



DIMENSIONAL TEST RESULTS

Organization:	GETRAG	Part Number:	2506517635
Supplier/Vendor Code:	GETRAG Modugno	Part Name:	INPUT 2
INSPECTION FACILITY:	NA	Design Record Change Level:	3 Index (e) 01 August 2014
		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	Rif. index "d" :												
	Ra	0,19	0,61		5	0,35	0,33	0,32	0,35	0,28		ok	
	Rp	0,63	2,20		5	1,14	1,24	1,24	1,32	1,08		ok	
	Rpc > 150	150	-		5	397	430	457	467	445		ok	
	RSk > -1,75	-1,75	-		5	-0,23	0,02	-0,33	-0,29	-0,48		ok	
	Lead 0 to 0,05°	0,00	0,05°		5	ok	ok	ok	ok	ok		ok	
2	Fourier Analysis of Ø 49mm	-	-		5	ok	ok	ok	ok	ok		ok	

SIGNATURE	TITLE	DATE
G. Cicirelli	QPE	13/11/2014



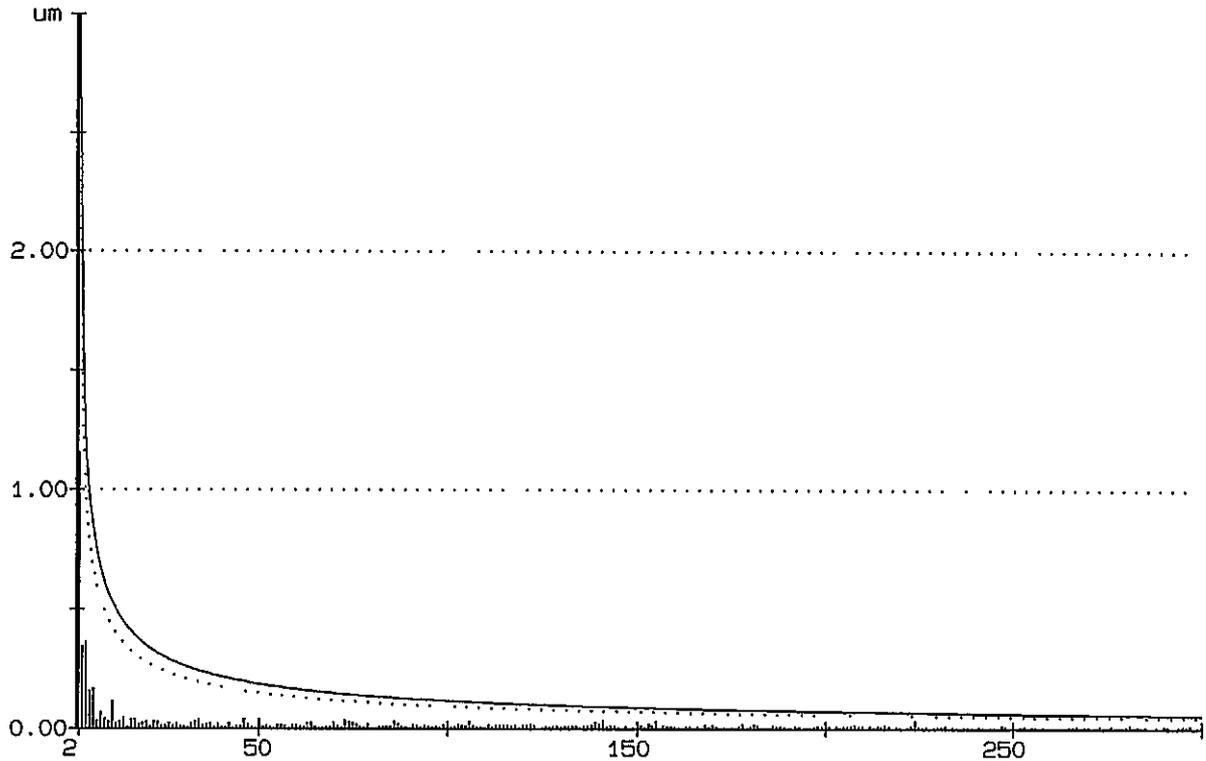
Klingelberg - P26 B7590

*** GETRAG

N. disegno: 2506517635	Cliente/macch. N. : P26_B7590
Collaudatore: Turno c	Denominazione: Input Shaft 2
N. di commessa / di serie Pz. N. 1	Stato di elaborazione:Fourier_Ø49mm
ID macchina: Getrag Bari	Nome file: 5176_Four_49.wel
Caratteristica:	Data: 13.11.2014, 14:14

Commento: FFT_D49

FFT_D49/506



Limite sbarram.

1.Armonica:0.00 um

R:3.00 um

2.Armonica:1.15 um

N0:0.70

Limite sbarram.:3.00 um

K:0.60

Limite allarme :2.40 um

Limite allarme :0.80

Tabella delle armoniche

Limite rappresentazione: 0.000 (Unità: um)

N	N+1	N+2	N+3	N+4	N+5	N+6	N+7	N+8	N+9	N+10
0	0.00	1.15	0.35	0.36	0.16	0.17	0.03	0.07	0.04	0.03
10	0.12	0.02	0.03	0.05	0.01	0.04	0.04	0.02	0.03	0.03
20	0.01	0.03	0.03	0.01	0.01	0.02	0.02	0.02	0.01	0.01
30	0.01	0.02	0.03	0.04	0.02	0.02	0.02	0.01	0.02	0.01
40	0.01	0.03	0.00	0.01	0.01	0.04	0.02	0.01	0.01	0.04
50	0.01	0.01	0.01	0.00	0.02	0.02	0.01	0.01	0.02	0.02
60	0.01	0.01	0.02	0.03	0.01	0.01	0.01	0.01	0.01	0.03
70	0.01	0.01	0.04	0.03	0.02	0.02	0.01	0.01	0.02	0.00
80	0.00	0.01	0.01	0.01	0.01	0.03	0.02	0.01	0.01	0.00
90	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01
100	0.01	0.01	0.02	0.01	0.01	0.03	0.01	0.01	0.01	0.01
110	0.02	0.01	0.02	0.01	0.02	0.01	0.01	0.02	0.00	0.01
120	0.01	0.02	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01
130	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.02
140	0.04	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.02
150	0.01	0.01	0.02	0.02	0.03	0.00	0.01	0.01	0.01	0.01
160	0.01	0.00	0.01	0.01	0.01	0.01	0.00	0.02	0.01	0.02
170	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.01
180	0.02	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00



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Klingelberg - P26 B7590

GETRAG

N. disegno: 2506517635	Cliente/macch. N. : P26_B7590
Collaudatore: Turno c	Denominazione: Input Shaft 2
N. di commessa / di serie :Pz. N. 1	Stato di elaborazione:Fourier_Ø49mm
ID macchina: Getrag Bari	Nome file: 5176_Four_49.wel
Caratteristica:	Data: 13.11.2014, 14:14

Commento: FFT_D49

FFT_D49/506

Tabella delle armoniche

Limite rappresentazione: 0.000 (Unità: µm)

N	N+1	N+2	N+3	N+4	N+5	N+6	N+7	N+8	N+9	N+10
190	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01
200	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.02	0.01	0.01
210	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.00	0.01	0.00
220	0.00	0.01	0.01	0.04	0.01	0.00	0.01	0.00	0.00	0.01
230	0.01	0.01	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.00
240	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00
250	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00
260	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
270	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.01
280	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.01
290	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.01	0.01



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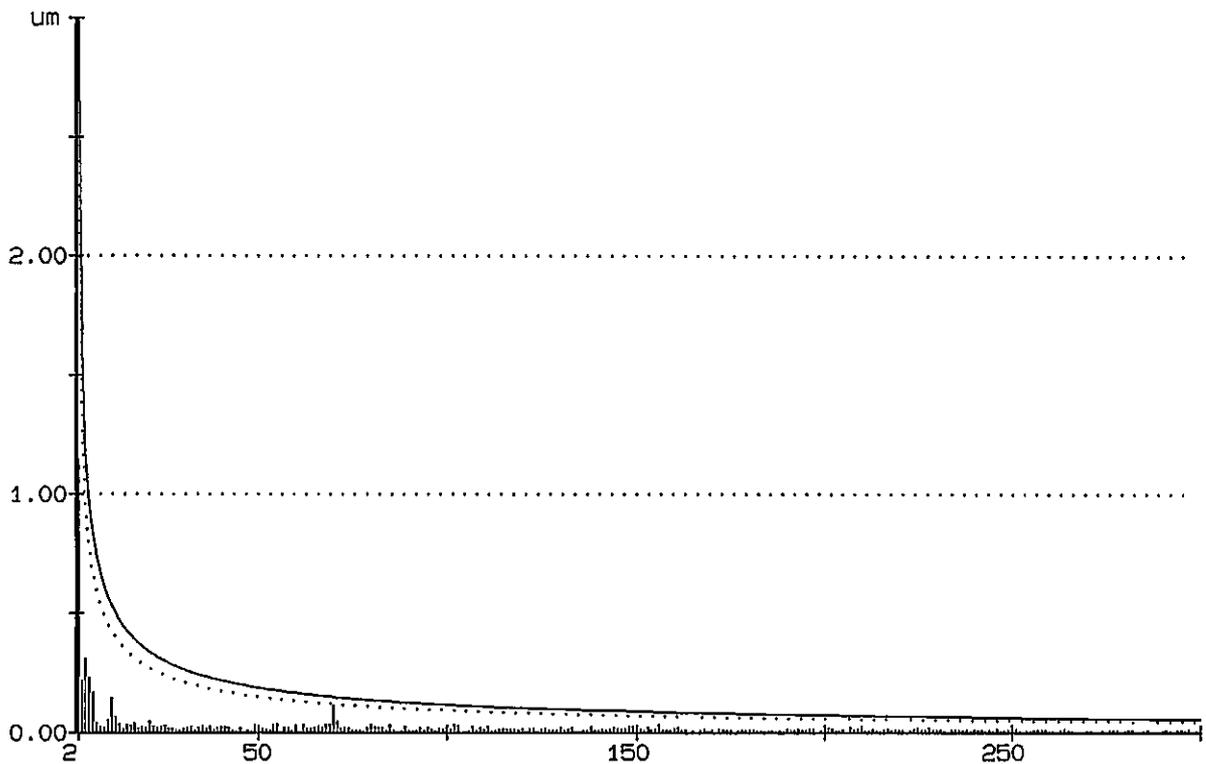
Klingelberg - P26 B7590

*** GETRAG

N. disegno	2506517635	Cliente/macch. N. :	P26_B7590
Collaudatore	Turno c	Denominazione	Input Shaft 2
N. di commessa / di serie	Pz. N. 2	Stato di elaborazione:	Fourier_Ø49mm
ID macchina	Getrag Bari	Nome file	5176_Four_49.wel
Caratteristica		Data	13.11.2014, 14:22

Commento: FFT_D49

FFT_D49/506



Limite sbarram.

1.Armonica:0.00 um

R:3.00 um

2.Armonica:1.14 um

NO:0.70

Limite sbarram.:3.00 um

K:0.60

Limite allarme :2.40 um

Limite allarme :0.80

Tabella delle armoniche

Limite rappresentazione: 0.000 (Unità: um)

N	N+1	N+2	N+3	N+4	N+5	N+6	N+7	N+8	N+9	N+10
0	0.00	1.14	0.22	0.31	0.23	0.17	0.04	0.03	0.02	0.05
10	0.15	0.07	0.04	0.02	0.04	0.03	0.04	0.02	0.02	0.02
20	0.05	0.03	0.02	0.03	0.03	0.02	0.02	0.01	0.01	0.02
30	0.02	0.03	0.01	0.02	0.03	0.02	0.03	0.01	0.02	0.03
40	0.02	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.03	0.01
50	0.02	0.02	0.01	0.03	0.04	0.00	0.02	0.02	0.01	0.03
60	0.01	0.03	0.02	0.02	0.02	0.03	0.02	0.03	0.03	0.11
70	0.05	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.02	0.03
80	0.02	0.02	0.02	0.01	0.03	0.01	0.01	0.01	0.02	0.01
90	0.01	0.01	0.02	0.01	0.02	0.01	0.01	0.02	0.01	0.02
100	0.02	0.04	0.03	0.00	0.00	0.01	0.03	0.01	0.02	0.02
110	0.03	0.01	0.01	0.01	0.02	0.02	0.02	0.01	0.01	0.02
120	0.00	0.02	0.02	0.00	0.02	0.02	0.01	0.01	0.01	0.02
130	0.01	0.02	0.02	0.00	0.01	0.01	0.01	0.03	0.01	0.01
140	0.01	0.01	0.01	0.02	0.02	0.01	0.02	0.02	0.03	0.00
150	0.01	0.01	0.02	0.01	0.01	0.03	0.01	0.01	0.01	0.02
160	0.02	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.01
170	0.00	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01
180	0.01	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.02



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Klingelberg - P26 B7590

*** GETRAG

N. disegno: 2506517635	Cliente/macch. N. : P26_B7590
Collaudatore: Turno c	Denominazione: Input Shaft 2
N. di commessa / di serie :Pz. N. 2	Stato di elaborazione:Fourier_049mm
ID macchina: Getrag Bari	Nome file: 5176_Four_49.wel
Caratteristica:	Data: 13.11.2014, 14:22

Commento: FFT_D49

FFT_D49/506

Tabella delle armoniche

Limite rappresentazione: 0.000 (Unità: um)

N	N+1	N+2	N+3	N+4	N+5	N+6	N+7	N+8	N+9	N+10
190	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.00	0.01	0.02
200	0.02	0.02	0.01	0.01	0.01	0.00	0.02	0.01	0.02	0.02
210	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01
220	0.01	0.00	0.01	0.02	0.02	0.01	0.01	0.02	0.01	0.01
230	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.01
240	0.01	0.01	0.00	0.01	0.00	0.02	0.00	0.01	0.01	0.00
250	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.01
260	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.01
270	0.01	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.01
280	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.01
290	0.01	0.01	0.00	0.01	0.01	0.01	0.02	0.01	0.01	0.01



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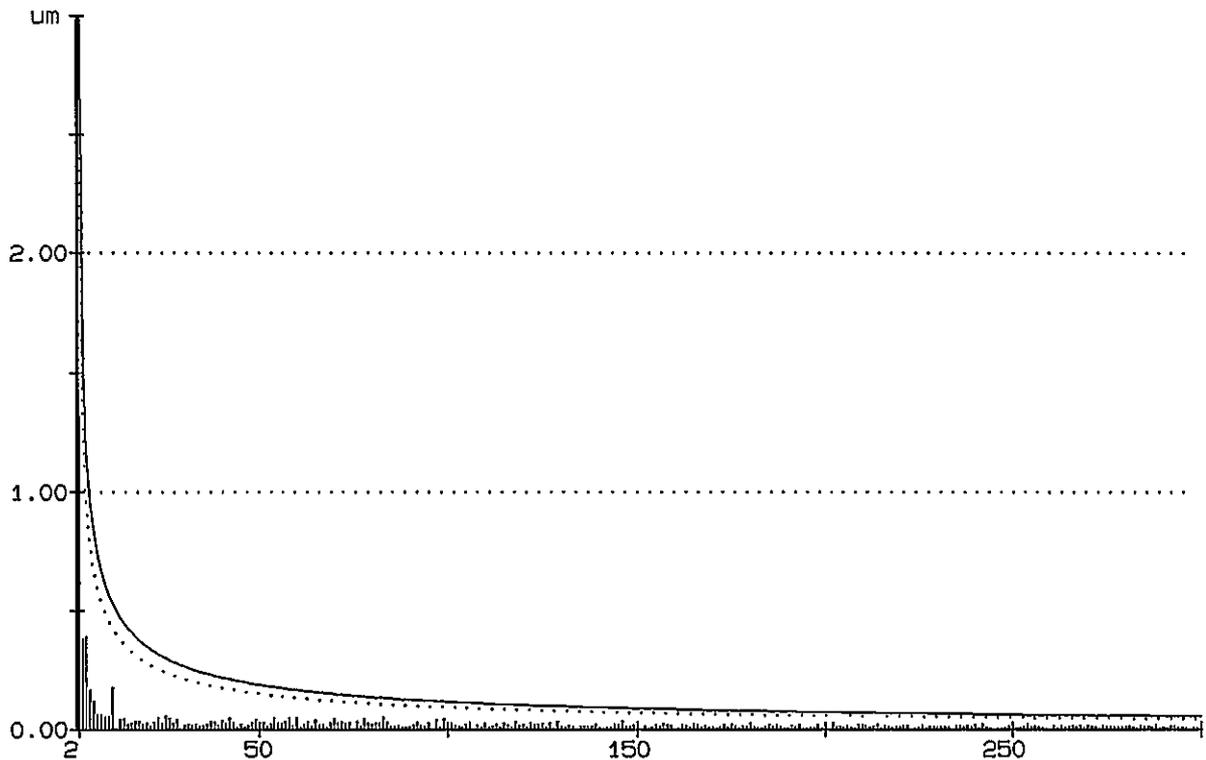
Klingelberg - P26 B7590

*** GETRAG

N. disegno	2506517635	Cliente/macch. N. :	P26_B7590
Collaudatore	Turno c	Denominazione	Input Shaft 2
N. di commessa / di serie	Pz. N. 3	Stato di elaborazione:	Fourier_049mm
ID macchina	Getrag Bari	Nome file	5176_Four_49.wel
Caratteristica		Data	13.11.2014, 14:24

Commento: FFT_D49

FFT_D49/506



Limite sbarram. 1.Armonica:0.01 um
 R:3.00 um
 NO:0.70 2.Armonica:1.32 um
 K:0.60 Limite sbarram.:3.00 um
 Limite allarme :0.80 Limite allarme :2.40 um

Tabella delle armoniche

Limite rappresentazione: 0.000 (Unità: um)

N	N+1	N+2	N+3	N+4	N+5	N+6	N+7	N+8	N+9	N+10
0	0.01	1.32	0.38	0.39	0.17	0.12	0.07	0.06	0.05	0.05
10	0.18	0.00	0.04	0.05	0.02	0.03	0.03	0.04	0.02	0.03
20	0.02	0.03	0.05	0.03	0.06	0.05	0.03	0.04	0.00	0.02
30	0.02	0.02	0.02	0.01	0.02	0.02	0.04	0.03	0.02	0.04
40	0.03	0.05	0.03	0.01	0.02	0.01	0.02	0.03	0.04	0.03
50	0.03	0.02	0.02	0.05	0.03	0.03	0.03	0.05	0.02	0.05
60	0.01	0.02	0.04	0.01	0.04	0.02	0.02	0.01	0.03	0.04
70	0.03	0.03	0.02	0.03	0.01	0.04	0.02	0.05	0.03	0.02
80	0.03	0.03	0.05	0.03	0.01	0.01	0.02	0.01	0.01	0.01
90	0.02	0.03	0.02	0.02	0.03	0.00	0.04	0.01	0.04	0.02
100	0.03	0.02	0.02	0.01	0.02	0.03	0.01	0.02	0.01	0.03
110	0.01	0.02	0.02	0.01	0.03	0.02	0.01	0.03	0.02	0.02
120	0.01	0.03	0.02	0.02	0.03	0.01	0.03	0.01	0.03	0.02
130	0.01	0.02	0.01	0.00	0.01	0.01	0.02	0.02	0.02	0.01
140	0.00	0.01	0.01	0.02	0.02	0.04	0.02	0.01	0.02	0.01
150	0.00	0.01	0.01	0.01	0.01	0.02	0.01	0.03	0.02	0.00
160	0.01	0.02	0.02	0.01	0.02	0.02	0.01	0.02	0.01	0.01
170	0.01	0.01	0.02	0.01	0.02	0.02	0.01	0.01	0.01	0.03
180	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.02	0.01	0.01



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Klingelberg - P26 B7590

*** GETRAG

N. disegno: 2506517635	Cliente/macch. N. : P26_B7590
Collaudatore: Turno c	Denominazione: Input Shaft 2
N. di commessa / di serie :Pz. N. 3	Stato di elaborazione:Fourier_049mm
ID macchina: Getrag Bari	Nome file: 5176_Four_49.wel
Caratteristica:	Data: 13.11.2014, 14:24

Commento: FFT_D49

FFT_D49/506

Tabella delle armoniche

Limite rappresentazione: 0.000 (Unità: um)

N	N+1	N+2	N+3	N+4	N+5	N+6	N+7	N+8	N+9	N+10
190	0.02	0.01	0.02	0.00	0.01	0.01	0.01	0.02	0.01	0.02
200	0.00	0.03	0.01	0.02	0.01	0.02	0.01	0.00	0.02	0.02
210	0.02	0.01	0.01	0.02	0.01	0.02	0.01	0.01	0.01	0.01
220	0.02	0.02	0.00	0.00	0.01	0.02	0.00	0.01	0.01	0.01
230	0.01	0.01	0.01	0.00	0.01	0.02	0.01	0.02	0.01	0.02
240	0.01	0.02	0.01	0.01	0.00	0.00	0.00	0.01	0.02	0.02
250	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.00	0.00
260	0.01	0.00	0.02	0.01	0.01	0.02	0.01	0.02	0.01	0.02
270	0.01	0.01	0.00	0.02	0.01	0.02	0.01	0.01	0.01	0.02
280	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.02	0.01	0.01
290	0.01	0.02	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01



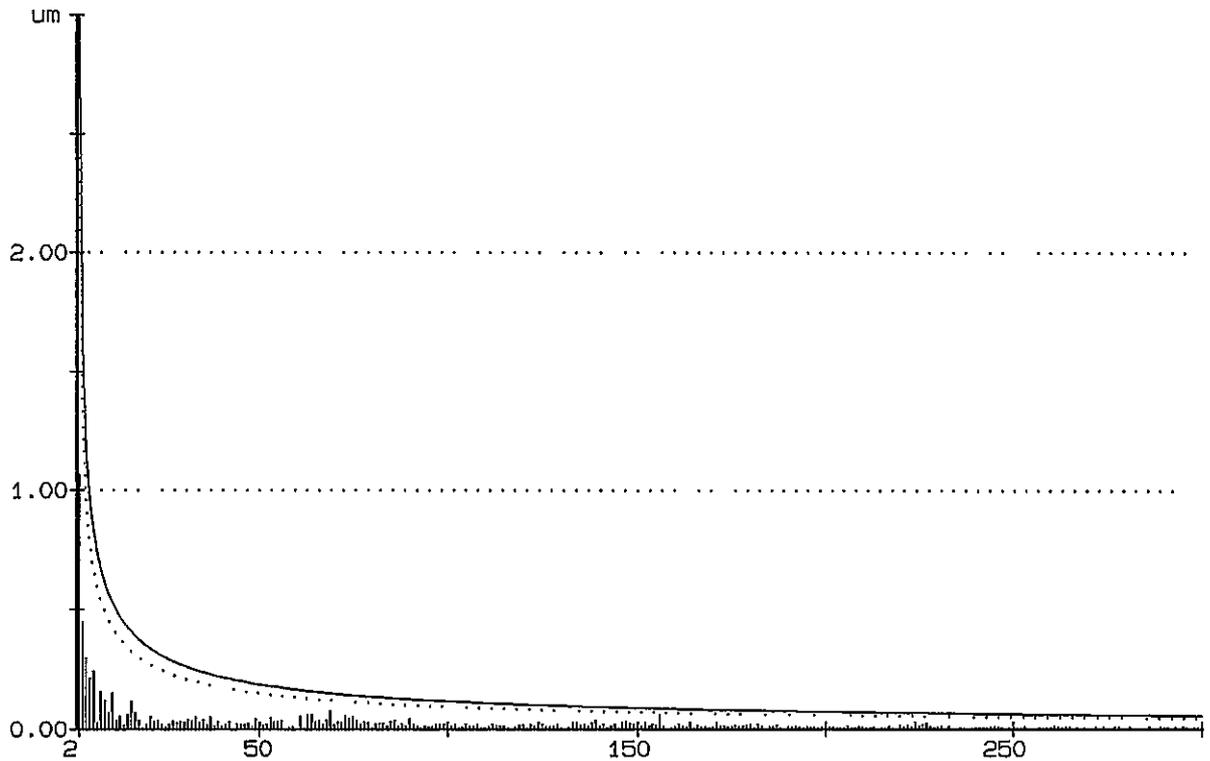
Klingelberg - P26 B7590

■ ■ ■ GETRAG

N. disegno: 2506517635	Cliente/macch. N. : P26_B7590
Collaudatore: Turno c	Denominazione: Input Shaft 2
N. di commessa / di serie :Pz. N. 4	Stato di elaborazione:Fourier_Ø49mm
ID macchina: Getrag Bari	Nome file: 5176_Four_49.wel
Caratteristica:	Data: 13.11.2014, 14:28

Commento: FFT_D49

FFT_D49/506



Limite sbarram. 1.Armonica:0.00 um
 R:3.00 um 2.Armonica:1.07 um
 NO:0.70 Limite sbarram.:3.00 um
 K:0.60 Limite allarme :2.40 um
 Limite allarme :0.80

Tabella delle armoniche

Limite rappresentazione: 0.000 (Unità: um)

N	N+1	N+2	N+3	N+4	N+5	N+6	N+7	N+8	N+9	N+10
0	0.00	1.07	0.45	0.30	0.21	0.24	0.03	0.16	0.12	0.07
10	0.15	0.04	0.05	0.02	0.06	0.12	0.07	0.04	0.01	0.02
20	0.05	0.03	0.03	0.02	0.01	0.02	0.03	0.03	0.03	0.03
30	0.04	0.03	0.05	0.03	0.04	0.02	0.05	0.01	0.03	0.02
40	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.01	0.04	0.03
50	0.02	0.02	0.05	0.03	0.03	0.04	0.00	0.01	0.01	0.00
60	0.05	0.00	0.06	0.06	0.03	0.03	0.02	0.04	0.08	0.02
70	0.03	0.03	0.06	0.05	0.05	0.04	0.02	0.03	0.03	0.00
80	0.02	0.02	0.02	0.02	0.03	0.04	0.01	0.02	0.01	0.04
90	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03
100	0.01	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.00	0.01
110	0.01	0.02	0.02	0.01	0.02	0.01	0.00	0.01	0.02	0.02
120	0.00	0.02	0.01	0.03	0.02	0.01	0.01	0.01	0.02	0.00
130	0.00	0.01	0.03	0.03	0.02	0.02	0.02	0.03	0.04	0.01
140	0.02	0.01	0.01	0.02	0.01	0.03	0.03	0.03	0.02	0.02
150	0.02	0.03	0.02	0.02	0.02	0.06	0.01	0.00	0.00	0.01
160	0.02	0.02	0.01	0.03	0.01	0.02	0.01	0.01	0.01	0.01
170	0.03	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.02	0.02
180	0.01	0.02	0.01	0.00	0.01	0.01	0.02	0.00	0.00	0.01



Klingelberg - P26 B7590

■ ■ ■ GETRAG

KLINGELBERG

N. disegno: 2506517635	Cliente/macch. N. : P26_B7590
Collaudatore: Turno c	Denominazione: Input Shaft 2
N. di commessa / di serie ;Pz. N. 4	Stato di elaborazione:Fourier_Ø49mm
ID macchina: Getrag Bari	Nome file: 5176_Four_49.wel
Caratteristica ...:	Data: 13.11.2014, 14:28

Commento: FFT_D49

FFT_D49/506

Tabella delle armoniche

Limite rappresentazione: 0.000 (Unità: um)

N	N+1	N+2	N+3	N+4	N+5	N+6	N+7	N+8	N+9	N+10
190	0.01	0.02	0.01	0.00	0.01	0.01	0.01	0.00	0.01	0.01
200	0.01	0.01	0.01	0.00	0.01	0.02	0.00	0.01	0.01	0.01
210	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.00	0.02
220	0.01	0.02	0.01	0.03	0.02	0.02	0.03	0.01	0.01	0.01
230	0.01	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.01	0.01
240	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01
250	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.01
260	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.00
270	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.00
280	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.01
290	0.01	0.00	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01



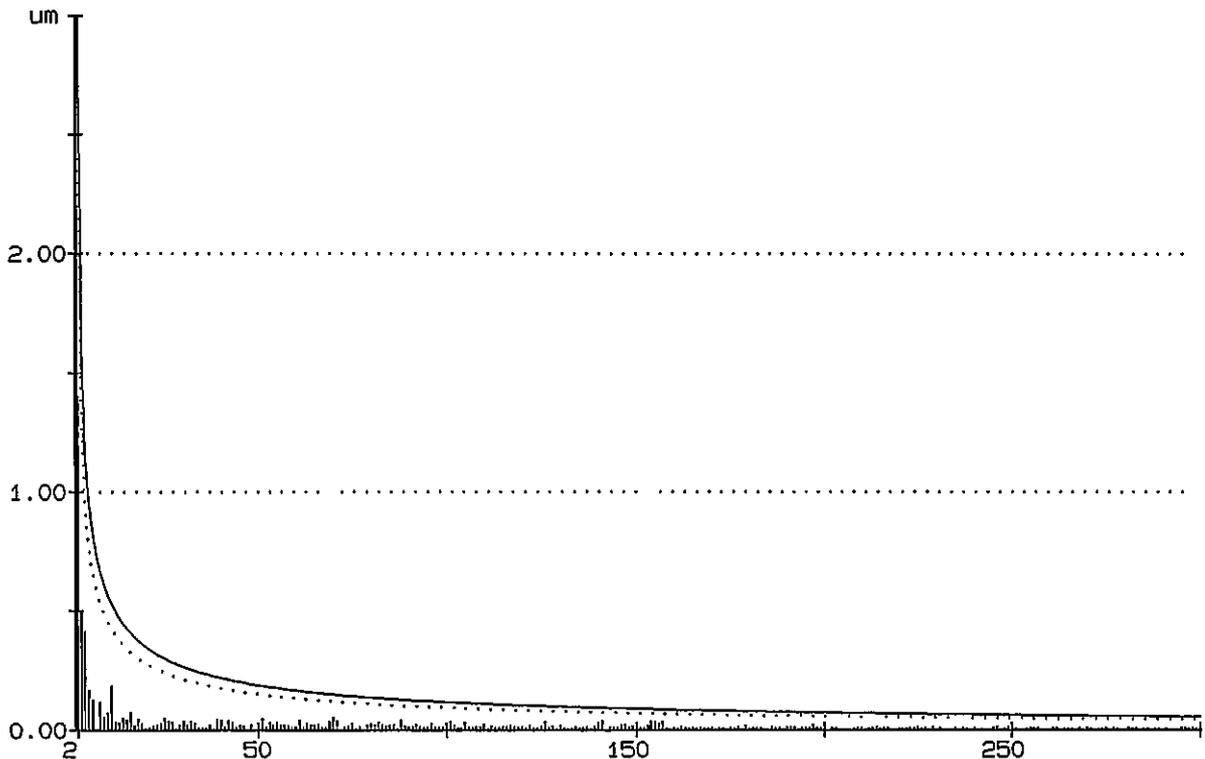
Klingelberg - P26 B7590

■■■ GETRAG

N. disegno: 2506517635	Cliente/macch. N. : P26_B7590
Collaudatore: Turno c	Denominazione: Input Shaft 2
N. di commessa / di serie :Pz. N. 5	Stato di elaborazione:Fourier_049mm
ID macchina: Getrag Bari	Nome file: 5176_Four_49.wel
Caratteristica:	Data: 13.11.2014, 14:30

Commento: FFT_D49

FFT_D49/506



Limite sbarram. 1.Armonica:0.00 um
 R:3.00 um 2.Armonica:1.40 um
 N0:0.70 Limite sbarram.:3.00 um
 K:0.60 Limite allarme :2.40 um
 Limite allarme :0.80

Tabella delle armoniche

Limite rappresentazione: 0.000 (Unità: um)

N	N+1	N+2	N+3	N+4	N+5	N+6	N+7	N+8	N+9	N+10
0	0.00	1.40	0.49	0.41	0.17	0.13	0.01	0.12	0.05	0.07
10	0.18	0.04	0.03	0.05	0.04	0.08	0.02	0.04	0.03	0.01
20	0.01	0.02	0.02	0.03	0.05	0.04	0.04	0.01	0.02	0.04
30	0.02	0.04	0.03	0.01	0.01	0.01	0.02	0.01	0.04	0.04
40	0.02	0.04	0.03	0.01	0.02	0.02	0.00	0.02	0.00	0.02
50	0.05	0.01	0.03	0.02	0.03	0.02	0.02	0.02	0.01	0.01
60	0.04	0.01	0.03	0.02	0.02	0.03	0.01	0.01	0.04	0.05
70	0.04	0.00	0.02	0.02	0.03	0.01	0.02	0.00	0.02	0.03
80	0.02	0.03	0.02	0.02	0.02	0.02	0.01	0.04	0.02	0.01
90	0.01	0.02	0.01	0.01	0.02	0.03	0.02	0.01	0.01	0.03
100	0.04	0.02	0.01	0.01	0.03	0.01	0.01	0.01	0.02	0.02
110	0.00	0.02	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.02
120	0.01	0.02	0.01	0.01	0.02	0.04	0.01	0.02	0.00	0.02
130	0.01	0.00	0.01	0.02	0.01	0.01	0.01	0.00	0.02	0.03
140	0.04	0.00	0.01	0.01	0.01	0.02	0.03	0.01	0.02	0.01
150	0.01	0.01	0.02	0.04	0.03	0.03	0.03	0.01	0.00	0.01
160	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
170	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.02	0.01
180	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01



Via dei Ciclamini, 4 Modugno (BA)

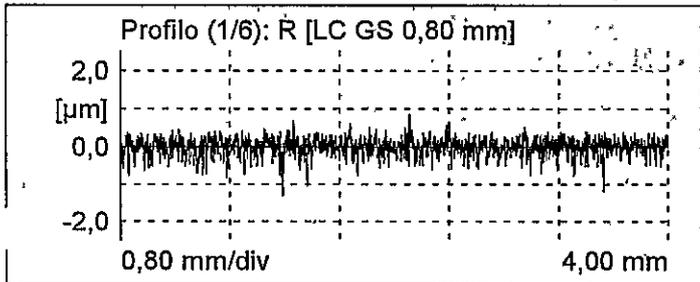
Sala Metrologica GPS1-2

Componente: INPUT SHAFT-2
 Tecnologia: 420A RETTIFICA
 Sequenza Diametri: Ø 49-40-39.9-35-PER 39.9-PIAN 49

