Limits		Test Date	Qty. Tested	1	2	3	4	5	Test distruttivo	Ok	Not Ok
82	 0.006		Ø 25 m6	-	6 µ		5	1,82	2,04	3,52	1,76	1,44		ok	
83	 0.006		G Ø 25 m6	-	6 µ		5	3,04	2,36	1,80	3,01	2,43		ok	
84	Caratteristica V			-	-		5	ok	ok	ok	ok	ok		ok	
85	Caratteristica U			-	-		5	ok	ok	ok	ok	ok		ok	
86	Caratteristica X			-	-		5	ok	ok	ok	ok	ok		ok	
87	Caratteristica P			-	-		5	ok	ok	ok	ok	ok		ok	
88	Caratteristica R			-	-		5	ok	ok	ok	ok	ok		ok	
89	Caratteristica Q			-	-		5	ok	ok	ok	ok	ok		ok	
90	Caratteristica Y			-	-		5	ok	ok	ok	ok	ok		ok	
90bis	Caratteristica N			-	-		5	ok	ok	ok	ok	ok		ok	
91	Caratteristica Z			-	-		5	ok	ok	ok	ok	ok		ok	
92	Caratteristica T			-	-		5	ok	ok	ok	ok	ok		ok	
93	Caratteristica W			-	-		5	ok	ok	ok	ok	ok		ok	
94	Caratteristica S			-	-		5	ok	ok	ok	ok	ok		ok	
94 Bis	 0,04		A - B	Oscill S	-	40 µ		5	1,2	1,2	1,2	1,2	1,5		ok
95	Mdk I			54,396	54,461		5	54,402	54,415	54,411	54,408	54,417		ok	
96	Mdk IIa			46,167	46,231		5	46,189	46,185	46,190	46,195	46,191		ok	
97	Mdk IIb			45,992	46,065		5	46,019	46,015	46,020	46,025	46,021		ok	
98	Mdk IIIa			42,088	42,148		5	42,108	42,115	42,107	42,106	42,108		ok	
99	Mdk IIIb			41,923	41,992		5	41,938	41,945	41,937	41,936	41,939		ok	
100	M1 HRA 80,5 + 2,5			80,5	83,0		1	-	-	-	-	-	81,3	ok	
101	M2 EHT 0,7 + 0,5			0,700	1,200		1	-	-	-	-	-	1,01	ok	
102	M3 EHT 0,5 min			-	-		1	-	-	-	-	-	0,9	ok	
103	M4 HV10 min300			-	-		1	-	-	-	-	-	344	ok	
104	Rz 63			-	63 µ		5	13,2	21,8	21,2	20,8	17,0		ok	
	Rmax 80			-	80 µ		5	17	30,5	34,4	27,7	24,1		ok	
105	Profilo dentatura			-	-		5	ok	ok	ok	ok	ok		ok	
106	Diametro 48,5 (-0,1)			48,4	48,5		5	48,488	48,468	48,438	48,462	48,460		ok	
107	Conformità pulizia pezzo GN4340-1			-	-		5	ok	ok	ok	ok	ok		ok	
108	Smusso 0,5			-	-		5	0,691	0,645	0,676	0,691	0,692		ok	
109	Angolo 30° ± 3°			27°	33°		5	31,837°	32,855°	32,061°	32,331°	31,692°		ok	
110	Smusso 1 ± 0,3			0,7	1,3		5	1,254	1,268	1,244	1,221	1,132		ok	
111	Angolo 30° ± 3°			27°	33°		5	27,396°	27,434°	27,364°	27,329°	27,410°		ok	
112	Smusso 0,7 ± 0,4			0,3	1,1		5	0,710	0,746	0,666	0,609	0,607		ok	
112 Bis	Smusso 1 ± 0,5			0,5	1,5		5	0,946	0,977	0,985	0,968	0,823		ok	
113	Smusso 0,7 ± 0,4			0,3	1,1		5	0,876	0,895	0,898	0,879	0,866		ok	
114	Smusso 1 ± 0,5			0,5	1,5		5	0,844	0,855	0,845	0,861	0,856		ok	
115	Angolo 30° ± 3°			27°	33°		5	28,251°	28,539°	28,056°	28,027°	27,578°		ok	
116	 0,04		A - B	Oscill W	-	40 µ		5	7,0	8,0	6,0	8,0	7,0		ok
117	 0,04		A - B	Oscill T	-	40 µ		5	8,0	8,0	7,0	8,0	7,0		ok
118	Tooth Chanfers			-	-		5	ok	ok	ok	ok	ok		ok	
119	Rz 16			0	16 µ		5	2,22	2,23	2,25	2,21	2,31		ok	

Toothing microgeometry validated by standard measurement report

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DATE

G. Cicirelli

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06/06/2014

Item	Caractheristic	Tolerance	Part 1	Part 2	Part 3	Part 4	Part 5	Device
1	Distanza	243,44 ± 0,6	243,289	243,384	243,426	243,252	243,524	Quota calcolata tra items 2 + 29
5	Distanza	128,23 ± 0,07	128,26	128,28	128,27	128,2	128,19	
9	Distanza	44,68 ± 0,1	44,672	44,686	44,684	44,682	44,683	
13	Tip diameter	39,89-0,25	39,8	39,83	39,85	39,78	39,75	Calibro
17	Diametro	43,8 (-0,2)	43,68	43,78	43,79	43,69	43,78	Calibro
18	Tip diameter	43,89 -0,25	43,71	43,75	43,74	43,70	43,69	Calibro
20	Diametro	45,7 (±0,1)	45,63	45,7	45,64	45,62	45,62	Calibro
24	Diametro	15 ± 0,3	14,87	15,01	14,95	15,02	15,15	Calibro
25	Diametro	41,89 (±0,1)	41,82	41,85	41,87	41,8	41,82	Calibro
28	Distanza	15,25 ± (0,3)	15,35	15,37	15,37	15,35	15,33	Visore Ottico
30	Diametro	18,3 ± 0,4	18,28	18,32	18,27	18,30	18,29	Calibro
31	Diametro	39 ± 0,1	39,03	39,03	39,06	396,08	39,08	Calibro
34	Distanza	209,4 ± 1	209,65	209,78	209,67	209,84	209,54	Calibro di profondità
44	Oscillazione	0-0,4	0,12	0,205	0,157	0,2	0,173	Banchetto punta contropunta
57	Oscillazione	0-0,4	0,2	0,21	0,2	0,17	0,22	Banchetto punta contropunta
95	Mdk I	54,396÷54,461	54,402	54,415	54,411	54,408	54,417	Calibro a sfere
96	Mdk IIa	46,167÷46,231	46,189	46,185	46,19	46,195	46,191	Calibro a sfere
97	Mdk IIb	45,992÷46,065	46,019	46,015	46,02	46,025	46,021	Calibro a sfere
98	Mdk IIIa	42,088÷42,148	42,108	42,115	42,107	42,106	42,108	Calibro a sfere
99	Mdk IIIb	41,923÷41,992	41,938	41,945	41,937	41,936	41,939	Calibro a sfere

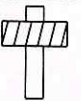
Misurazioni Manuali

OS1 2506397435

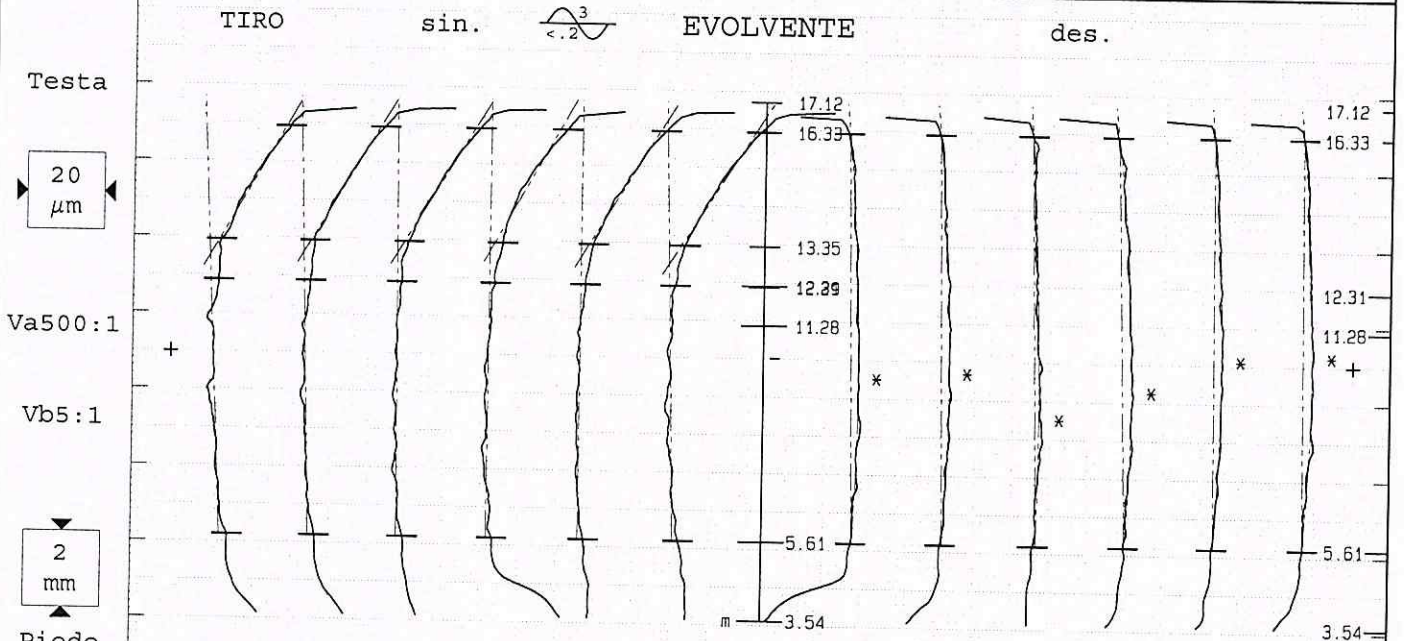
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GETRAG B7590

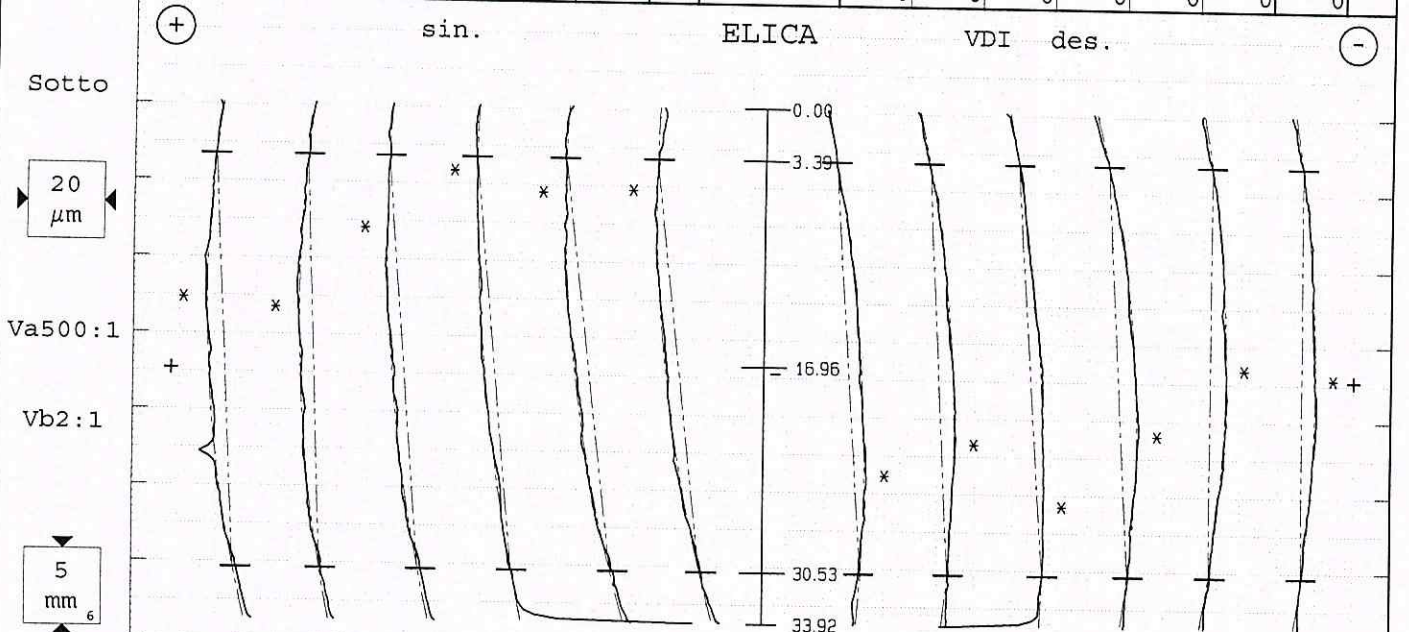
Ruota cilindrica Evolvente/Elica



Nr. prog.: STI0410005 0	P26 B7590	Controllore: TURNO A	Data: 23.05.2014 08:31
Denominazione: Output Shaft 1		Numero denti z 19	Largh.fasc.dent. b 33.92mm
Numero disegno.: 250.6.3974.35-IF		Modulo m 2.25mm	Tratto evolv. La 6.68/10.72mm
Commissa/serie nr.: 1		Angolo pressione 20°00'00"	Tratto elica LS 27.14mm
Masch.Nr.: M001	Spindel: Formm	Angolo elica -27°48'00"	Inizio elab. M1 5.61mm
Untersuchungszweck: Laufende Messung		Ø Base db 44.6926mm	Palpatore Ø (#2C) 1mm
Werkzeug:	Charge:	Ang. Base -25°59'35"	Fat.scor.pr. x .6



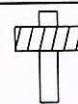
Tolerance	Medio	Val.misur [μ m]							Qual	Tolerance	Val.misur [μ m]							Medio	Qual
fHam	± 6	1	Var 3							± 6	Var 1							-1	
fHa	± 8	1	3	2	0	0	0	0	1	± 8	-2	-1	-2	-2	-1	-1	-1	-1	
Pa		4	6	4	3	3	3	3	4		4	4	3	5	3	3	4	4	
ffa	4	3	4	3	3	3	3	3	3	4	1	1	2	1	1	2	1	1	
Ca	0/4	2	2	2	2	2	2	2	2	0/4	2	2	1	3	2	2	2	2	
fKo	-22/-14	-21	-21	-21	-21	-18	-20	-23			0	0	0	0	0	0	0	0	



Sopra																		
N:Z		15	10	6	1t	1c	1p	Ø Dente	1p	1c	1t	6	10	15				
fHsm	8±6	10	Var					10		±6	Var					7		4
fHß	8±13	10	7	5	11	12	15	15		±13	9	7	9	7	0	0	4	
Fß		6	7	4	4	4	7	7			8	7	7	7	3	2	5	
ffß	4	3	5	2	2	1	2	1		4	1	1	1	1	1	1	1	
Cß	2/6	4	4	4	3	3	4	4		2/6	3	4	3	5	4	4	4	
Bd	4±4	3								4±4							0	

GETRAG B7590

Ruota cilindrica Divisione



Nr. prog.: STI0410005 0	P26 B7590	Controllore: TURNO A	Data: 23.05.2014 08:31
Denominazione: Output Shaft 1	Numero denti z	19	Angolo pressione 20°00'00"
Numero disegno.: 250.6.3974.35-IF	Modulo m	2.25mm	Angolo elicita -27°48'00"
Comnessa/serie nr.: 1	Untersuchungszweck:	Laufende Messung	
Masch.Nr.: M001	Spindel: Formelatzelg:	Charge:	



Errori singoli di divisione fp fianco sinistro

+

:

20µm

-

500:1

Errore somma di divisione Fp fianco sinistro

+

:

20µm

-

500:1

Errori singoli di divisione fp fianco destro

+

:

20µm

-

500:1

Errore somma di divisione Fp fianco destro

+

:

20µm

-

500:1

Corso per misura divis.: 51.028 z=17mm

fianco sinistro / TIRO

fianco destro

	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	2		14		2		14	
Gr. salto di passo fu max	3		18		1		18	
Scarto di divisione Rp	4				3			
Err. globale di divisione Fp	12		40		7		40	
Err. cordale di divisione Fpz/8	4				3			