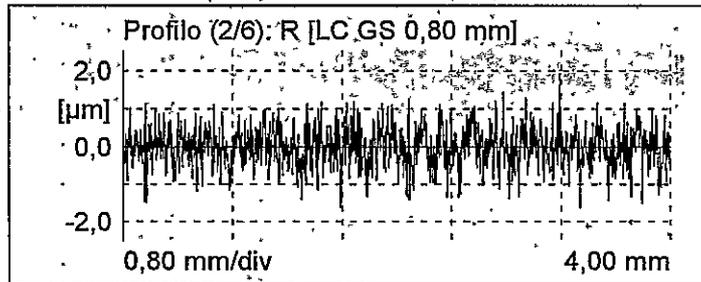
Numero: 5179 PPAP PZ.1
 Operatore: TURNO B
 Data, ora: 06/11/2014, 17:48
 Nota: Ø 49-40-39.9-35-PER 39.9-PIAN 49
 Tastatore: MFW-250 CAL
 Nome file: C:\Programmi\Mahr\Perthometer Concept\420A3225.PCD

PARAMETRI GENERALI

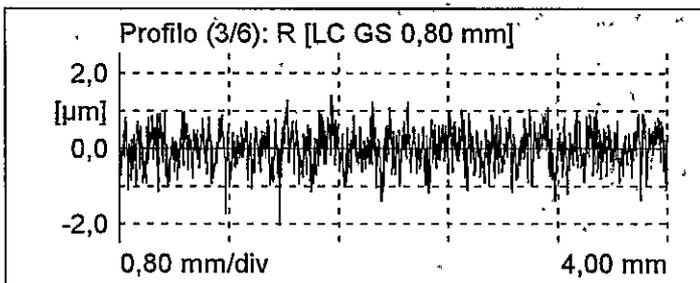
1: LS	2,5	µm
1: LT	5,60	mm
1: LM	4,00	mm
1: Z	5	
1: VB	±250,0	µm



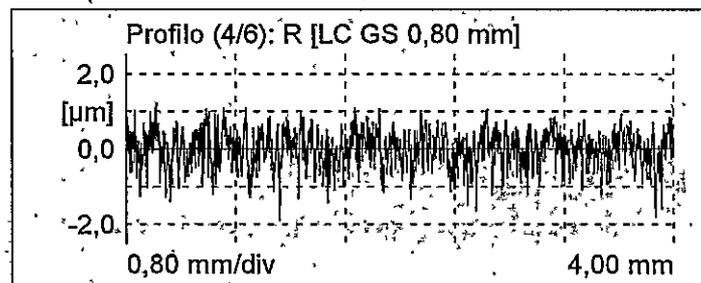
Ø 49mm	
1: Ra	0,17 µm
1: Rmax	1,97 µm 0,00
1: Rz	1,53 µm 0,00



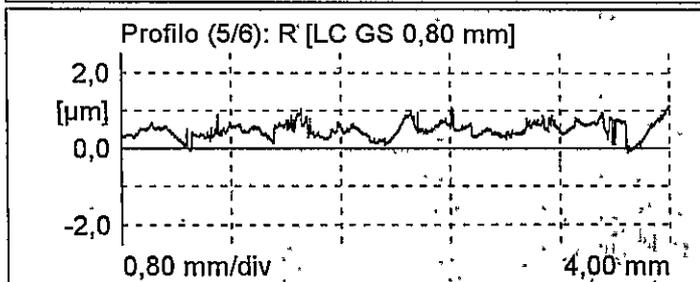
Ø 40mm	
2: Ra	0,36 µm
2: Rmax	3,28 µm
2: Rz	2,82 µm 0,00



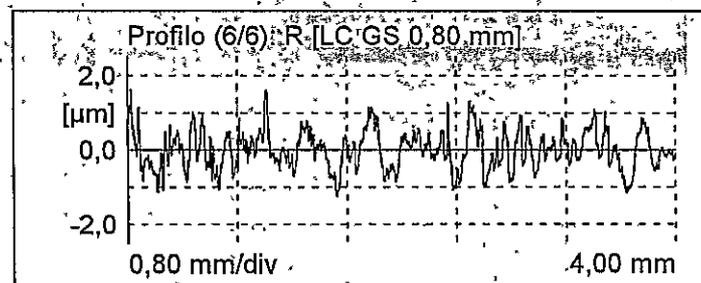
Ø 39.9mm	
3: Ra	0,35 µm 0,19
3: Rmax	3,43 µm 0,00
3: Rz	2,71 µm 1,00
3: Rp	1,14 µm 0,63
3: R Pc (0,25;0,00)	397 /cm 150
3: R Sk	-0,23 -1,75



Ø 35mm	
4: Ra	0,37 µm
4: Rmax	2,96 µm
4: Rz	2,67 µm 0,00



Ø 39.9mm Perpendicolare	
5: Ra	0,48 µm
5: Rmax	1,23 µm
5: Rz	0,96 µm 0,00



Ø 49mm Pianetto	
6: Ra	0,41 µm
6: Rmax	2,85 µm 0,00
6: Rz	2,50 µm 0,00

PERTHOMETER CONCEPT

MACCHINA: MOA 416121 001



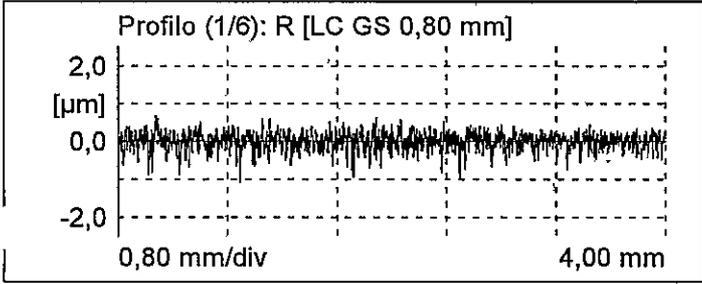
Via dei Ciclamini, 4 Modugno (BA)

Sala Metrologica GPS1-2

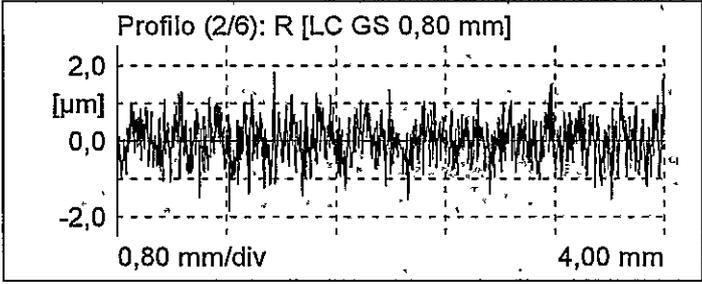
Componente: INPUT SHAFT 2
 Tecnologia: 420A_RETTIFICA
 Sequenza Diometri: Ø 49-40-39,9-35-PER 39,9-PIAN 49

Numero: 5179 PPAP PZ.2
 Operatore: TURNO B
 Data, ora: 06/11/2014, 17:53
 Nota: Ø 49-40-39,9-35-PER 39,9-PIAN 49
 Tastatore: MFW-250 CAL
 Nome file: C:\Programmi\Mahr\Perthometer Concept\420A3226.PCD

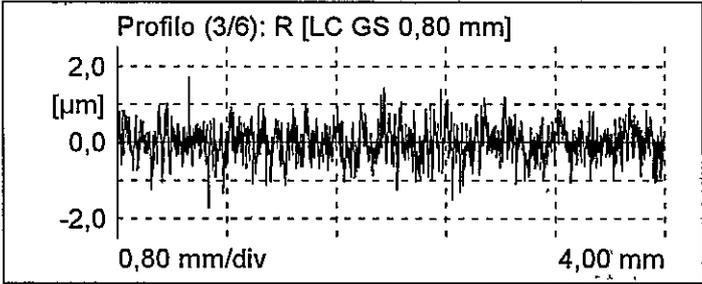
PARAMETRI GENERALI		
1: LS	2,5	µm
1: LT	5,60	mm
1: LM	4,00	mm
1: Z	5	
1: VB	±250,0	µm



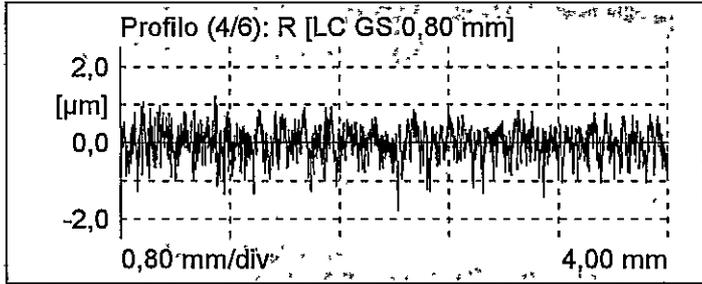
Ø 49mm		
1: Ra	0,16 µm	
1: Rmax	1,67 µm 0,00	3,20
1: Rz	1,46 µm 0,00	2,00



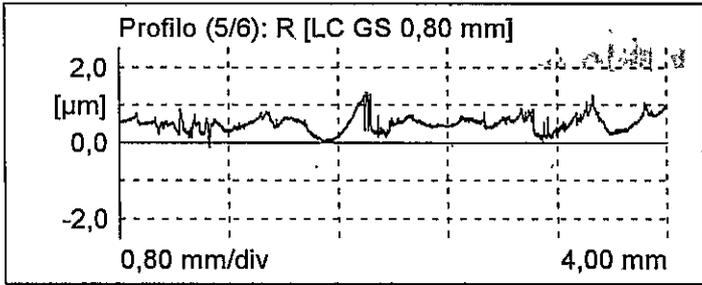
Ø 40mm		
2: Ra	0,36 µm	
2: Rmax	3,63 µm	
2: Rz	3,06 µm 0,00	6,30



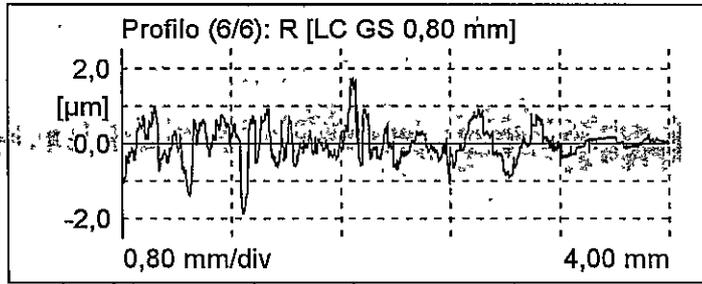
Ø 39,9mm		
3: Ra	0,33 µm 0,19	0,61
3: Rmax	3,41 µm 0,00	6,30
3: Rz	2,55 µm 1,00	4,00
3: Rp	1,24 µm 0,63	2,20
3: R Pc (0,25;0,00)	430 /cm	150 1000
3: R Sk	0,02	-1,75 10,00



Ø 35mm		
4: Ra	0,31 µm	
4: Rmax	2,63 µm	
4: Rz	2,30 µm 0,00	6,30



Ø 39,9mm Perpendicolare		
5: Ra	0,51 µm	
5: Rmax	1,20 µm	
5: Rz	0,98 µm 0,00	2,00



Ø 49mm Pianetto		
6: Ra	0,34 µm	
6: Rmax	2,83 µm 0,00	6,30
6: Rz	2,10 µm 0,00	4,00

PERTHOMETER CONCEPT

MACCHINA: MOA 416121 001



Via dei Ciclamini, 4 Modugno (BA)

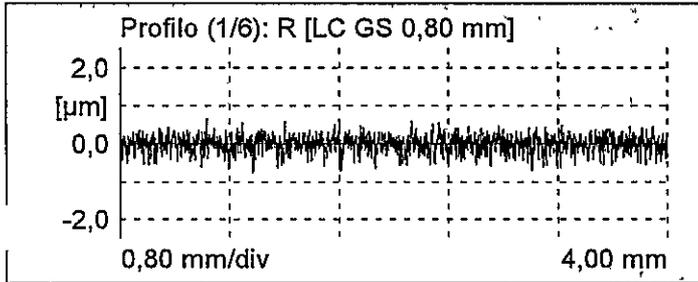
Sala Metrologica GPS1-2

Componente: INPUT SHAFT 2
 Tecnologia: 420A_RETTIFICA
 Sequenza Diametri: Ø 49-40-39.9-35-PER 39.9-PIAN 49

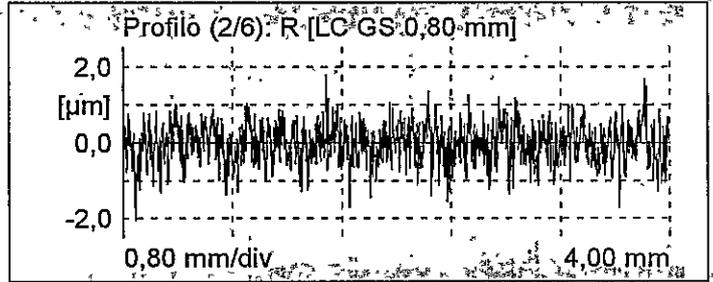
Numero: 5179 PPAP PZ.3
 Operatore: TURNO B
 Data, ora: 06/11/2014, 18:05
 Nota: Ø 49-40-39.9-35-PER 39.9-PIAN 49
 Tastatore: MFW-250 CAL
 Nome file: C:\Programmi\Mahr\Perthometer Concept\420A3228.PCD

PARAMETRI GENERALI

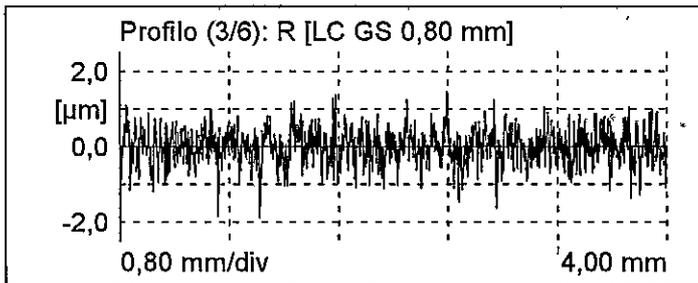
1: LS 2,5 µm
 1: LT 5,60 mm
 1: LM 4,00 mm
 1: Z 5
 1: VB ±250,0 µm



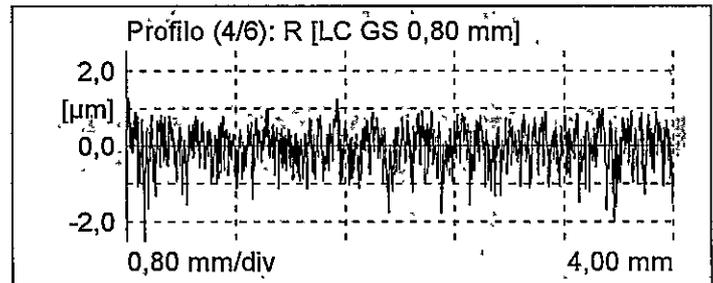
Ø 49mm			
1: Ra	0,15 µm		
1: Rmax	1,33 µm 0,00		3,20
1: Rz	1,24 µm 0,00		2,00



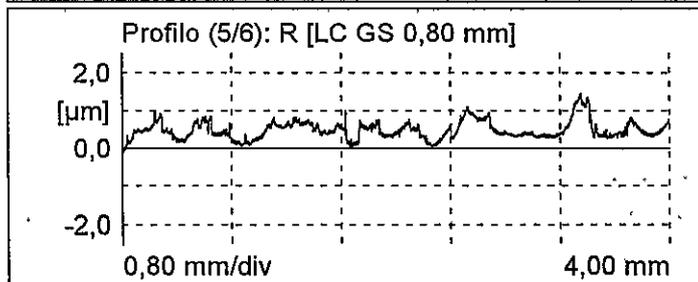
Ø 40mm			
2: Ra	0,37 µm		
2: Rmax	3,37 µm		
2: Rz	3,02 µm 0,00		6,30



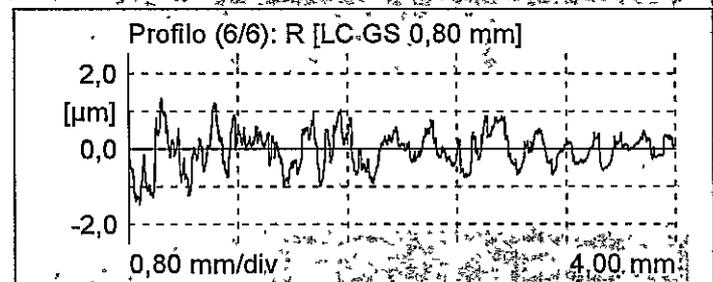
Ø 39.9mm			
3: Ra	0,32 µm	0,19	0,61
3: Rmax	3,24 µm	0,00	6,30
3: Rz	2,80 µm	1,00	4,00
3: Rp	1,24 µm	0,63	2,20
3: R Pc (0,25;0,00)	457 /cm	150	1000
3: R Sk	-0,33	-1,75	10,00



Ø 35mm			
4: Ra	0,38 µm		
4: Rmax	3,94 µm		
4: Rz	2,93 µm 0,00		6,30



Ø 39.9mm Perpendicolare			
5: Ra	0,47 µm		
5: Rmax	1,21 µm		
5: Rz	0,98 µm 0,00		2,00



Ø 49mm Pianetto			
6: Ra	0,39 µm		
6: Rmax	2,81 µm 0,00		6,30
6: Rz	1,86 µm 0,00		4,00

PERTHOMETER CONCEPT

MACCHINA: MOA 416121 001



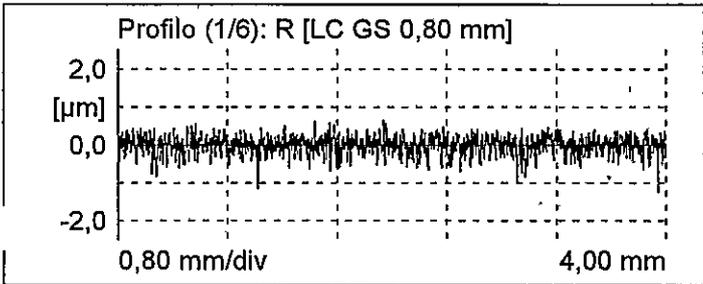
Via dei Ciclamini, 4 Modugno (BA)

Sala Metrologica GPS1-2

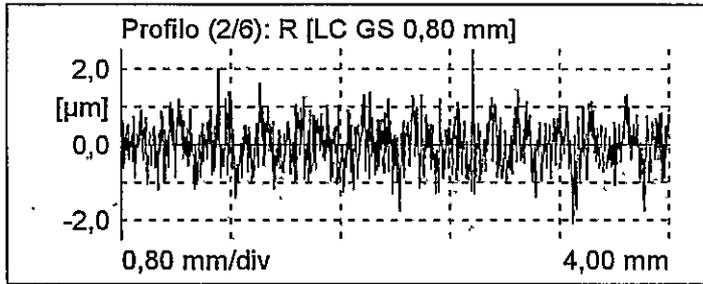
Componente: INPUT SHAFT 2
 Tecnologia: 420A_RETTIFICA
 Sequenza Diametri: Ø 49-40-39.9-35-PER 39.9-PIAN 49

Numero: 5179 PPAP PZ.4
 Operatore: TURNO B
 Data, ora: 06/11/2014, 18:14
 Nota: Ø 49-40-39.9-35-PER 39.9-PIAN 49
 Tastatore: MFW-250 CAL
 Nome file: C:\Programmi\Mahr\Perthometer Concept\420A3230.PCD

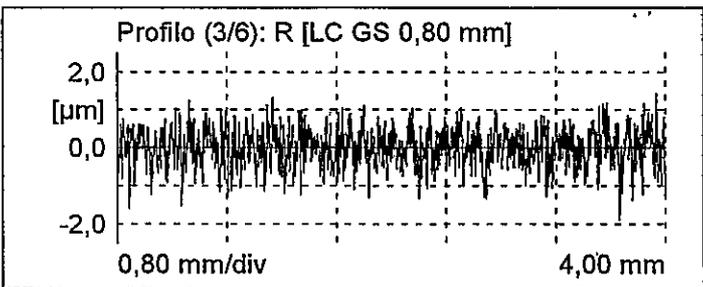
PARAMETRI GENERALI		
1: LS	2,5	µm
1: LT	5,60	mm
1: LM	4,00	mm
1: Z	5	
1: VB	±250,0	µm



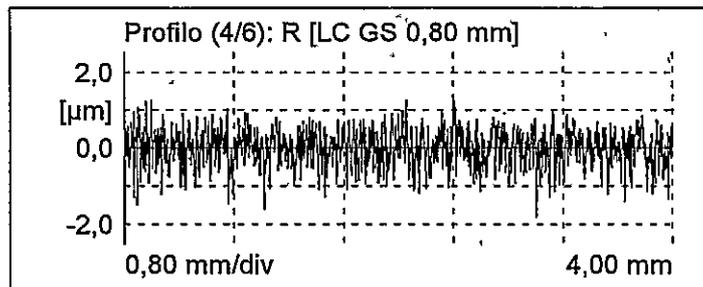
Ø 49mm		
1: Ra	0,16 µm	
1: Rmax	1,75 µm 0,00	3,20
1: Rz	1,50 µm 0,00	2,00



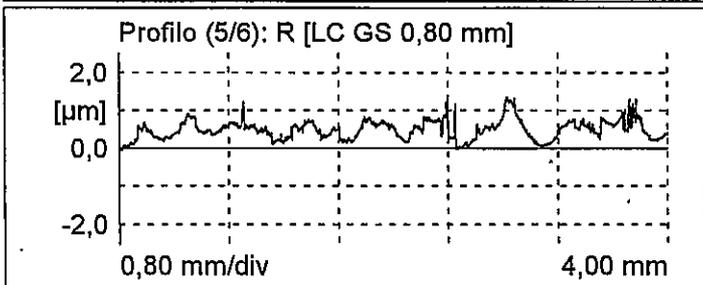
Ø 40mm		
2: Ra	0,40 µm	
2: Rmax	4,24 µm	
2: Rz	3,37 µm 0,00	6,30



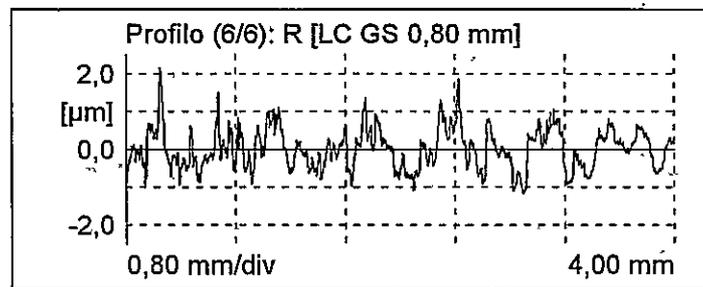
Ø 39.9mm		
3: Ra	0,35 µm	0,19 0,61
3: Rmax	3,32 µm	0,00 6,30
3: Rz	2,69 µm	1,00 4,00
3: Rp	1,22 µm	0,63 2,20
3: R Pc (0,25;0,00)	467 /cm	150 1000
3: R Sk	-0,29	-1,75 10,00



Ø 35mm		
4: Ra	0,34 µm	
4: Rmax	3,01 µm	
4: Rz	2,58 µm 0,00	6,30



Ø 39.9mm Perpendicolare		
5: Ra	0,48 µm	
5: Rmax	1,38 µm	
5: Rz	1,14 µm 0,00	2,00



Ø 49mm Pianetto		
6: Ra	0,42 µm	
6: Rmax	3,09 µm 0,00	6,30
6: Rz	2,46 µm 0,00	4,00

PERTHOMETER CONCEPT

MACCHINA: MOA 416121 001

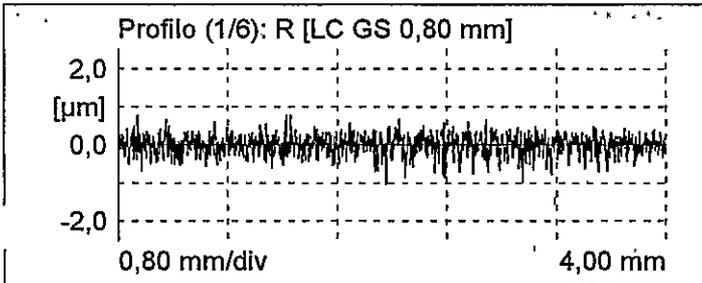


Componente: INPUT SHAFT 2
Tecnologia: 420A_RETTIFICA
Sequenza Diametri: Ø 49-40-39.9-35-PER 39.9-PIAN 49
Numero: 5179 PPAP PZ.5
Operatore: TURNO B
Data, ora: 06/11/2014, 18:17
Nota: Ø 49-40-39.9-35-PER 39.9-PIAN 49
Tastatore: MFW-250 CAL
Nomé file: C:\Programmi\Mahr\Perthometer Concept\420A3231.PCD

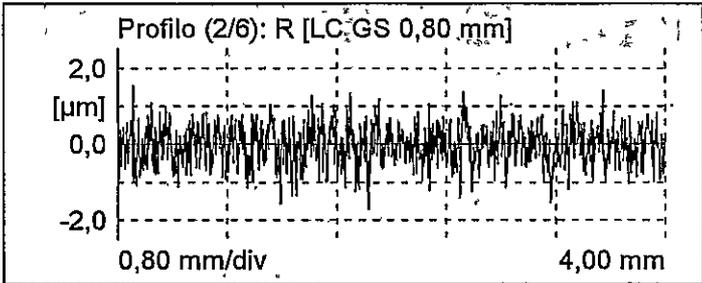
Via dei Ciclamini, 4 Modugno (BA)

Sala Metrologica GPS1-2

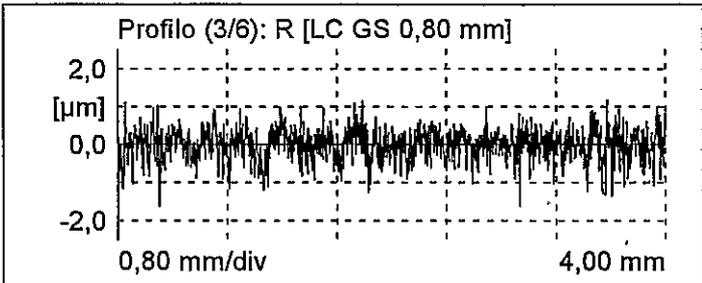
PARAMETRI GENERALI	
1: LS	2,5 µm
1: LT	5,60 mm
1: LM	4,00 mm
1: Z	5
1: VB	±250,0 µm



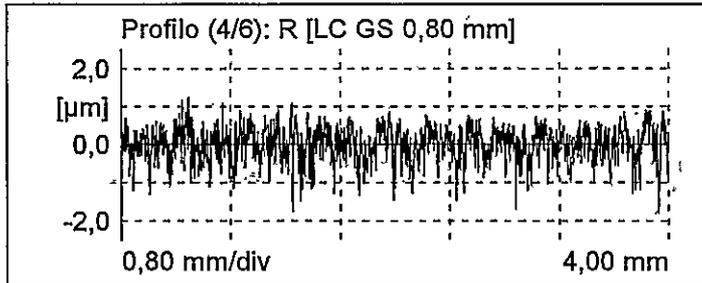
Ø 49mm	
1: Ra	0,18 µm
1: Rmax	1,68 µm 0,00
1: Rz	1,46 µm 0,00



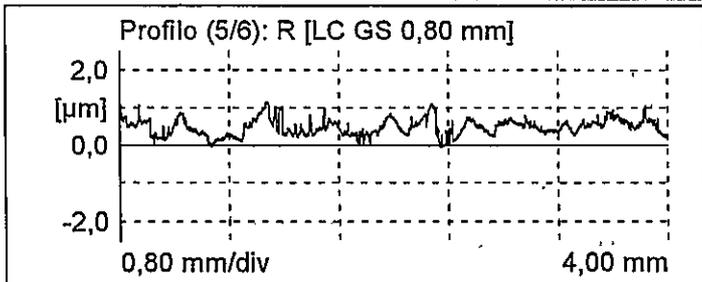
Ø 40mm	
2: Ra	0,35 µm
2: Rmax	3,02 µm
2: Rz	2,79 µm 0,00



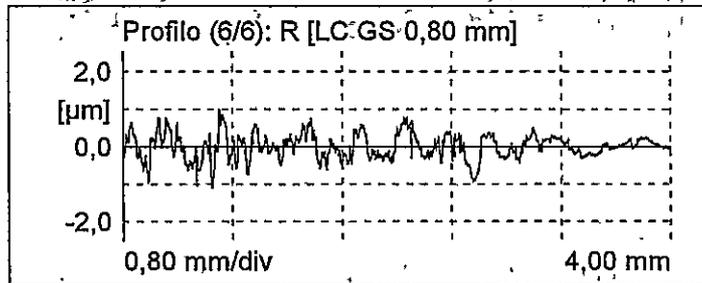
Ø 39.9mm	
3: Ra	0,28 µm 0,19
3: Rmax	2,72 µm 0,00
3: Rz	2,48 µm 1,00
3: Rp	1,08 µm 0,63
3: R Pc (0,25;0,00)	445 /cm 150
3: R Sk	-0,48 -1,75



Ø 35mm	
4: Ra	0,33 µm
4: Rmax	2,81 µm
4: Rz	2,54 µm 0,00



Ø 39.9mm Perpendicolare	
5: Ra	0,48 µm
5: Rmax	1,17 µm
5: Rz	0,99 µm 0,00



Ø 49mm Pianetto	
6: Ra	0,26 µm
6: Rmax	2,08 µm 0,00
6: Rz	1,37 µm 0,00

PERTHOMETER CONCEPT

MACCHINA: MOA 416121 001

DIMENSIONAL TEST RESULTS

Organization: GETRAG	Part Number: 2506517635
Supplier/Vendor Code: GETRAG Modugno	Part Name: INPUT 2
INSPECTION FACILITY: NA	Design Record Change Level: 3 Index (c) 11 Dic 2013
	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 240,63 ± 0,4	240.23	241.03		5	240.410	240.458	240.466	240.412	240.467		ok	
2	Distanza 94,8 ± 0,1	94.7	94.9		5	94.832	94.808	94.812	94.834	94.826		ok	
3	Distanza 142,03 ± 0,2	141.83	142.23		5	141.831	141.866	141.885	141.833	141.888		ok	
4	Distanza 139,39 ± 0,03	139.36	139.42		5	139.405	139.398	139.401	139.404	139.406		ok	
5	Distanza 122,63 - 0,23	122.4	123.63		5	122.505	122.409	122.416	122.529	122.483		ok	
6	Distanza 80,95 ± 0,1	80.85	81.05		5	80.983	80.934	80.967	80.979	80.963		ok	
7	Distanza 3,22 ± 0,1	3.12	3.32		5	3.13	3.15	3.14	3.13	3.14		ok	
8	Distanza 0,7 ± 0,4	0.3	1.1		5	0.715	0.737	0.724	0.722	0.724		ok	
9	Distanza 1 ± 0,5	0.5	1.5		5	0.984	0.993	0.975	0.987	0.980		ok	
10	Profilo dentatura	-	-		5	ok	ok	ok	ok	ok		ok	
11	Distanza 74,2 ± 0,2	74	74.4		5	74.254	74.288	74.236	74.247	74.232		ok	
12	Distanza 80 ± 0,5	79.5	80.5		5	79.883	79.924	79.916	79.889	79.899		ok	
13	Conformità pulizia pezzo GN4340-1	-	-		5	ok	ok	ok	ok	ok		ok	
14	Distanza 26,1 + 2	26.1	28.1		5	26.41	26.64	26.68	26.51	26.62		ok	
15	Distanza 29,3 ± 0,4	28.9	29.7		5	29.397	29.371	29.391	29.403	29.382		ok	
16	Distanza 20,5 ± 0,3	20.2	20.8		5	20.500	20.528	20.557	20.586	20.578		ok	
17	Distanza 25,5 ± 0,3	25.2	25.8		5	25.483	25.509	25.523	25.493	25.511		ok	
18	Distanza 16,835 ± 0,025	16.81	16.86		5	16.857	16.846	16.849	16.854	16.854		ok	
19	Smusso 0,5	-	0.5		5	0.431	0.412	0.494	0.480	0.496		ok	
	Angolo 45° ±2°	43°	47°		5	44,53°	44,43°	43,42°	47,52°	45,41°		ok	
21	raggio 5 ± 1	4.0	6.0		5	5.126	5.166	5.169	5.118	5.092		ok	
22	raggio 4 ± 1	3.0	5.0		5	5.00	4.90	4.99	4.99	4.85		ok	
23	raggio 5 ± 0,4	4.6	5.4		5	5.006	5.063	4.885	4.946	5.120		ok	
24	raggio 3 ± 0,4	2.6	3.4		5	2.79	2.74	2.71	2.83	2.72		ok	
25	Angolo 30° ± 3°	27°	33°		5	29,64°	29,16°	29,58°	29,58°	29,33°		ok	
26	raggio 2 ± 0,4	1.6	2.4		5	2.003	2.000	2.004	2.009	2.002		ok	
27	raggio 2 ± 0,4	1.6	2.4		5	2.002	1.997	1.994	1.998	1.928		ok	
28	Angolo 30° ± 3°	27°	33°		5	27,953°	28,666°	27,729°	30,412°	28,594°		ok	
29	Smusso 0,5	-	0.5		5	0.477	0.486	0.482	0.479	0.478		ok	
	Angolo 45° ±2°	43°	47°		5	47°	47°	47°	46°	47°		ok	

SIGNATURE	TITLE	DATE
G. Cicirelli	QPE	31/07/2014

**GETRAG**

Production Part Approval

DIMENSIONAL TEST RESULTS

Organization: GETRAG						Part Number: 2506517635							
Supplier/Vendor Code: GETRAG Modugno						Part Name: INPUT 2							
INSPECTION FACILITY: NA						Design Record Change Level: 3 Index (c) 11 Dic 2013							
						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
30	Tip Diameter Z 46 36,95 - 0,25	36,7	36,95		5	36,8	36,78	36,77	36,8	36,75		ok	
31	Ø 34,9 -0,05	34,85	34,9		5	34,863	34,854	34,883	34,889	34,877		ok	
32	Ø 28,5 ± 0,1	28,4	28,6		5	28,55	28,56	28,55	28,49	28,49		ok	
33	Distanza 1,20 ± 0,3	0,9	1,5		5	1,04	1,09	1,22	1,02	1,18		ok	
34	Ø 35 +0,011 +0,022	35,011	35,022		5	35,013	35,013	35,014	35,013	35,012		ok	
35	MDK dentatura I	97,248	97,331		5	97,250	97,261	97,250	97,251	97,265		ok	
36	Raggio 0,8 +0,2 -0,1	0,7	1		5	0,953	0,768	0,725	0,780	0,704		ok	
37	Ø 28 H 8 +0,033	28,00	28,033		5	28,024	28,01	28,012	28,015	28,012		ok	
	Ø 27,2 ± 0,2	27	27,4		5	27,25	27,29	27,27	27,28	27,3		ok	
39	Ø 36 ± 0,1	35,9	36,1		5	35,90	35,91	35,90	35,90	35,90		ok	
40	Ø 37 ± 0,1	36,9	37,1		5	36,91	36,94	36,98	36,99	36,92		ok	
41	Ø 27 ± 0,1	26,9	27,1		5	26,92	26,95	26,91	26,96	26,99		ok	
42	Ø 39 ± 0,1	38,9	39,1		5	38,96	38,98	38,98	38,99	38,99		ok	
43	Ø 39,9 + 0,05	39,9	39,95		5	39,929	39,928	39,928	39,931	39,929		ok	
45	Ø 40 K6 +0,002 +0,018	40,002	40,018		5	40,006	40,005	40,007	40,009	40,008		ok	
46	Ø 30 G7 +0,007 +0,028	30,007	30,028		5	30,017	30,018	30,016	30,017	30,015		ok	
47	Raggio 0,8 +0,2 -0,1	0,7	1		5	0,883	0,940	0,996	0,975	0,945		ok	
48	Ø 40 ± 0,1	39,9	40,1		5	40,02	40,03	40,05	40,03	40,04		ok	
49	Ø 75 ± 0,2	74,8	75,2		5	74,85	74,90	74,87	74,88	74,94		ok	
50	Angolo 50° ± 0,5°	49,5°	50,5°		5	50,382°	50,381°	50,390°	50,426°	50,076°		ok	
51	Ø 30,5 ± 0,1	30,4	30,6		5	30,548	30,531	30,550	30,552	30,500		ok	
52	Angolo 60° ± 3°	57°	63°		5	59,369°	58,99°	59,252°	59,348°	59,610°		ok	
53	Ø 49 G6 +0,009 +0,025	49,009	49,025		5	49,013	49,011	49,009	49,006	49,010		ok	
F	Ø 54,3 ± 0,2	54,1	54,5		5	54,420	54,389	54,402	54,399	54,392		ok	
55	Root Diameter 87.5 - 0,45 Z 47	87,05	87,5		5	87,47	87,45	87,45	87,43	87,44		ok	
56	Tip Diameter 98 - 0,26 Z 47	97,74	98		5	97,82	97,79	97,80	97,77	97,79		ok	
57	Distanza 0,5 ± 0,3	0,2	0,8		5	0,359	0,340	0,352	0,351	0,362		ok	
58	MDK dentatura II	49,643	49,712		5	49,65	49,646	49,652	49,658	49,648		ok	

SIGNATURE

TITLE

DATE

G. Cicirelli

QPE

31/07/2014

GETRAG Production Part Approval DIMENSIONAL TEST RESULTS

Organization: GETRAG					Part Number: 2506517635								
Supplier/Vendor Code: GETRAG Modugno					Part Name: INPUT 2								
INSPECTION FACILITY: NA					Design Record Change Level. 3 Index (c) 11 Dic 2013								
					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
59	raggio 2 ± 0,3	1,7	2,3		5	1,981	1,799	1,856	2,204	1,708		ok	
59Bis	Angolo 30° ± 3°	27°	33°		5	29,884°	30,079°	27,126°	29,280°	28,838°		ok	
60	Distanza 1 ± 0,5	0,5	1,5		5	0,853	0,898	0,856	0,836	0,876		ok	
61	Distanza 0,7 ± 0,4	0,3	1,1		5	0,587	0,602	0,595	0,586	0,617		ok	
62	Root Diameter 40,3 -0,45 Z 21	39,85	40,3		5	40,029	40,038	40,007	40,031	40,022		ok	
63	Distanza 98,6 ± 0,2	98,4	98,8		5	98,585	98,592	98,581	98,578	98,579		ok	
64	Distanza 86,63 ± 0,025	86,605	86,655		5	86,630	86,622	86,617	86,623	86,622		ok	
65	MDK rullatura III	38,382	38,441		5	38,388	38,385	38,388	38,389	38,385		ok	
66	Tip Diameter 51,6 -0,26 Z 21	51,34	51,6		5	51,428	51,429	51,398	51,423	51,428		ok	
67	Distanza 19 ± 0,3	18,7	19,3		5	19,261	19,274	19,272	19,264	19,275		ok	
68	Distanza 3 ± 0,3	2,7	3,3		5	2,950	2,952	2,941	2,938	2,928		ok	
69	Distanza 92,6 ± 0,3	92,3	92,9		5	92,386	92,417	92,430	92,371	92,418		ok	
70	Distanza 2 ± 0,2	1,8	2,2		5	2,041	2,029	2,035	2,033	2,022		ok	
71	Distanza 10 ± 0,1	9,9	10,1		5	9,98	10,00	10,00	9,95	9,95		ok	
72	Distanza 96,9 ± 0,5	96,4	97,4		5	96,6	96,8	96,7	96,9	96,8		ok	
73	Root Diameter 34,6 -0,2 Z 46	34,4	34,6		5	34,43	34,43	34,42	34,43	34,43		ok	
74	Ø 26 G7 +0,007 +0,028	26,007	26,028		5	26,024	26,017	26,017	26,015	26,016		ok	
75	Distanza 17,2 ± 0,5	17	17,4		5	17,119	17,138	17,151	17,184	17,16		ok	
76	Distanza 24,3 ± 0,2	24,1	24,5		5	24,209	24,239	24,247	24,284	24,293		ok	
77	Distanza 33,9 ± 0,3	33,6	34,2		5	33,722	33,712	33,772	33,801	33,811		ok	
78	Angolo 30° ± 3°	27°	33°		5	30,7°	31,86°	30,41°	29,89°	30,65°		ok	
80	Rz 4 Dentatura I Z 47	-	4µ		5	3,08	2,66	1,69	1,68	1,65		ok	
	Rmax 8 Dentatura I Z 47	-	8µ		5	5,32	4,46	2,06	1,85	1,84		ok	
81	Distanza 3	-	3		5	ok	ok	ok	ok	ok		ok	
82	Raggio 42 max	-	70		5	ok	ok	ok	ok	ok		ok	
83	Rz 4 Dentatura II Z 21	-	4µ		5	2,58	3,14	2,54	2,62	2,64		ok	
	Rmax 8 Dentatura II Z 21	-	8µ		5	3,15	3,9	2,92	3,2	3,68		ok	
84	Ra	0,19	0,61		5	0,34	0,34	0,33	0,41	0,35		ok	
	Rp	0,63	2,20		5	1,24	1,33	1,49	1,59	1,68		ok	
	Rpc	150	1000		5	377	400	460	335	317		ok	
	RSk	-1,75	10		5	-0,18	0,12	-0,13	0,12	0,16		ok	

SIGNATURE	TITLE	DATE
G. Cicirelli	QPE	31/07/2014

DIMENSIONAL TEST RESULTS

Organization:		GETRAG			Part Number: 2506517635							
Supplier/Vendor Code:		GETRAG Modugno			Part Name: INPUT 2							
INSPECTION FACILITY:					Design Record Change Level. 3 Index (c) 11 Dic 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
85	Rz 25	- 25μ		5	13,75	13,89	13,73	13,83	13,79		ok	
86	∇ 0,1 A - B	- 0,1		5	0,095	0,064	0,053	0,075	0,043		ok	
87	Rz 3	- 3μ		5	2,5	2,8	2,2	2,5	2,7		ok	
	Rmax 4	- 4μ		5	2,8	3,0	2,6	3,0	3,2		ok	
88	Rz y Ø 40	- 6,3μ		5	3,20	3,18	3,11	3,49	3,18		ok	
89	// 0,006 H	- 6μ		5	0,84	1,13	0,93	2,83	1,48		ok	
90	○ 0.004	- 4μ		5	2,94	2,77	2,95	2,48	2,62		ok	
91	— 0.004	- 4μ		5	0,79	0,79	0,69	0,80	0,81		ok	
	∇ 0,2 A - B	- 0,2		5	0,130	0,076	0,870	0,650	0,133		ok	
93	∇ 0,1 L	- 0,1		5	0,011	0,013	0,030	0,018	0,016		ok	
94	∇ 0,2 A - B	- 0,2		5	0,107	0,153	0,060	0,159	0,013		ok	
96	Rz 16 Rullatura	- 16μ		5	9,71	10,66	11,53	10,98	12,41		ok	
97	∇ 0,05 A - B	- 50μ		5	26	27	28	27	27		ok	
98	∇ 0,02 A - B	- 20μ		5	2,62	2,33	2,48	3,57	3,25		ok	
99	// 0,006 F	- 6μ		5	1,96	0,94	1,32	0,89	1,31		ok	
100	○ 0.005	- 5μ		5	2,40	2,00	2,32	2,18	1,94		ok	
101	— 0.004	- 4μ		5	0,57	0,49	0,45	0,50	0,91		ok	
102	∇ 0,2 A - B	- 0,2		5	0,132	0,142	0,096	0,054	0,073		ok	
103	∇ 0,2 A - B	- 0,2		5	0,007	0,095	0,048	0,136	0,085		ok	
104	Rz 3	- 3μ		5	2,8	2,7	2,9	2,4	2,9		ok	
	Rmax 4	- 4μ		5	3,2	3,1	3,4	2,8	3,1		ok	
105	∇ 0,02 A - B	- 20μ		5	3,62	3,44	4,90	2,93	3,59		ok	
106	// 0,006 E	- 6μ		5	2,11	1,67	1,07	1,40	1,32		ok	
107	○ 0.004	- 4μ		5	2,68	2,86	2,97	2,25	2,82		ok	
	∇ 0,02 A - B	- 20μ		5	3,80	3,46	5,44	2,99	3,39		ok	
109	// 0,006 D	- 6μ		5	0,94	0,93	1,28	0,79	1,11		ok	
110	○ 0.004	- 4μ		5	3,06	2,89	2,91	2,75	2,74		ok	
111	Rz 25	- 25μ		5	2,87	2,81	3,84	2,86	3,66		ok	

SIGNATURE	TITLE	DATE
G. Cicirelli	QPE	31/07/2014

**GETRAG**

Production Part Approval

DIMENSIONAL TEST RESULTS

Organization: GETRAG					Part Number: 2506517635									
Supplier/Vendor Code: GETRAG Modugno					Part Name: INPUT 2									
INSPECTION FACILITY: NA					Design Record Change Level: 3 Index (c) 11 Dic 2013									
					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
112	∇ 0,02	A - B	-	20 μ		5	3	3	6	4	6		ok	
113	∇ 0,028	A - B	-	28 μ		5	19	15	27	27	11		ok	
114	∇ 0,032	A - B	-	32 μ		5	25	22	18	18	19		ok	
115	∇ 0,02	A - B	-	20 μ		5	3,45	3,72	5,28	2,78	3,81		ok	
116	∇ 0,006	K	-	6 μ		5	2,12	1,69	2,00	1,34	1,29		ok	
117	\bigcirc 0.005		-	5 μ		5	3,18	2,92	2,68	2,54	3,13		ok	
118	— 0.004		-	4 μ		5	1,29	0,85	1,22	1,15	0,77		ok	
119	Numero non utilizzato													
120	∇ 0,006	A	-	6 μ		5	2,28	2,03	2,34	2,46	2,61		ok	
121	\bigcirc 0.004		-	4 μ		5	3,13	3,31	3,31	3,38	3,33		ok	
122	— 0.004		-	4 μ		5	0,37	0,34	0,42	0,37	0,44		ok	
123	Rz 2,5		-	2,5 μ		5	1,72	1,73	1,92	1,87	1,66		ok	
	Rmax 3,2		-	3,2 μ		5	2,72	1,91	2,43	2,38	1,75		ok	
124	Particolare Z		-	-		5	ok	ok	ok	ok	ok		ok	
125	Particolare T		-	-		5	ok	ok	ok	ok	ok		ok	
126	Particolare Y		-	-		5	ok	ok	ok	ok	ok		ok	
128	Particolare V		-	-		5	ok	ok	ok	ok	ok		ok	
129	Particolare X		-	-		5	ok	ok	ok	ok	ok		ok	
130	Particolare S		-	-		5	ok	ok	ok	ok	ok		ok	
131	Particolare W		-	-		5	ok	ok	ok	ok	ok		ok	
132	Particolare Q		-	-		5	ok	ok	ok	ok	ok		ok	
133	Particolare U		-	-		5	ok	ok	ok	ok	ok		ok	
134	Particolare O		-	-		5	ok	ok	ok	ok	ok		ok	
135	M1 80,5 \pm 2,5 HRA		80,5	83		1	-	-	-	-	-	81,0	ok	
136	/2 (Eht) 0,7 + 0,5		0,7	1,2		1	-	-	-	-	-	1,08	ok	
137	M3 (Eht) 0,2 min		0,2	-		1	-	-	-	-	-	0,86	ok	
138	M4 300 min HV10		300	-		1	-	-	-	-	-	381	ok	
139	Rz 4		-	4 μ		5	2,61	2,28	2,09	1,83	2,18		ok	
	Rmax 6,3		-	6,3 μ		5	4,31	2,62	2,98	2,37	3,06		ok	
140	Rz 6,3 \varnothing 35		-	6,3 μ		5	2,37	2,46	2,07	2,54	2,46		ok	
141	Angolo 90,5° \pm 0,15°		90,35°	90,65°		5	90,461°	90,482°	90,444°	90,506°	90,496°		ok	
142	Tooth Changers I		-	-		5	ok	ok	ok	ok	ok		ok	
143	Tooth Changers II		-	-		5	ok	ok	ok	ok	ok		ok	
144	Diametro 41.6		41,5	41,7		5	41,62	41,65	41,60	41,58	41,60		ok	
145	Diametro 47		46,9	47,1		5	47,02	47,05	47,08	47,00	47,01		ok	

Toothing microgeometry validated by standard measurement report.

SIGNATURE

TITLE

DATE

G. Cicirelli

QPE

31/07/2014

Item	Caracteristic	Tolerance	Part 1	Part 2	Part 3	Part 4	Part 5	Device
1	Distanza	240,63 ± 0,4	240,41	240,458	240,466	240,412	240,467	Altimetro
7	Distanza	3,22 ± 0,1	3,13	3,15	3,14	3,13	3,14	Altimetro
14	Distanza	26,1 + 2	26,41	26,64	26,68	26,51	26,62	Calibro
31	Ø 34,9	34,9 -0,05	34,863	34,854	34,863	34,889	34,877	Exameca Manuale
32	Ø 28,5	28,5 ± 0,1	28,55	28,56	28,55	28,49	28,49	Calibro
35	MDK dentatura I	97,248 - 97,331	97,25	97,261	97,25	97,251	97,265	Banchetto Marpos
38	Ø 27,2	27,2 ± 0,2	27,25	27,29	27,27	27,28	27,3	Calibro per interni
39	Ø 36	36 ± 0,1	35,9	35,91	35,9	35,9	35,9	Calibro
40	Ø 37	37 ± 0,1	36,91	36,94	36,98	36,99	36,92	Calibro
41	Ø 27	27 ± 0,1	26,92	26,95	26,91	26,96	26,99	Calibro
42	Ø 39	39 ± 0,1	38,96	38,98	38,98	38,99	38,99	Calibro
48	Ø 40	40 ± 0,1	40,02	40,03	40,05	40,03	40,04	Calibro
49	Ø 75	75 ± 0,2	74,85	74,9	74,87	74,88	74,94	Calibro
58	MDK dentatura II	49,643 - 49,712	49,65	49,646	49,652	49,658	49,648	Banchetto Marpos
65	MDK rullatura III	38,382 - 38,441	38,388	38,385	38,388	38,389	38,385	Banchetto Marpos
67	Distanza	19 ± 0,3	19,261	19,274	19,272	19,264	19,275	Calcolata da misura 63 - profilometro
68	Distanza	3 ± 0,3	2,95	2,952	2,941	2,938	2,928	Calcolata da misura 63 - profilometro
69	Distanza	92,6 ± 0,3	92,386	92,417	92,43	92,371	92,418	Calcolata da misura 3 - profilometro
70	Distanza	2 ± 0,2	2,041	2,029	2,035	2,033	2,022	Calcolata da misura 63 - profilometro
71	Distanza	2 ± 0,2	9,98	10,00	10,00	9,95	9,95	Calibro
144	Diametro	41,6 ± 0,1	41,62	41,65	41,60	41,58	41,60	Calibro
145	Diametro	47 ± 0,1	47,02	47,05	47,08	47,00	47,01	Visore ottico

Misurazioni Manuali

IS2 2506517635

31-lug-14

Pezzo 02

30-07-2014

MANTENIMENTO

Selezione dell'asse per la sua lettera. C X Y

Posizione 10850 45.5060 125.6796

Fine corsa

in corso ...

←

1.000

→

↑

Diametro

34.8548

D1

-1.5500

Rif.

D2

-1.6005

Rif.

Conv. 556

X IN 0

Arresto Operatore

Ausiliaia

Barriera

Inter Regolaggio

X IN 1

Rif. tamburo

Presenza pezzo

X PALP

SwR+

SwR-

SwX+

SwX-

X OUT 0

Rientro D1

Rientro D2

Boost 1

IN SERVIZIO

MONTARE

IN MISURA

TARATURA

Boost 2

X OUT 1

CarL AUTO

Manca

Verdetto Buono

Verdetto F. LIM.

Verdetto F. TOL.

Perzo 03

30-07-2014

MANTENIMENTO

Selezione dell'asse per la sua lettera

C X Y

Posizione 0900 45.5055 125.6796

Fine corsa

in corso ...

D1 D2

Diametro 34.8833

Rif. -1.5380

Rif. -1.5840

Conv. 554

←
1.000
→

→

X IN 0

Arresto Operatore

Ausiliaria

Barriera

Inter Regolaggio

X IN 1

Rif. tamburo

Presenza pezzo

X PALP

SWR+

SWR-

SWX+

SWX-

X OUT 0

Rientro D1

Rientro D2

Boost 1

IN SERVIZIO

MONTARE

IN MISURA

TAPATURA

Boost 2

X OUT 1

Car. AUTO

Manca

Verdello Buono

Verdello F. LIM.

Verdello F. TOL.

pezzo 04

30-07-2014

MANTENIMENTO

ESC

REF

FCAL

GO

STOP

+NY

Selezione dell'asse per la sua lettera

C X Y

Posizione 0900 45.5060 125.6796

Fine corsa

in corso ...

←

→

←

→

1.000

Diametro

34.8893

D1

1.5320

D2

1.5840

Cariv. 554

X OUT 1

Carit. AUTO

Manca

Verdetto Buono

Verdetto F. LIM.

Verdetto F. TOL.

X OUT 0

Rientro D1

Rientro D2

Boost 1

IN SERVIZIO

IN MISURA

TARATURA

Boost 2

X PALP

SWR+

SWR-

SWX+

SWX-

X IN 1

Rif. tamburo

Presenza pezzo

X IN 0

Arresto Operatore

Ausiliaria

Barriera

Inter Regolaggio

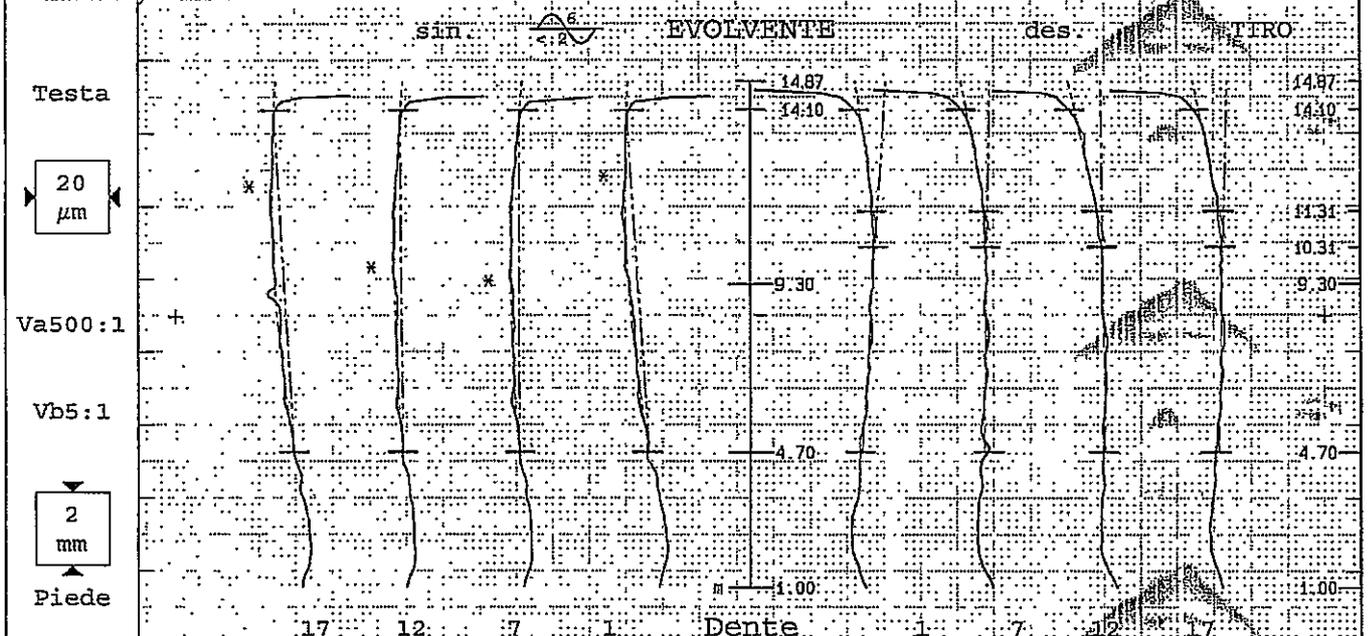
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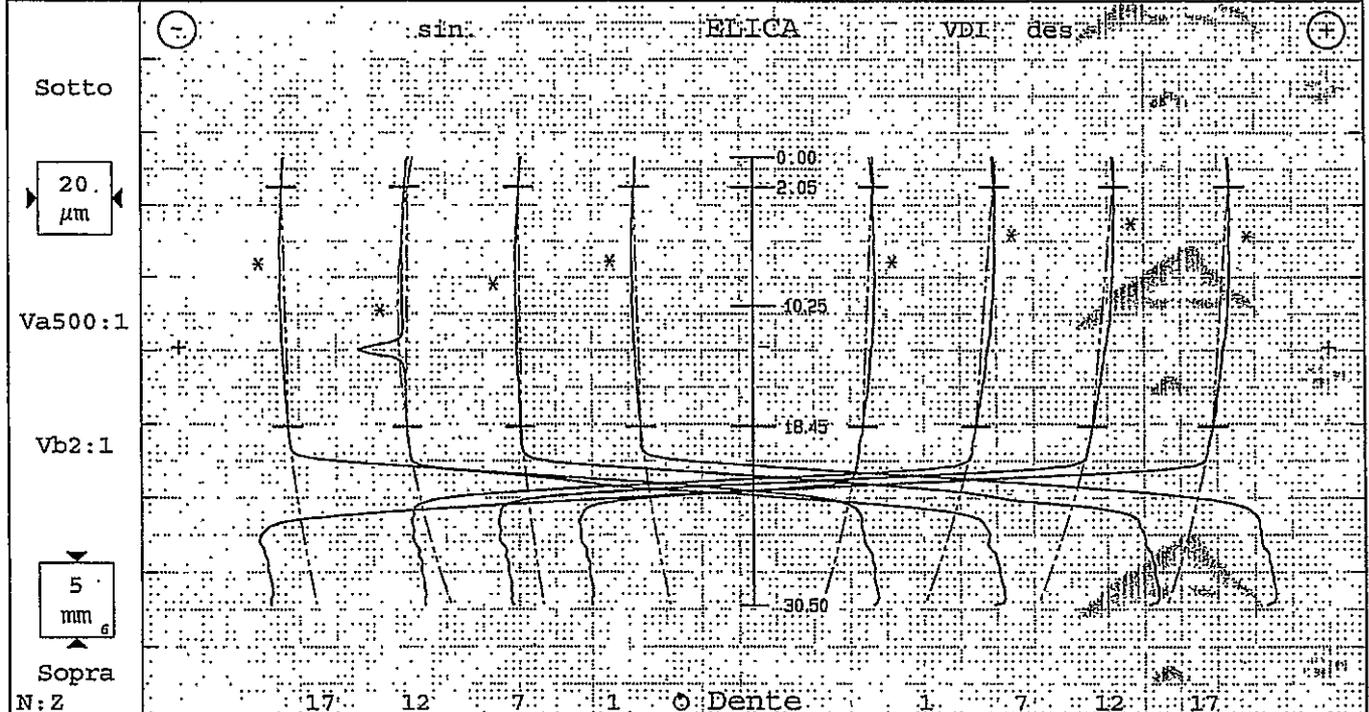
Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410o05 0	P26 B7590	Controllora:	TURNO A	Data:	30.07.2014 19:45
Denominazione:	Input Outer Z21		Numero denti z	21	Largh. fasc. dent. b	30.5mm
Numero disegno:	250.6.5176.35-IIF		Modulo m	2mm	Tratto evol. da	9.4/5.61mm
Commessa/serie nr.:	7.0-1		Angolo pressione	20°	Tratto elica L6	16.4mm
Masch.Nr.:	M001	Spindel: FORM	Angolo elica	22°	Inizio elab. M1	4.7mm
Untersuchungszweck:	Laufende Messung		Ø Base db	42.1659mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:		Ang. Base	20.611°	Fat. scor. pr. x	.39



Tolerance	Medio	Val. misur [µm]			Qual	Tolerance	Val. misur [µm]			Medio	Qual
		Var					Var				
fHm	±6	3		6		±6		5		1	1
fHa	±10	3	5	1	0	6	4	1	-1	1	1
Fa		5	7	3	4	7	4	2	2	3	3
ffa	4	2	3	2	2	2	4	2	2	2	2
Ca	0/4	2	2	2	2	2					
fKo		0	0	0	0	0					
fKo							-13/-5	-7	-6	-7	-7



N: Z	Tolerance	Medio	Val. misur [µm]			Qual	Tolerance	Val. misur [µm]			Medio	Qual
			Var					Var				
fHSm	±6	-2		4			12±6		6		8	8
fHS	±13	-2	-3	1	-1	-3	12±13	5	9	11	8	8
Fß		5	2	13	1	2		4	2	2	2	3
ffß	4	4	0	13	1	1	4	1	1	1	1	1
Cß	1/5	1	1	2	1	1	1/5	2	2	2	2	2

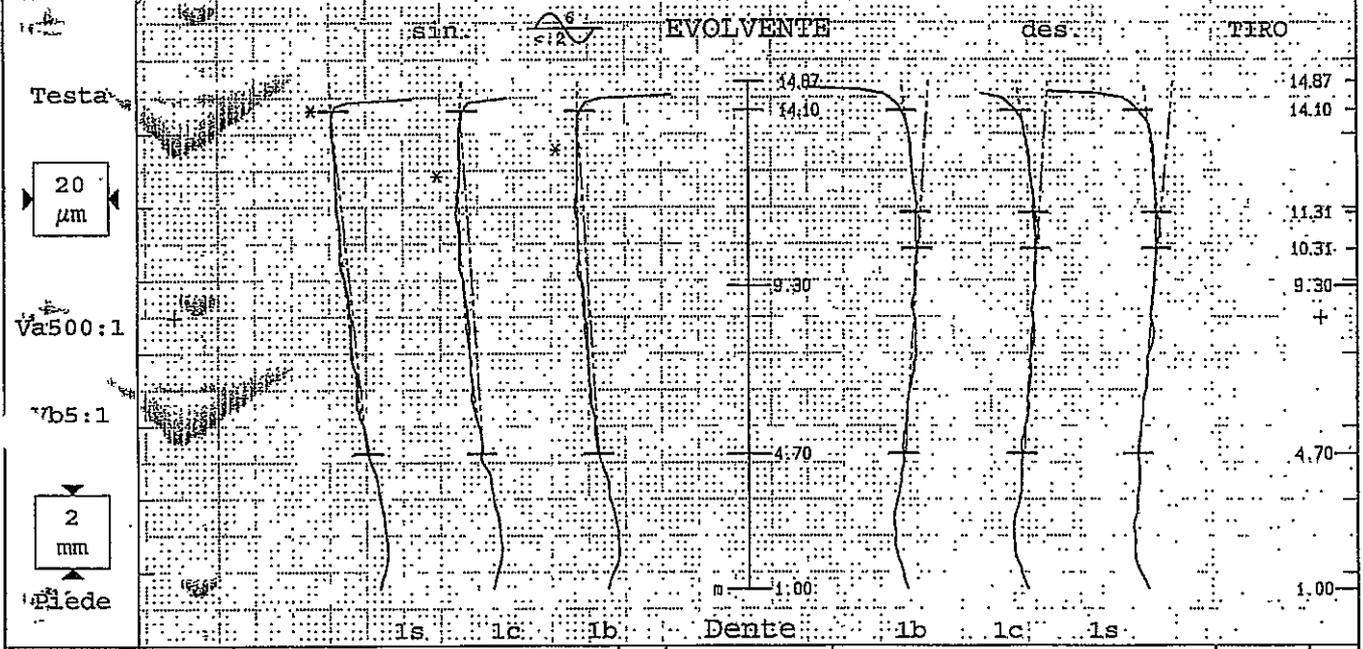


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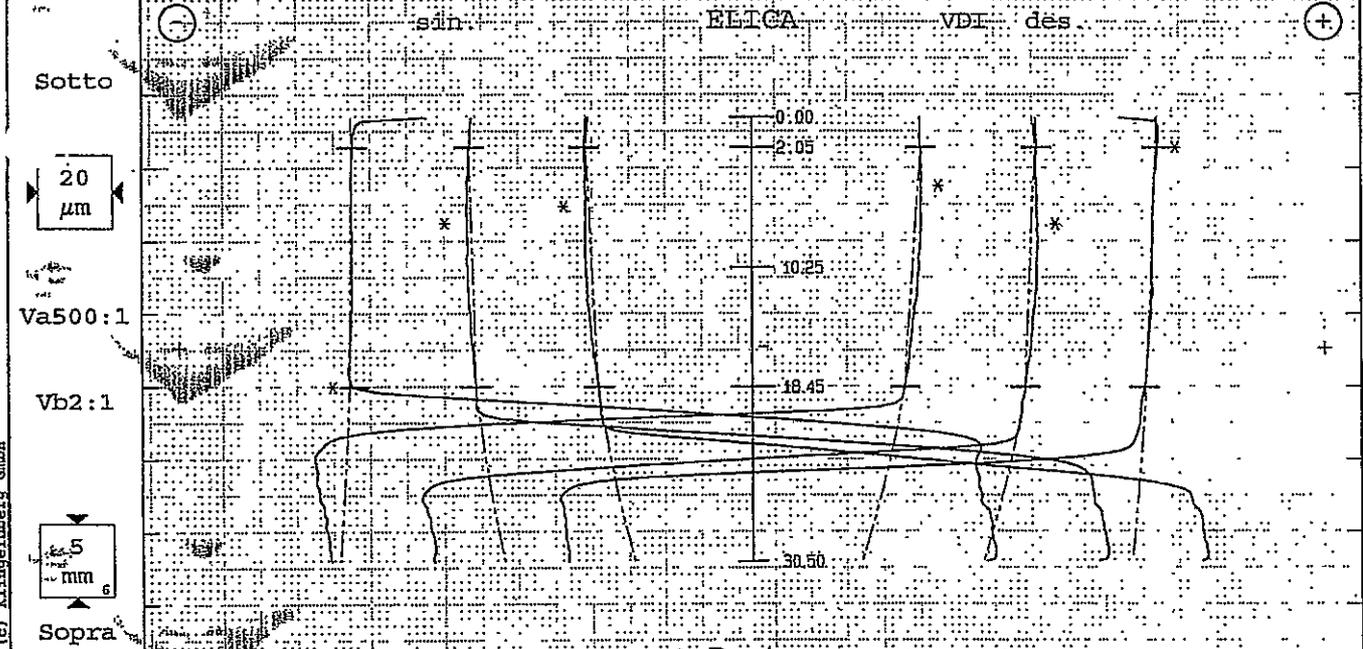
Ruota cilindrica Svergolamento



Nr. prog.:	STI0410o05 0 P26 B7590	Controllore:	TURNO A	Data:	30.07.2014 19:45
Denominazione:	Input Outer Z21	Numero denti z	21	Largh. fasc. dent. b	30.5mm
Numero disegno:	250.6.5176.35-IIF	Modulo m	2mm	Tratto evol. La	9.4/5.61mm
Comessa/serie nr.:	7.0-1	Angolo pressione	20°	Tratto elica LE	16.4mm
Masch.Nr.:	M001 Spindel: Form. addizionale	Angolo elicoidale	22°	Inizio elab. M1	4.7mm
Untersuchungszweck:	Laufende Messung	Ø Base db	42.1659mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:	Ang. Base	20.611°	Fat. scor. pr. x	.39



Tolerance	Medio	Val. misur [µm]			Qual	Tolerance	Val. misur [µm]			Medio	Qual
		Var					Var				
fHm ±6	7	10	6	6		±6	4	4	5	4	4
fHa ±10	7	10	7	6		±10	4	4	5	4	4
Fa	8	10	7	6			4	4	5	4	4
ffa 4	2	2	2	2		4	2	2	2	2	2
Ca 0/4	2	1	2	2							
fKo	0	0	0	0							
fKo ^{st-a}						-13/-5	-6	-7	-6	-6	-6



Tolerance	Medio	Val. misur [µm]			Qual	Tolerance	Val. misur [µm]			Medio	Qual
		Var					Var				
fHSm ±6	-3	1	-3	-6		12±6	8	5	5	6	6
fHS ±13	-3	2	2	4		12±13	2	4	4	3	3
FS	-3	2	1	1			1	1	1	1	1
ffS 4	1	2	1	1		4	1	1	1	1	1
CS 1/5	1	0	1	2		1/5	2	2	0	1	1
Bd	7										3