Centricità Fr (Ø-sfera =4.5mm)

⊙ : 6µm

+

:

20µm

-

500:1

SS

Err. di concentricità Fr

6

32

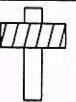
Variaz. spessore dente Rs



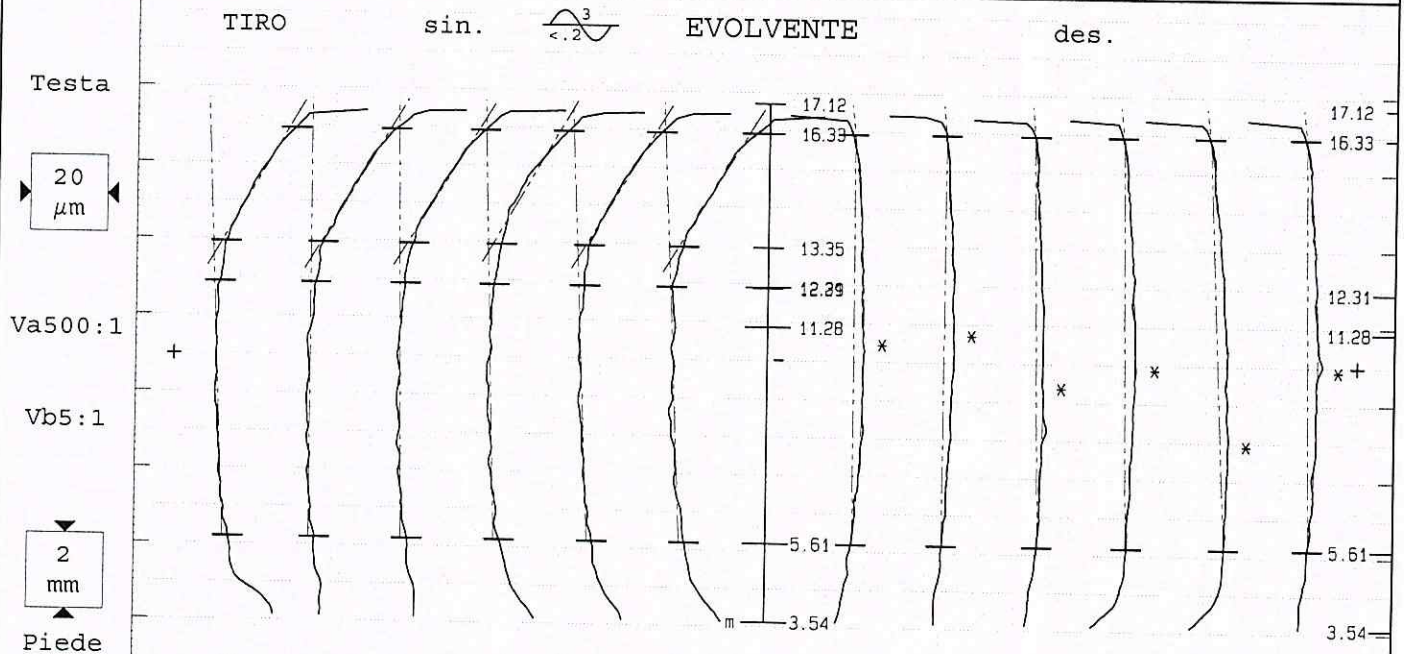
KLINGELBERG

GETRAG B7590

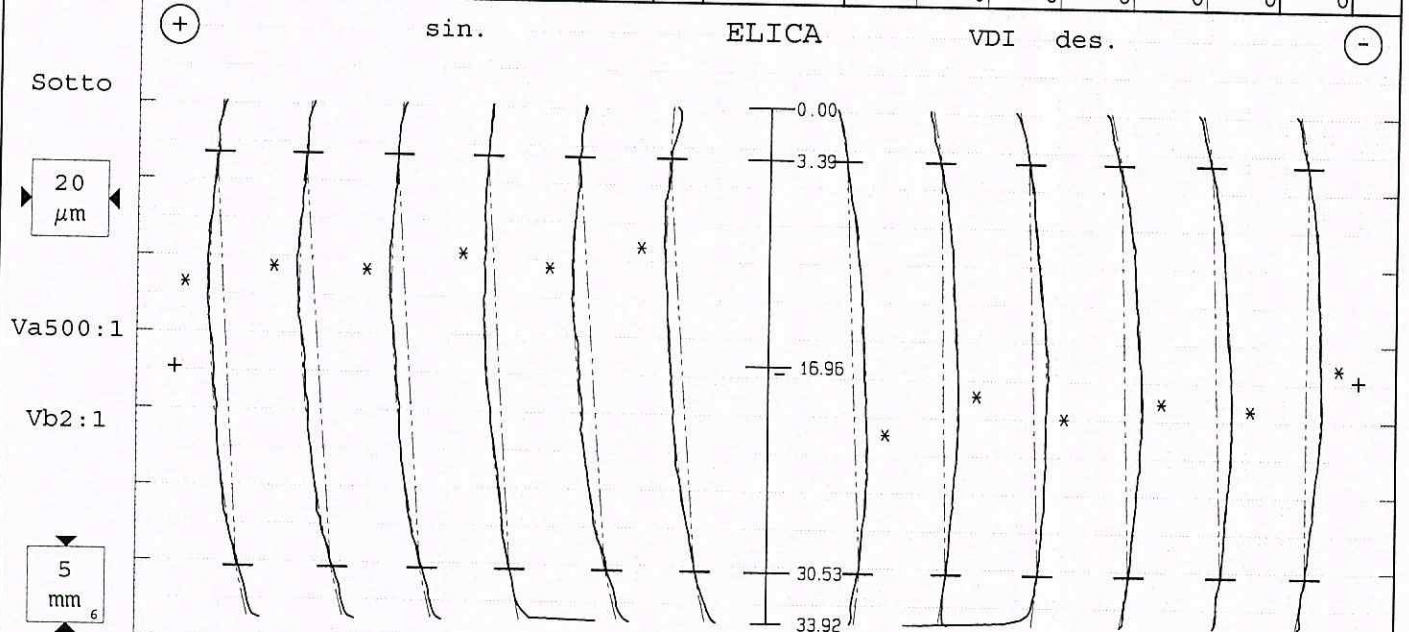
Ruota cilindrica Evolvente/Elica



Nr. prog.: STI0410005 0	P26 B7590	Controllore: TURNO A	Data: 23.05.2014 08:35
Denominazione: Output Shaft 1		Numero denti z 19	Largh.fasc.dent. b 33.92mm
Numero disegno.: 250.6.3974.35-IF		Modulo m 2.25mm	Tratto evolv. La 6.68/10.72mm
Commessa/serie nr.: 2		Angolo pressione 20°00'00"	Tratto elica Ls 27.14mm
Masch.Nr.: M001	Spindel: Forme	Angolo elica -27°48'00"	Inizio elab. M1 5.61mm
Untersuchungszweck: Laufende Messung		Ø Base db 44.6926mm	Palpatore Ø (#2C) 1mm
Werkzeug:	Charge:	Ang. Base -25°59'35"	Fat.scor.pr. x .6



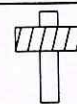
Tolerance	Medio	Val.misur [μ m]							Qual	Tolerance	Val.misur [μ m]							Medio	Qual
fHam	± 6	2	Var 3							± 6	Var 5							-2	
fHa	± 8	2	3	0	1	2	3	3		± 8	0	0	-2	-1	-5	-1	-2		
Fa		4	4	3	3	4	4	5			4	3	4	4	6	5	5		
ffa	4	3	2	2	3	3	3	3		4	1	1	1	1	1	2	1		
Ca	0/4	2	2	2	2	2	2	2		0/4	3	2	2	3	2	3	3		
fKo	-22/-14	-21	-21	-21	-21	-19	-21	-22			0	0	0	0	0	0	0		



Sopra																		
N:Z		15	10	6	1t	1c	1p	☉ Dente	1p	1c	1t	6	10	15				
fHsm	8±6	9	Var 2							±6	Var 4							2
fHs	8±13	9	8	10	9	8	10	9	±13	5	2	4	3	4	0	2		
Fs		4	3	4	3	2	4	3		5	4	3	5	4	2	4		
ffs	4	2	2	2	1	1	1	1	4	1	1	1	1	1	1	1		
CS	2/6	4	4	4	4	3	4	3	2/6	3	4	4	4	4	4	4		
Bd	4±4	1							4±4							1		

GETRAG B7590

Ruota cilindrica Divisione



Nr. prog.: STI0410005 0	P26 B7590	Controllore: TURNO A	Data: 23.05.2014 08:35
Denominazione: Output Shaft 1		Numero denti z 19	Angolo pressione 20°00'00"
Numero disegno.: 250.6.3974.35-IF		Modulo m 2.25mm	Angolo elica -27°48'00"
Commessa/serie nr.: 2		Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	Spindel: Formelwerkzeug:	Charge:	



Errori singoli di divisione fp fianco sinistro

+

20µm
500:1

Errore somma di divisione Fp fianco sinistro

+

20µm
500:1

Errori singoli di divisione fp fianco destro

+

20µm
500:1

Errore somma di divisione Fp fianco destro

+

20µm
500:1

Corsa per misura divis.: 51.028 z=17mm

fianco sinistro / TIRO

fianco destro

	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	2		14		2		14	
Gr. salto di passo fu max	3		18		1		18	
Scarto di divisione Rp	4				4			
Err. globale di divisione Fp	9		40		8		40	
Err. cordale di divisione Fpz/8	4				3			

Centricità Fr (Ø-sfera =4.5mm)

⊙ : 6µm

+

20µm
500:1

Err. di concentricità Fr
Variaz. spessore dente Rs

7

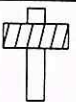
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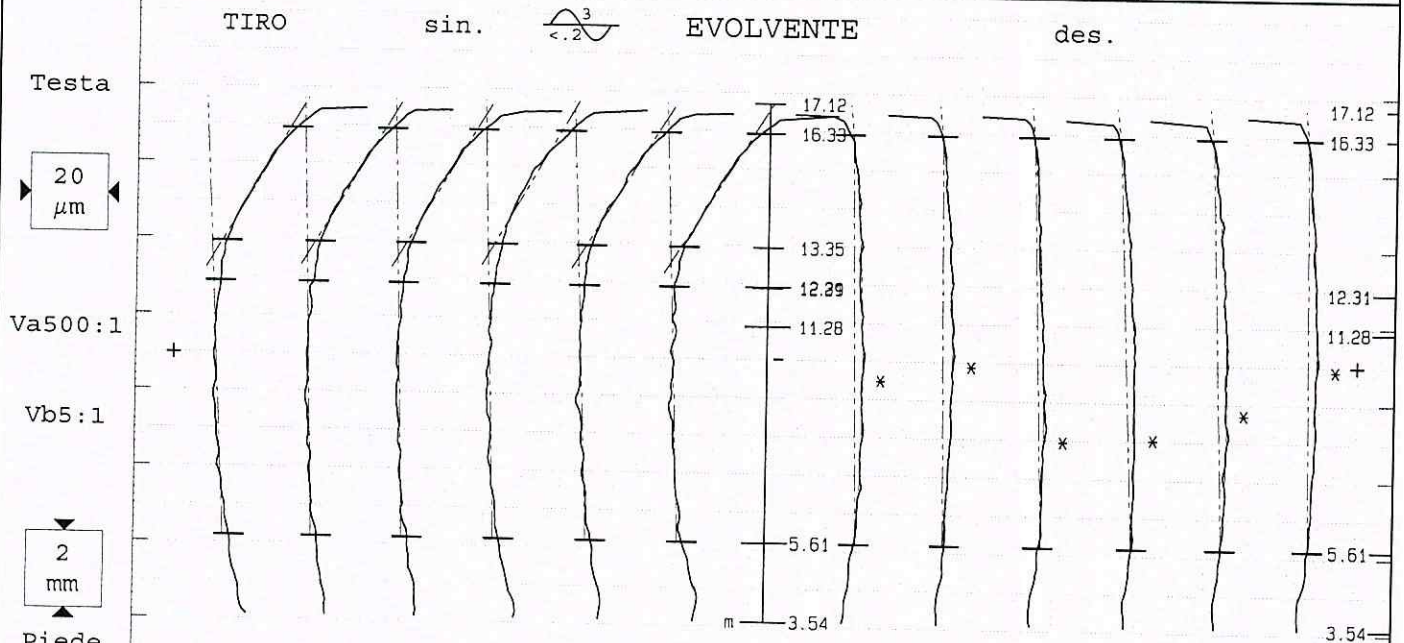
KLINGELBERG

GETRAG B7590

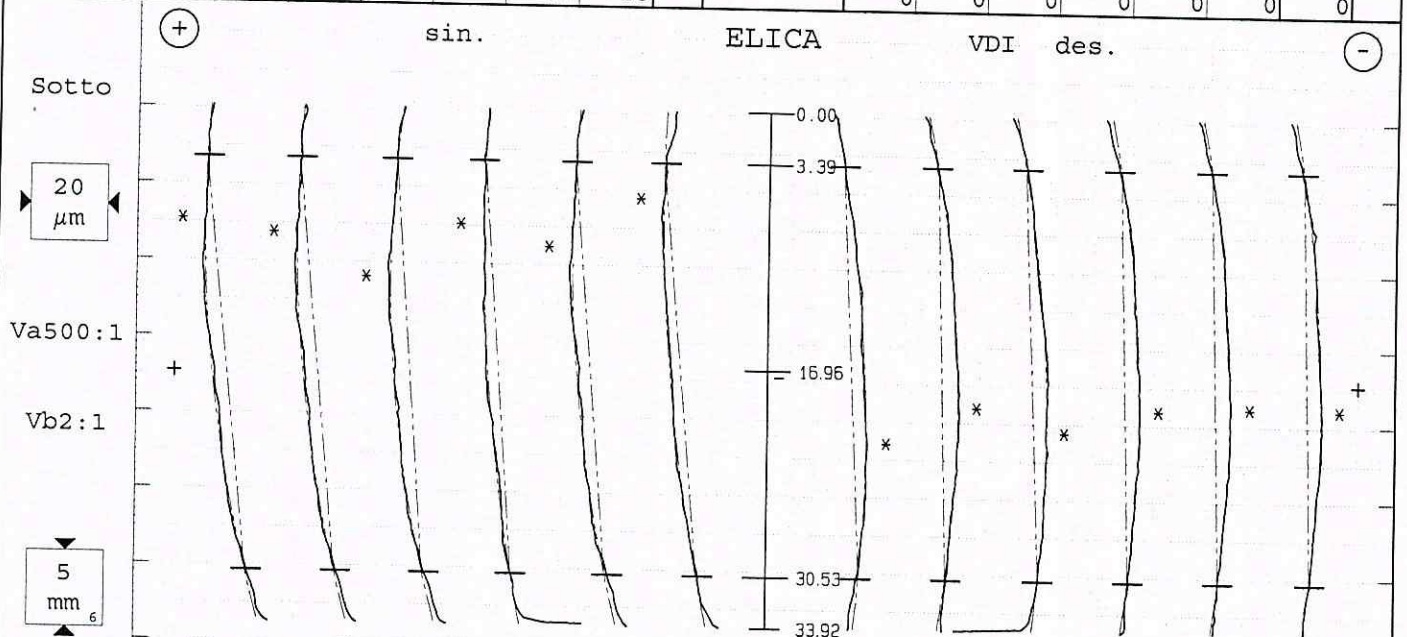
Ruota cilindrica Evolvente/Elica



Nr. prog.: STI0410005 0	P26 B7590	Controllore: TURNO A	Data: 23.05.2014 08:49
Denominazione: Output Shaft 1		Numero denti z 19	Largh.fasc.dent. b 33.92mm
Numero disegno.: 250.6.3974.35-IF		Modulo m 2.25mm	Tratto evolv. La 6.68/10.72mm
Commessa/serie nr.: 3		Angolo pressione 20°00'00"	Tratto elica LS 27.14mm
Masch.Nr.: M001	Spindel: Formata	Angolo elica -27°48'00"	Inizio elab. M1 5.61mm
Untersuchungszweck: Laufende Messung		Ø Base db 44.6926mm	Palpatore Ø (#2C) 1mm
Werkzeug:	Charge:	Ang. Base -25°59'35"	Fat.scor.pr. x .6