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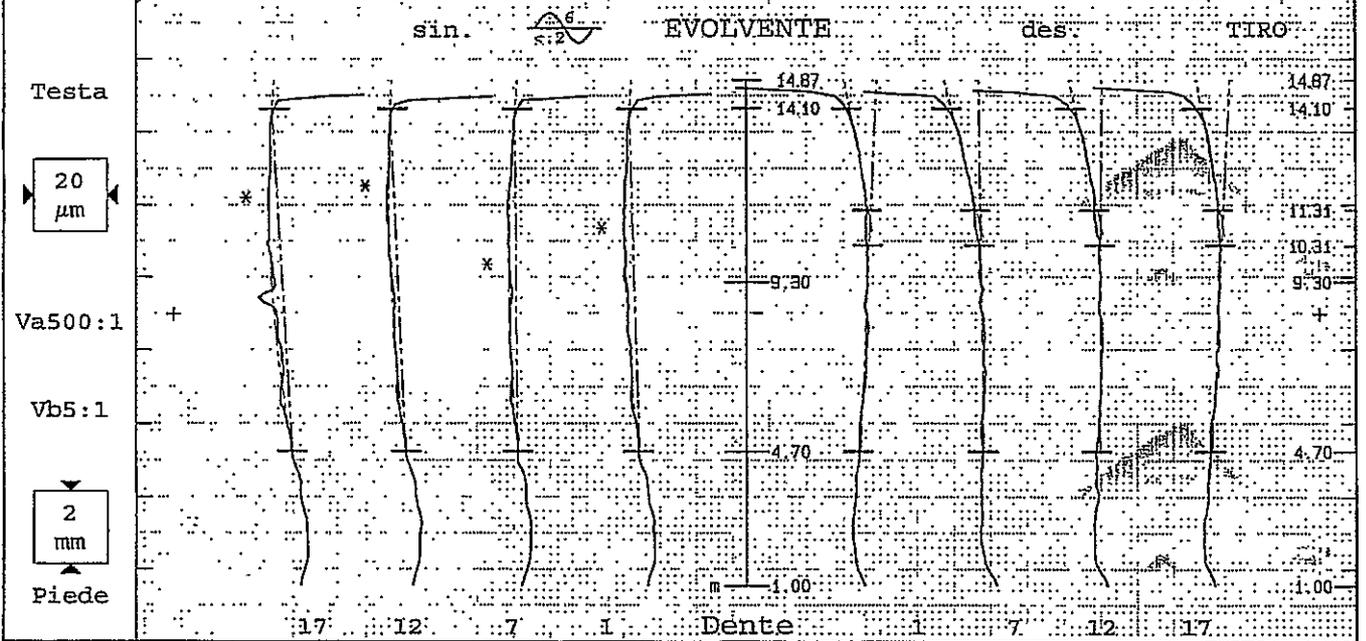


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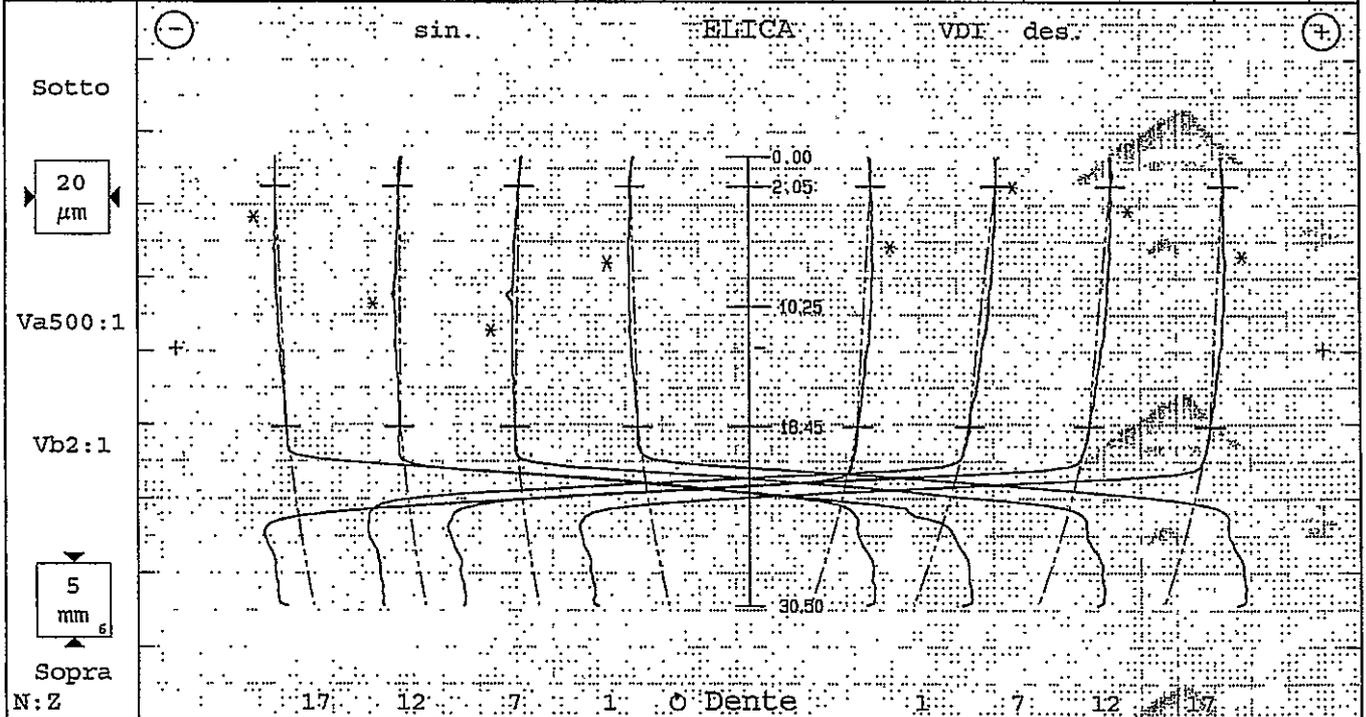
Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410005 0	P26 B7590	Controllora:	TURNO A	Data:	30.07.2014 18:39
Denominazione:	Input Outer Z21		Numero denti z	21	Largh.fasc.dent. b	30.5mm
Numero disegno:	250.6.5176.35-IIF		Modulo m	2mm	Tratto evol. Laq	9.4/5.61mm
Commessa/serie nr.:	7.0-2		Angolo pressione	20°	Tratto elica	16.4mm
Masch.Nr.:	M001	Spindel: FORM	Angolo elica	22°	Inizio lab. M1	4.7mm
Untersuchungszweck:	Laufende Messung		Ø Base db	42.1659mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:		Ang. Base	20.611°	Fat. scor. pr. xst	.39°



Tolerance	Medio	Val. misur [μm]				Qual	Tolerance	Val. misur [μm]				Medio	Qual
fHm	±6	3	Var 4				±6	Var 4			1		
fHa	±10	3	5	4	1	3	±10	2	-1	0	3	1	
Fa		5	9	5	3	4		3	2	2	3	3	
ffa	4	2	5	1	2	1	4	1	2	2	2	2	
Ca	0/4	2	3	2	2	2							
fKo		0	0	0	0	0							
fKo							-13/-5	-7	-8	-7	-7	-7	



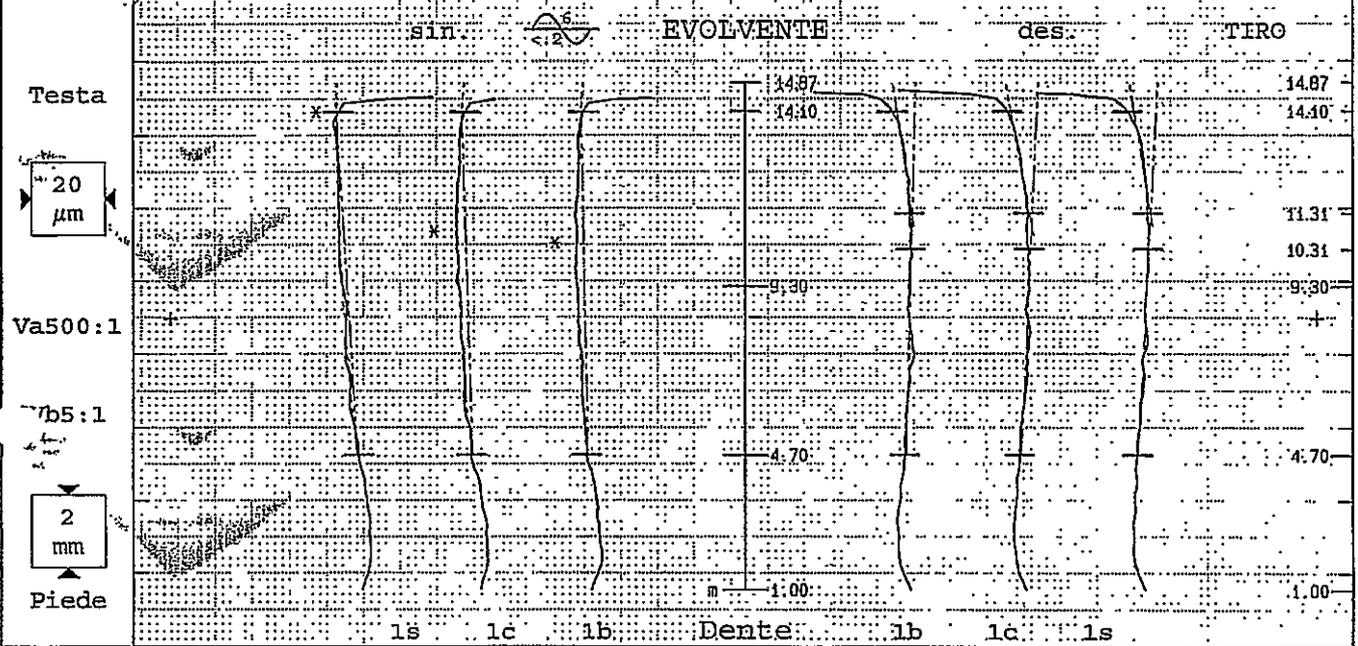
N: Z	Tolerance	Medio	Val. misur [μm]				Qual	Tolerance	Val. misur [μm]				Medio	Qual
fHsm	±6	-2	Var 8				12±6	Var 8			10			
fHs	±13	-2	-6	0	2	-4	12±13	7	14	11	6	10		
fFs		2	3	1	3	2		3	2	1	3	2		
FfS	4	1	1	1	2	1	4	1	1	1	1	1		
CS	1/5	1	1	1	1	1	1/5	2	2	2	2	2		

GETRAG B7590

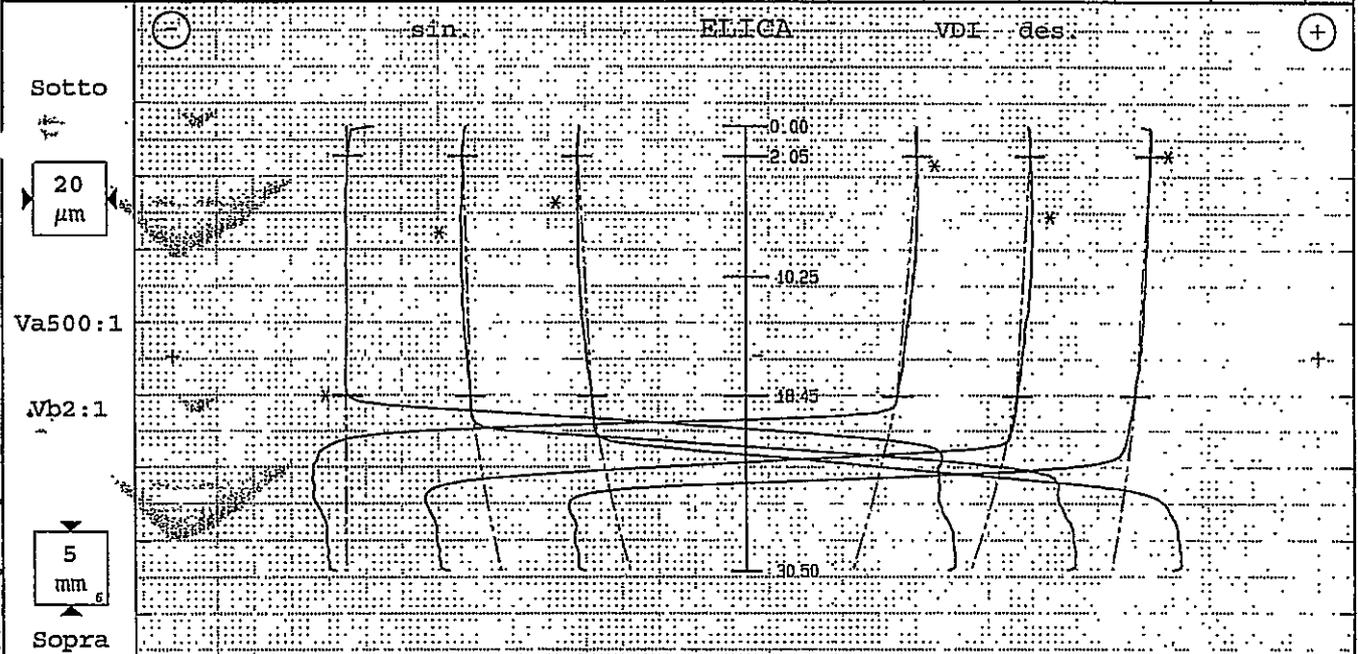
Ruota cilindrica Svergolamento



Nr. prog.:	STI0410005 0	P26 B7590	Controllore:	TURNO A	Data:	30.07.2014 18:39
Denominazione:	Input Outer Z21		Numero denti z	21	Largh.fasc.dent. b	30.5mm
Numero disegno:	250.6.5176.35-IIF		Modulo m	2mm	Tratto evol. La	9.4/5.61mm
Comessa/serie nr.:	7.0-2		Angolo pressione	20°	Tratto elica Ls	16.4mm
Masch.Nr.:	M001	Spindel: Form	Angolo elica	22°	Inizio elab. M1	4.7mm
Untersuchungszweck:	Laufende Messung		δ Base db	42.1659mm	Palpatore φ	(#2C) 1mm
Werkzeug:	Charge:	Ang. Base	20.611°	Fat.scor.pr. x	.39	



Tolerance	Medio	Val. misur [μm]		Qual	Tolerance	Val. misur [μm]		Medio	Qual
fHm ±6	4	Var	4		±6	Var	2		2
fHa ±10	4	6	3	2	±10	1	2	3	2
Fa	5	7	4	3		3	3	3	3
ffa	1	2	1	1	4	2	1	1	1
Ca 0/4	2	1	2	2					
fKo	0	0	0	0					
fKo					-13/-5	-5	-7	-6	-6



N:Z	Tolerance	Medio	Val. misur [μm]		Qual	Tolerance	Val. misur [μm]		Medio	Qual
fHm ±6	-3	Var	8		12±6	Var	-4		8	
fHb ±13	-3	1	-4	-7	12±13	11	7	7	8	
Fb	2	1	2	4		2	3	2	2	
ffb	1	1	1	1	4	1	1	1	1	
Cb 1/5	1	0	1	2	1/5	2	2	1	2	
Bd	-8								4	

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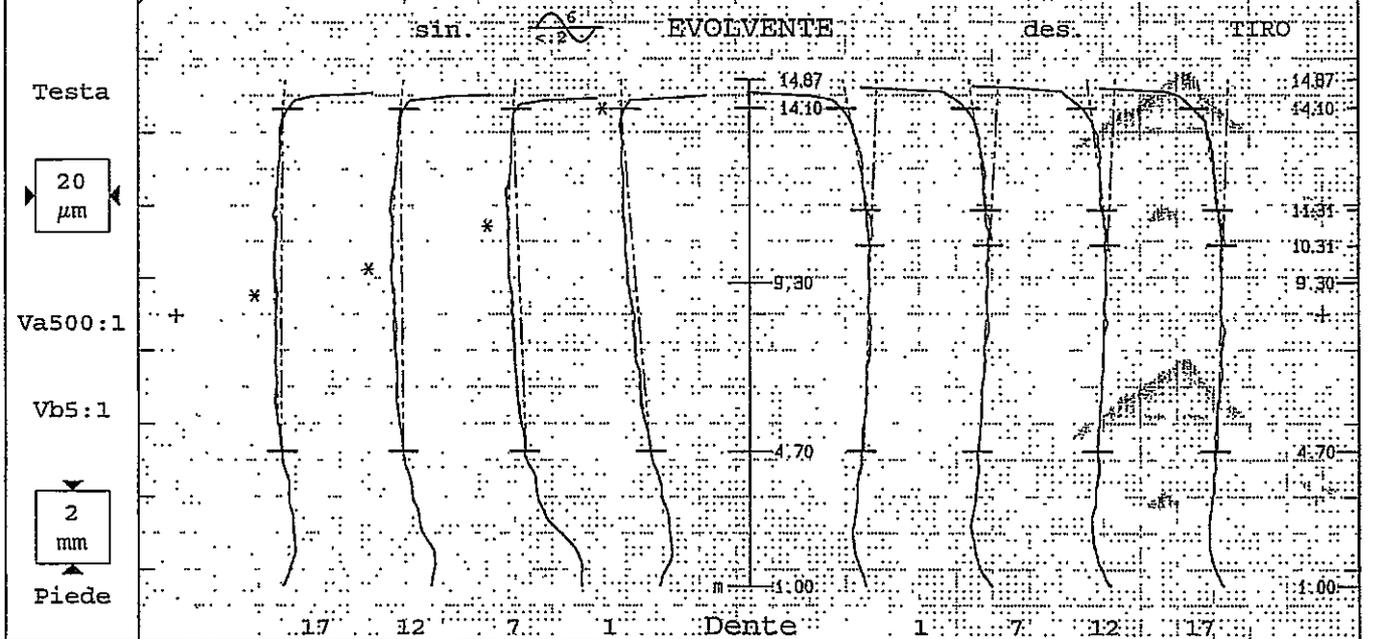


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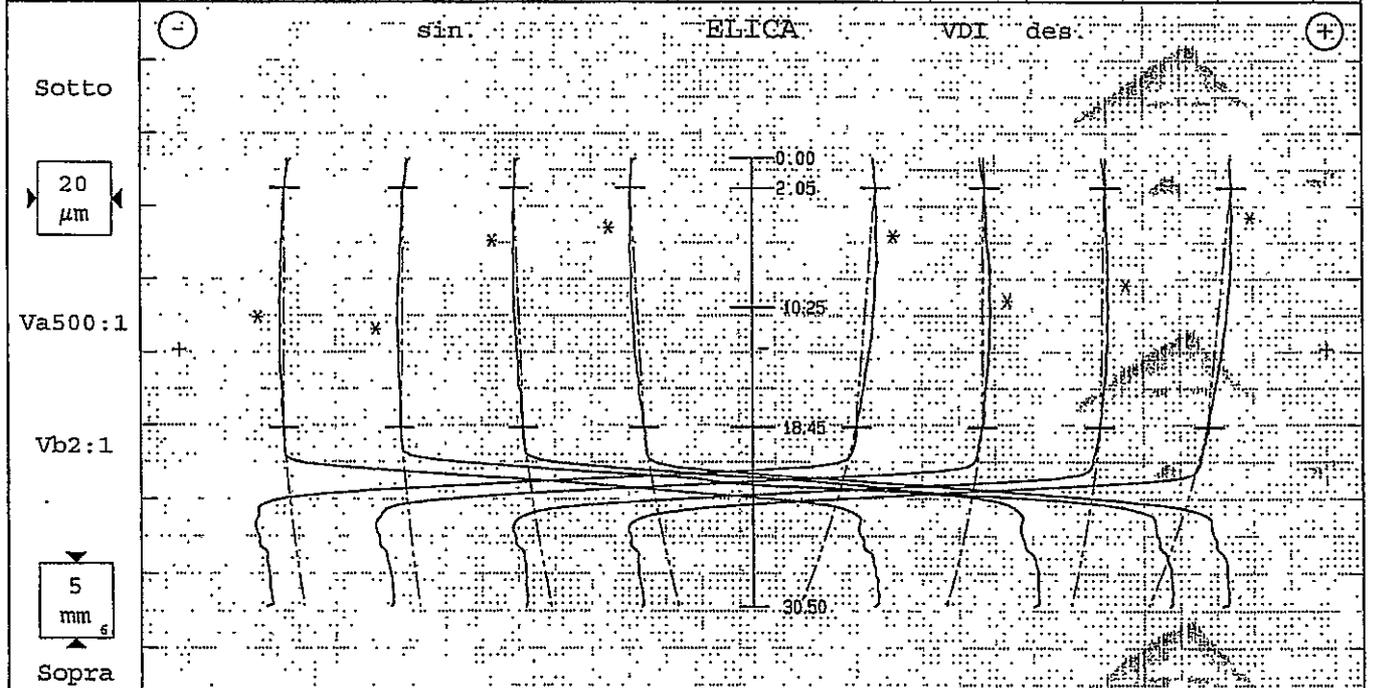
Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410o05 0	P26 B7590	Controllore:	TURNO A	Data:	30.07.2014 18:52
Denominazione:	Input Outer Z21		Numero denti z	21	Largh. fasc. dent. b	30.5mm
Numero disegno.:	250.6.5176.35-IIF		Modulo m	2mm	Tratto, evolv. la	9.4/5.61mm
Comessa/serie nr.:	7.0-3		Angolo pressione	20°	Tratto elica	LE 16.4mm
Maach.Nr.:	M001	Spindel: FORM	Ang. elica	22°	Inizio elab. M	4.2mm
Untersuchungszweck:	Laufende Messung		Ø Base db	42.1659mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:		Ang. Base	20.611°	Fat. scor. pr. x	.39



Tolerance	Medio	Val. misur [µm]				Qual	Tolerance	Val. misur [µm]				Medio	Qual
		Var					Var						
fHgm	±6	3			9		±6				3		
fHa	±10	3	-1	1	3	8	±10	2	3	3	2	3	
Fa		6	4	4	5	9		3	3	3	3	3	
ffa	4	2	2	2	2	2	4	2	2	2	2	2	
Ca	0/4	3	2	3	3	2							
fKo		0	0	0	0	0							
fKo							-13/-5	-7	-7	-6	-7	-7	



N: Z													
fHgm	±6	-3			8		12±6			Var	12		7
fHß	±13	-3	1	1	-5	-7	12±13	10	1	2	13	7	
Fß		2	1	1	3	4		2	6	5	1	4	
ffß	4	1	1	1	1	1	4	1	1	1	1	1	
CB	1/5	1	1	1	1	1	1/5	2	2	1	2	2	

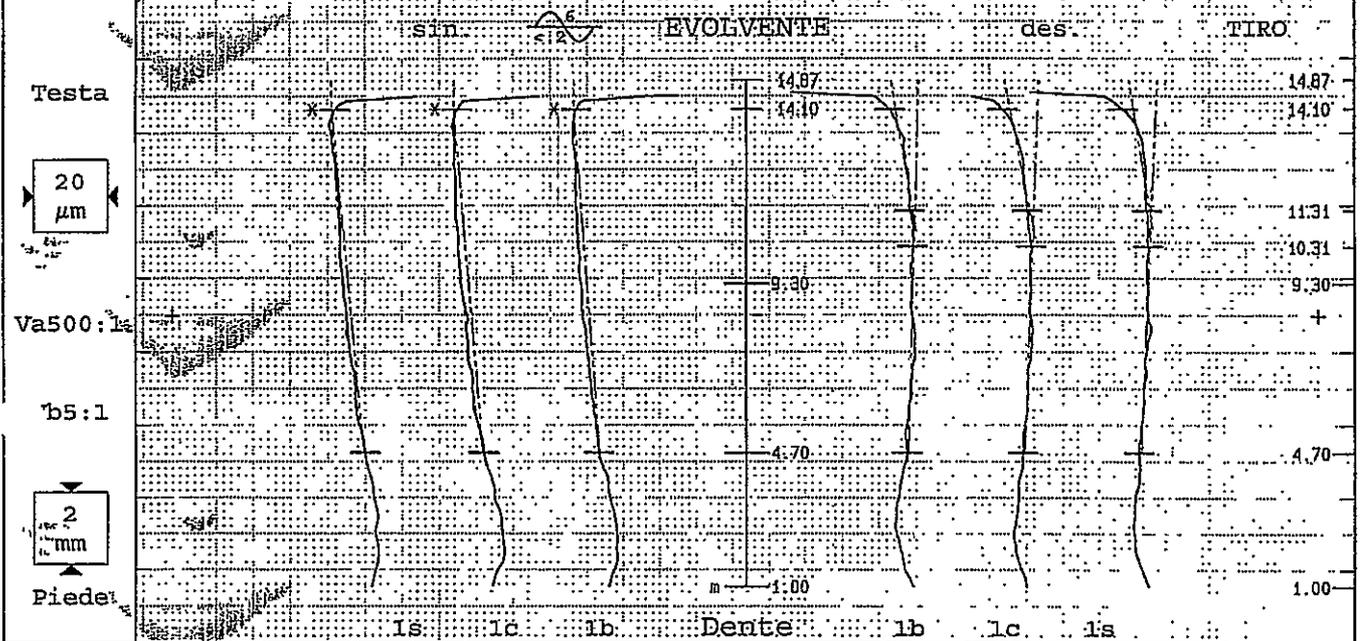


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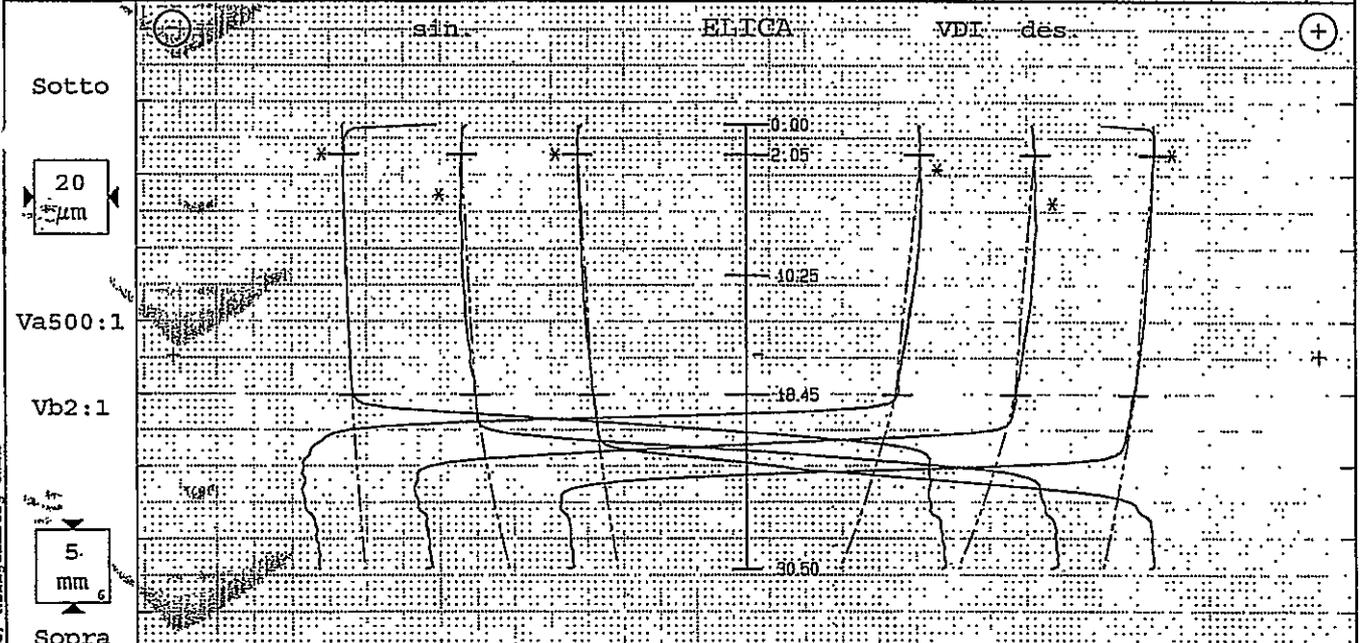
Ruota cilindrica Svergolamento



Nr. prog.: ST10410005 0	P26 B7590	Controllore: TURNO A	Data: 30.07.2014 18:52
Denominazione: Input Outer Z21	Numero denti z	21	Largh. fasc. dent. b
Numero disegno.: 250.6.5176.35-IIF	Modulo m	2mm	Tratto evol. La
Comessa/serie nr.: 7.0-3	Angolo pressione	20°	Tratto elica Lb
Masch. Nr.: M001	Spindel: FORMULA	Angolo elica	22°
Untersuchungszweck: Laufende Messung	Ø Base db	42.1659mm	Palpatore ø (#2C) lmm
Werkzeug: Charge:	Ang. Base	20.611°	Fat. scor. pr. x



Tolerance	Medio	Val. misur [µm]		Qual	Tolerance	Val. misur [µm]		Medio	Qual
fHm	±6	8	Var 2		±6	1	2	2	2
fHa	±10	8	9 8	7	±10	1	2	2	2
Fa		9	10 9	7		3	3	4	3
Ffa	4	2	2 2	1	4	2	2	2	2
Ca	0/4	2	1 2	2					
fKo	0	0	0 0	0					
fKo					-13/-5	-6	-7	-6	-6



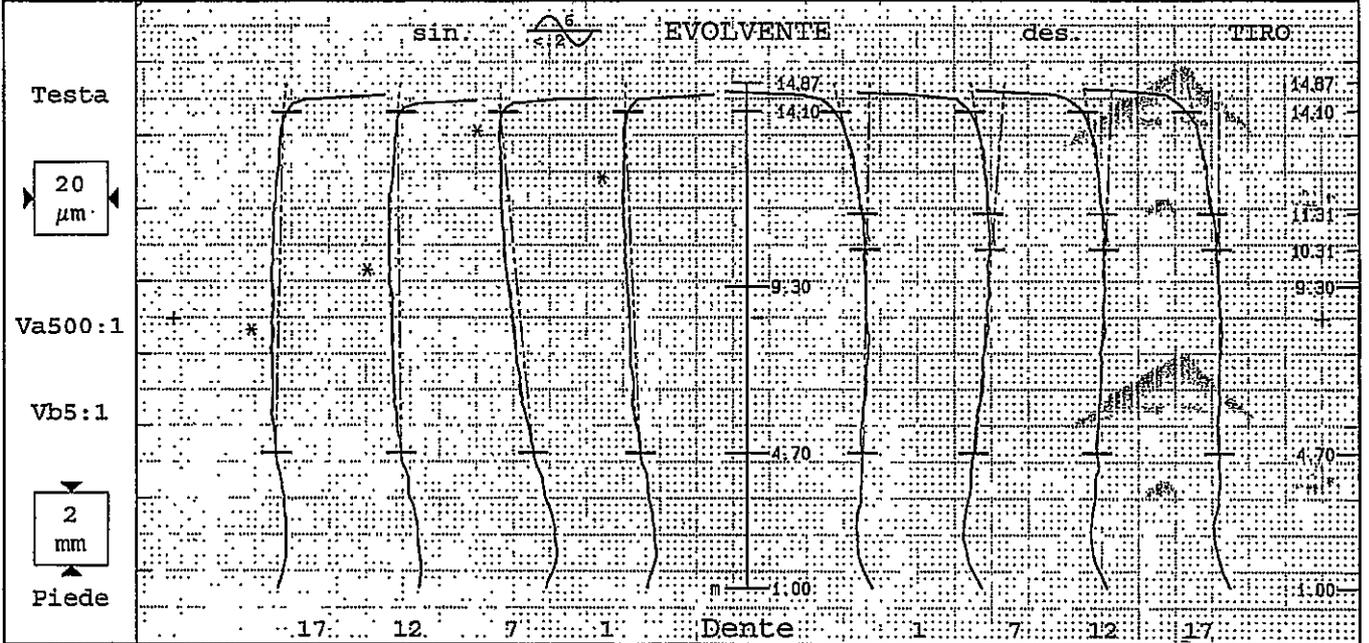
N:Z	Medio	Val. misur [µm]		Qual	Tolerance	Val. misur [µm]		Medio	Qual
fHGm	±6	-6	Var 2		12±6	1	2	2	11
fHG	±13	-6	-5 -7 -7		12±13	13	10	10	11
FB		4	3 4	5		1	2	1	1
FfB	4	1	1 1	1	4	1	1	1	1
CB	1/5	1	0 1	1	1/5	2	2	1	2
Bd		-2							3

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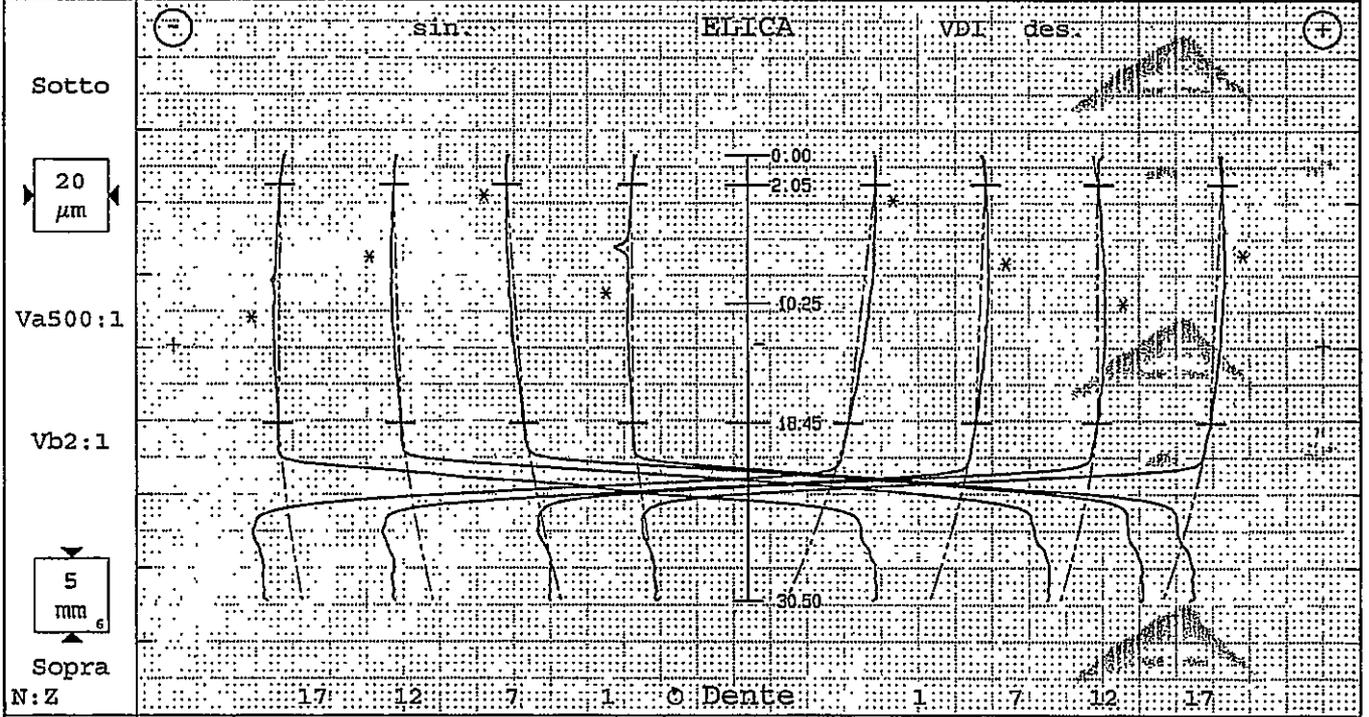
Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410005 0	P26 B7590	Controllo:	TURNO A	Data:	30.07.2014 18:56
Denominazione:	Input Outer Z21		Numero denti z	21	Largh. fasc. dent. b	30.5mm
Numero disegno:	250.6.5176.35-IIF		Modulo m	2mm	Tratto evolvent. La	9.4/5.61mm
Commissa/serie nr.:	7.0-4		Angolo pressione	20°	Tratto elica Ls	16.4mm
Masch. Nr.:	M001	Spindel: Forme	Angolo elica	22°	Inizio elab. M ₁	4.7mm
Untersuchungszweck:	Laufende Messung		Ø Base db	42.1659mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:	Ang. Base	20.611°	Fat. scor. pr. x	.39	