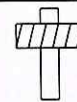
Tolerance		Medio	Val.misur [µm]							Qual	Tolerance		Val.misur [µm]							Medio	Qual
			Var										Var								
fHam	±6	2	1								±6		3							-2	
fHa	±8	2	3	2	2	2	2	2	2		±8		-2	-1	-3	-4	-3	-1	-2		
Fa		4	5	4	3	4	4	4	4				5	4	4	5	6	4	5		
ffa	4	3	3	3	3	3	3	3	3		4		2	1	2	1	1	1	1		
Ca	0/4	2	2	2	2	2	2	2	2		0/4		2	3	1	2	2	2	2		
fKo	-22/-14	-22	-22	-21	-21	-20	-22	-23					0	0	0	0	0	0	0		



N:Z		15	10	6	1t	1c	1p	○ Dente	1p	1c	1t	6	10	15		
fHsm	8±6	12	Var 4							±6	Var 0					3
fHs	8±13	12	14	13	10	10	11	12		±13	6	3	5	3	3	3
Fß		5	6	5	4	2	4	4			5	5	4	4	4	4
ffß	4	2	2	2	2	1	2	1		4	1	1	1	1	2	1
Cß	2/6	4	4	4	4	3	4	3		2/6	4	4	4	4	4	4
Bd	4±4	2								4±4						1

GETRAG B7590

Ruota cilindrica Divisione



Nr. prog.: STI0410005 0	P26 B7590	Controllore: TURNO A	Data: 23.05.2014 08:49
Denominazione: Output Shaft 1		Numero denti z 19	Angolo pressione 20°00'00"
Numero disegno.: 250.6.3974.35-IF		Modulo m 2.25mm	Angolo elica -27°48'00"
Commessa/serie nr.: 3		Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	Spindel: FORMER	Arbeitszeug:	Charge:



Errori singoli di divisione fp fianco sinistro

+

:

20µm

-

500:1

Errore somma di divisione Fp fianco sinistro

+

:

20µm

-

500:1

Errori singoli di divisione fp fianco destro

+

:

20µm

-

500:1

Errore somma di divisione Fp fianco destro

+

:

20µm

-

500:1

Centricità Fr (Ø-sfera =4.5mm)

⊙ : 4µm

Err. di concentricità Fr

Variaz. spessore dente Rs

Fr

Rs

6

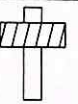
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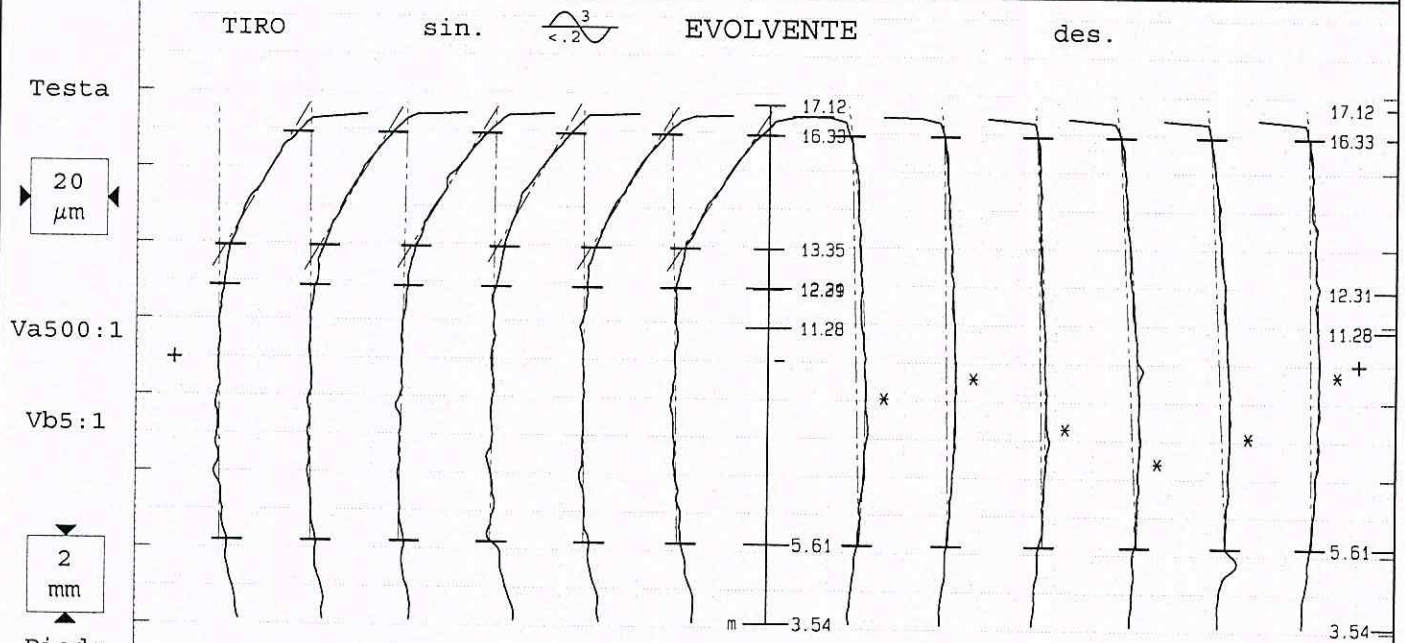
KLINGELBERG

GETRAG B7590

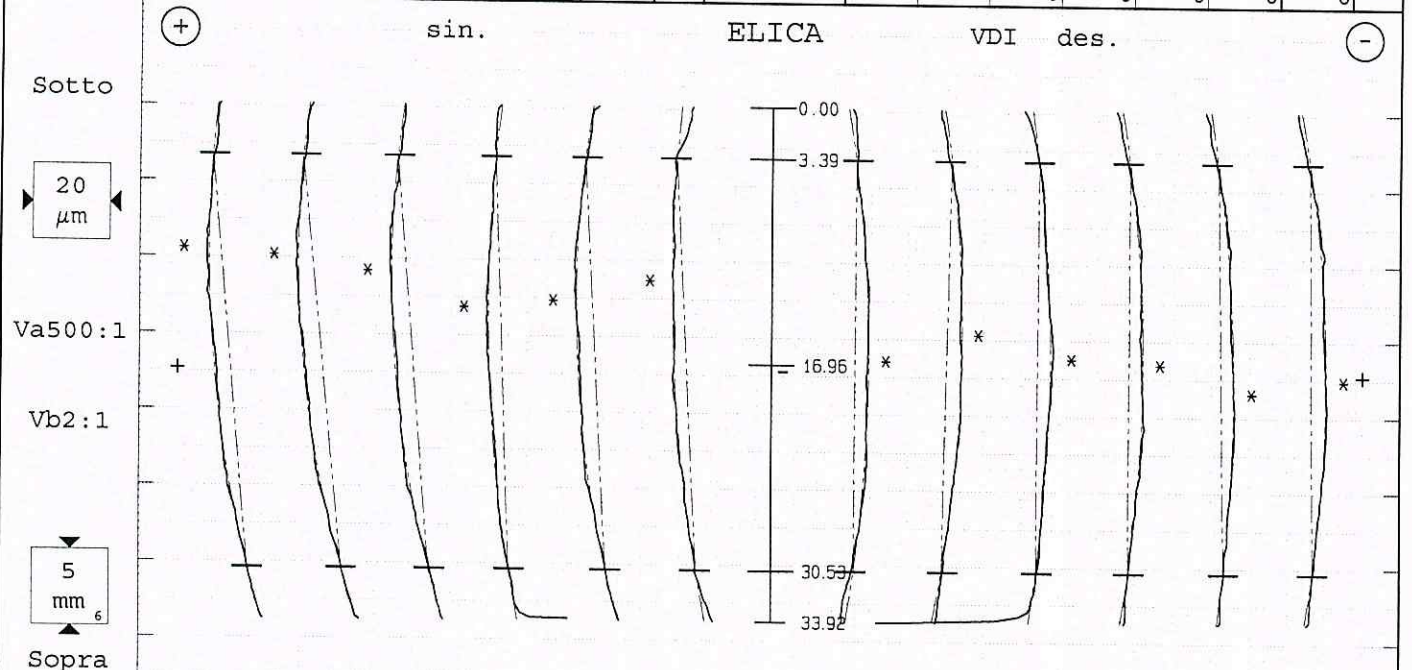
Ruota cilindrica Evolvente/Elica



Nr. prog.: STI0410005 0	P26 B7590	Controllore: TURNO A	Data: 23.05.2014 08:53
Denominazione: Output Shaft 1		Numero denti z 19	Largh.fasc.dent. b 33.92mm
Numero disegno.: 250.6.3974.35-IF		Modulo m 2.25mm	Tratto evol. La 6.68/10.72mm
Comessa/serie nr.: 4		Angolo pressione 20°00'00"	Tratto elica L& 27.14mm
Masch.Nr.: M001	Spindel: Formest	Angolo elica -27°48'00"	Inizio elab. M1 5.61mm
Untersuchungszweck: Laufende Messung		Ø Base db 44.6926mm	Palpatore Ø (#2C) 1mm
Werkzeug:	Charge:	Ang. Base -25°59'35"	Fat.scor.pr. x .6



Tolerance	Medio	Val.misur [μ m]							Qual	Tolerance	Val.misur [μ m]							Medio	Qual
fHam	± 6	0	Var 2							± 6	Var 4							-3	
fHa	± 8	0	1	0	-1	0	0	1		± 8	-3	-2	-2	-5	-4	-1		-3	
Fa		3	4	3	3	2	3	3			5	4	4	6	6	3		5	
ffa	4	3	4	2	3	2	3	2		4	2	1	2	2	1	1		1	
Ca	0/4	1	2	1	1	0	1	2		0/4	2	2	1	2	2	2		2	
fKo	-22/-14	-20	-19	-20	-20	-18	-20	-22			0	0	0	0	0	0		0	



N:Z		15	10	6	1t	1c	1p	Ø Dente	1p	1c	1t	6	10	15			
fHsm	8±6	11	Var 6							±6	Var 5						0
fHs	8±13	11	12	13	11	5	7	6		±13	0	-3	-1	0	2	1	0
Fs		5	5	6	5	3	4	2			3	4	2	3	3	4	4
ffs	4	1	1	1	2	1	1	1		4	1	1	1	2	1	2	2
Cs	2/6	5	4	5	5	3	5	3		2/6	4	4	3	4	3	4	4
Bd	4±4	1								4±4							1



Nr. prog.:	STI0410005 0	P26 B7590	Controllore:	TURNO A	Data:	23.05.2014 08:53
Denominazione:	Output Shaft 1		Numero denti z	19	Angolo pressione	20°00'00"
Numero disegno.:	250.6.3974.35-IF		Modulo m	2.25mm	Angolo elica	-27°48'00"
Comessa/serie nr.:	4		Untersuchungszweck:	Laufende Messung		
Masch.Nr.:	M001	Spindel: FORMULAZIONE	Charge:			



Errori singoli di divisione fp fianco sinistro

+

20µm
500:1

Errore somma di divisione Fp fianco sinistro

+

20µm
500:1

Errori singoli di divisione fp fianco destro

+

20µm
500:1

Errore somma di divisione Fp fianco destro

+

20µm
500:1

Corso per misura divis.: 51.028 z=17mm

fianco sinistro / TIRO

fianco destro

	Val. misur	Qual.	Val. amn	Qual.	Val. misur	Qual.	Val. amn	Qual.
Gr. err. singoli divisione fp max	2		14		2		14	
Gr. salto di passo fu max	2		18		1		18	
Scarto di divisione Rp	3				4			
Err. globale di divisione Fp	5		40		10		40	
Err. cordale di divisione Fpz/8	2				4			

Centricità Fr (Ø-sfera =4.5mm)

⊙ : 6µm

+

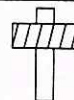
20µm
500:1

SS

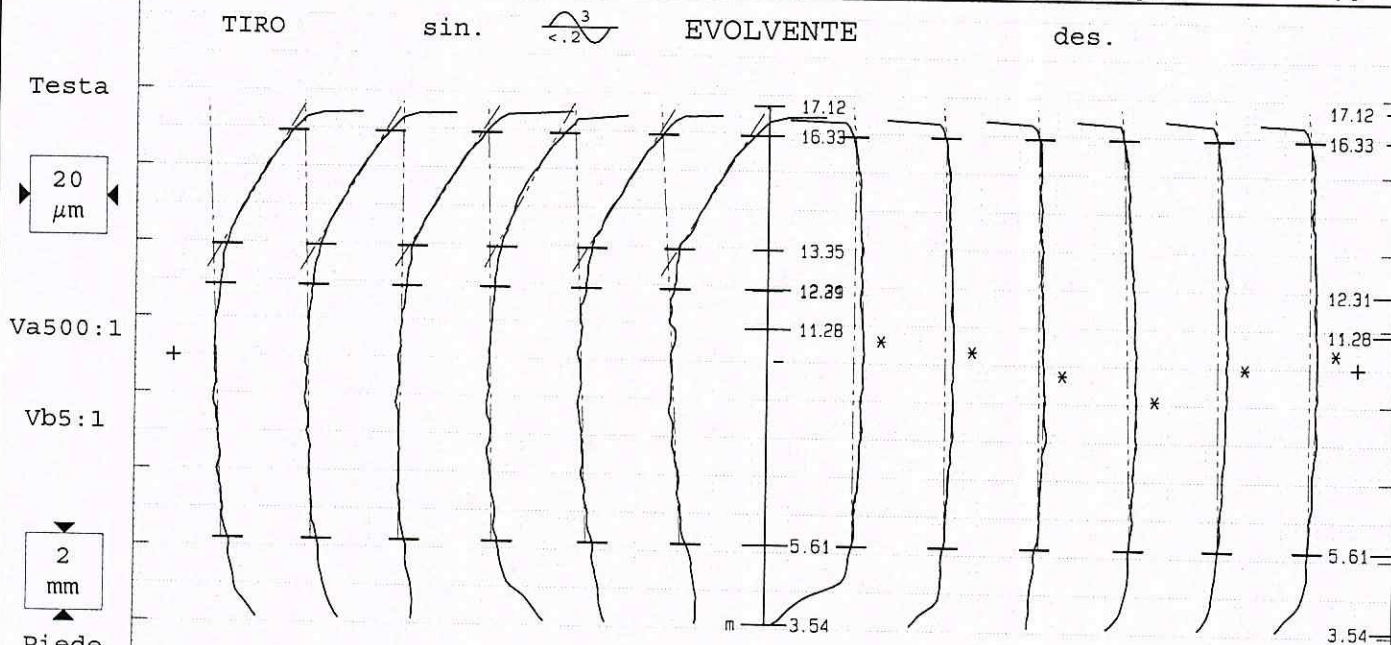
Err. di concentricità Fr	6	32	
Variaz. spessore dente Rs			