Tolerance	Medio	Val. misur [μ m]				Qual	Tolerance	Val. misur [μ m]				Medio	Qual
		Var					Var						
fH _{0m}	± 6	3			11		± 6			4		2	
fH _a	± 10	3	-2	1	9	4	± 10	1	4	2	0	2	
F _a	6		4	4	9	5		2	5	3	2	3	
ffa	4		1	2	1	2	4	2	2	1	2	2	
C _a	0/4		2	3	2	2							
fK ₀	0		0	0	0	0							
fK ₀							-13/-5	-8	-7	-6	-7	-7	



Tolerance	Medio	Val. misur [μ m]				Qual	Tolerance	Val. misur [μ m]				Medio	Qual
		Var					Var						
fH _{0m}	± 6	-3			10		12 \pm 6			14		6	
fH _S	± 13	-3	1	-4	-9	-1	12 \pm 13	14	5	0	6	6	
F _B	3		1	2	5	4		2	4	7	4	4	
ffb	4		1	1	1	4	4	1	1	1	1	1	
CB	1/5		1	1	1	1	1/5	2	2	2	2	2	

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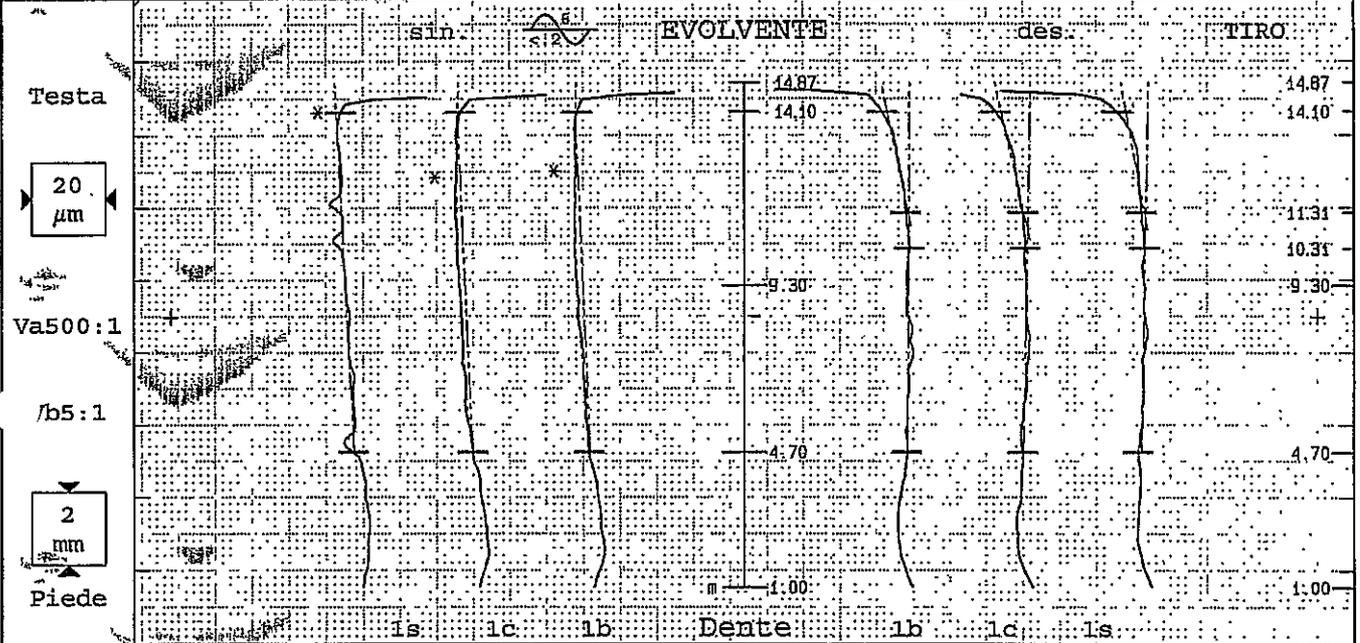


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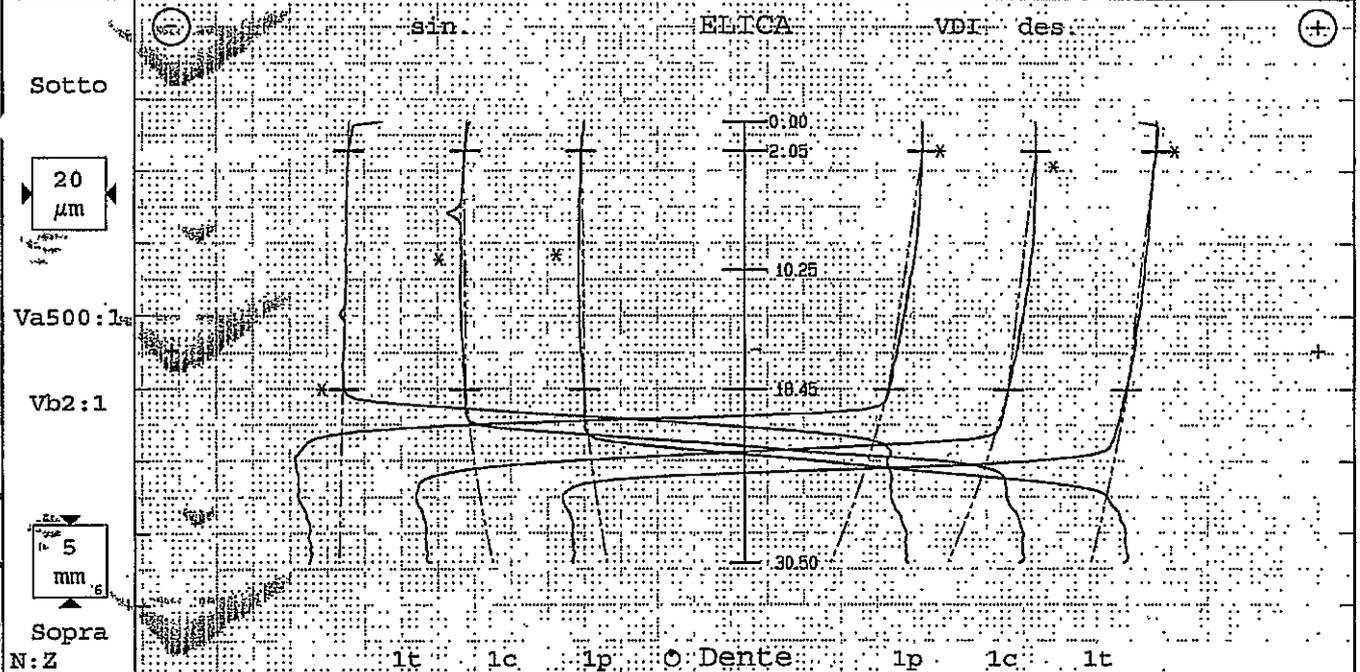
Ruota cilindrica Svergolamento



Nr. prog.: ST104110005 0 P26 B7590	Controllore: TURNO A	Data: 30.07.2014 18:56
Denominazione: Input Outer Z21	Numero denti z: 21	Largh. fasc. dent. b: 30.5mm
Numero disegno: 250.6.5176.35-IIF	Modulo m: 2mm	Tratto evol. La: 9.4/5.61mm
Comessa/serie nr.: 7.0-4	Angolo pressione: 20°	Tratto elica Ls: 16.4mm
Masch.Nr.: M001	Spindel: Formulasolida 22°	Inizio elab. M1: 4.7mm
Untersuchungszweck: Laufende Messung	Ø Base db: 42.1659mm	Palpatore ø (#2C): 1mm
Werkzeug: Charge:	Ang. Base: 20.611°	Fat. scor. pr. x: .39



Tolerance	Medio	Val. misur [µm]	Qual	Tolerance	Val. misur [µm]	Medio	Qual
fHm ±6	4	Var 1		±6	Var 1	1	
fHa ±10	4	5 4	4	±10	0 1 1	1	
Fa	5	7 5	4		2 2 3	2	
ffa 4	3	5 2	1	4	2 2 2	2	
Ca 0/4	1	0 2	1				
fKo	0	0 0	0				
fKo				-13/-5	-6 -8 -6		-7



N:Z	EHSm	EHG	FG	ffb	CS	Bd	Var	Qual	Tolerance	Val. misur [µm]	Medio	Qual
	±6	±13	3	4	1/5	-4	4		12±6	Var -3	15	
							-1 -1		12±13	17 14 14	15	
							4 1			3 2 2	2	
							2 1		4	1 1 1	1	
							0 1		1/5	2 2 1	2	
											3	

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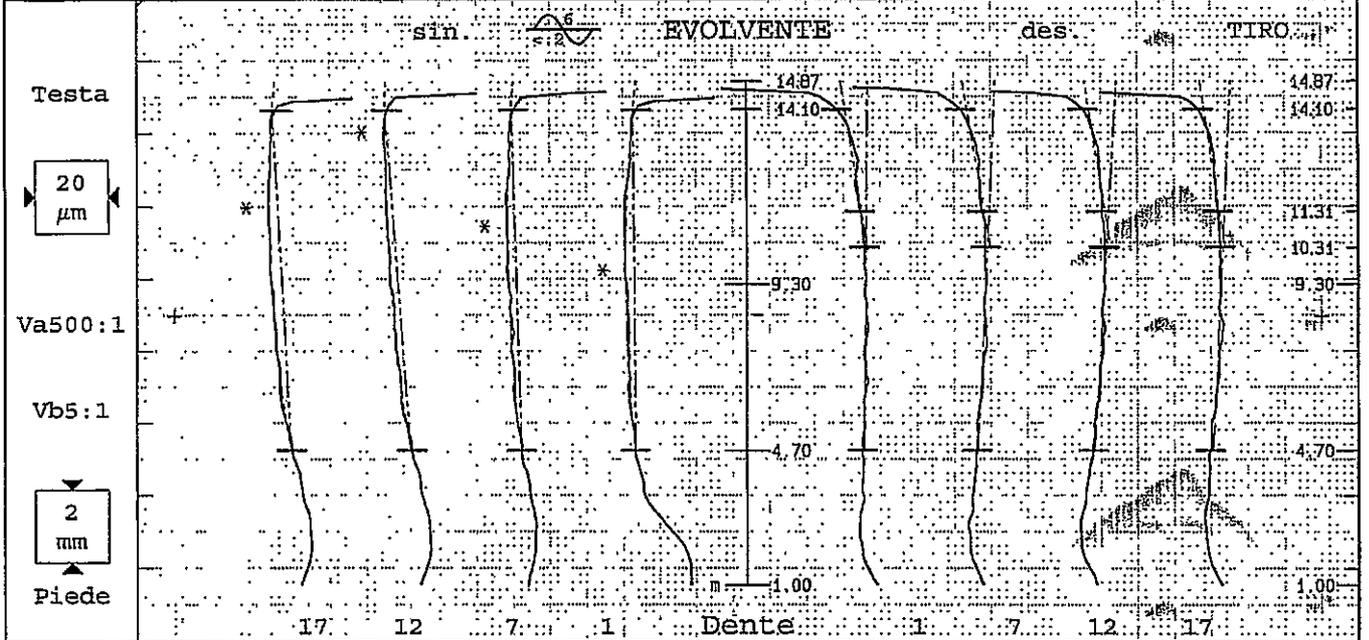


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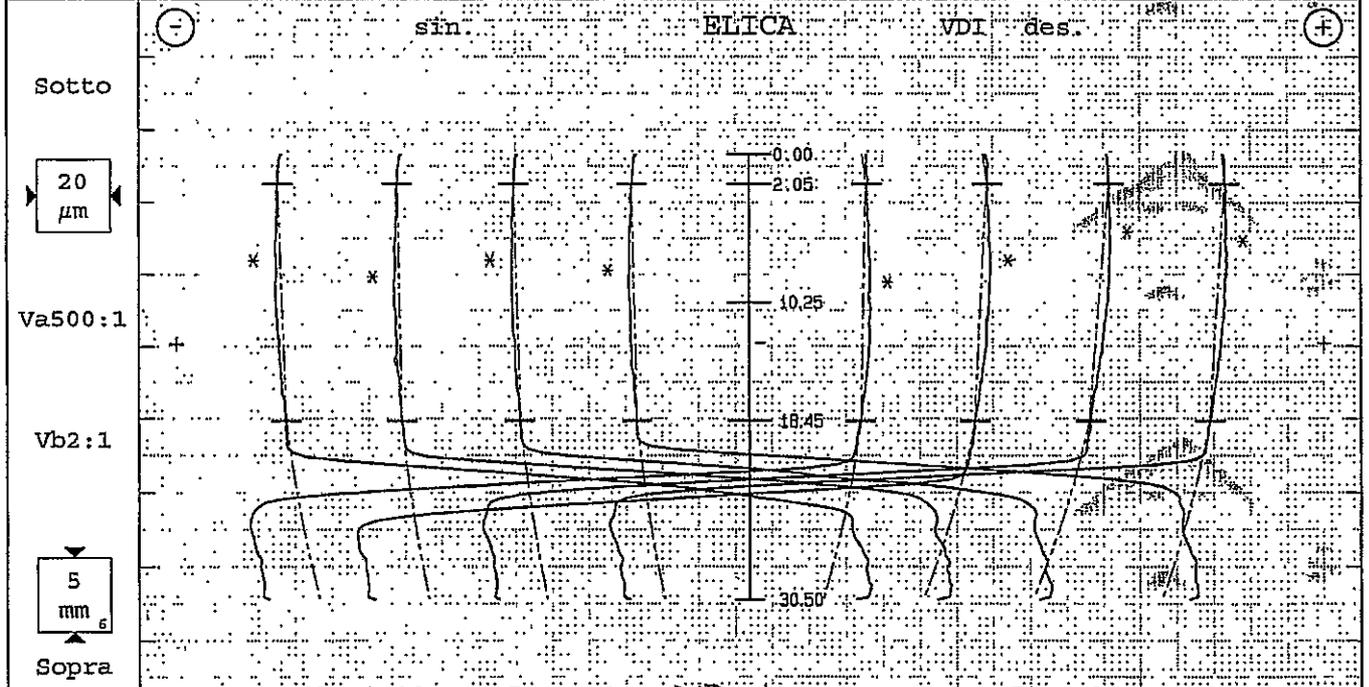
Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410c05 0	P26 B7590	Controlliore:	TURNO A	Data:	30.07.2014 19:01
Denominazione:	Input Outer Z21		Numero denti z	21	Largh.fasc.dent. b	30.5mm
Numero disegno:	250.6.5176.35-IIF		Modulo m	2mm	Tratto evolv. La	9.4/5.61mm
Commessa/serie nr.:	7,0-5		Angolo pressione	20°	Tratto elica Ls	16.4mm
Masch.Nr.:	M001	spindel: Form	Angolo elica	22°	Inizio elab. m	4.7mm
Untersuchungszweck:	Laufende Messung		φ Base db	42.1659mm	Palpatore	(#2C) 1mm
Werkzeug:	Charge:		Ang. Base	20.611°	Fat.scor.pr. x	.39



Tolerance	Medio	Val. misur [μm]			Qual	Tolerance	Val. misur [μm]			Medio	Qual
		Var					Var				
fHm	±6	4		6		±6			3		3
fHa	±10	4	5	7	3	±10	1	3	3	3	3
Fa		5	6	8	4		2	3	3	4	3
ffa	4	1	1	1	1	4	2	2	2	2	2
Ca	0/4	2	3	2	2						
fKo	0	0	0	0	0						
FKo						-13/-5	-6	-7	-7	-7	-7



Tolerance	Medio	Val. misur [μm]			Qual	Tolerance	Val. misur [μm]			Medio	Qual
		Var					Var				
fHm	±6	-3		2		12±6			8		7
fHs	±13	-3	-4	-2	-3	12±13	2	6	10	8	7
Fs		2	3	2	2		5	3	2	3	3
ffa	4	1	1	1	1	4	1	1	1	1	1
CB	1/5	1	2	1	1	1/5	2	2	2	2	2

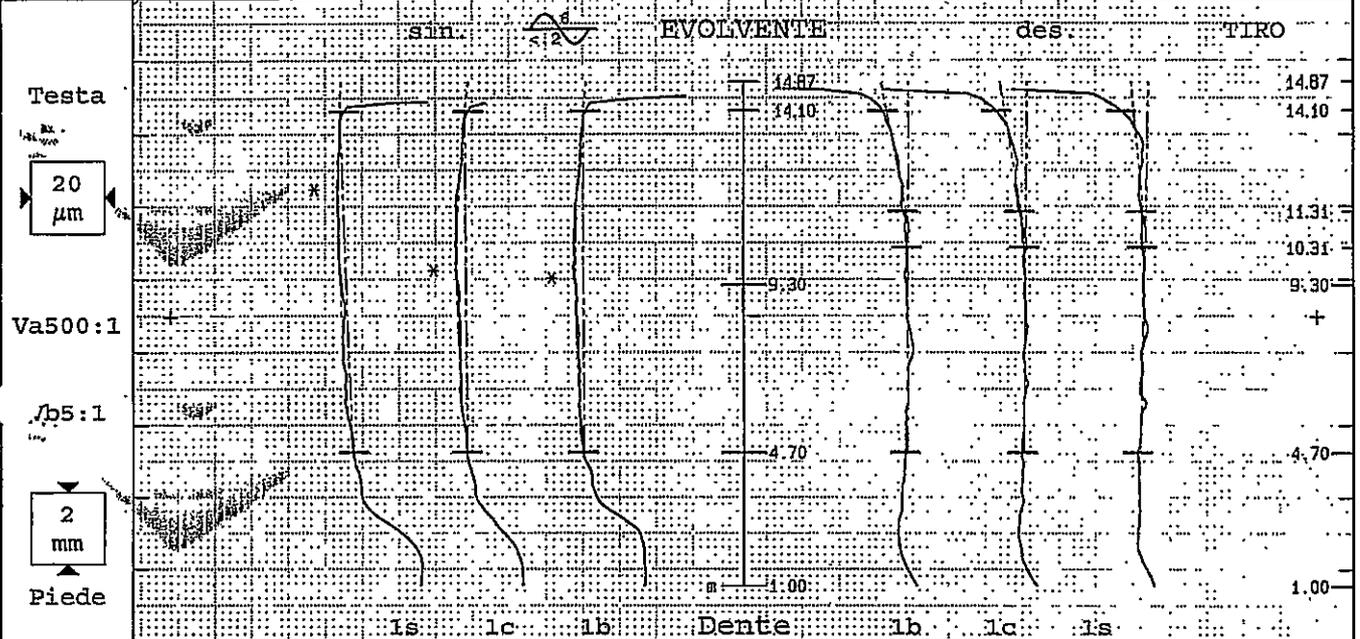


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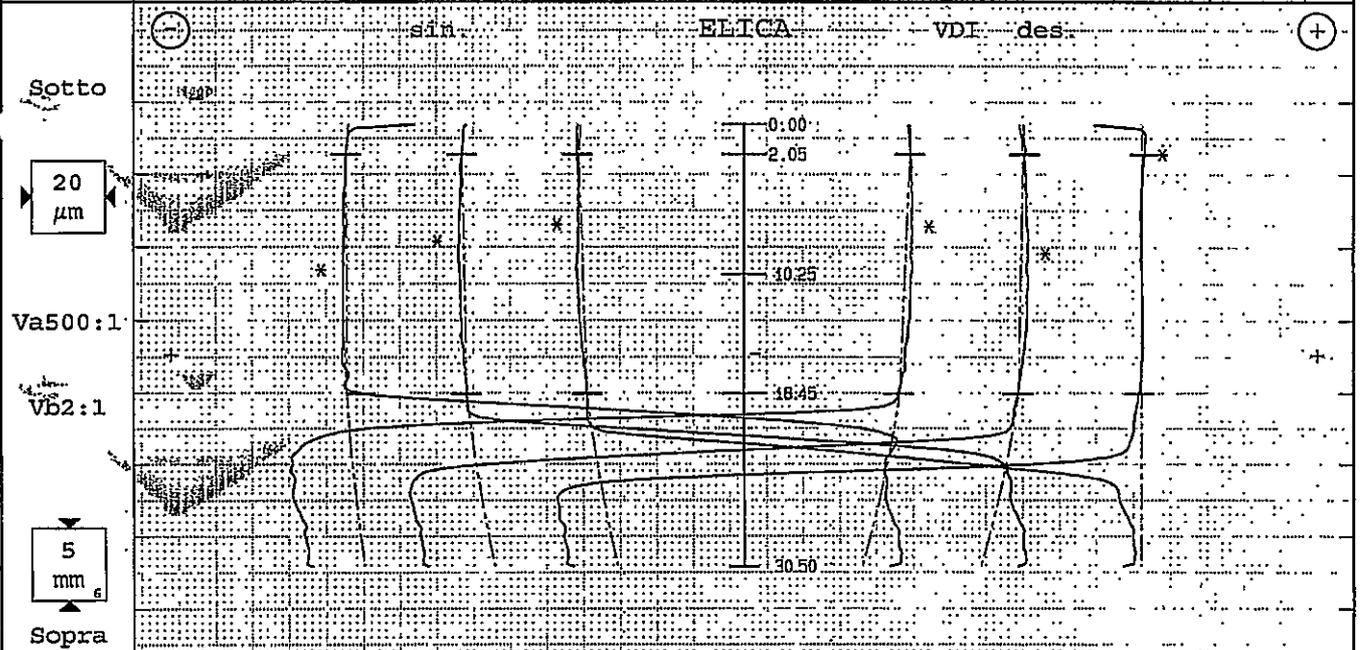
Ruota cilindrica Svergolamento



Nr. prog.:	STI0410o05 0 P26 B7590	Controllore:	TURNO A	Data:	30.07.2014 19:01
Denominazione:	Input Outer Z21	Numero denti z	21	Largh.fasc.dent. b	30.5mm
Numero disegno:	250.6.5176.35-IIF	Modulo m	2mm	Tratto evol. Ia	9.4/5.61mm
Comessa/serie nr.:	7.0-5	Angolo pressione	20°	Tratto elica	16.4mm
Masch.Nr.:	M001	Spindel: Forme	22°	Inizio elab. M1	4.7mm
Untersuchungs-Wechsel:	Laufende Messung	Ø Base db	42.1659mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:	Ang. Base	20.611°	Fat.scor.pr. x	.39



Tolerance	Medio	Val. misur [µm]			Qual	Tolerance	Val. misur [µm]			Medio	Qual
		Var	3	3			Var	1	1		
fHm	±6					±6					1
fHa	±10	1	3	1	0	±10	0	1	1	1	
Fa	4	5	3	3	3		2	2	3	2	
ffa	4	2	1	1	1	4	2	2	2	2	
Ca	0/4	2	2	2	2						
fKo	0	0	0	0	0						
fKo						-13/-5	-6	-6	-4	-5	



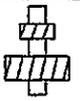
Tolerance	Medio	Val. misur [µm]			Qual	Tolerance	Val. misur [µm]			Medio	Qual
		Var	4				Var	-5			
fHm	±6	-2				12±6				2	
fHa	±13	-2	0	-3	-4	12±13	5	2	0	2	
Fa	5	5	2	3	3		4	5	6	5	
ffa	4	5	1	1	1	4	1	1	1	1	
Ca	1/5	1	1	1	1	1/5	2	2	0	1	
Bd	-4									5	

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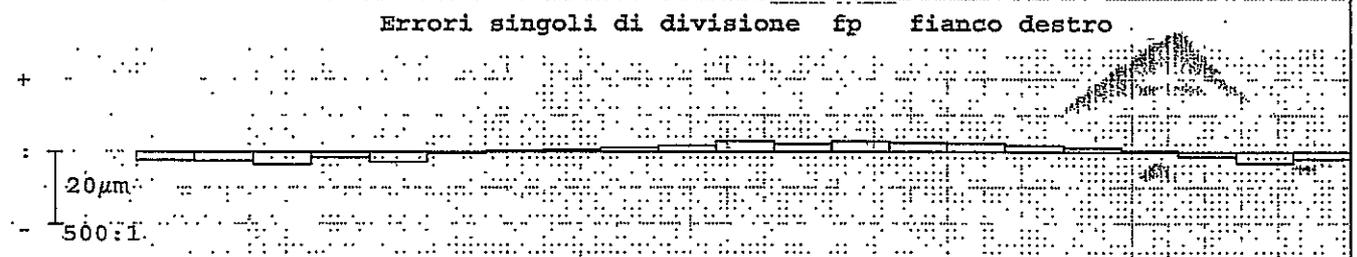


GETRAG B7590

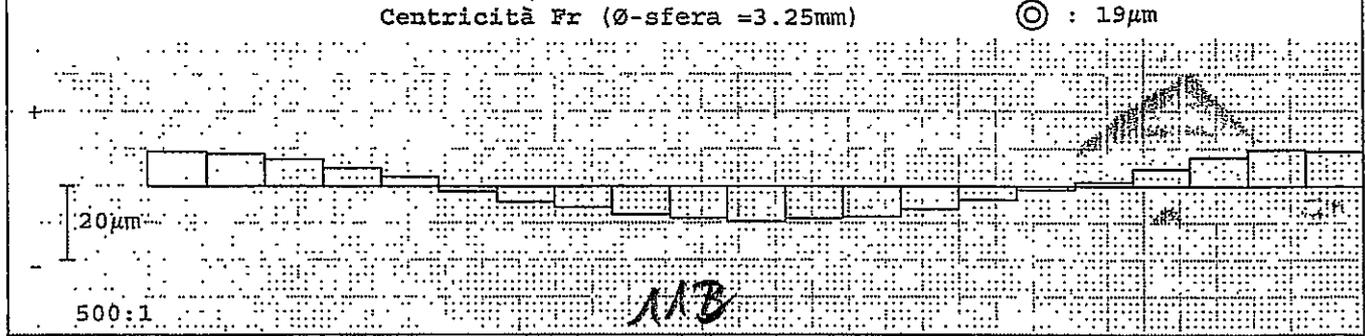
Ruota cilindrica Divisione



Nr. prog.: STI041005 0	P26 B7590	Controllore: TURNO A	Data: 30.07.2014 19:45
Denominazione: Input Outer Z21	Numero denti z: 21	Angolo pressione: 20°	
Numero disegno.: 250.6.5176.35-IIF	Modulo m: 2mm	Angolo elica: 22°	
Commessa/serie nr.: 7.0-4	Untersuchungszweck: Laufende Messung		
Masch.Nr.: M001	Spindel: FORM	Bestellg:	Charge:



	fianco sinistro				fianco destro / TIRO			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	3		14		4		14	
Gr. salto di passo fu max	2		18		2		18	
Scarto di divisione Rp	6				7			
Err. globale di divisione Fp	18		36		20		36	
Err. cordale di divisione Fpz/8	9				8			



Err. di concentricità Fr	19	28	
Variaz. spessore dente Ra			

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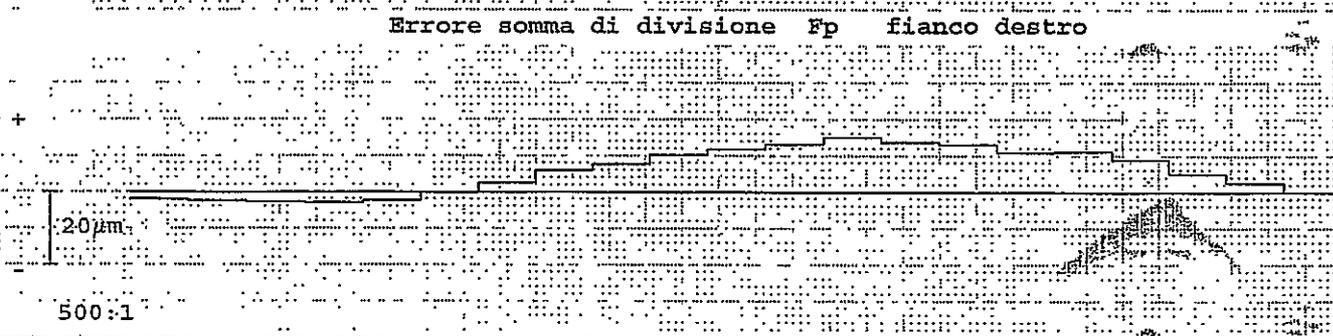
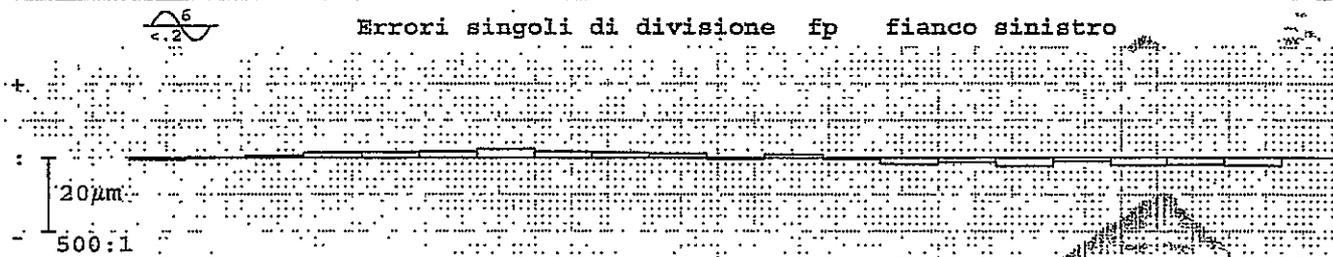


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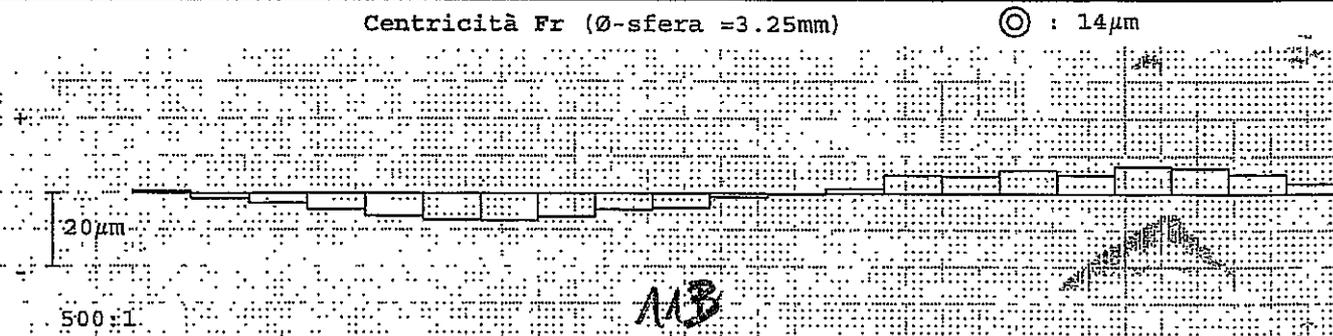
Ruota cilindrica Divisione



Nr. prog.: STI0410005 0	P26 B7590	Controllore: TURNO A	Data: 30.07.2014 18:39
Denominazione: Input Outer Z21		Numero denti z: 21	Angolo pressione: 20°
Numero disegno: 250.6.5176.35-IIF		Modulo m: 2mm	Angolo elica: 22°
Comessa/serie nr.: 7.0-2		Untersuchungszweck: Laufende Messung	
Maach.Nr.: M001	Spindel: FORM	Charge:	



Corso per misura divis.: 46.086 ±10.3mm	fianco sinistro		fianco destro / TIRO	
	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	2		14	
Gr. salto di passo fu max	2		18	
Scarto di divisione Rp	4		7	
Err. globale di divisione Fp	13		36	
Err. cordale di divisione Fpz/8	6		9	



Err. di concentricità Fr	15	28	
Variaz. spessore dente Rs			

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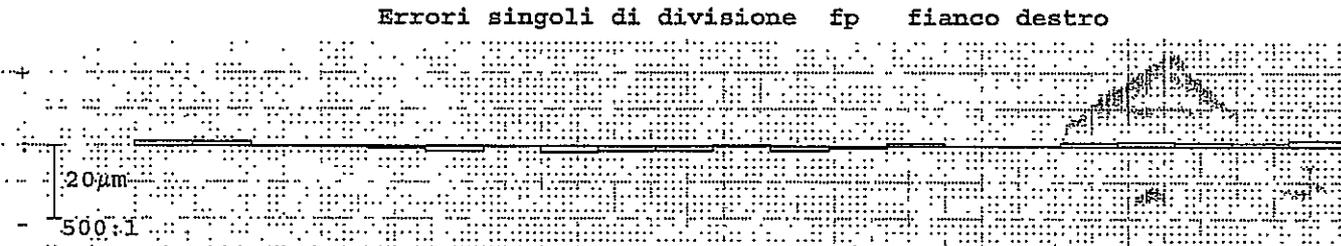
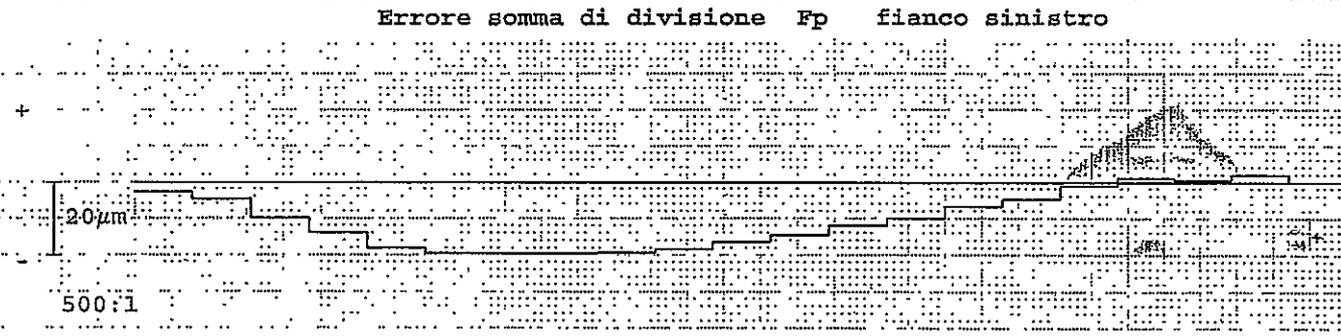