GETRAG B7590

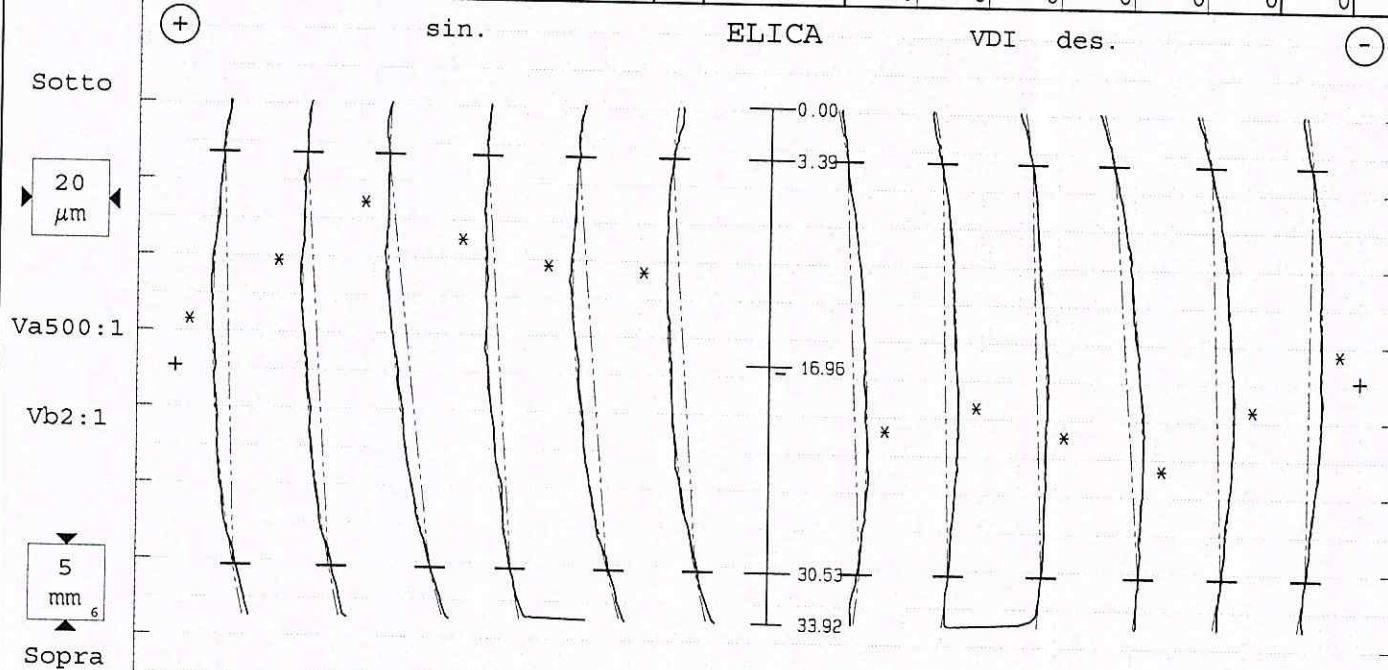
Ruota cilindrica Evolvente/Elica



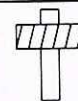
Nr. prog.: STI0410005 0	P26 B7590	Controllore: TURNO A	Data: 23.05.2014 09:07
Denominazione: Output Shaft 1		Numero denti z 19	Largh.fasc.dent. b 33.92mm
Numero disegno.: 250.6.3974.35-IF		Modulo m 2.25mm	Tratto evolv. La 6.68/10.72mm
Commessa/serie nr.: 5		Angolo pressione 20°00'00"	Tratto elica Ls 27.14mm
Masch.Nr.: M001	Spindel: Forme	Angolo elica -27°48'00"	Inizio elab. M1 5.61mm
Untersuchungszweck: Laufende Messung		Ø Base db 44.6926mm	Palpatore Ø (#2C) 1mm
Werkzeug:	Charge:	Ang. Base -25°59'35"	Fat.scor.pr. x .6



Tolerance	Medio	Val.misur [μ m]							Qual	Tolerance	Val.misur [μ m]							Medio	Qual
fHm	± 6	2	Var 3							± 6	Var 2							-1	
fHa	± 8	2	3	2	0	1	2	3		± 8	0	0	-1	-2	-1	0	-1		
Fa		4	4	4	3	3	5	5			3	3	3	4	3	3	3		
ffa	4	3	3	3	3	3	3	3		4	1	1	2	1	1	1	1		
Ca	0/4	2	2	2	2	2	2	2		0/4	2	2	1	2	2	2	2		
fKo	-22/-14	-21	-21	-21	-21	-18	-22	-23			0	0	0	0	0	0	0		



N:Z		15	10	6	1t	1c	1p	Ø Dente	1p	1c	1t	6	10	15			
fHsm	8±6	9	Var 11							±6	Var 11						4
fHs	8±13	9	4	8	15	9	10	9		±13	5	3	4	9	4	-2	4
Fs		5	4	3	7	2	5	3			5	4	3	8	5	2	5
ffa	4	2	1	1	2	2	2	2		4	1	1	1	1	1	1	1
Cs	2/6	4	4	4	4	3	4	4		2/6	3	3	3	4	4	3	4
Bd	4±4	0								4±4							1



Nr. prog.: STI0410005 0	P26 B7590	Controllore: TURNO A	Data: 23.05.2014 09:07
Denominazione: Output Shaft 1		Numero denti z 19	Angolo pressione 20°00'00"
Numero disegno.: 250.6.3974.35-IF		Modulo m 2.25mm	Angolo elica -27°48'00"
Comessa/serie nr.: 5		Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	Spindel: Formeltestzelg:	Charge:	



Errori singoli di divisione fp fianco sinistro

+

:

-

20µm

500:1

Errore somma di divisione Fp fianco sinistro

+

:

-

20µm

500:1

Errori singoli di divisione fp fianco destro

+

:

-

20µm

500:1

Errore somma di divisione Fp fianco destro

+

:

-

20µm

500:1

Corso per misura divis.: 51.028 z=17mm

		fianco sinistro / TIRO				fianco destro			
		Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione	fp max	2		14		2		14	
Gr. salto di passo	fu max	2		18		1		18	
Scarto di divisione	Rp	4				3			
Err. globale di divisione	Fp	12		40		7		40	
Err. cordale di divisione	Fpz/8	4				3			

Centricità Fr (Ø-sfera =4.5mm)

⊙ : 6µm

+

:

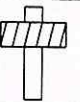
-

20µm

500:1

SS

Err. di concentricità	Fr	6	32	
Variaz. spessore dente	Rs			

GETRAG B7590**Ruota cilindrica Evolvente/Elica**

Nr. prog.:	STI0410005 0	P26 B7590	Controllore:	TURNO A	Data:	23.05.2014 09:17
Denominazione:	Output Shaft 1		Numero denti z	19	Largh.fasc.dent. b	33.92mm
Numero disegno.:	250.6.3974.35-IF		Modulo m	2.25mm	Tratto evolv. La	6.68/10.72mm
Commessa/serie nr.:	1		Angolo pressione	20°00'00"	Tratto elica L _S	27.14mm
Masch.Nr.:	M001	Spindel: Formm	Angolo elica	-27°48'00"	Inizio elab. M1	5.61mm
Untersuchungszweck:	Laufende Messung		Ø Base db	44.6926mm	Palpatore Ø	(#2C) 1mm
Werkzeug:		Charge:	Ang. Base	-25°59'35"	Fat.scor.pr. x	.6

TIRO

Piede-Ø: 43.475mm

[43.15/43.6]

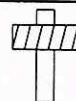
32

Testa-Ø: 56.199mm

[56.09/56.35]

33

VDI

GETRAG B7590**Ruota cilindrica Evolvente/Elica**

Nr. prog.:	STI041005 0	P26 B7590	Controllore:	TURNO A	Data:	23.05.2014 09:15
Denominazione:	Output Shaft 1		Numero denti z	19	Largh.fasc.dent. b	33.92mm
Numero disegno.:	250.6.3974.35-IF		Modulo m	2.25mm	Tratto evol. La	6.68/10.72mm
Commessa/serie nr.:	2		Angolo pressione	20°00'00"	Tratto elica L8	27.14mm
Masch.Nr.:	M001	Spindel: Formnast	Angolo elica	-27°48'00"	Inizio elab. M1	5.61mm
Untersuchungszweck:	Laufende Messung		Ø Base db	44.6926mm	Palpatore Ø	(#2C) 1mm
Werkzeug:		Charge:	Ang. Base	-25°59'35"	Fat.scor.pr. x	.6

TIRO

Piede-Ø: 43.497mm [43.15/43.6] 32

Testa-Ø: 56.228mm [56.09/56.35] 33

VDI

GETRAG B7590**Ruota cilindrica Evolvente/Elica**

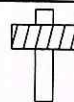
Nr. prog.:	STI041005 0	P26 B7590	Controllore:	TURNO A	Data:	23.05.2014 09:14
Denominazione:	Output Shaft 1		Numero denti z	19	Largh.fasc.dent. b	33.92mm
Numero disegno.:	250.6.3974.35-IF		Modulo m	2.25mm	Tratto evol. La	6.68/10.72mm
Comessa/serie nr.:	3		Angolo pressione	20°00'00"	Tratto elica LS	27.14mm
Masch.Nr.:	M001	Spindel: Formest	Angolo elica	-27°48'00"	Inizio elab. M1	5.61mm
Untersuchungszweck:	Laufende Messung		Ø Base db	44.6926mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:		Ang. Base	-25°59'35"	Fat.scor.pr. x	.6

TIRO

Piede-Ø: 43.518mm [43.15/43.6] 32

Testa-Ø: 56.229mm [56.09/56.35] 33

VDI

GETRAG B7590**Ruota cilindrica Evolvente/Elica**

Nr. prog.:	STI0410005 0	P26 B7590	Controllore:	TURNO A	Data:	23.05.2014 09:13
Denominazione:	Output Shaft 1		Numero denti z	19	Largh.fasc.dent. b	33.92mm
Numero disegno.:	250.6.3974.35-IF		Modulo m	2.25mm	Tratto evol. La	6.68/10.72mm
Commessa/serie nr.:	4		Angolo pressione	20°00'00"	Tratto elica L8	27.14mm
Masch.Nr.:	M001	Spindel: Forme	Angolo elica	-27°48'00"	Inizio elab. M1	5.61mm
Untersuchungszweck:	Laufende Messung		Ø Base db	44.6926mm	Palpatore Ø	(#2C) 1mm
Werkzeug:		Charge:	Ang. Base	-25°59'35"	Fat.scor.pr. x	.6

TIRO

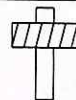
Piede-Ø: 43.504mm

[43.15/43.6] 32

Testa-Ø: 56.212mm

[56.09/56.35] 33

VDI

GETRAG B7590**Ruota cilindrica Evolvente/Elica**

Nr. prog.:	STI0410005 0	P26 B7590	Controllore:	TURNO A	Data:	23.05.2014 09:11
Denominazione:	Output Shaft 1		Numero denti z	19	Largh.fasc.dent. b	33.92mm
Numero disegno.:	250.6.3974.35-IF		Modulo m	2.25mm	Tratto evol. La	6.68/10.72mm
Commessa/serie nr.:	5		Angolo pressione	20°00'00"	Tratto elica L8	27.14mm
Masch.Nr.:	M001	Spindel: Formmest.	Angolo elica	-27°48'00"	Inizio elab. M1	5.61mm
Untersuchungszweck:	Laufende Messung		Ø Base db	44.6926mm	Palpatore Ø	(#2C) 1mm
Werkzeug:		Charge:	Ang. Base	-25°59'35"	Fat.scor.pr. x	.6

TIRO

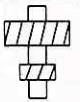
Piede-Ø: 43.5mm

[43.15/43.6] 32

Testa-Ø: 56.198mm

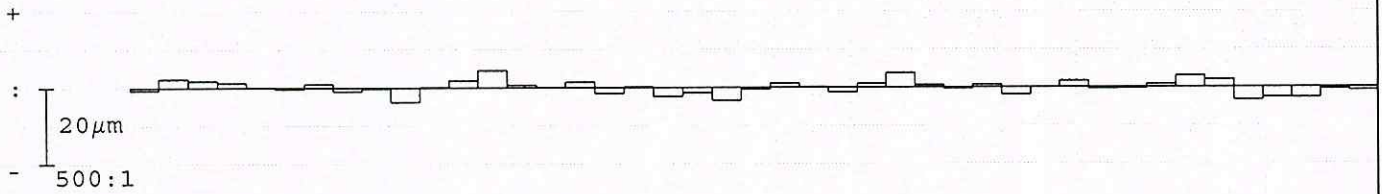
[56.09/56.35] 33

VDI

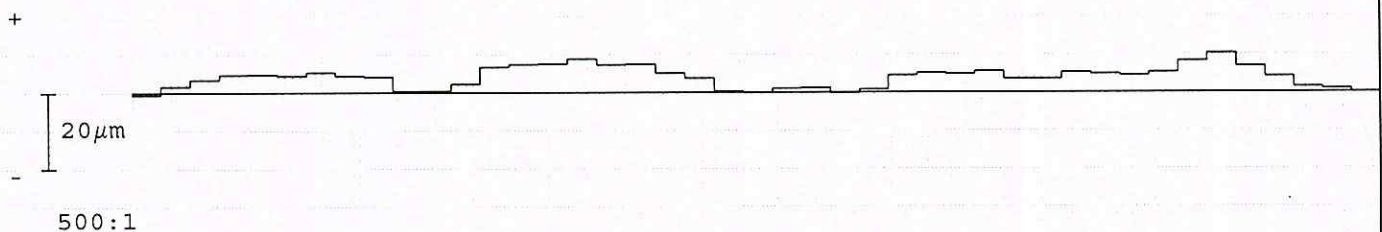


Nr. prog.: STI0410005 0	P26 B7590	Controllore: TURNO A	Data: 23.05.2014 09:18
Denominazione: Output Shaft 1		Numero denti z 43	Angolo pressione 30°00'00"
Numero disegno.: 250.6.3974.RIIa H		Modulo m 1mm	Angolo elica 00°00'00"
Commessa/serie nr.: 1		Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	Spindel: Formel	Gezeichnet: Charge:	

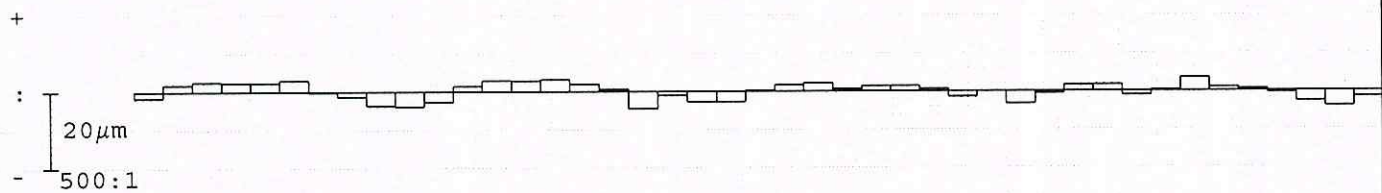
Errori singoli di divisione fp fianco sinistro



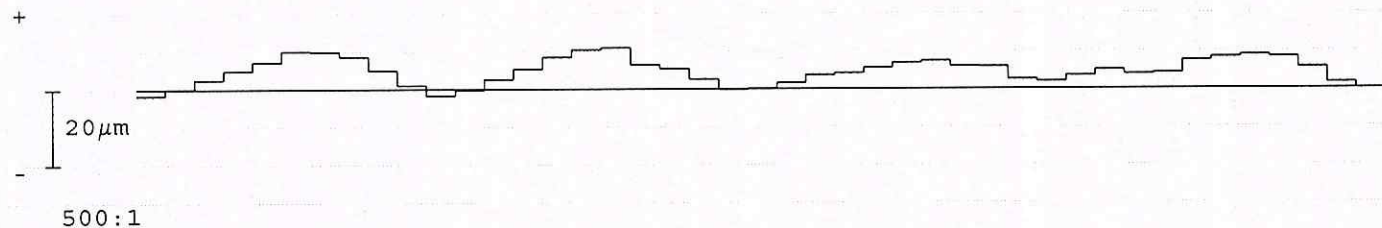
Errore somma di divisione Fp fianco sinistro



Errori singoli di divisione fp fianco destro



Errore somma di divisione Fp fianco destro

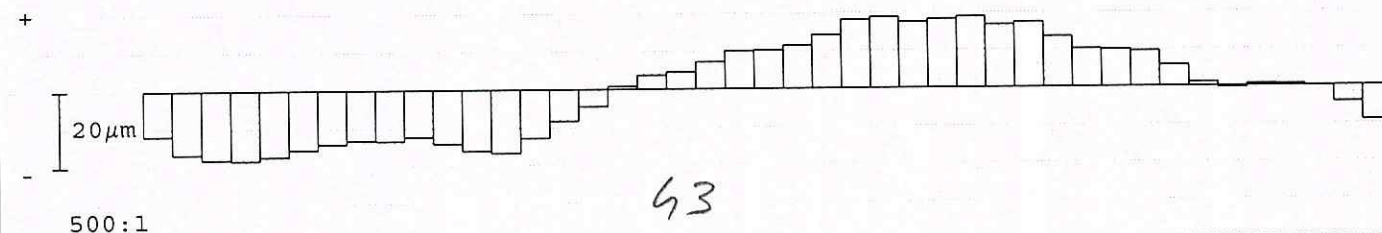


Corsa per misura divis.: 42.9 z=6.3mm

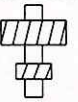
	fianco sinistro				fianco destro			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	4		17		4		17	
Gr. salto di passo fu max	5				5			
Scarto di divisione Rp	8				7			
Err. globale di divisione Fp-e	11		40		13		40	
Err. cordale di divisione Fpz/8	10				12			

Centricità Fr (Ø-sfera =2mm)

⊙ : 35μm

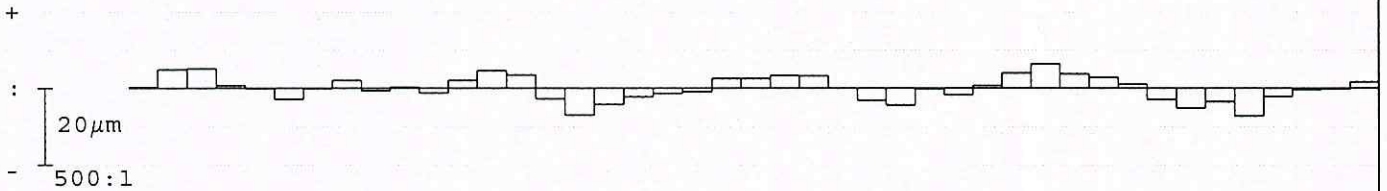


Err. di concentricità Fr	37	50	
Variaz. spessore dente Rs			

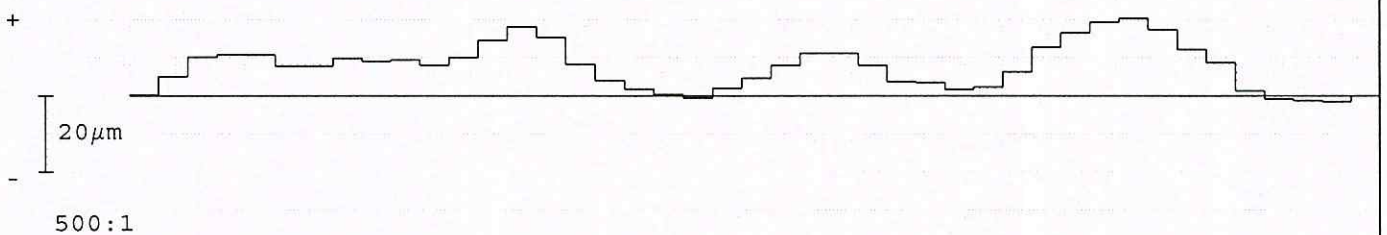


Nr. prog.: STI0410005 0	P26 B7590	Controllore: TURNO A	Data: 23.05.2014 09:21
Denominazione: Output Shaft 1		Numero denti z 43	Angolo pressione 30°00'00"
Numero disegno.: 250.6.3974.RIIa H		Modulo m 1mm	Angolo elica 00°00'00"
Commessa/serie nr.: 2		Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	Spindel: Formnerz	Gr. err. div.:	Charge:

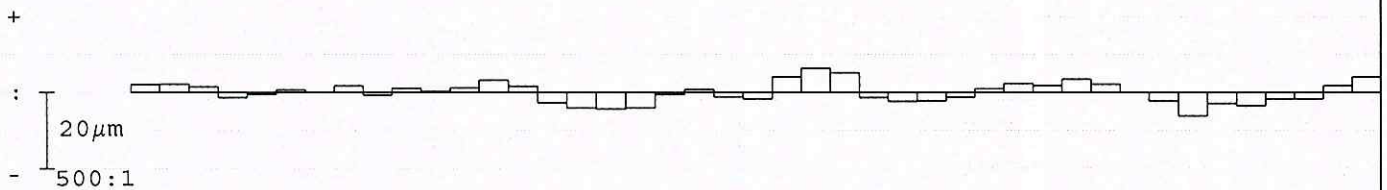
Errori singoli di divisione fp fianco sinistro



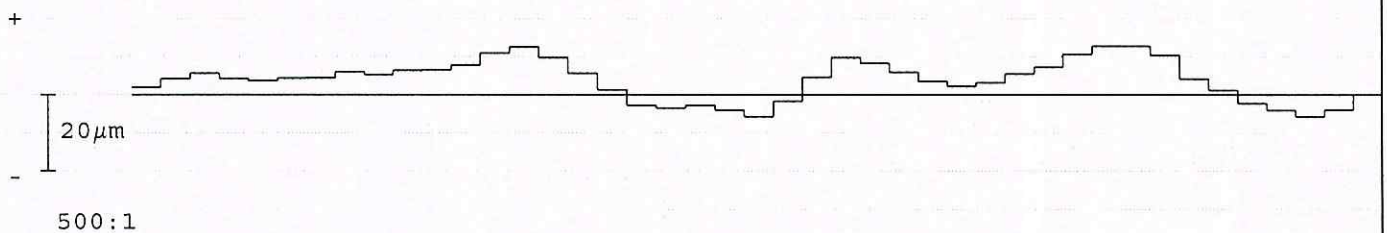
Errore somma di divisione Fp fianco sinistro



Errori singoli di divisione fp fianco destro



Errore somma di divisione Fp fianco destro

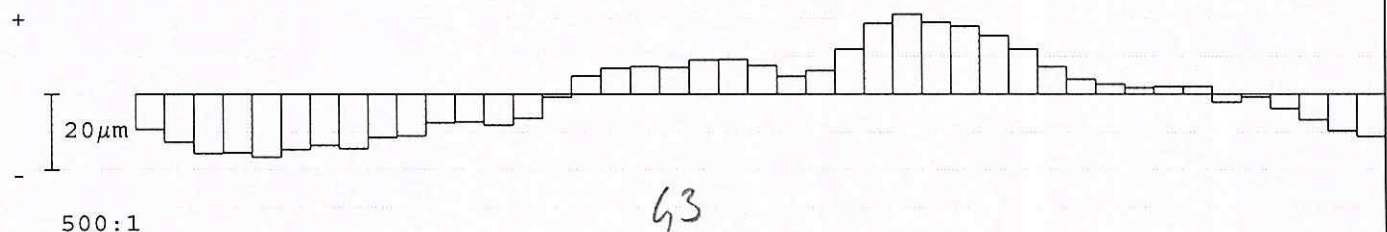


Corsa per misura divis.: 42.9 z=6.3mm

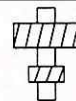
	fianco sinistro				fianco destro			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	7		17		6		17	
Gr. salto di passo fu max	6				6			
Scarto di divisione Rp	13				12			
Err. globale di divisione Fp-e	22		40		18		40	
Err. cordale di divisione Fpz/8	21				17			

Centricità Fr (Ø-sfera =2mm)

⊙ : 29µm

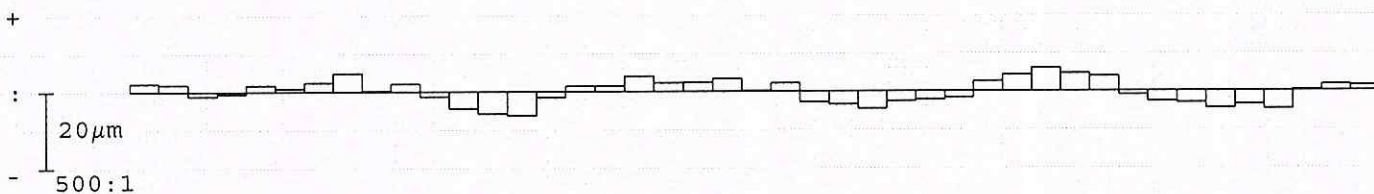


Err. di concentricità Fr	38	50	
Variaz. spessore dente Rs			

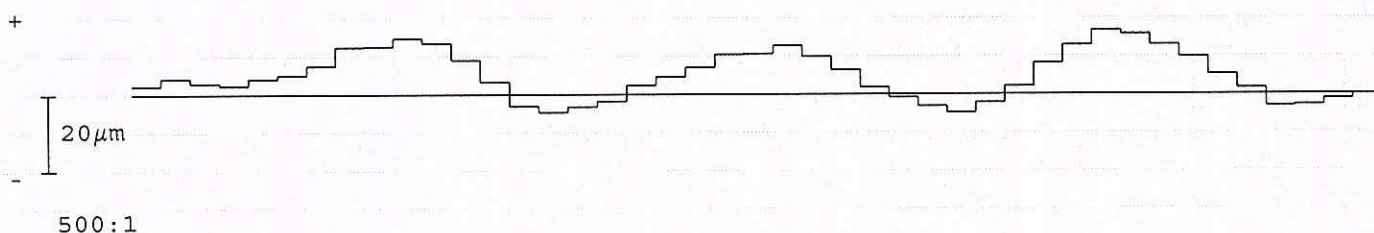


Nr. prog.: STI0410005 0	P26 B7590	Controllore: TURNO A	Data: 23.05.2014 09:25
Denominazione: Output Shaft 1		Numero denti z 43	Angolo pressione 30°00'00"
Numero disegno.: 250.6.3974.RIIa H		Modulo m 1mm	Angolo elica 00°00'00"
Comessa/serie nr.: 3		Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	Spindel: Formel	Caricadg:	Charge:

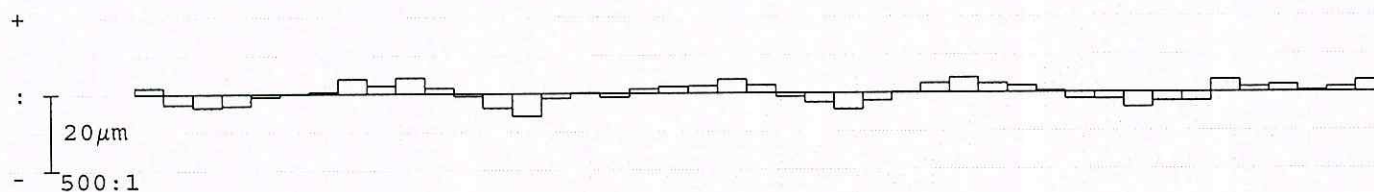
Errori singoli di divisione fp fianco sinistro



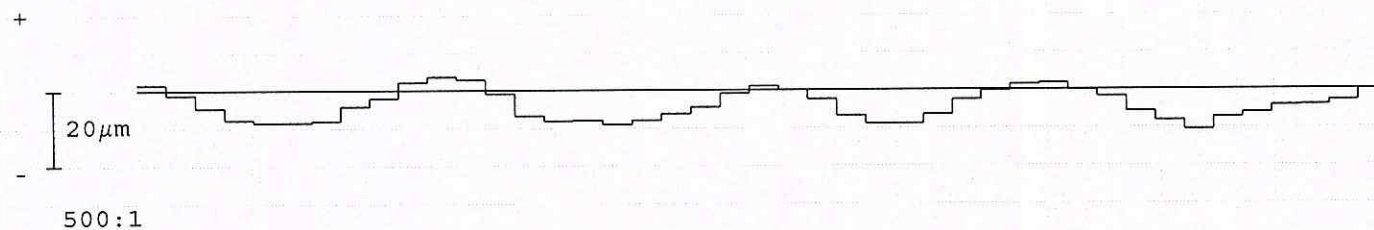
Errore somma di divisione Fp fianco sinistro



Errori singoli di divisione fp fianco destro



Errore somma di divisione Fp fianco destro

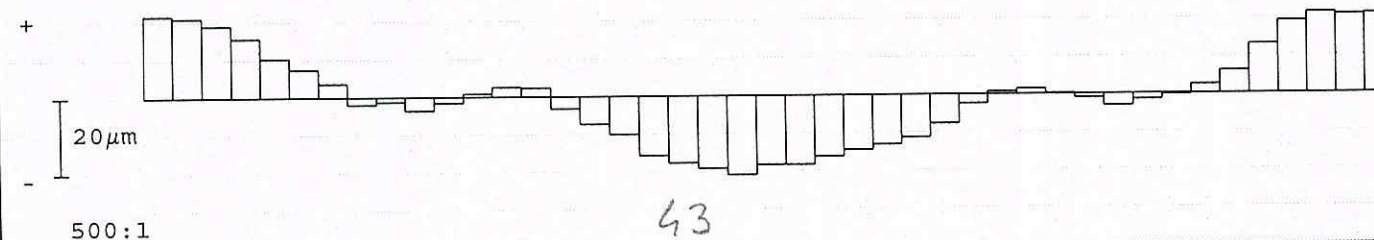


Corsa per misura divis.: 42.9 z=6.3mm

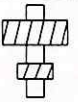
	fianco sinistro				fianco destro			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	6		17		6		17	
Gr. salto di passo fu max	5				6			
Scarto di divisione Rp	12				10			
Err. globale di divisione Fp-e	22		40		14		40	
Err. cordale di divisione Fpz/8	22				12			

Centricità Fr (Ø-sfera =2mm)

⊙ : 33µm

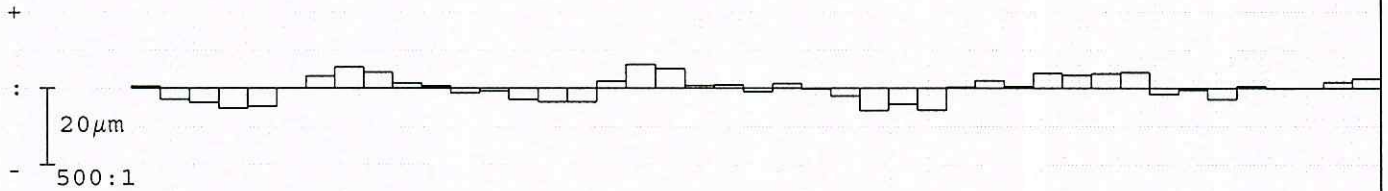


Err. di concentricità Fr	42	50	
Variaz. spessore dente Rs			

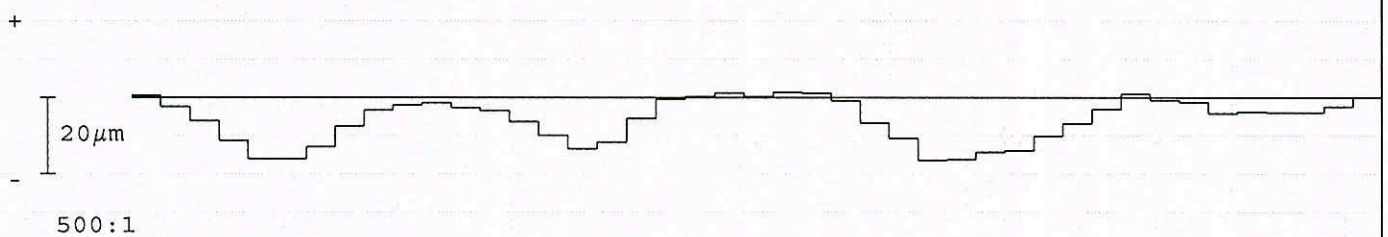


Nr. prog.: STI0410005 0	P26 B7590	Controllatore: TURNO A	Data: 23.05.2014 09:30
Denominazione: Output Shaft 1		Numero denti z 43	Angolo pressione 30°00'00"
Numero disegno.: 250.6.3974.RIIa H		Modulo m 1mm	Angolo elica 00°00'00"
Commessa/serie nr.: 4		Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	Spindel: FORMER	Gr. Zeig:	Charge:

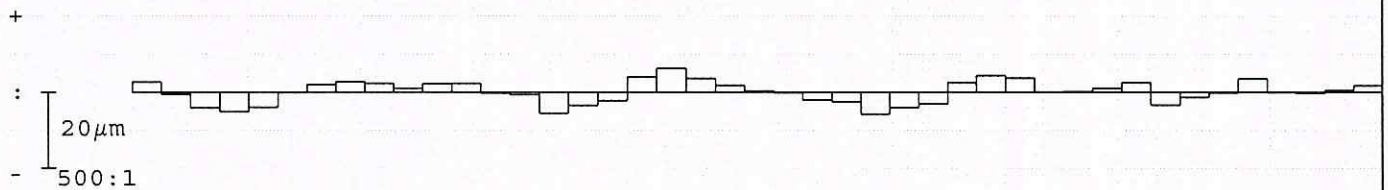
Errori singoli di divisione fp fianco sinistro