GETRAG B7590

Ruota cilindrica Divisione

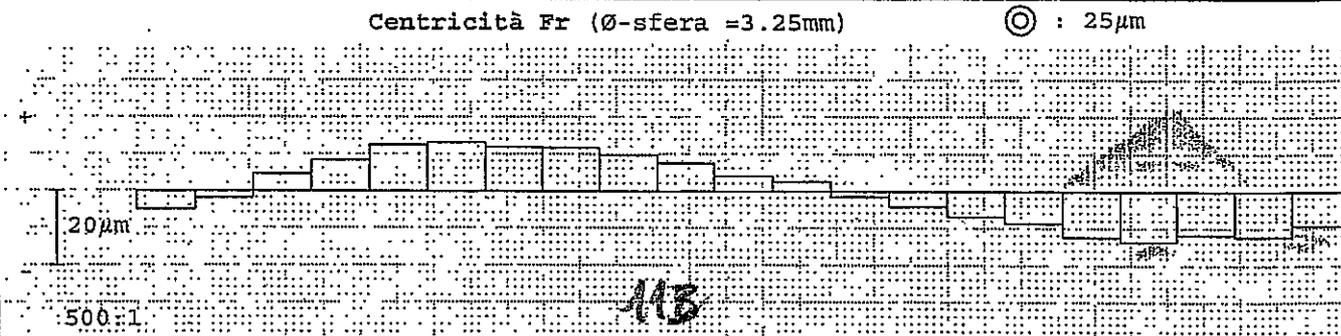


Nr. prog.: STI0410o05 0 P26 B7590	Controllora: TURNO A	Data: 30/07/2014 18:52
Benominazione: Input Outer Z21	Numero denti z: 21	Angolo pressione: 20°
Numero disegno.: 250.6.5176.35-IIF	Modulo m: 2mm	Angolo elica: 22°
Commessa/serie nr.: 7.0-3	Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	Spindel: Formieratzelg:	Charge:



Corsa per misura divis.: 46.086 z=10.3mm

	fianco sinistro		fianco destro / TIRO	
	Val. misur	Qual.	Val. amn	Qual.
Gr. err. singoli divisione fp max	5		14	14
Gr. salto di passo fu max	4		18	18
Scarto di divisione Rp	9		4	
Err. globale di divisione Fp	21		36	36
Err. cordale di divisione Fpz/8	13		4	



Err. di concentricità Fr	27	28
Variaz. spessore dente Ra		

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GETRAG B7590

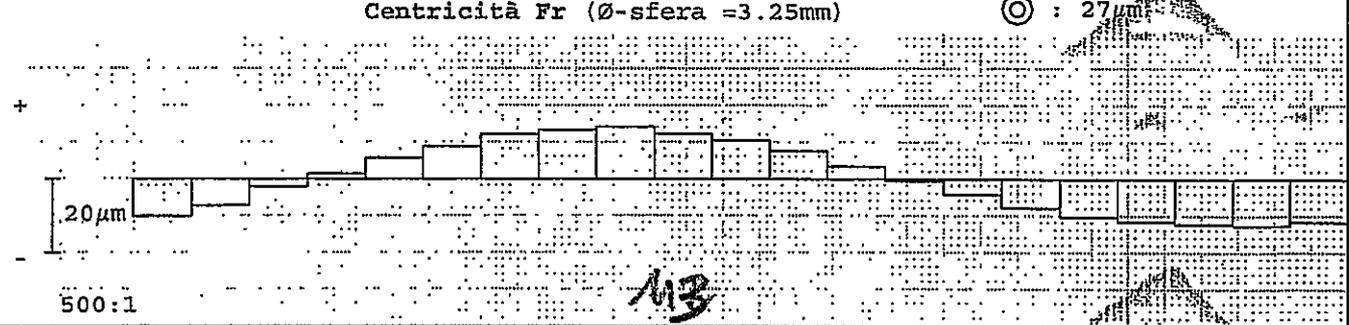
Ruota cilindrica Divisione



Nr. prog.: STI0410c05 0	P26 B7590	Controllore: TURNO A	Data: 30.07.2014 18:56
Denominazione: Input Outer Z21		Numero denti z: 21	Angolo pressione: 20°
Numero disegno.: 250.6.5176.35-IIF		Modulo m: 2mm	Angolo elica: 22°
Commessa/Seria nr.: 7.0-4		Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	spindel: FORMER	saftzahl:	Charge:



Corsa per misura divis. 146.086 $\alpha=10.3mm$	fianco sinistro				fianco destro / TIRO			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	5		14		3		14	
Gr. salto di passo fu max	3		18		2		18	
Scarto di divisione fp	9				6			
Err. globale di divisione Fp	29		36		17		36	
Err. cordale di divisione fpz/8	13				8			



Err. di concentricità Fr	27	28	
Variaz. spessore dente Rs			

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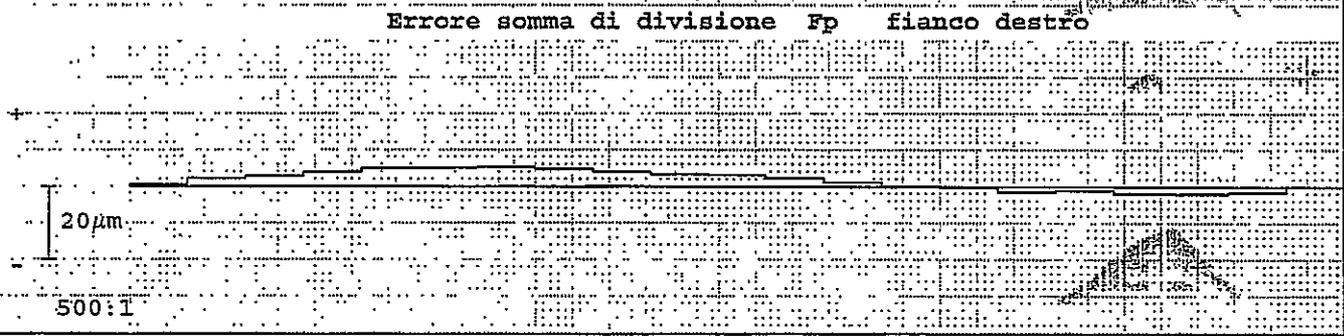
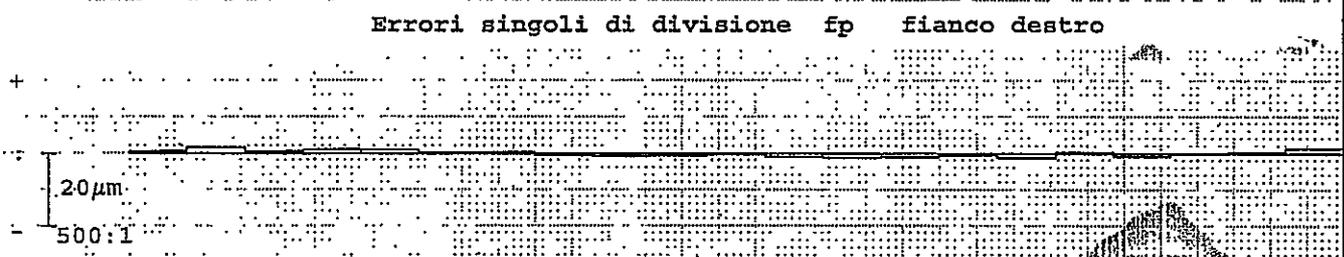


GETRAG B7590

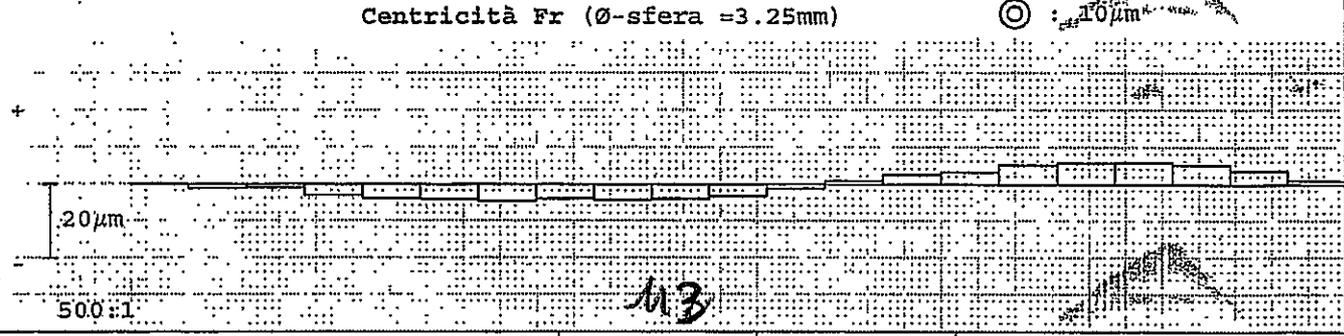
Ruota cilindrica Divisione



Nr. prog.: STI0410o05 0	P26 B7590	Controllore: TURNO A	Data: 30.07.2014 19:01
Denominazione: Input Outer Z21	Numero denti z: 21	Angolo pressione: 20°	
Numero disegno: 250.6.5176.35-IIF	Modulo m: 2mm	Angolo elica: 22°	
Commessa/serie nr.: 7.0-5	Untersuchungszweck: Laufende Messung		
Masch.Nr.: M001	Spindel: Formwerkzeug	Charge:	



Corsa per misura divis. 16,086 z=10.3mm		fianco sinistro				fianco dentro / TIRO			
		Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione	fp max	3		14		2		14	
Gr. salto di passo	fu max	2		18		2		18	
Scarto di divisione	Rp	6				3			
Err. globale di divisione	Fp	17		36		7		36	
Err. cordale di divisione	Fpz/8	8				4			



Err. di concentricità	Fr	11	28	
Variaz. spessore dente	Rs			

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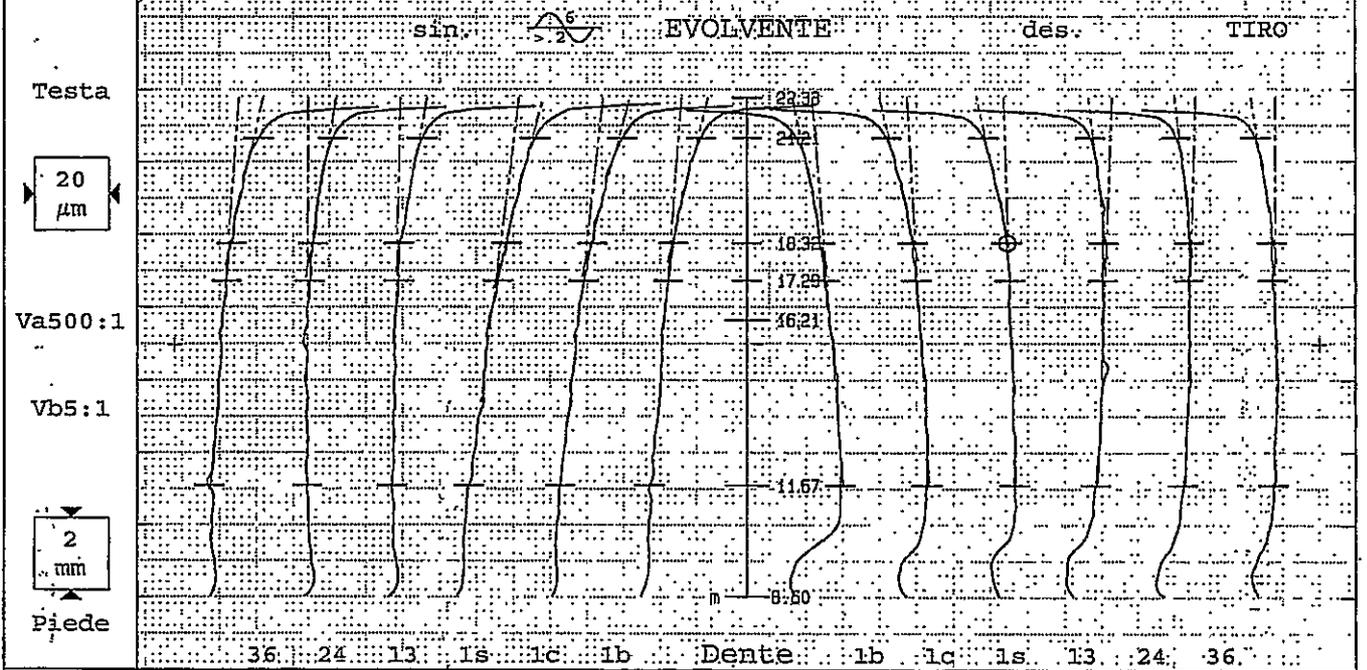


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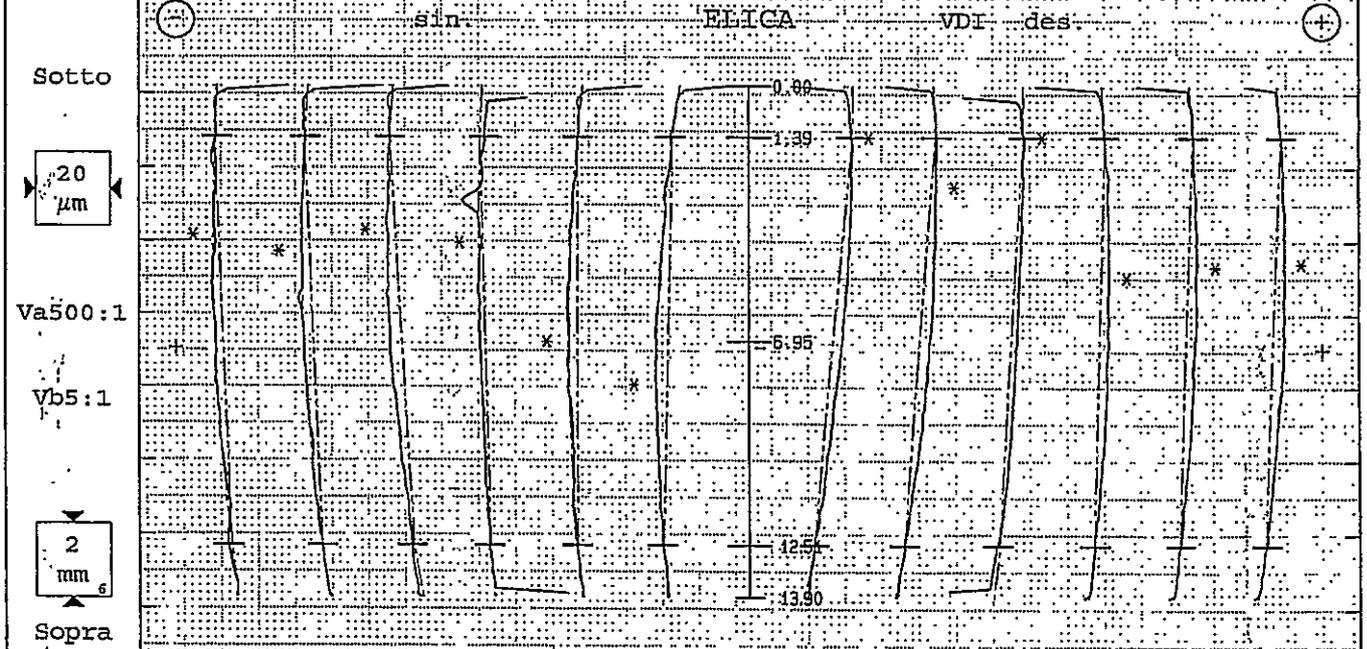
Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410c05 0	PNC35 B4784	Controllore:	TURNO A	Data:	30.07.2014 22:02
Denominazione:	Input Outer Z47		Numero denti z	47	Largh.fasc.dent. b	13.9mm
Numero disegno.:	250.6.5176.35-IF		Modulo m	1.75mm	Tratto evolv. La	5.62mm
Comessa/serie nr.:	7.0-1		Angolo pressione	17.5°	Tratto elica Ls	11.12mm
Manch.Nr.:	M001	Spindel: FORMULA	Angolo elica	27.3°	Inizio elab. M1	11.67mm
Untersuchungszweck:	Laufende Messung		Ø Base db	87.2312mm	Palpatore Ø	(#1) 1mm
Werkzeug:	Charge:	Ang. Base	25.94°	Fat.acor.pr. x	.2	



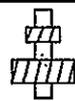
Tolerance	Medio	Val. misur [μ m]							Qual	Tolerance	Val. misur [μ m]							Medio	Qual	
fHm	± 6	-3	Var 6								2 ± 6	Var 5								0
fHa	± 7	-3	-4	0	-1	-7	-6	-4		2 ± 7	-4	-3	-2	2	1	0	0			
Fa		4	5	2	2	8	7	5			6	5	3	2	2	3				
ffa	4	2	2	2	1	2	1	1	4	2	1	1	2	1	2					
fko	-14/-6	-6	-5	-6	-5	-5	-6	-5	-14/-6	-4	-6	-5	-5	-4	-5					
P/T-Ø (mm)		87.478	[87.05/87.5]								97.825	[97.74/98]								



Tolerance	Medio	Val. misur [μ m]							Qual	Tolerance	Val. misur [μ m]							Medio	Qual	
fHSm	-8 ± 6	-5	Var 8								8 ± 6	Var 7								6
fHS	-8 ± 13	-5	-5	-6	-8	-4	0	3		8 ± 13	13	11	8	4	5	5				
FBS		5	4	5	3	7	7	9			5	4	2	5	4					
ffBS	4	2	2	2	1	6	1	1	4	1	1	1	1	1	1					
CS	0/5	3	2	3	3	1	2	3	0/5	2	3	2	2	3						
Bd	4 ± 4	7									4 ± 4									

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Nr. prog.: STI0410005 0	PNC35 B4784	Controllore: TURNO A	Data: 30.07.2014 22:02
Denominazione: Input Outer Z47	Numero denti z	47	Angolo pressione 17.5°
Numero disegno: 250.6.5176.35-IF	Modulo m	1.75mm	Angolo elica 27.3°
Comessa/série nr.: 7.0-1	Untersuchungszweck:	Laufende Messung	
Hasch.Nr.: M001	Spindel: FORMER	Charge:	



Errori singoli di divisione fp fianco sinistro



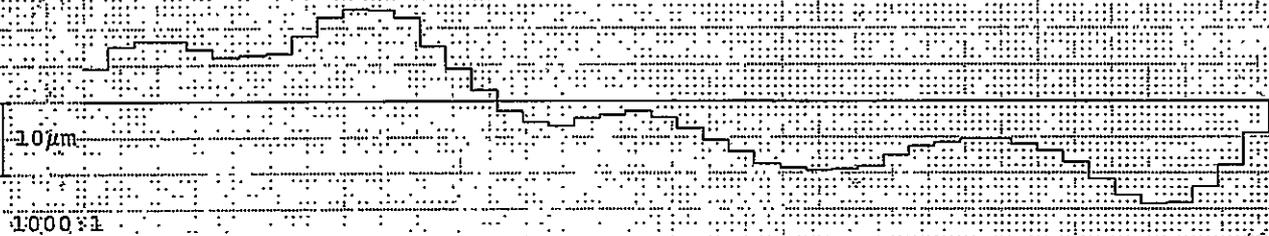
Errore somma di divisione Fp fianco sinistro



Errori singoli di divisione fp fianco destro

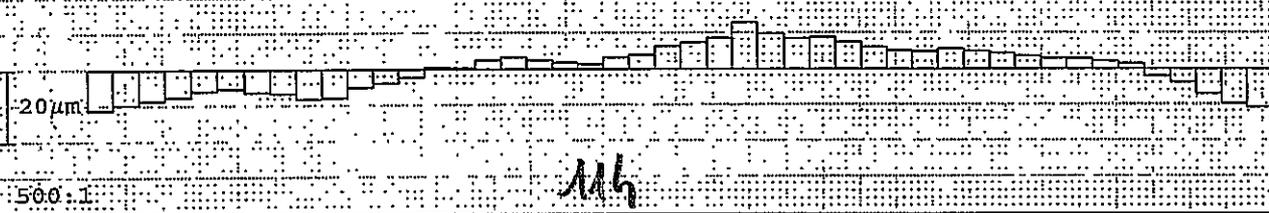


Errore somma di divisione Fp fianco destro



Corona per misura divis.: 93.061 z=7mm	fianco sinistro				fianco destro / TIRO'			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	6		14		5		14	
Gr. salto di passo fu max	6		18		3		18	
Scarto di divisione Rp	11				9			
Err. globale di divisione Fp	32		50		27		50	
Err. cordale di divisione Fpz/8	24				22			

Centricità Fr (Ø-sfera =3mm) © : 17µm



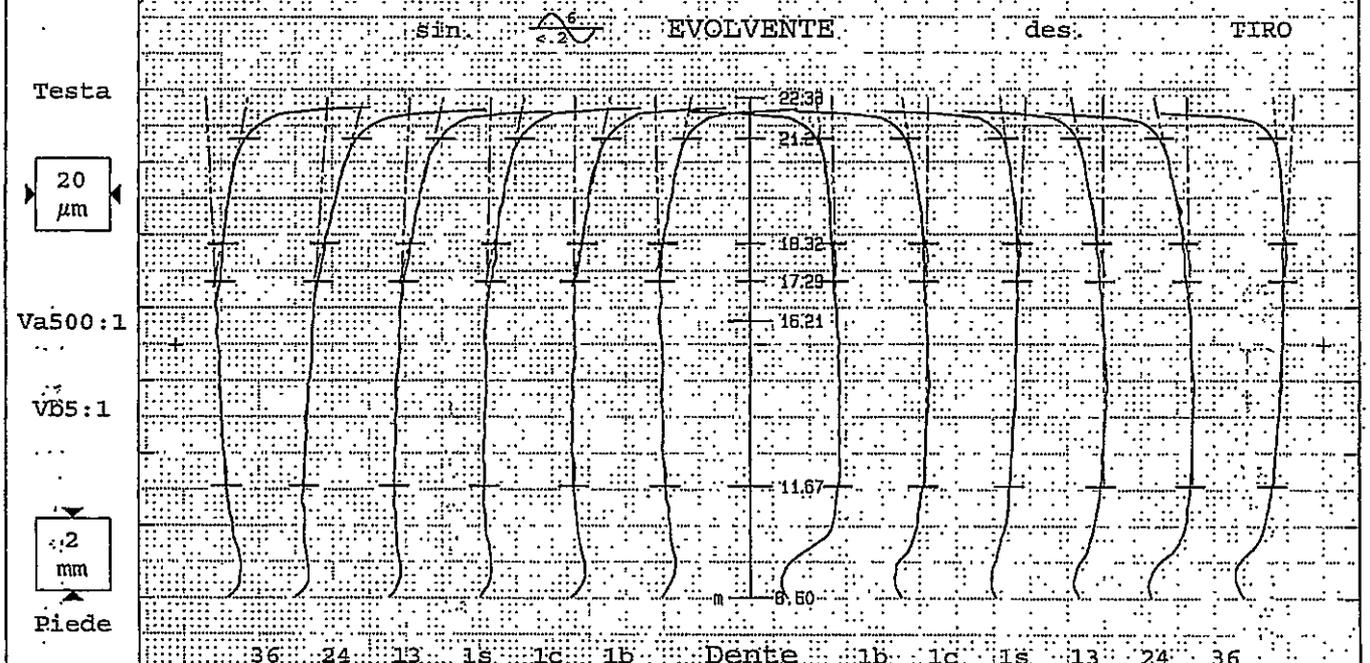
Err. di concentricità Fr	25	32	
Variaz. spessore dente Rs			

GETRAG

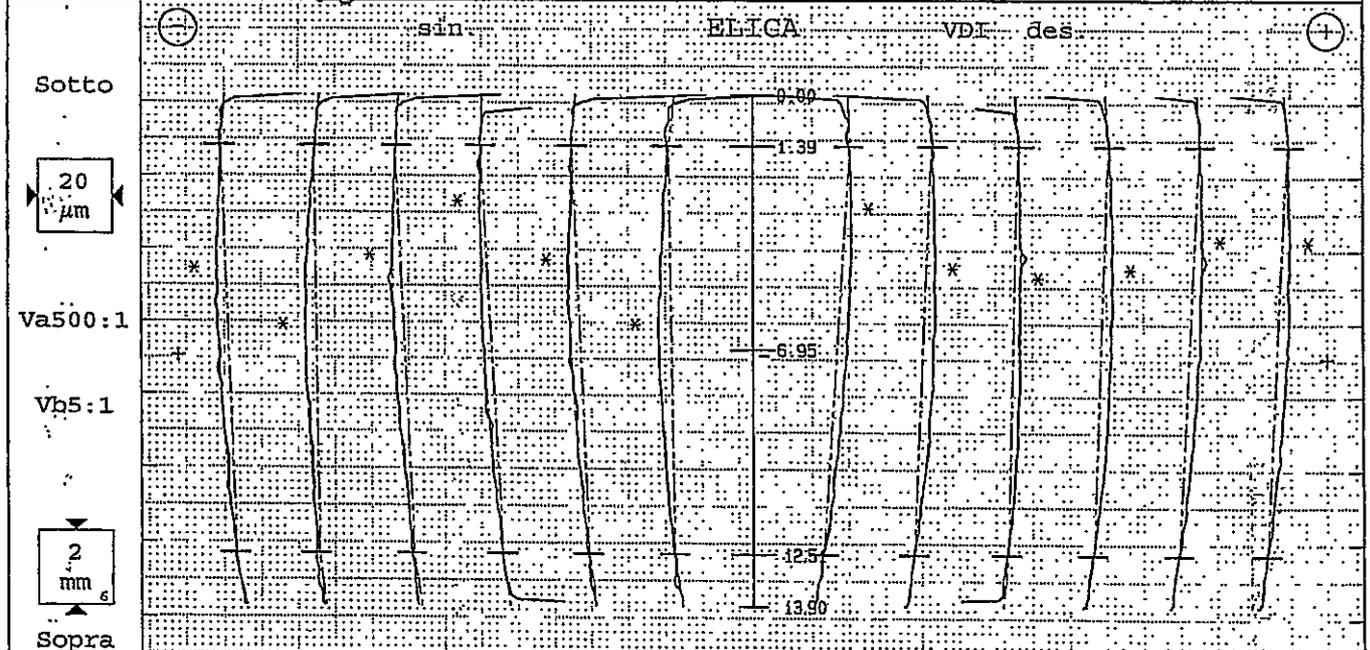
Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410005 0	PNC35 B4784	Controllore:	TURNO A	Data:	30.07.2014 20:41
Denominazione:	Input Outer Z47		Numero denti z	47	Largh. fasc. dent. b	13.9mm
Numero disegno.:	250.6.5176.35-IF		Modulo m	1.75mm	Tratto evolv. La	5.62mm
Commessa/serie nr.:	7.0-2		Angolo pressione	17.5°	Tratto elica Ls	11.12mm
Masch.Nr.:	M001	Spindel: Forme	Angolo elica	27.3°	Inizio elab. M1	11.67mm
Untersuchungszweck:	Laufende Messung		Ø Base db	87.2312mm	Palpatore ø	(#1) 1mm
Werkzeug:	Charge:		Ang. Base	25.94°	Fat. scor. pr. z	.2



Tolerance	Medio	Val. misur [μm]							Qual	Tolerance	Val. misur [μm]							Medio	Qual
fHsm ±6	-1	Var - 7								2±6	Var 4								1
fHa ±7	-1	3	-4	-2	-1	0	1	1	2±7	-1	0	2	0	-1	3	1			
Fa	3	3	4	3	2	1	2	2	4	2	1	3	3	2	3				
ffa	4	1	2	1	1	2	1	1	4	1	2	1	2	1	2				
fko -14/-6	-8	-9	-8	-7	-7	-7	-7	-7	-14/-6	-3	-5	-5	-7	-7	-4				
P/T-φ[mm]	87.451	[87.05/87.5]								97.797	[97.74/98]								



N:Z	Medio	Val. misur [μm]							Qual	Tolerance	Val. misur [μm]							Medio	Qual
fHsm -8±6	-5	Var 4								8±6	Var 2								6
fHs -8±13	-5	-5	-2	-6	-7	-6	-2	-2	8±13	9	6	4	5	7	7	6			
FB	5	4	6	4	3	4	6	6	4	4	4	4	4	3	4				
fEG	4	2	1	2	2	2	1	1	4	1	1	2	1	2	1				
CS 0/5	3	3	3	3	2	3	3	3	0/5	3	3	2	3	3	3				
Bd 4±4	5									4±4									5

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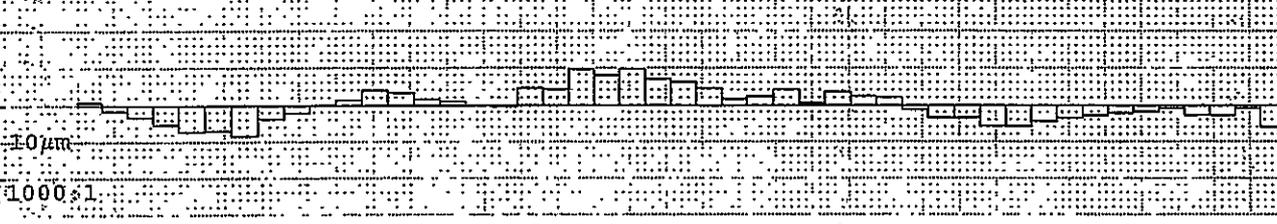




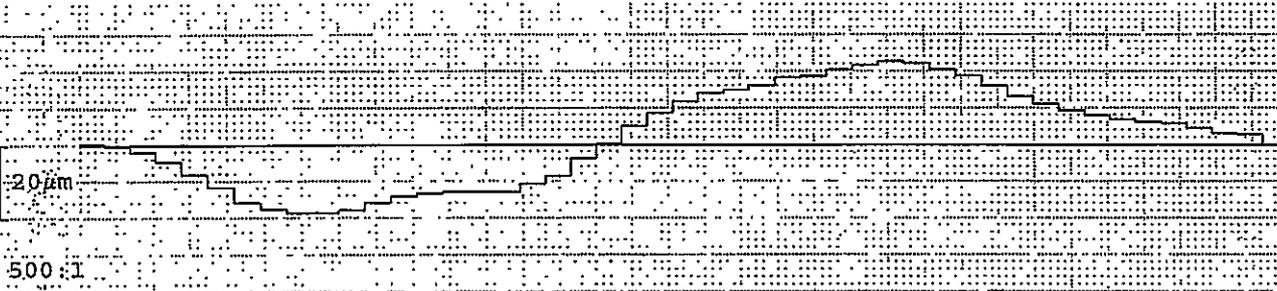
Nr. prog.: STI0410005 0 PNC35 B4784	Controllore: TURNO A	Data: 30.07.2014 20:41
Denominazione: Input Outer Z47	Numero denti z: 47	Angolo pressione: 17.5°
Numero disegno.: 250.6.5176.35-IF	Modulo m: 1.75mm	Angolo elic.: 27.3°
Comessa/serie nr.: 7.0-2	Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	Spindel: FORMULAZEDG	Charge:



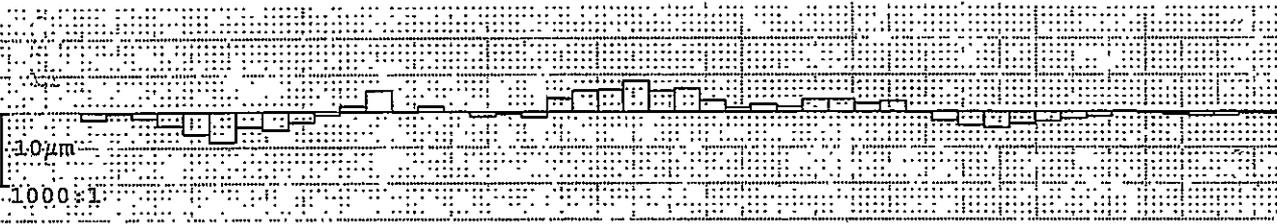
Errori singoli di divisione fp fianco sinistro



Errore somma di divisione Fp fianco sinistro



Errori singoli di divisione fp fianco destro

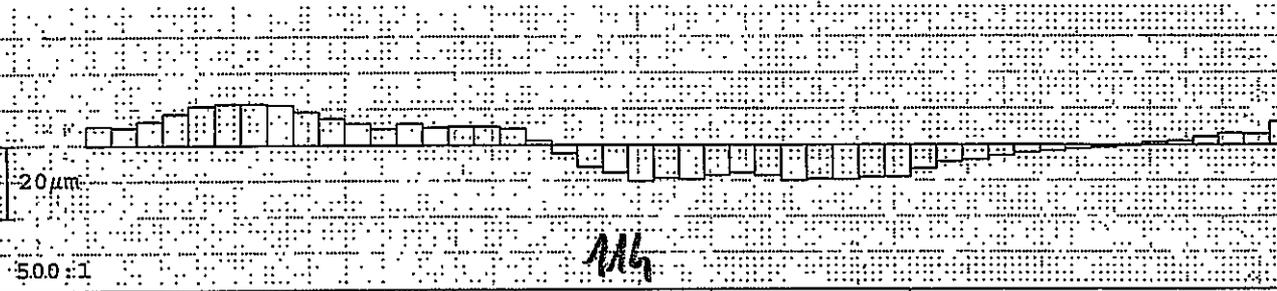


Errore somma di divisione Fp fianco destro



Corsa per misura divis.: 93.061 z=7mm	fianco sinistro				fianco destro / TIRO			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	5		14		4		14	
Gr. salto di passo fu max	3		18		3		18	
Scarto di divisione Rp	9				8			
Err. globale di divisione Fp	41		50		30		50	
Err. cordale di divisione Fpz/8	23				18			

Centricità Fr (Ø-sfera =3mm) \odot : 19µm



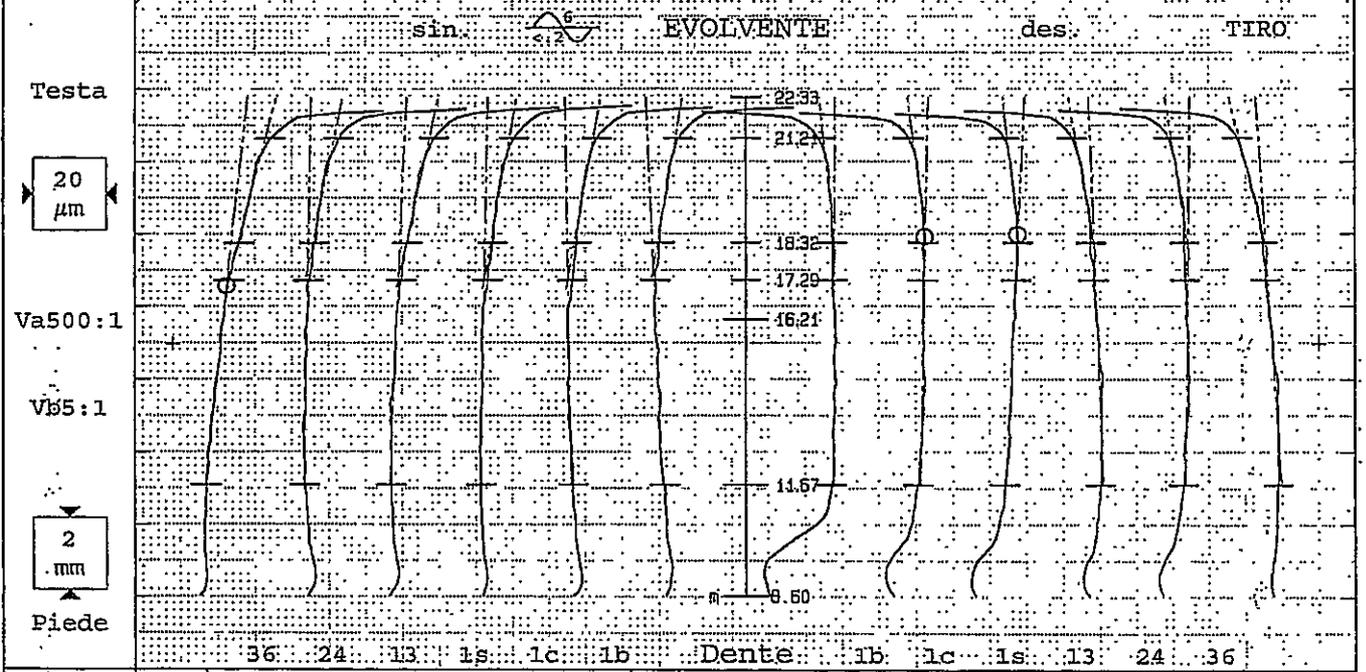
Err. di concentricità Fr	22	32	
Variaz. spessore dente Rs			