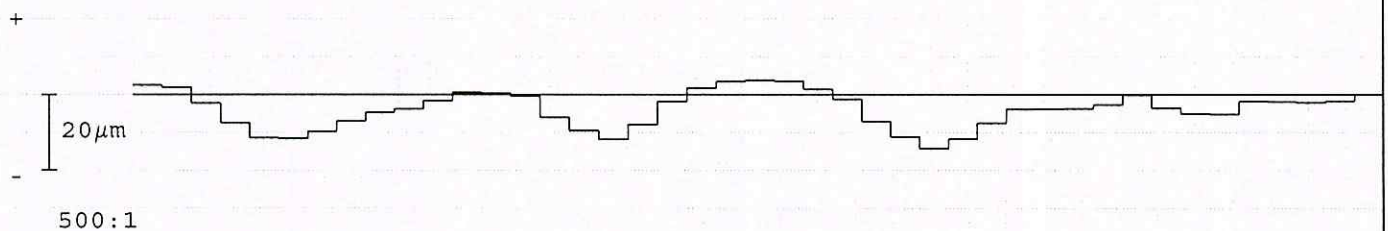
Errore somma di divisione Fp fianco sinistro



Errori singoli di divisione fp fianco destro



Errore somma di divisione Fp fianco destro

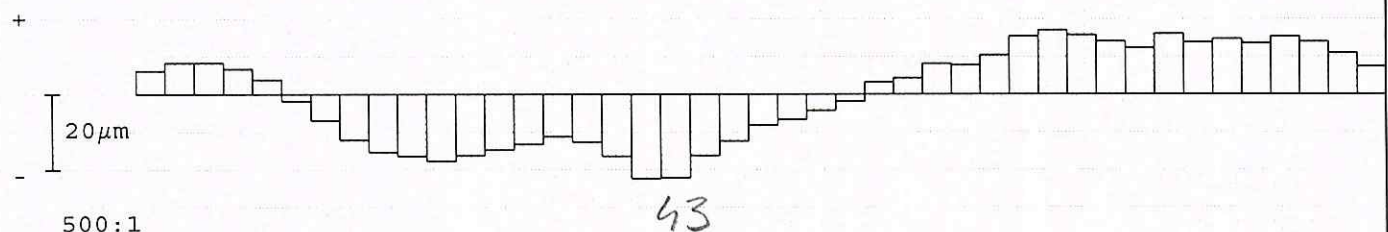


Corso per misura divis.: 42.9 z=6.3mm

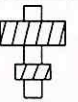
	fianco sinistro				fianco destro			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	6		17		6		17	
Gr. salto di passo fu max	6				6			
Scarto di divisione Rp	12				12			
Err. globale di divisione Fp-e	18		40		18		40	
Err. cordale di divisione Fpz/8	18				18			

Centricità Fr (Ø-sfera =2mm)

⊙ : 34μm

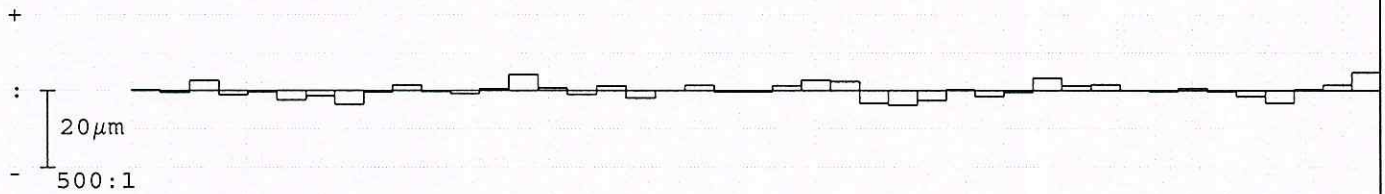


Err. di concentricità Fr	39	50	
Variaz. spessore dente Rs			

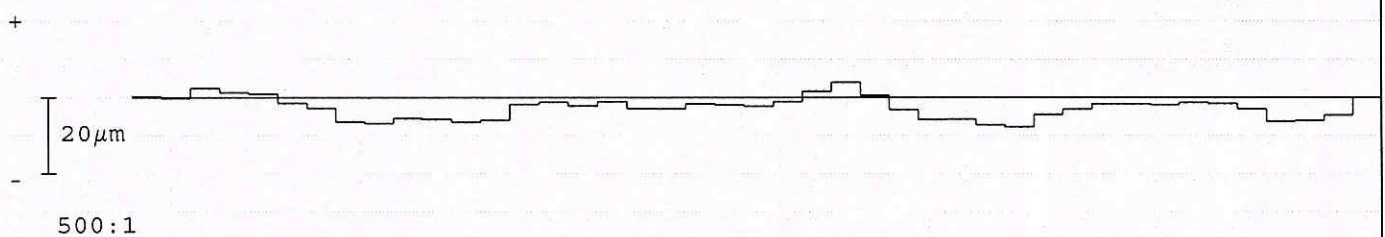


Nr. prog.: STI041005 0	P26 B7590	Controllore: TURNO A	Data: 23.05.2014 09:33
Denominazione: Output Shaft 1		Numero denti z 43	Angolo pressione 30°00'00"
Numero disegno.: 250.6.3974.RIIa H		Modulo m 1mm	Angolo elica 00°00'00"
Commessa/serie nr.: 5		Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	Spindel: Formelstzdg:	Charge:	

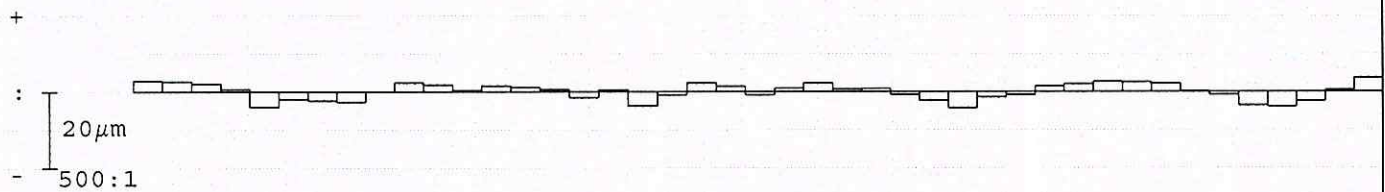
Errori singoli di divisione fp fianco sinistro



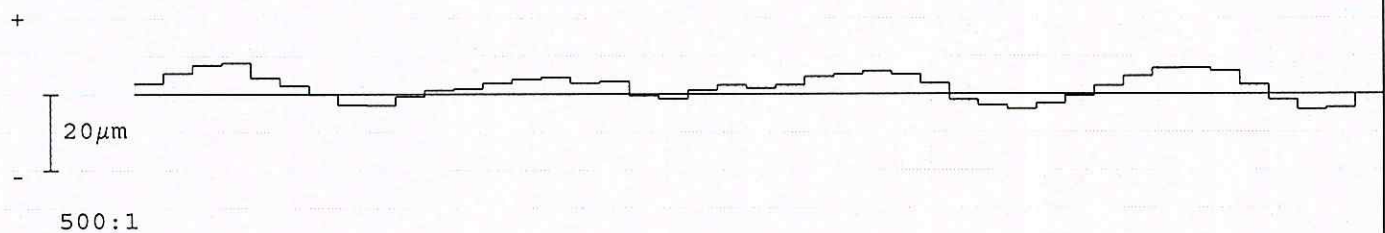
Errore somma di divisione Fp fianco sinistro



Errori singoli di divisione fp fianco destro



Errore somma di divisione Fp fianco destro

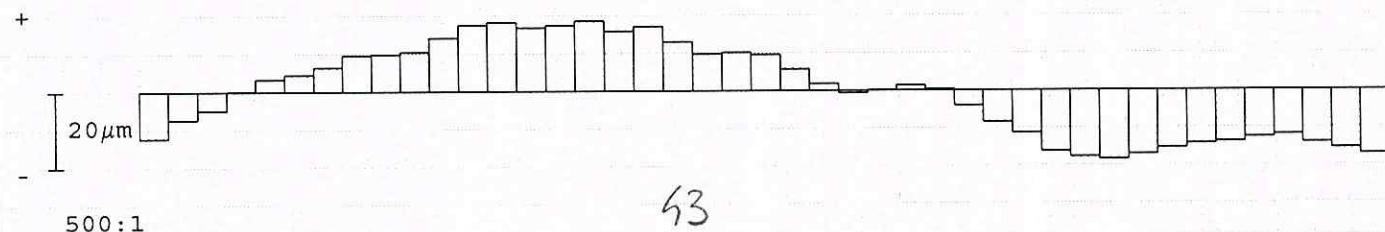


Corso per misura divis.: 42.9 z=6.3mm

	fianco sinistro				fianco destro			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	5		17		4		17	
Gr. salto di passo fu max	6				5			
Scarto di divisione Rp	9				8			
Err. globale di divisione Fp-e	12		40		12		40	
Err. cordale di divisione Fpz/8	11				12			

Centricità Fr (Ø-sfera = 2mm)

⊙ : 34μm

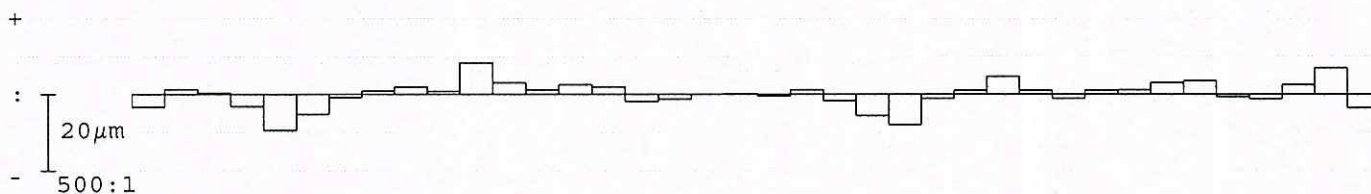


Err. di concentricità Fr	37	50	
Variaz. spessore dente Rs			

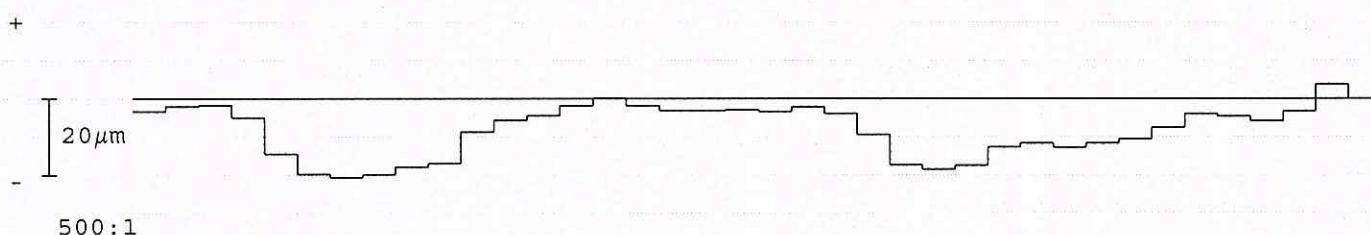


Nr. prog.:	STI041005 0	P26 B7590	Controllore:	TURNO A	Data:	23.05.2014 09:36
Denominazione:	Output Shaft 1		Numero denti z	38	Angolo pressione	30°00'00"
Numero disegno.:	250.6.3974.RIIIIa H		Modulo m	1mm	Angolo elica	00°00'00"
Commessa/serie nr.:	1		Untersuchungszweck:	Laufende Messung		
Masch.Nr.:	M001	Spindel:	Formelwerkzeug:	Charge:		

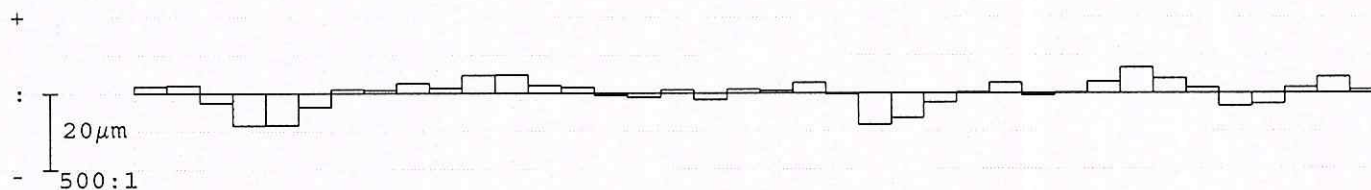
Errori singoli di divisione fp fianco sinistro



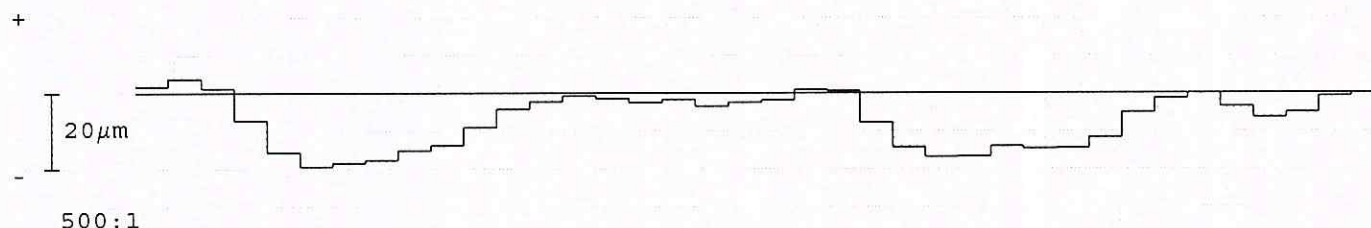
Errore somma di divisione Fp fianco sinistro



Errori singoli di divisione fp fianco destro



Errore somma di divisione Fp fianco destro



Corso per misura divis.: 38.9 z=5.5mm

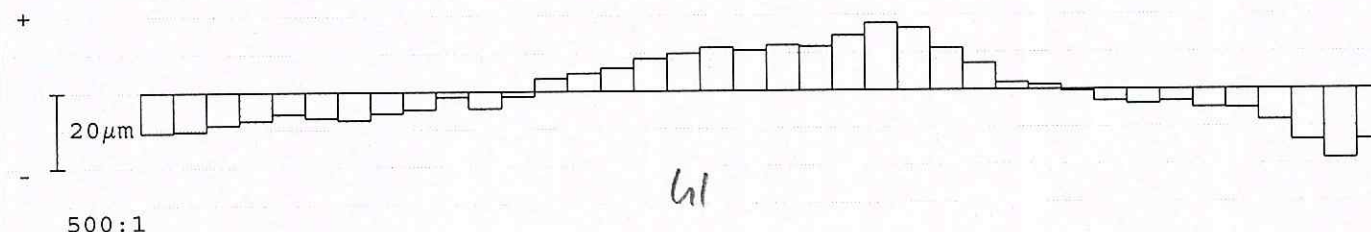
fianco sinistro

fianco destro

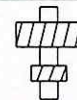
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	9		17		8		17	
Gr. salto di passo fu max	10				8			
Scarto di divisione Rp	17				15			
Err. globale di divisione Fp-e	24		40		23		40	
Err. cordale di divisione Fpz/8	19				22			

Centricità Fr (Ø-sfera =2mm)

⊙ : 25µm

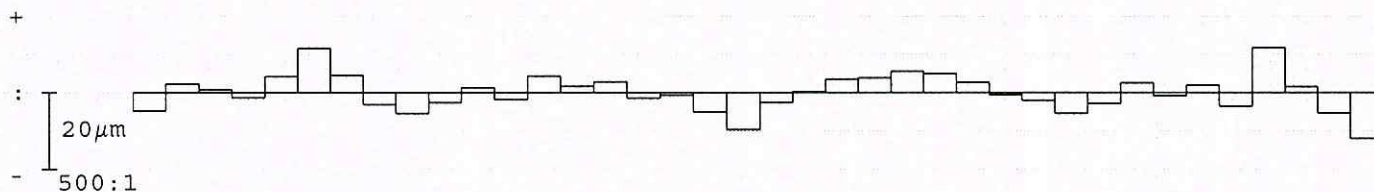


Err. di concentricità Fr	36	50	
Variaz. spessore dente Rs			

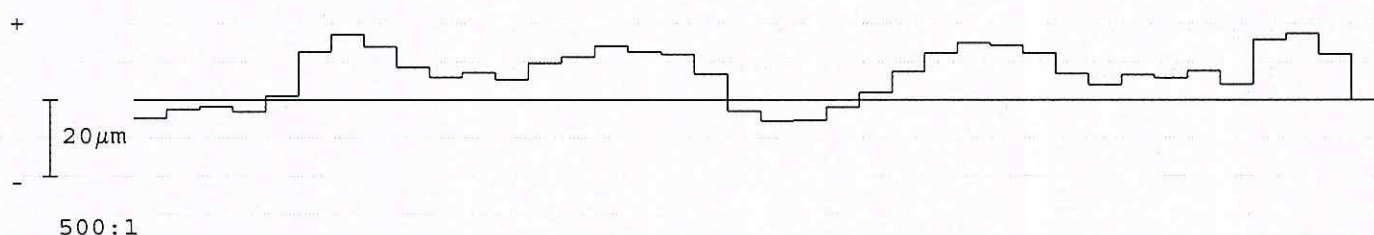


Nr. prog.: STI0410005 0	P26 B7590	Controllore: TURNO A	Data: 23.05.2014 09:39
Denominazione: Output Shaft 1		Numero denti z 38	Angolo pressione 30°00'00"
Numero disegno.: 250.6.3974.RIIIIa H		Modulo m 1mm	Angolo elica 00°00'00"
Commessa/serie nr.: 2		Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	Spindel: Formelwerkzeug	Charge:	