GETRAG

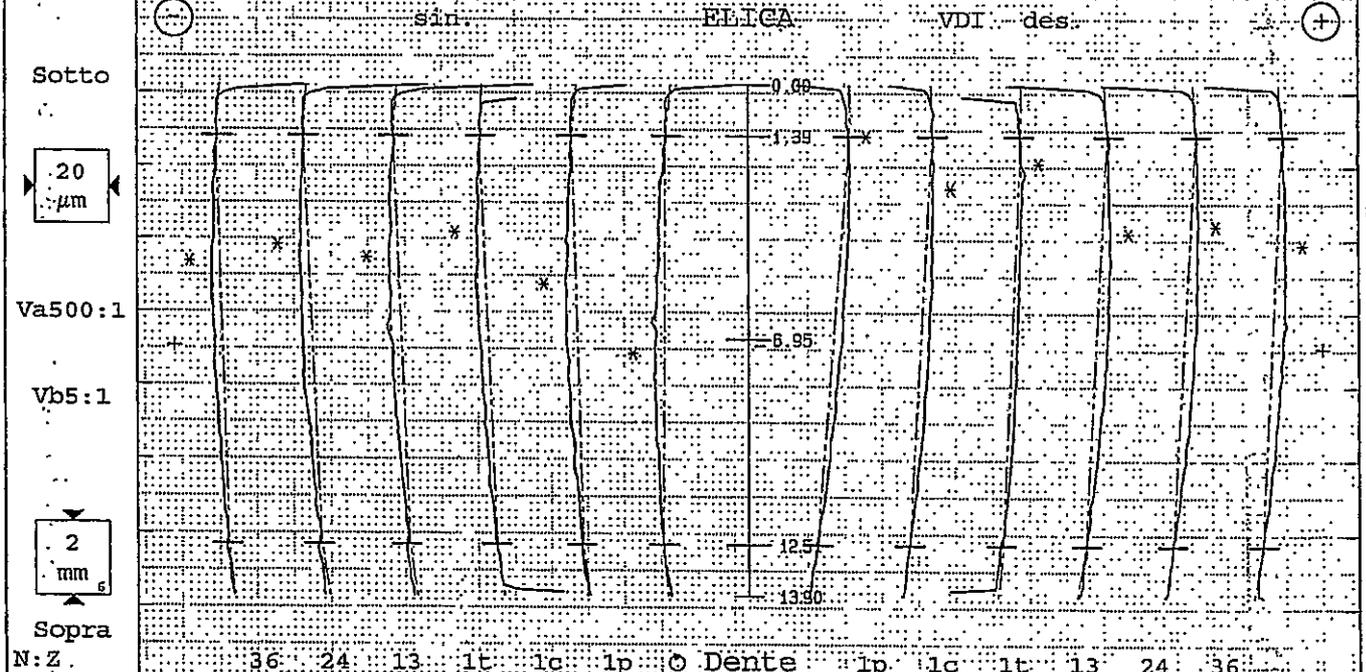
Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410c05 0	PNC35 B4784	Controllore:	TURNO A	Data:	30.07.2014 19:06
Denominazione:	Input Outer Z47		Numero denti z	47	Largh.fasc.dent. b	13.9mm
Numero disegno.:	250.6.5176.35-IF		Modulo m	1.75mm	Tratto evolv. La	5.62mm
Comessa/serie nr.:	7.0-3		Angolo pressione	17.5°	Tratto elica Ls	11.12mm
Manch.Nr.:	M001	spindel: FORM	Angolo elica	27.3°	Inizio elab. M1	11.67mm
Untersuchungszweck:	Laufende Messung		Ø Base db	87.2312mm	Palpatore Ø	(#1) 1mm
Werkzeug:	Charge:		Ang. Base	25.94°	Fat.scor.pr. x	.2



Tolerance	Medio	Val. misur [µm]							Qual	Tolerance	Val. misur [µm]							Medio	Qual	
fHm	±6	-2	Var 7								±6	Var 5							-1	
fHa	±7	-2	-6	-1	-3	-1	1	2		±7	0	1	3	-2	1	-4	-1			
Fa		3	6	2	3	2	2	3			2	2	1	4	2	6	4			
Ffa	4	2	1	1	2	2	2	1		4	1	1	1	2	1	2	2			
FKo	-14/-6	-7	-6	-7	-7	-6	-8	-8		-14/-6	-3	-4	-4	-4	-5	-5	-5			
P/T-φ (mm)		87.453	[87.05/87.5]								97.803	[97.74/98]								



Tolerance	Medio	Val. misur [µm]							Qual	Tolerance	Val. misur [µm]							Medio	Qual	
fHm	-8±6	-5	Var 2								8±6	Var 1							8	
fHa	-8±13	-5	-4	-6	-5	-6	-4	1		8±13	11	8	6	8	8	7	8			
Fa		5	5	4	5	4	5	8			4	2	3	3	3	4	3			
Ffa	4	1	1	1	2	1	1	2		4	1	1	2	1	1	1	1			
CS	0/5	3	2	3	3	2	3	2		0/5	2	2	1	3	3	3	3			
Bd	4±4	7									4±4									

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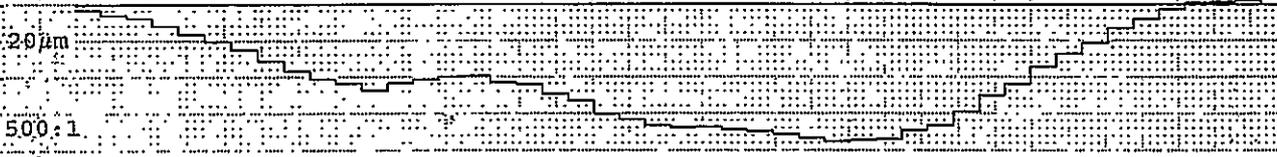
Nr. prog.: STI0410005 0 PNC35 B4784	Controllore: TURNO A	Data: 30.07.2014 19:06
Denominazione: Input Outer Z47	Numero denti z: 47	Angolo pressione: 17.5°
Numero disegno: 250.6.5176.35-IF	Modulo m: 1.75mm	Angolo elica: 27.3°
Comessa/serie nr.: 7.0-3	Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	Spindel: Formelastzylinder	Charge:



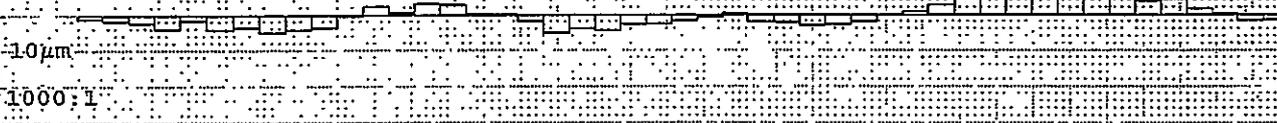
Errori singoli di divisione fp fianco sinistro



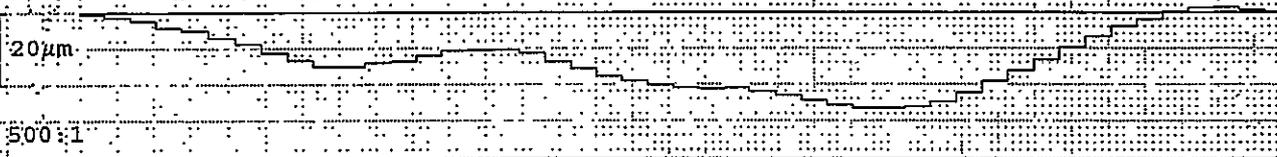
Errore somma di divisione Fp fianco sinistro



Errori singoli di divisione fp fianco destro

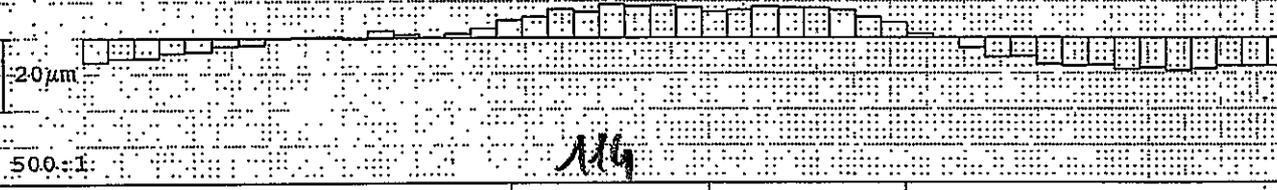


Errore somma di divisione Fp fianco destro



Correa per misura divis.: 93.061 z=7mm	fianco sinistro				fianco destro / TIRO				
	z	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max		5		14		3		14	
Gr. salto di passo fu max		4		18		2		18	
Scarto di divisione Rp		9				5			
Err. globale di divisione Fp		38		50		28		50	
Err. cordale di divisione Fpz/8		23				18			

Centricità Fr (Ø-sfera =3mm) © : 17µm



114

Err. di concentricità Fr	18	32
Variaz. spessore dente Rs		

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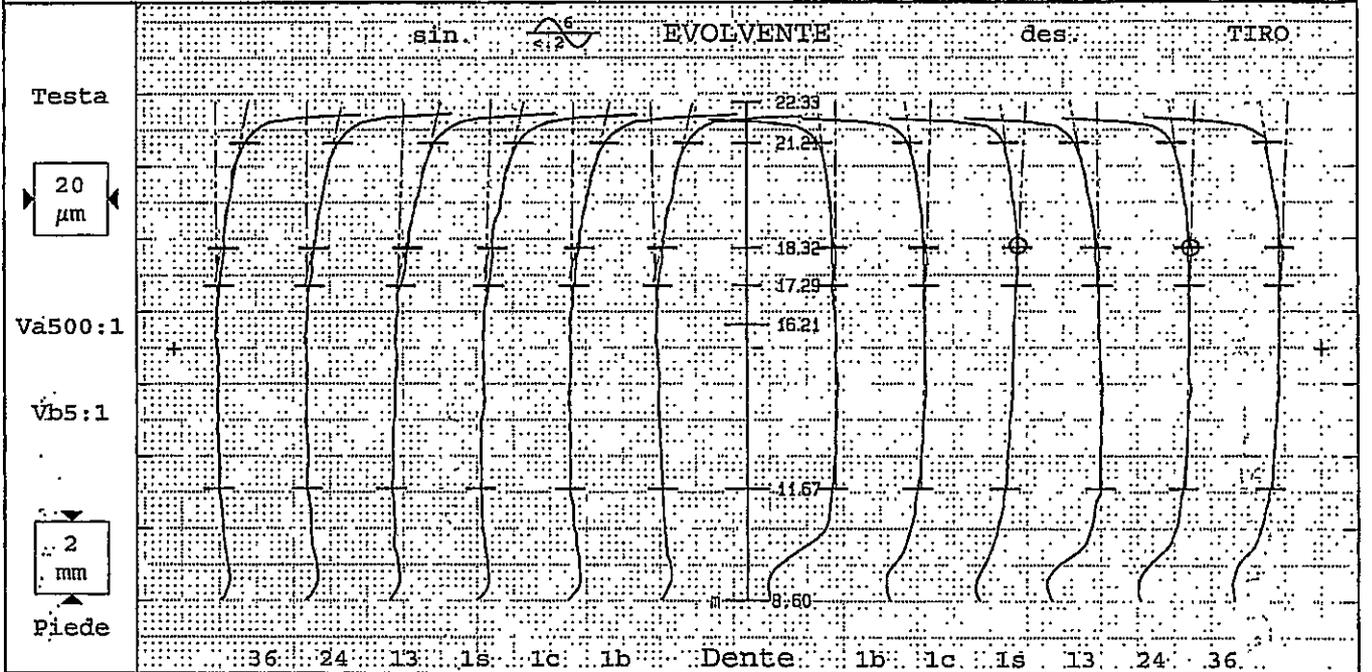


GETRAG

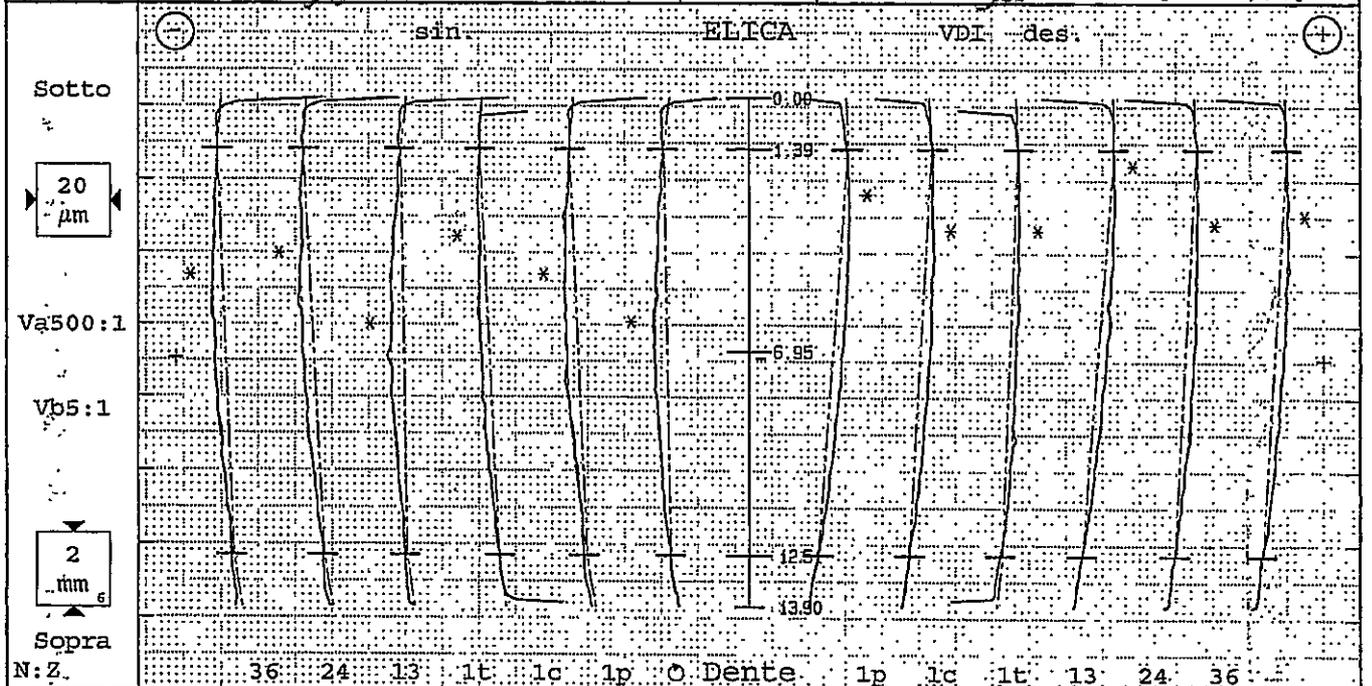
Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410005 0	PNC35 B4784	Controllore:	TURNO A	Data:	30.07.2014 19:26
Denominazione:	Input Outer Z47		Numero denti z	47	Largh. fasc. dent. b	13.9mm
Numero disegno.:	250.6.5176.35-IF		Modulo m	1.75mm	Tratto evolv. La	5.62mm
Commessa/serie nr.:	7.0-4		Angolo pressione	17.5°	Tratto elica Ls	11.12mm
Masch.Nr.:	M001	Spindel: Formula	Angolo elica	27.3°	Inizio elab. M1	11.67mm
Untersuchungszweck:	Laufende Messung		Ø Base db	87.2312mm	Palpatore Ø	(#1) 1mm
Werkzeug:	Charge:	Ang. Base	25.94°	Fat. scor. pr. x	.2	



Tolerance	Medio	Val. misur [µm]						Qual	Tolerance	Val. misur [µm]						Medio	Qual
F _{Hm} ±6	-1	Var 2							±6	Var 3						1	
F _{Ha} ±7	-1	0	0	-2	-2	-1	2		±7	0	2	3	-1	1	2	1	
F _a	2	1	1	3	2	2	2			3	2	1	3	2	2	2	
f _{fa} 4	1	1	1	1	1	1	1		4	2	2	1	1	2	1	2	
f _{Ko} -14/-6	-8	-7	-7	-8	-7	-8	-9		-14/-6	-4	-5	-5	-5	-5	-6	-5	
P/T-µ (mm)	87.430	55 [87.05/87.5]							97.777	56 [97.74/98]							



Tolerance	Medio	Var						Qual	Tolerance	Var						Medio	Qual
F _{Hm} -8±6	-5	5							±6	4						9	
f _{Hs} -8±13	-5	-6	-7	-2	-7	-6	-2		±13	10	8	5	11	7	8	9	
F _B	5	4	4	7	4	5	6			4	3	4	4	3	3	3	
f _{FB} 4	2	1	1	2	1	2	1		4	1	1	2	1	1	1	1	
C _B 0/5	3	3	3	3	2	3	3		0/5	3	3	2	2	2	2	2	
B _d 4±4	5								±4							5	



GETRAG**Ruota cilindrica Divisione**

Nr. prog.: STI0410005 0	PNC35 B4784	Controllore: TURNO A	Data: 30.07.2014 19:26
Denominazione: Input Outer Z47	Numero denti z	47	Angolo pressione 17.5°
Numero disegno.: 250.6.5176.35-IF	Modulo m	1.75mm	Angolo elicita 27.3°
Commessa/serie nr.: 7.0-4	Untersuchungszweck:	Laufende Messung	
Masch.Nr.: M001	Spindel: Formel	Charge:	

**Errori singoli di divisione fp fianco sinistro**10µm
1000:1**Errore somma di divisione Fp fianco sinistro**20µm
500:1**Errori singoli di divisione fp fianco destro**10µm
1000:1**Errore somma di divisione Fp fianco destro**10µm
1000:1

Corso per misura divis.: 93.061 z=7mm	fianco sinistro				fianco destro / TIRO			
	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		2		18	
Scarto di divisione Rp	4				4			
Err. globale di divisione Fp	22		50		16		50	
Err. cordale di divisione Fpz/8	10				8			

Centricità Fr (Ø-sfera =3mm)

⊙ : 14µm

20µm
500:1

AAG

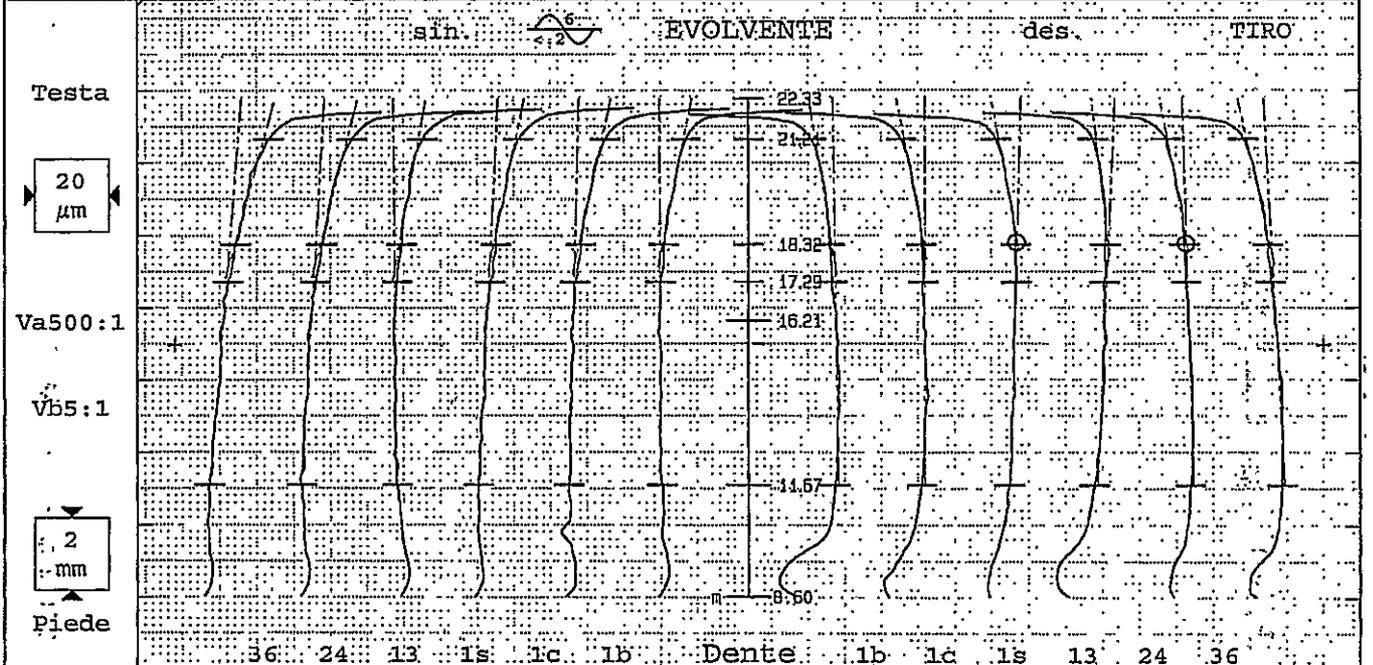
Err. di concentricità Fr	18	32	
Variab. spessore dente Rs			

GETRAG

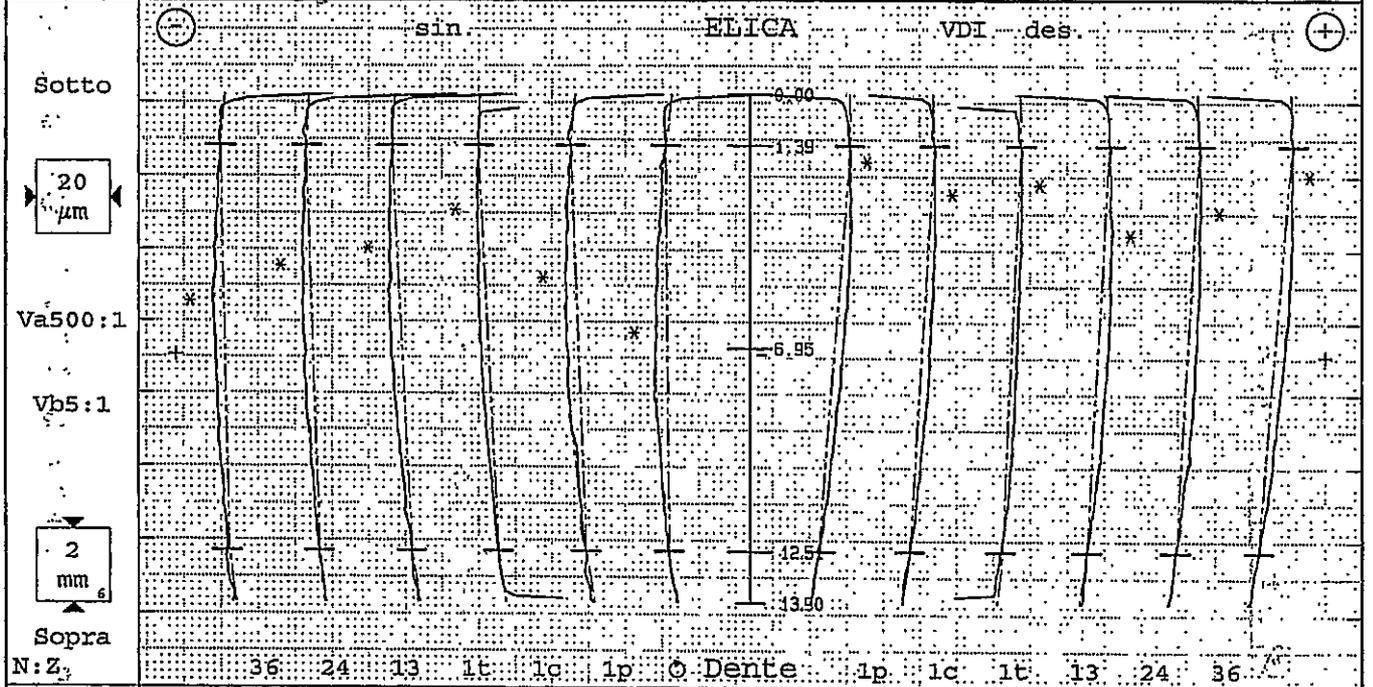
Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410005 0	PNC35 B4784	Controllore:	TURNO A	Data:	30.07.2014 19:32
Denominazione:	Input Outer Z47		Numero denti z	47	Largh. fasc. dent. b	13.9mm
Numero disegno:	250.6.5176.35-IF		Modulo m	1.75mm	Tratto evolv. La	5.62mm
Comessa/serie nr.:	7.0-5		Angolo pressione	17.5°	Tratto elica Ls	11.12mm
Masch.Nr.:	M001	spindel: FORM	Angolo elica	27.3°	Inizio elab. M1	11.67mm
Untersuchungszweck:	Laufende Messung		Ø Base db	87.2312mm	Palpatore Ø	(#1) 1mm
Werkzeug:	Charge:		Ang. Base	25.94°	Fat. scor. pr. z	.2



Tolerance	Medio	Val. misur [µm]							Qual	Tolerance	Val. misur [µm]							Medio	Qual	
fHm	±6	-2	Var 4								2±6	Var 5							-1	
fHa	±7	-2	-4	-3	0	-3	-1	0		2±7	-1	0	1	2	-2	-3	-1			
Fa		3	5	4	1	3	2	1			3	3	1	2	3	5	3			
ffa	4	1	1	1	1	1	1	1		4	2	2	1	2	1	1	2			
fXo	-14/-6	-7	-7	-7	-7	-5	-7	-7		-14/-6	-5	-6	-6	-5	-4	-5	-5			
P/T-α [mm]		87.447	SS [87.05/87.5]								97.795	SB [97.74/98]								



Tolerance	Medio	Val. misur [µm]							Qual	Tolerance	Val. misur [µm]							Medio	Qual	
fHm	-8±6	-5	Var 4								8±6	Var 4							9	
fHa	-8±13	-5	-3	-5	-7	-7	-5	-1		8±13	11	8	6	8	8	12	9			
Fa		5	5	4	4	3	5	7			4	3	3	3	3	5	4			
ffa	4	1	1	1	1	1	1	1		4	1	1	1	1	1	1	1			
fXo	0/5	3	3	2	3	2	3	3		0/5	2	2	2	3	2	3	3			
Bd	4±4	6									4±4									

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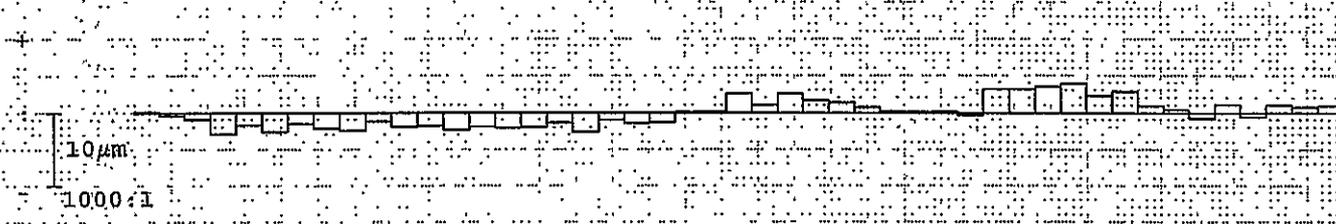




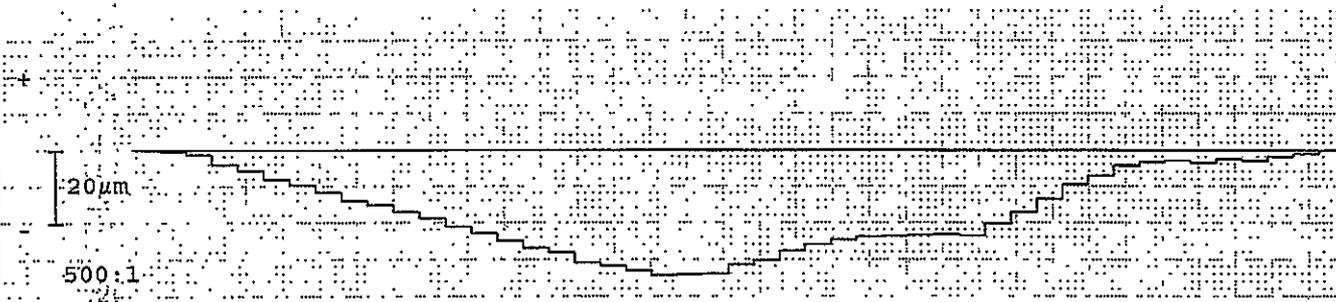
Nr. prog.:	STI041005 0 PNC35 B4784	Controller:	TURNO A	Data:	30.07.2014 19:32
Denominazione:	Input Outer Z47	Numero denti z	47	Angolo pressione	17.5°
Numero disegno.:	250.6.5176.35-IF	Modulo m	1.75mm	Angolo elica	27.3°
Comessa/serie nr.:	7.0-5	Untersuchungszweck:	Laufende Messung		
Masch.Nr.:	M001	Spindel:	Formelatzelg:	Charge:	



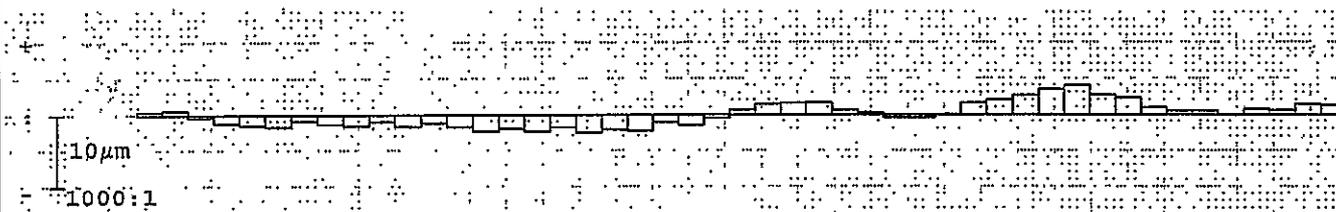
Errori singoli di divisione fp fianco sinistro



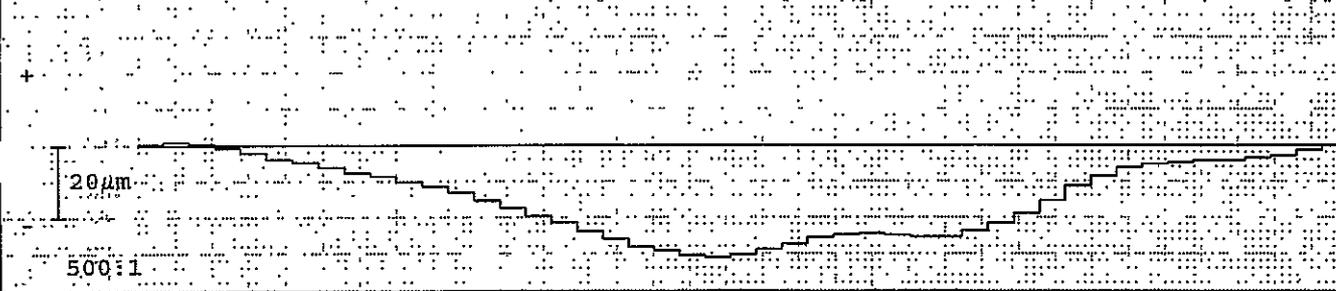
Errore somma di divisione Fp fianco sinistro



Errori singoli di divisione fp fianco destro



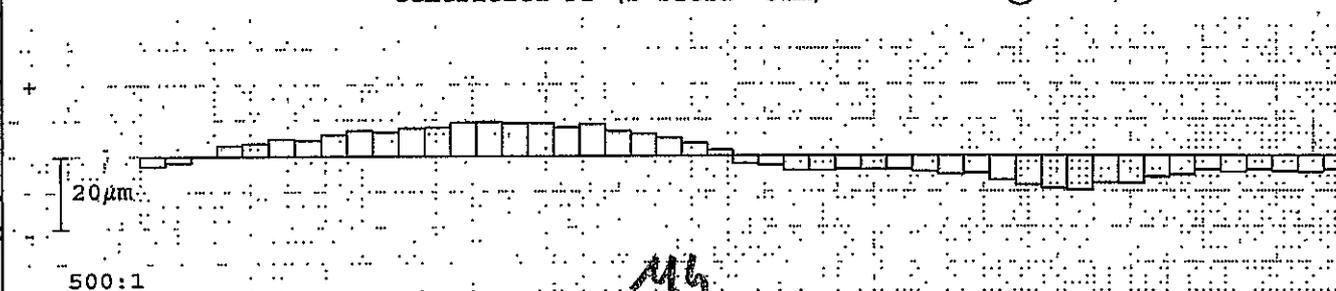
Errore somma di divisione Fp fianco destro



Corsa per misura divis. 93.061 za=7mm	fianco sinistro				fianco destro / TIRO			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	4		14		4		14	
Gr. salto di passo fu max	3		18		2		18	
Scarto di divisione Rp	7				6			
Err. globale di divisione Fp	34		50		32		50	
Err. cordale di divisione Fpz/8	19				17			

Centricità Fr (Ø-sfera =3mm)

⊙ : 16µm



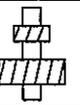
Err. di concentricità Fr	19	32	
Variaz. spessore dente Rs			