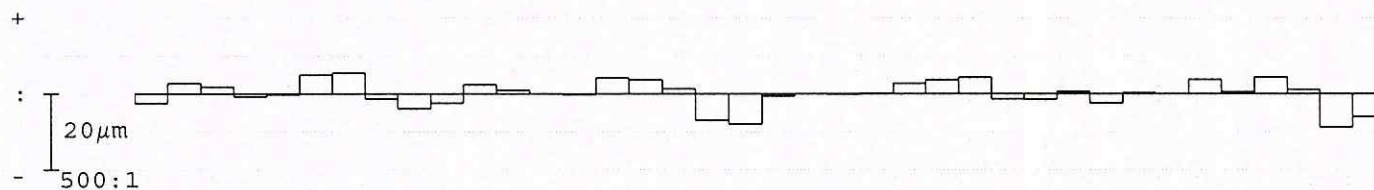
Errori singoli di divisione fp fianco sinistro



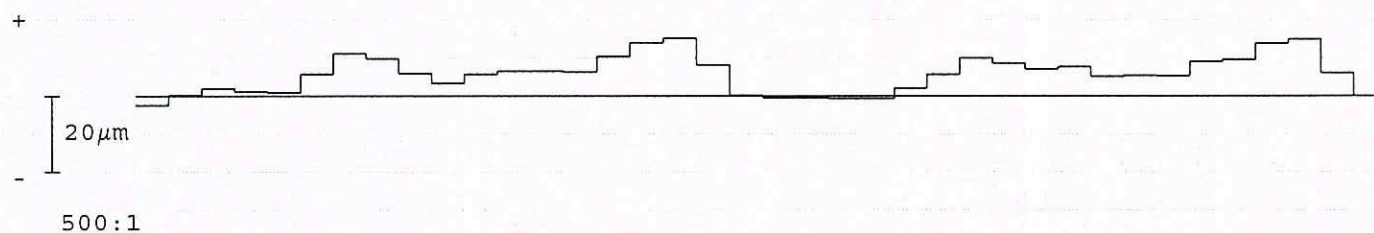
Errore somma di divisione Fp fianco sinistro



Errori singoli di divisione fp fianco destro



Errore somma di divisione Fp fianco destro



Corso per misura divis.: 38.9 z=5.5mm

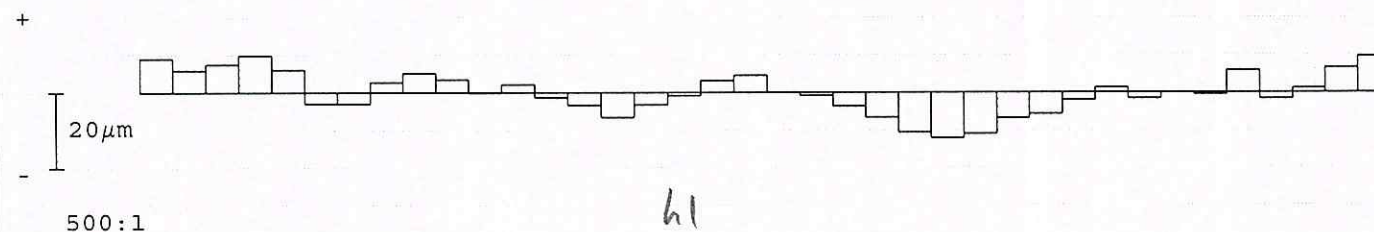
fianco sinistro

fianco destro

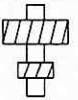
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	12		17		9		17	
Gr. salto di passo fu max	15				10			
Scarto di divisione Rp	24				14			
Err. globale di divisione Fp-e	23		40		18		40	
Err. cordale di divisione Fpz/8	20				16			

Centricità Fr (Ø-sfera =2mm)

⊙ : 11µm

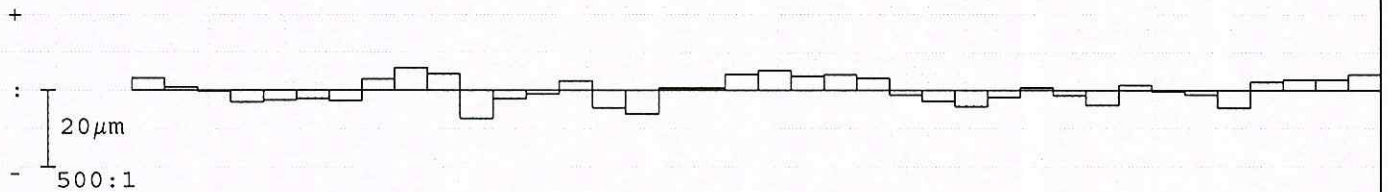


Err. di concentricità Fr	22	50	
Variaz. spessore dente Rs			

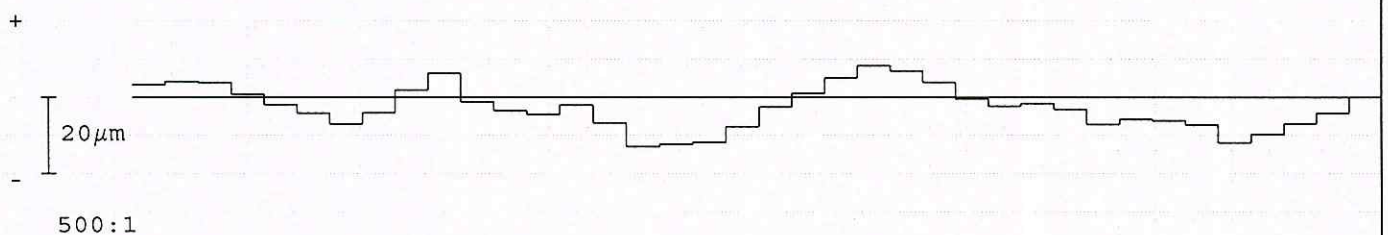


Nr. prog.: STI0410005 0	P26 B7590	Controllore: TURNO A	Data: 23.05.2014 09:42
Denominazione: Output Shaft 1		Numero denti z 38	Angolo pressione 30°00'00"
Numero disegno.: 250.6.3974.RIIIIa H		Modulo m 1mm	Angolo elica 00°00'00"
Commessa/serie nr.: 3		Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	Spindel: Formwerkzeug	Charge:	

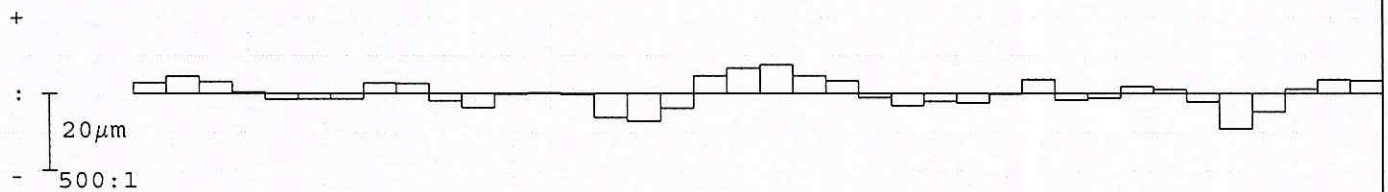
Errori singoli di divisione fp fianco sinistro



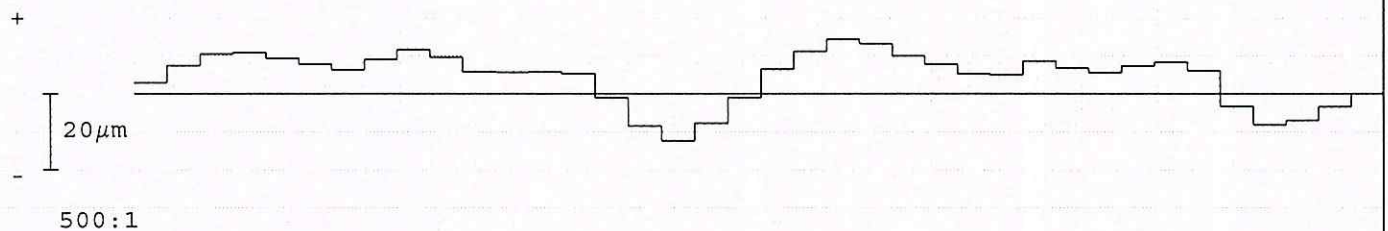
Errore somma di divisione Fp fianco sinistro



Errori singoli di divisione fp fianco destro



Errore somma di divisione Fp fianco destro



Corsa per misura divis.: 38.9 z=5.5mm

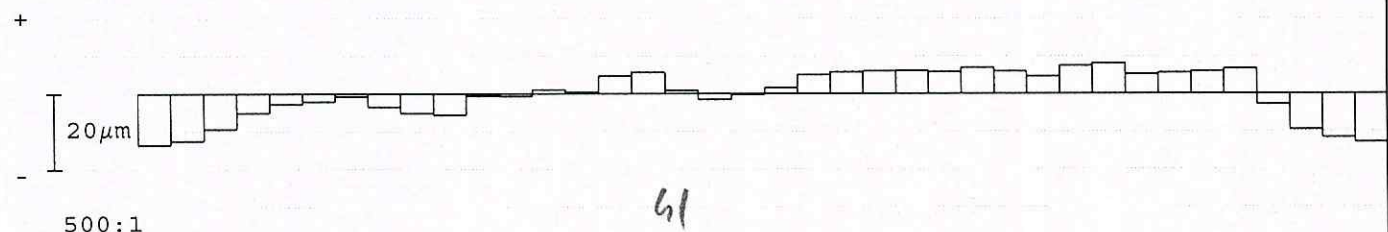
fianco sinistro

fianco destro

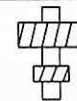
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	7		17		9		17	
Gr. salto di passo fu max	12				9			
Scarto di divisione Rp	13				17			
Err. globale di divisione Fp-e	21		40		27		40	
Err. cordale di divisione Fpz/8	20				27			

Centricità Fr (Ø-sfera =2mm)

⊙ : 14μm

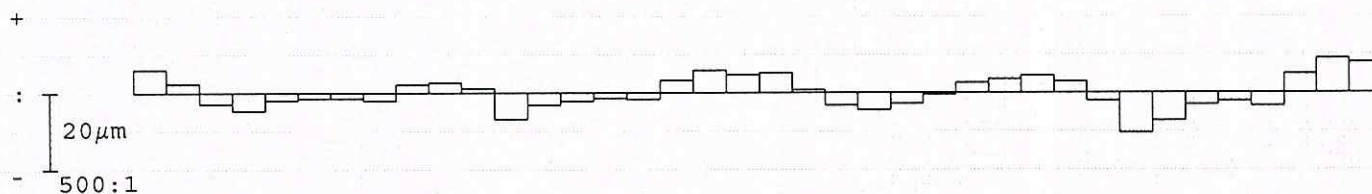


Err. di concentricità Fr	22	50	
Variaz. spessore dente Rs			

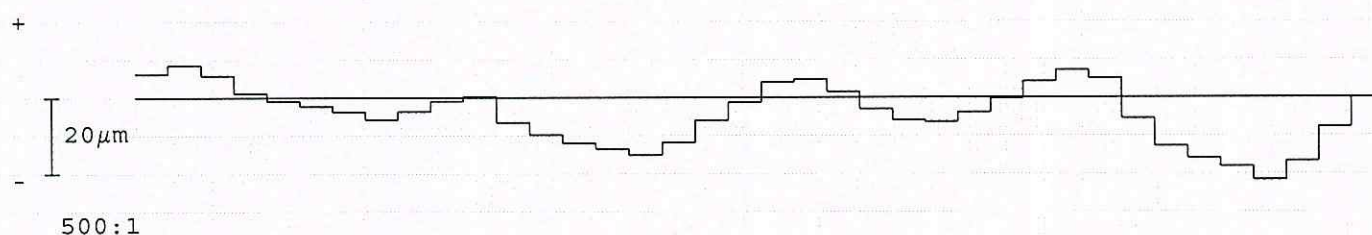


Nr. prog.: STI0410005 0	P26 B7590	Controllore: TURNO A	Data: 23.05.2014 09:44
Denominazione: Output Shaft 1		Numero denti z 38	Angolo pressione 30°00'00"
Numero disegno.: 250.6.3974.RIIIA H		Modulo m 1mm	Angolo elica 00°00'00"
Commissa/serie nr.: 4		Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	Spindel: Formtest	Charge:	

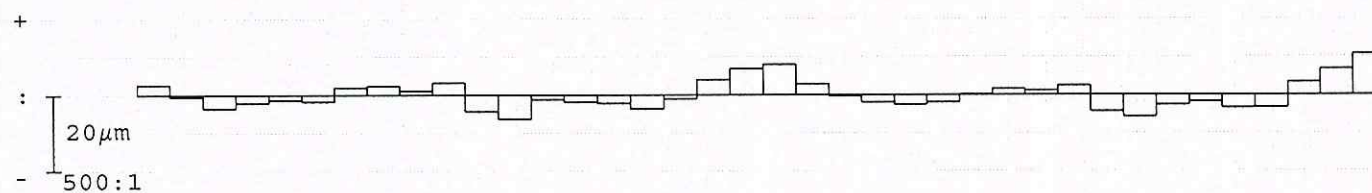
Errori singoli di divisione fp fianco sinistro



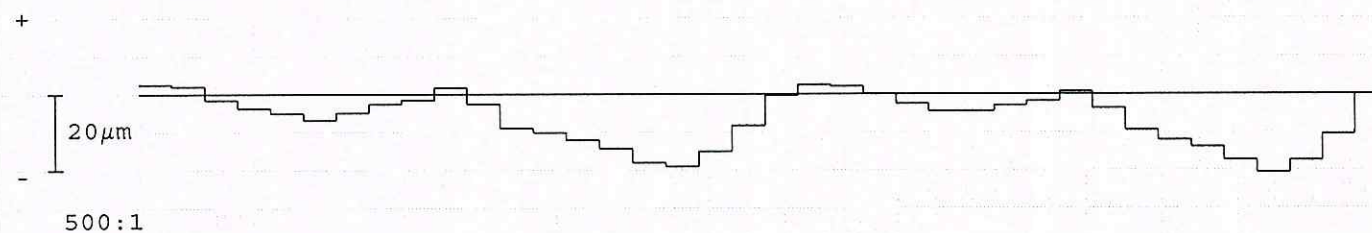
Errore somma di divisione Fp fianco sinistro



Errori singoli di divisione fp fianco destro



Errore somma di divisione Fp fianco destro



Corsa per misura divis.: 38.9 z=5.5mm

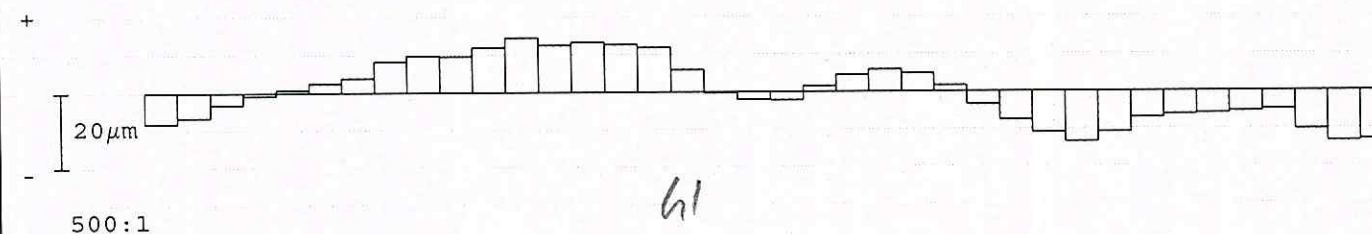
fianco sinistro

fianco destro

	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	10		17		11		17	
Gr. salto di passo fu max	8				8			
Scarto di divisione Rp	19				17			
Err. globale di divisione Fp-e	30		40		23		40	
Err. cordale di divisione Fpz/8	30				23			

Centricità Fr (Ø-sfera =2mm)

⊙ : 21μm

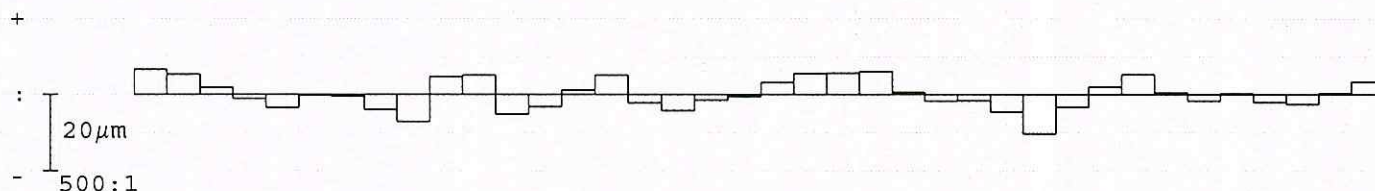


Err. di concentricità Fr	28	50	
Variaz. spessore dente Rs			

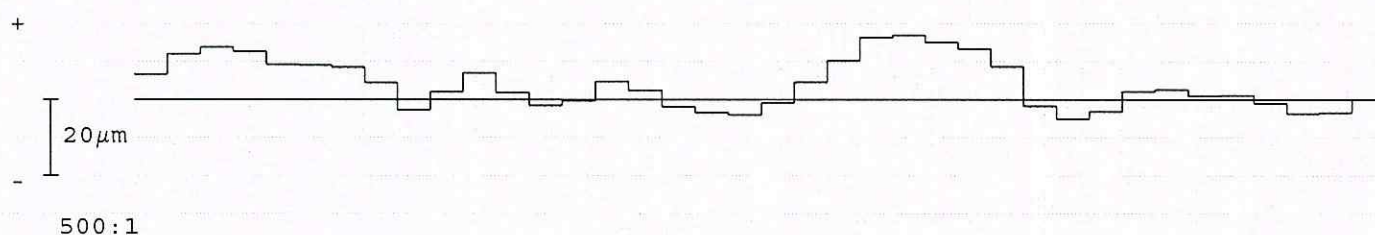


Nr. prog.: STI0410005 0	P26 B7590	Controllore: TURNO A	Data: 23.05.2014 09:47
Denominazione: Output Shaft 1		Numero denti z 38	Angolo pressione 30°00'00"
Numero disegno.: 250.6.3974.RIIIA H		Modulo m 1mm	Angolo elica 00°00'00"
Commessa/serie nr.: 5		Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	Spindel: Formel	est. redg:	Charge:

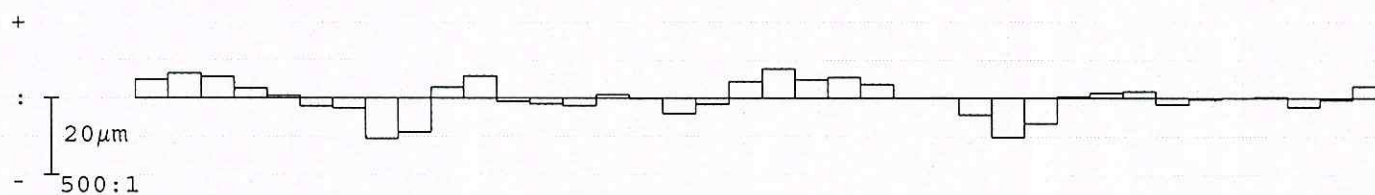
Errori singoli di divisione fp fianco sinistro



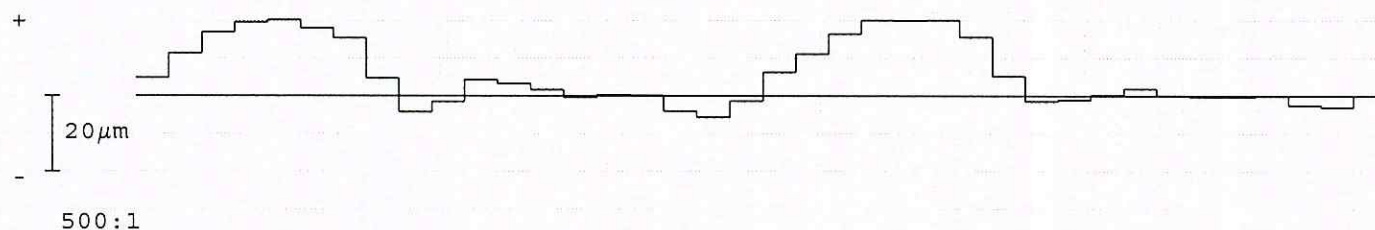
Errore somma di divisione Fp fianco sinistro



Errori singoli di divisione fp fianco destro



Errore somma di divisione Fp fianco destro



Corso per misura divis.: 38.9 z=5.5mm

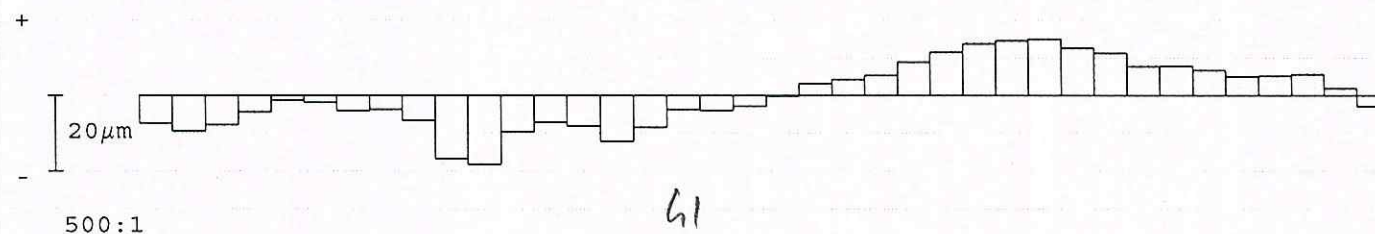
fianco sinistro

fianco destro

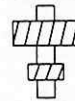
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	10		17		11		17	
Gr. salto di passo fu max	12				12			
Scarto di divisione Rp	17				19			
Err. globale di divisione Fp-e	22		40		26		40	
Err. cordale di divisione Fpz/8	22				26			

Centricità Fr (Ø-sfera =2mm)

⊙ : 22µm



Err. di concentricità Fr	33	50	
Variaz. spessore dente Rs			

GETRAG B7590**Ruota cilindrica Evolvente/Elica**

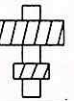
Nr. prog.:	STI0410005 0	P26 B7590	Controllore:	TURNO C	Data:	23.05.2014 15:39
Denominazione:	Output Shaft 1		Numero denti z	43	Largh.fasc.dent. b	12.66mm
Numero disegno:	250.6.3974.RIIa H		Modulo m	1mm	Tratto evol. La	1.73mm
Comessa/serie nr.:	pezzo 1		Angolo pressione	30°00'00"	Tratto elica LS	10.13mm
Masch.Nr.:	M001	Spindel: Forme	Angolo elica	00°00'00"	Inizio elab. M1	9.65mm
Untersuchungszweck:	Laufende Messung		Ø Base db	37.2391mm	Palpatore Ø	(#2C) 1mm
Werkzeug:		Charge:	Ang. Base	00°00'00"	Fat.scor.pr. x	- .05

Piede-Ø: 41.338mm

[41.21/41.8]

19

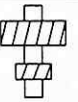
VDI

GETRAG B7590**Ruota cilindrica Evolvente/Elica**

Nr. prog.:	STI0410005 0	P26 B7590	Controllore:	TURNO C	Data:	23.05.2014 15:52
Denominazione:	Output Shaft 1		Numero denti z	43	Largh.fasc.dent. b	12.66mm
Numero disegno.:	250.6.3974.RIIa H		Modulo m	1mm	Tratto evolv. La	1.73mm
Commessa/serie nr.:	pezzo 2		Angolo pressione	30°00'00"	Tratto elica L&	10.13mm
Masch.Nr.:	M001	Spindel: Formel	Angolo elica	00°00'00"	Inizio elab. M1	9.65mm
Untersuchungszweck:	Laufende Messung		Ø Base db	37.2391mm	Palpatore Ø	(#2C) 1mm
Werkzeug:		Charge:	Ang. Base	00°00'00"	Fat.scor.pr. x	- .05

Piede-Ø: 41.331mm [41.21/41.8] 19

VDI

GETRAG B7590**Ruota cilindrica Evolvente/Elica**

Nr. prog.:	STI0410o05 0	P26 B7590	Controllore:	TURNO c	Data:	23.05.2014 15:53
Denominazione:	Output Shaft 1		Numero denti z	43	Largh.fasc.dent. b	12.66mm
Numero disegno.:	250.6.3974.RIIa H		Modulo m	1mm	Tratto evolv. La	1.73mm
Commessa/serie nr.:	pezzo 3		Angolo pressione	30°00'00"	Tratto elica LS	10.13mm
Masch.Nr.:	M001	Spindel: Formel	Angolo elica	00°00'00"	Inizio elab. M1	9.65mm
Untersuchungszweck:	Laufende Messung		Ø Base db	37.2391mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:		Ang. Base	00°00'00"	Fat.scor.pr. x	- .05

Piede-Ø: 41.331mm

[41.21/41.8]

19

VDI

GETRAG B7590**Ruota cilindrica Evolvente/Elica**

Nr. prog.:	STI0410005 0	P26 B7590	Controllore:	TURNO C	Data:	23.05.2014 15:55
Denominazione:	Output Shaft 1		Numero denti z	43	Largh.fasc.dent. b	12.66mm
Numero disegno.:	250.6.3974.RIIa H		Modulo m	1mm	Tratto evol. La	1.73mm
Commessa/serie nr.:	pezzo 4		Angolo pressione	30°00'00"	Tratto elica L8	10.13mm
Masch.Nr.:	M001	Spindel: Forme	Angolo elica	00°00'00"	Inizio elab. M1	9.65mm
Untersuchungszweck:	Laufende Messung		Ø Base db	37.2391mm	Palpatore Ø	(#2C) 1mm
Werkzeug:		Charge:	Ang. Base	00°00'00"	Fat.scor.pr. x	- .05

Piede-Ø: 41.334mm [41.21/41.8] 19

VDI

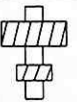
GETRAG B7590**Ruota cilindrica Evolvente/Elica**

Nr. prog.:	STI0410005 0	P26 B7590	Controllore:	TURNO C	Data:	23.05.2014 15:56
Denominazione:	Output Shaft 1		Numero denti z	43	Largh.fasc.dent. b	12.66mm
Numero disegno.:	250.6.3974.RIIa H		Modulo m	1mm	Tratto evolv. La	1.73mm
Commessa/serie nr.:	pezzo 5		Angolo pressione	30°00'00"	Tratto elica LS	10.13mm
Masch.Nr.:	M001	Spindel: Formn	Angolo elica	00°00'00"	Inizio elab. M1	9.65mm
Untersuchungszweck:	Laufende Messung		Ø Base db	37.2391mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:		Ang. Base	00°00'00"	Fat.scor.pr. x	- .05

Piede-Ø: 41.34mm [41.21/41.8]

19

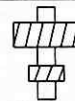
VDI

GETRAG B7590**Ruota cilindrica Evolvente/Elica**

Nr. prog.:	STI041005 0	P26 B7590	Controllore:	TURNO C	Data:	23.05.2014 15:42
Denominazione:	Output Shaft 1		Numero denti z	38	Largh.fasc.dent. b	10.99mm
Numero disegno.:	250.6.3974.RIIa H		Modulo m	1mm	Tratto evol. La	1.61mm
Commissa/serie nr.:	pezzo 1		Angolo pressione	30°00'00"	Tratto elica L8	8.79mm
Masch.Nr.:	M001	Spindel: Forment	Angolo elica	00°00'00"	Inizio elab. M1	9.44mm
Untersuchungszweck:	Laufende Messung		Ø Base db	32.909mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:		Ang. Base	00°00'00"	Fat.scor.pr. x	.45

Piede-Ø: 37.312mm [37.21/37.8] 16

VDI

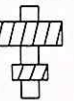
GETRAG B7590**Ruota cilindrica Evolvente/Elica**

Nr. prog.:	STI041005 0	P26 B7590	Controllore:	TURNO C	Data:	23.05.2014 15:44
Denominazione:	Output Shaft 1		Numero denti z	38	Largh.fasc.dent. b	10.99mm
Numero disegno.:	250.6.3974.RIIa H		Modulo m	1mm	Tratto evol. La	1.61mm
Commessa/serie nr.:	pezzo 2		Angolo pressione	30°00'00"	Tratto elica LS	8.79mm
Masch.Nr.:	M001	Spindel: Forme	Angolo elica	00°00'00"	Inizio elab. M1	9.44mm
Untersuchungszweck:	Laufende Messung		Ø Base db	32.909mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:		Ang. Base	00°00'00"	Fat.scor.pr. x	.45

Piede-Ø: 37.313mm

[37.21/37.8] 16

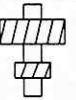
VDI

GETRAG B7590**Ruota cilindrica Evolvente/Elica**

Nr. prog.:	STI0410o05 0	P26 B7590	Controllore:	TURNO C	Data:	23.05.2014 15:46
Denominazione:	Output Shaft 1		Numero denti z	38	Largh.fasc.dent. b	10.99mm
Numero disegno.:	250.6.3974.RIIa H		Modulo m	1mm	Tratto evol. La	1.61mm
Commessa/serie nr.:	pezzo 3		Angolo pressione	30°00'00"	Tratto elica LS	8.79mm
Masch.Nr.:	M001	Spindel: Forme	Angolo elica	00°00'00"	Inizio elab. M1	9.44mm
Untersuchungszweck:	Laufende Messung		Ø Base db	32.909mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:		Ang. Base	00°00'00"	Fat.scor.pr. x	.45

Piede-Ø: 37.312mm [37.21/37.8] 16

VDI

GETRAG B7590**Ruota cilindrica Evolvente/Elica**

Nr. prog.:	STI0410005 0	P26 B7590	Controllore:	TURNO C	Data:	23.05.2014 15:48
Denominazione:	Output Shaft 1		Numero denti z	38	Largh.fasc.dent. b	10.99mm
Numero disegno.:	250.6.3974.RIIa H		Modulo m	1mm	Tratto evolv. La	1.61mm
Commessa/serie nr.:	pezzo 4		Angolo pressione	30°00'00"	Tratto elica LS	8.79mm
Masch.Nr.:	M001	Spindel: Forme	Angolo elica	00°00'00"	Inizio elab. M1	9.44mm
Untersuchungszweck:	Laufende Messung		Ø Base db	32.909mm	Palpatore Ø	(#2C) 1mm
Werkzeug:		Charge:	Ang. Base	00°00'00"	Fat.scor.pr. x	.45

Piede-Ø: 37.309mm [37.21/37.8] 16

VDI

GETRAG B7590**Ruota cilindrica Evolvente/Elica**

Nr. prog.:	STI0410005 0	P26 B7590	Controllore:	TURNO C	Data:	23.05.2014 15:50
Denominazione:	Output Shaft 1		Numero denti z	38	Largh.fasc.dent. b	10.99mm
Numero disegno.:	250.6.3974.RIIIIa H		Modulo m	1mm	Tratto evol. La	1.61mm
Commessa/serie nr.:	pezzo 5		Angolo pressione	30°00'00"	Tratto elica LS	8.79mm
Masch.Nr.:	M001	Spindel: Forme	Angolo elica	00°00'00"	Inizio elab. M1	9.44mm
Untersuchungszweck:	Laufende Messung		Ø Base db	32.909mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:		Ang. Base	00°00'00"	Fat.scor.pr. x	.45

Piede-Ø: 37.309mm

[37.21/37.8] 14

VDI