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GETRAG B7590

Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410005 0 P26 B7590	Controllore:	TURNO c	Data:	28.07.2014 16:44	
Denominazione:	Input Shaft 2 Z46	Numero denti z	46	Largh.fasc.dent. b	26.1mm	
Numero disegno.:	250.6.5176.35-RI H	Modulo m	.79375mm	Tratto evolv. La	1.81mm	
Commessa/serie nr.:	1	Angolo pressione	30°00'00"	Tratto elica L _s	20.88mm	
Masch.Nr.:	M001	Spindel: Form	Angolo elica	00°00'00"	Inizio elab. M1	7.5mm
Untersuchungszweck:	Laufende Messung	Ø Base db	31.6208mm	Palpatore Ø	(#4F) .5mm	
Werkzeug:	Charge:	Ang. Base	00°00'00"	Fat.scor.pr. x	-.209	

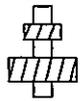
Piede-Ø: 34.431mm

[34.4/34.6]

73



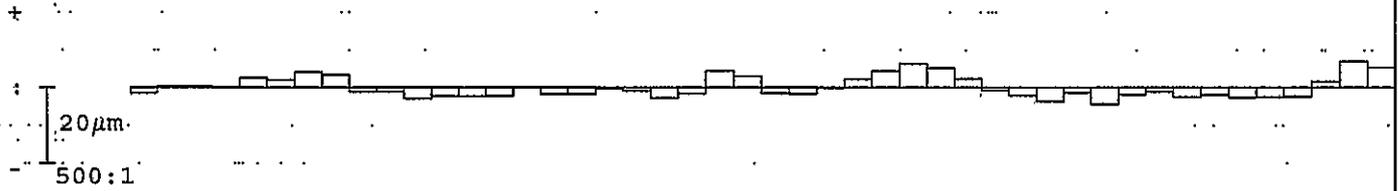
VDI



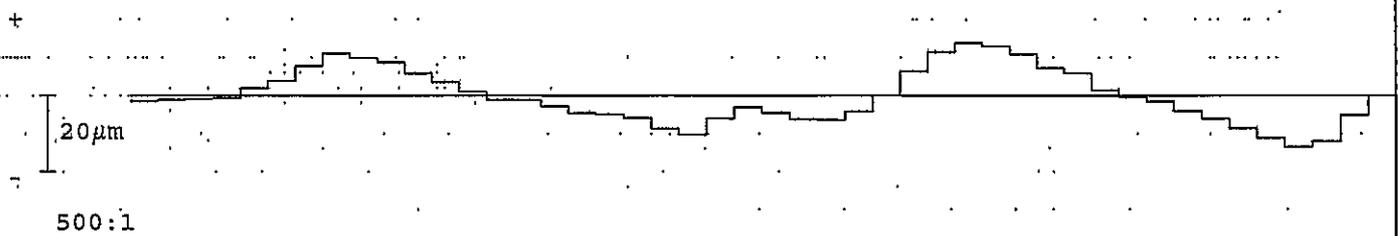
Nr. prog.: STI041005 0	P26 B7590	Controllore: TURNO C	Data: 28.07.2014 16:44
Denominazione: Input Shaft 2 Z46	Numero denti z	46	Angolo pressione 30°00'00"
Numero disegno: 250.6.5176.35-RI H	Modulo m	.79375mm	Angolo elica 00°00'00"
Comessa/serie nr.: 1	Untersuchungszweck:	Laufende Messung	
Masch.Nr.: M001	Spindel: FORM 1	Seitzelg:	Charge:

ANSI

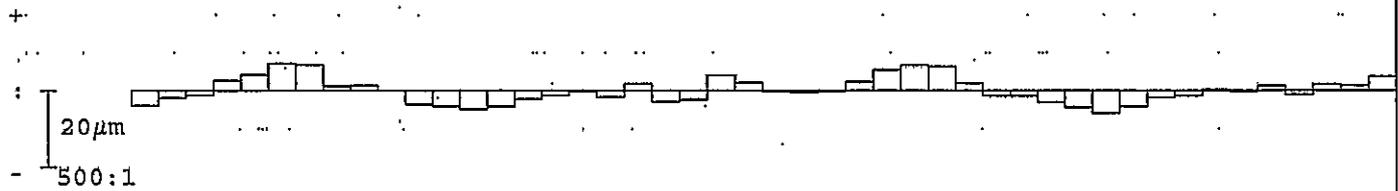
Errori singoli di divisione Vp fianco sinistro



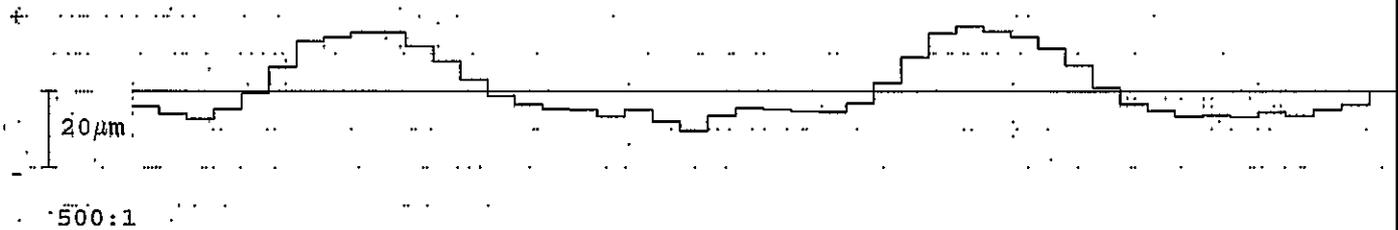
Errore somma di divisione Vap fianco sinistro



Errori singoli di divisione Vp fianco destro



Errore somma di divisione Vap fianco destro

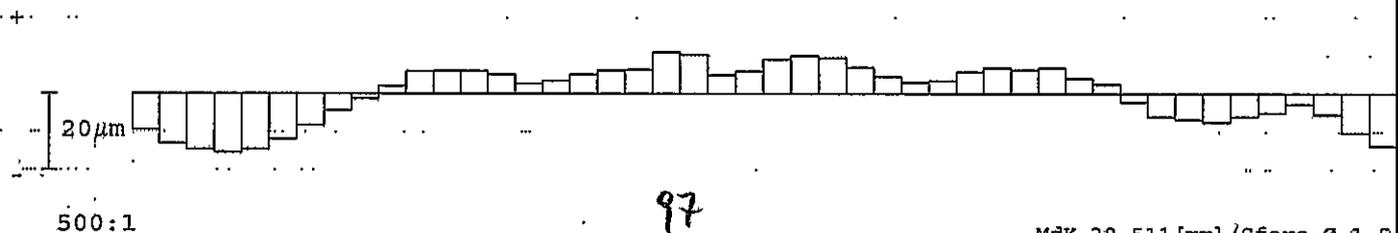


Corsa per misura divis.: 36.254 z=13.1mm	fianco sinistro				fianco destro			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione Vp max	7				7			
Gr. salto di passo Vs max	7				8			
Scarto di divisione Rp	11				13			
Err. globale di divisione Vap-a	27	4			28	4		
Err. cordale di divisione Vapz/8	20				23			

ANSI

Centricità Vr (Ø-sfera = 1.5mm)

⊙ : 20µm

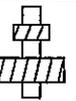


Err. di concentricità Vr	26	50	Val. amm	38.441	38.382	
Variaz. spessore dente tn			Val.	38.395	38.408	38.385

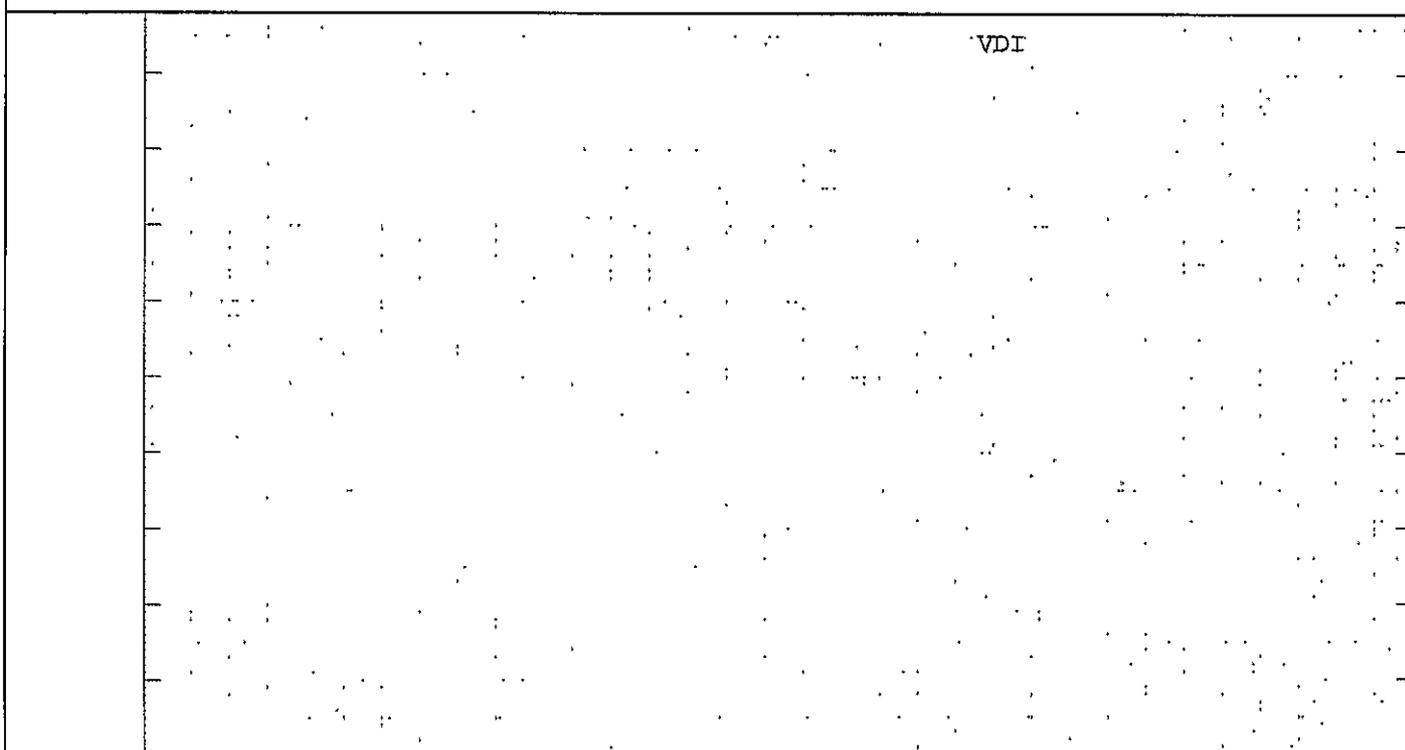
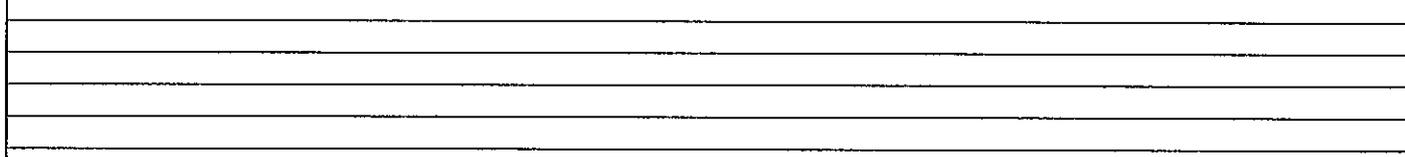
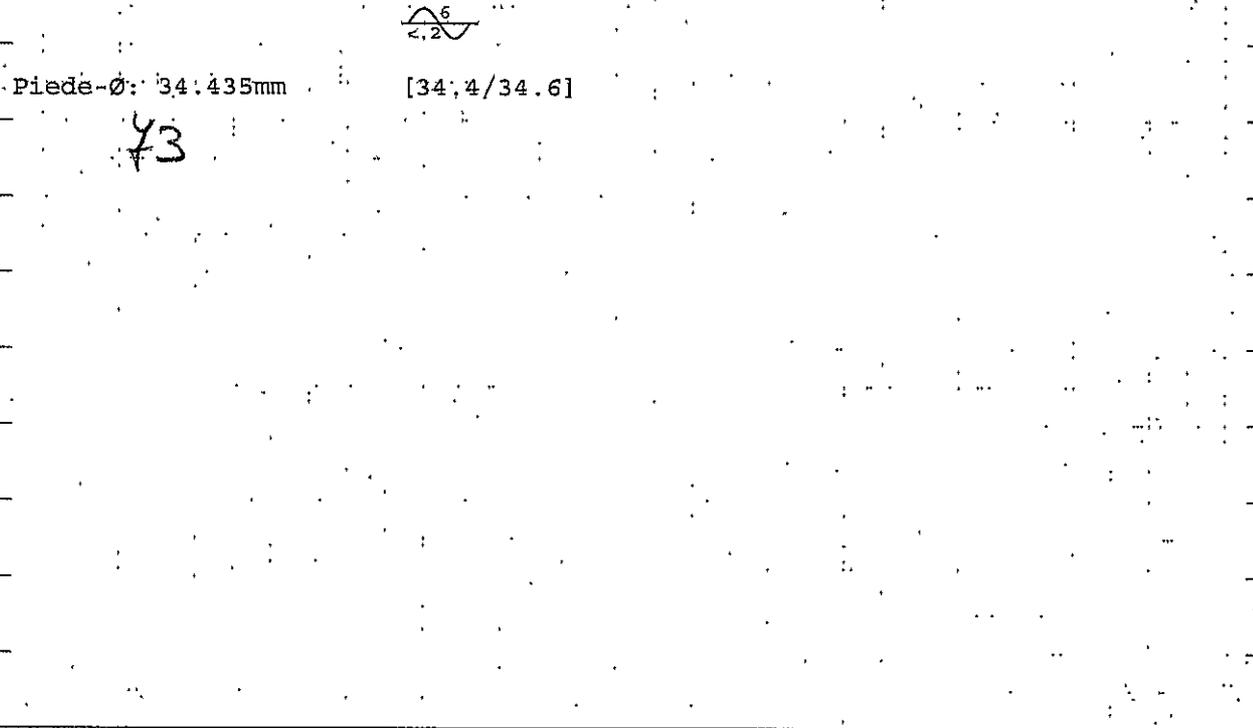


GETRAG B7590

Ruota cilindrica Evolvente/Elica

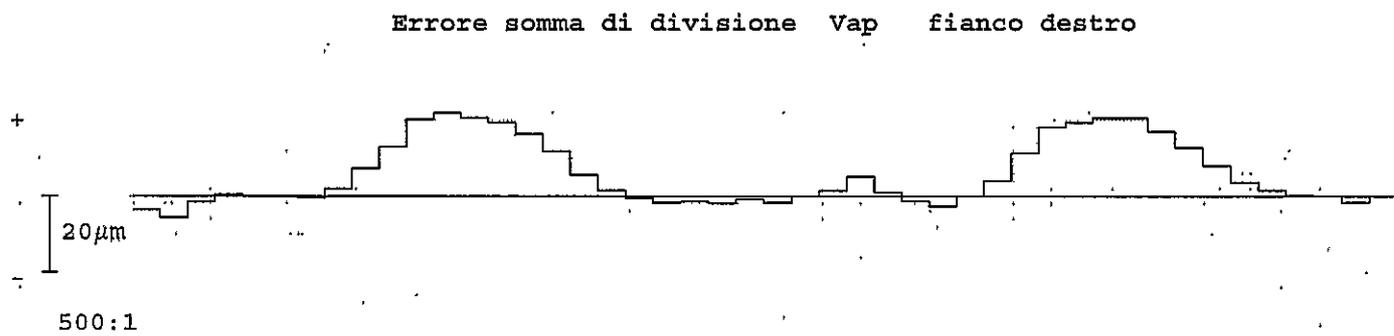
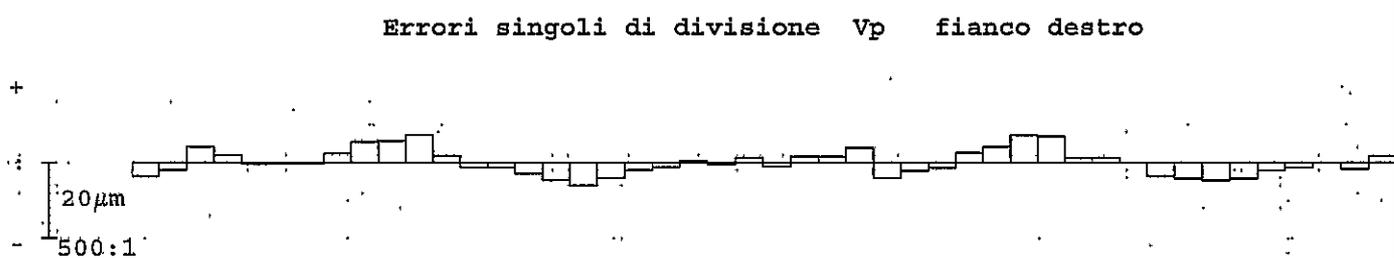
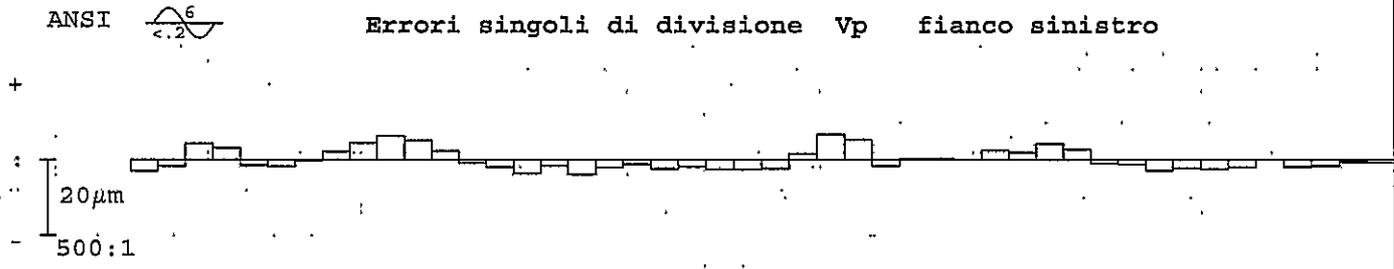


Nr. prog.:	STI0410005 0	P26 B7590	Controllore:	TURNO C	Data:	28.07.2014 16:48
Denominazione:	Input Shaft 2 Z46		Numero denti z	46	Largh.fasc.dent. b	26.1mm
Numero disegno.:	250.6.5176.35-RI H		Modulo m	.79375mm	Tratto evolv. La	1.81mm
Commessa/serie nr.:	2		Angolo pressione	30°00'00"	Tratto elica L&	20.88mm
Masch.Nr.:	M001	Spindel: FORM	Angolo elica	00°00'00"	Inizio elab. M1	7.5mm
Untersuchungszweck:	Laufende Messung		Ø Base db	31.6208mm	Palpatore Ø (#4F)	.5mm
Werkzeug:	Charge:		Ang. Base	00°00'00"	Fat.scor.pr. x	-.209

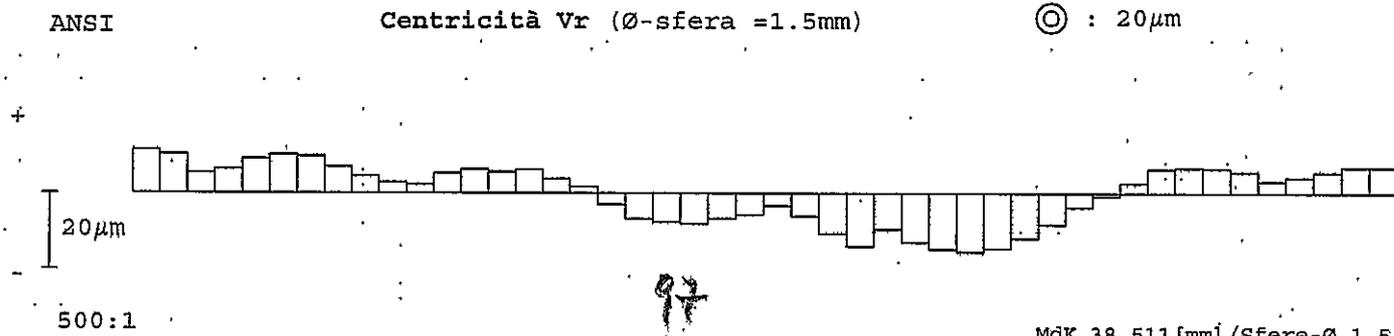




Nr. prog.: STI041005 0	P26 B7590	Controllore: TURNO C	Data: 28.07.2014 16:48
Denominazione: Input Shaft 2 Z46	Numero denti z	46	Angolo pressione 30°00'00"
Numero disegno.: 250.6.5176.35-RI H	Modulo m	.79375mm	Angolo elica 00°00'00"
Comessa/serie nr.: 2	Untersuchungszweck: Laufende Messung		
Masch.Nr.: M001	Spindel: FORMER	Werkzeug:	Charge:



Corsa per misura divis.: 36.254 z=13.1mm	fianco sinistro				fianco destro			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione Vp max	7				7			
Gr. salto di passo Vs max	7				8			
Scarto di divisione Rp	11				13			
Err. globale di divisione Vap-a	27	4			27	4		
Err. cordale di divisione Vapz/8	20				23			



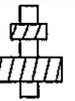
Err. di concentricità Vr	27	50	Val. amm	38.441	38.382
Variaz. spessore dente tn			Val.	38.397	38.41 38.387

MdK 38.511[mm]/Sfere-Ø 1.5

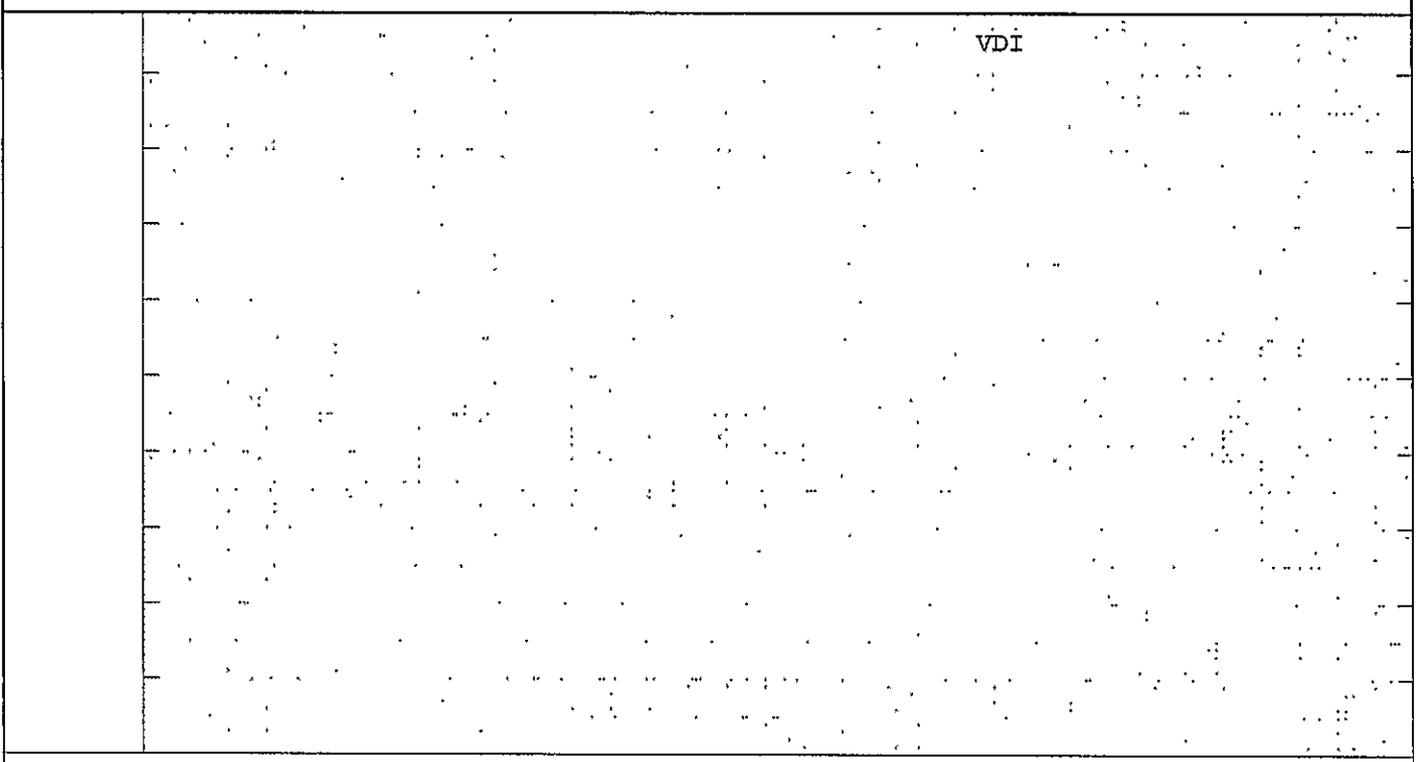
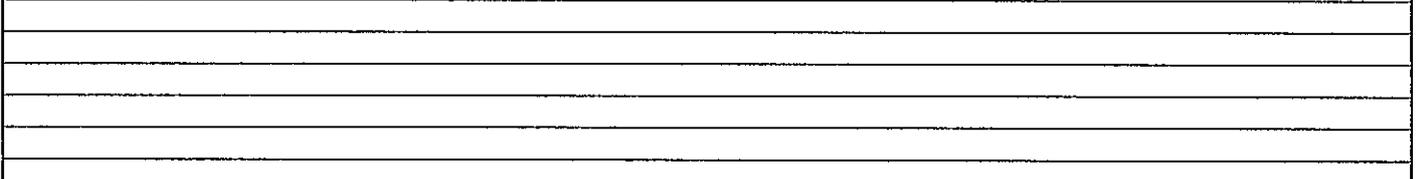
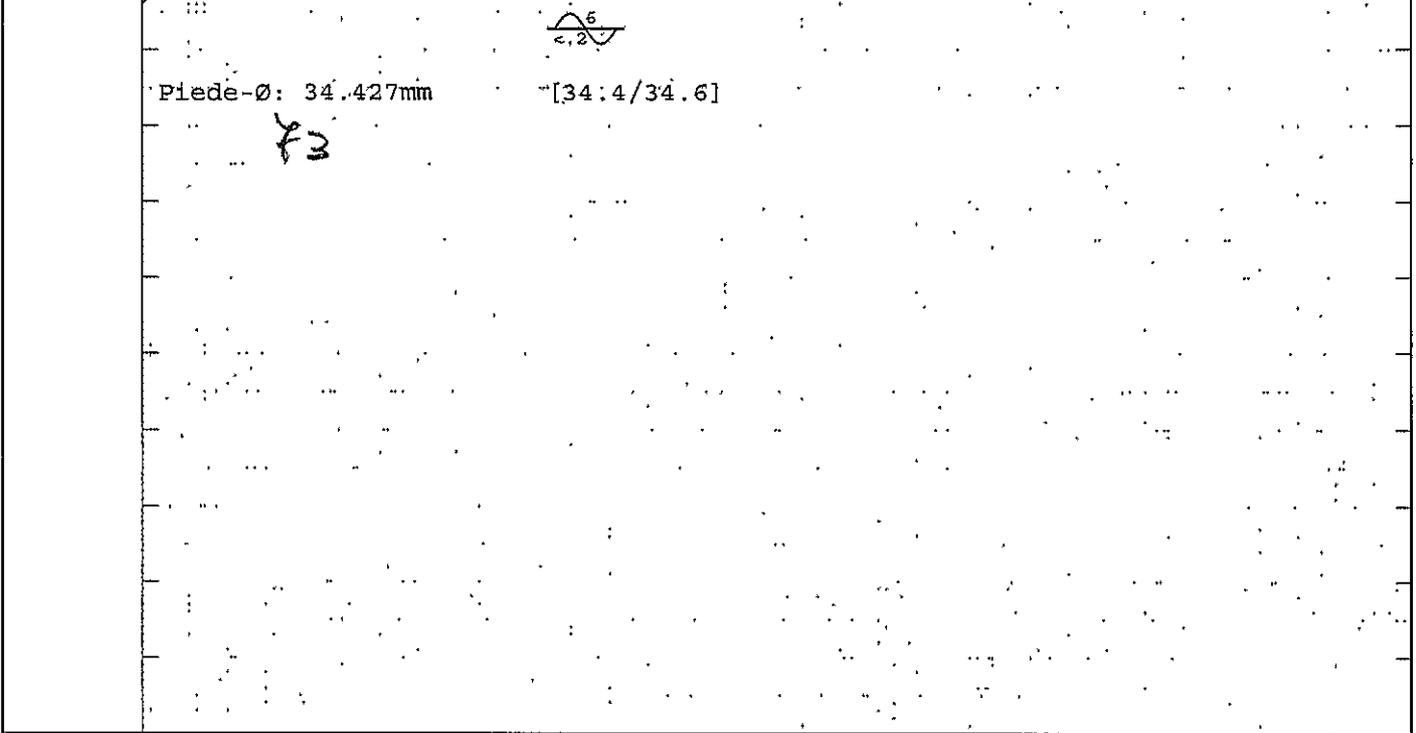


GETRAG B7590

Ruota cilindrica Evolvente/Elica



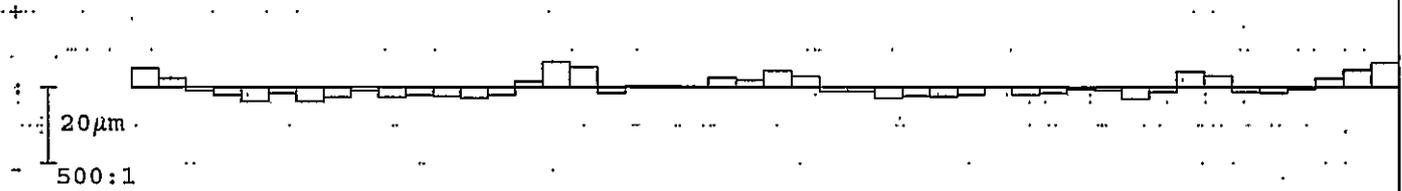
Nr. prog.:	STI0410005 0 P26 B7590	Controllore:	TURNO c	Data:	28.07.2014 16:51	
Denominazione:	Input Shaft 2 Z46	Numero denti z	46	Largh.fasc.dent. b	26.1mm	
Numero disegno.:	250.6.5176.35-RI H	Modulo m	.79375mm	Tratto evolv. La	1.81mm	
Comessa/serie nr.:	3	Angolo pressione	30°00'00"	Tratto elica LE	20.88mm	
Masch.Nr.:	M001	Spindel: Form	Angolo elica	00°00'00"	Inizio elab. M1	7.5mm
Untersuchungszweck:	Laufende Messung	Ø Base db	31.6208mm	Palpatore Ø	(#4F) .5mm	
Werkzeug:	Charge:	Ang. Base	00°00'00"	Fat.scor.pr. x	-.209	



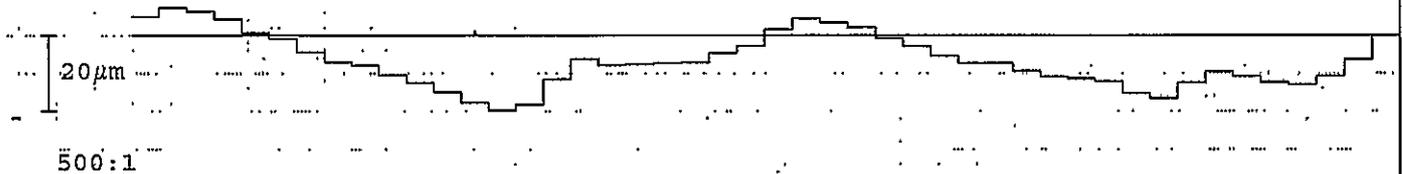


Nr. prog.: STI0410005 0	P26 B7590	Controllore: TURNO C	Data: 28.07.2014 16:51
Denominazione: Input Shaft 2 Z46	Numero denti z: 46	Angolo pressione: 30°00'00"	
Numero disegno.: 250.6.5176.35-RI H	Module m: .79375mm	Angolo elicita: 00°00'00"	
Comessa/serie nr.: 3	Untersuchungszweck: Laufende Messung		
Masch.Nr.: M001	Spindel: FORMI	Charge:	

ANSI  Errori singoli di divisione Vp fianco sinistro



Errore somma di divisione Vap fianco sinistro



Errori singoli di divisione Vp fianco destro

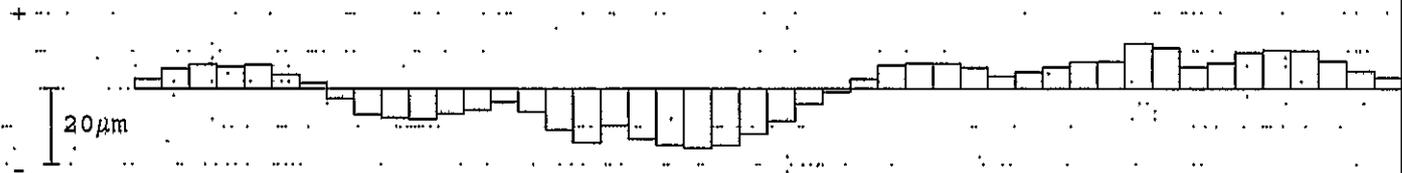


Errore somma di divisione Vap fianco destro



Corso per misura divis.: 36.254 z=13.1mm	fianco sinistro				fianco destro			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione Vp max	7				7			
Gr. salto di passo Vs max	7				8			
Scarto di divisione Rp	11				13			
Err. globale di divisione Vap-e	27	4			27	4		
Err. cordale di divisione Vapz/8	20				23			

ANSI Centricità Vr (Ø-sfera =1.5mm)  : 21µm



Err. di concentricità Vr	28	50	MdK 38.511 [mm] / Sfere-Ø 1.5			
			Val. amm	38.441	38.382	
Variaz. spessore dente tn			Val.	38.395	38.408	38.385



GETRAG B7590

Ruota cilindrica Evolvente/Elica



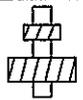
Nr. prog.:	STI0410005 0 P26 B7590	Controllore:	TURNO c	Data:	28.07.2014 16:54
Denominazione:	Input Shaft 2 Z46	Numero denti z	46	Largh.fasc.dent. b	26.1mm
Numero disegno.:	250.6.5176.35-RI H	Modulo m	.79375mm	Tratto evolv. La	1.81mm
Commessa/serie nr.:	4	Angolo pressione	30°00'00"	Tratto elica Lg	20.88mm
Masch.Nr.:	M001 Spindel: Form	Angolo elica	00°00'00"	Inizio elab. M1	7.5mm
Untersuchungszweck:	Laufende Messung	Ø Base db	31.6208mm	Palpatore Ø	(#4F).5mm
Werkzeug:	Charge:	Ang. Base	00°00'00"	Fat.scor.pr. x	-.209

Piede-Ø: 34.434mm [34.4/34.6]

73



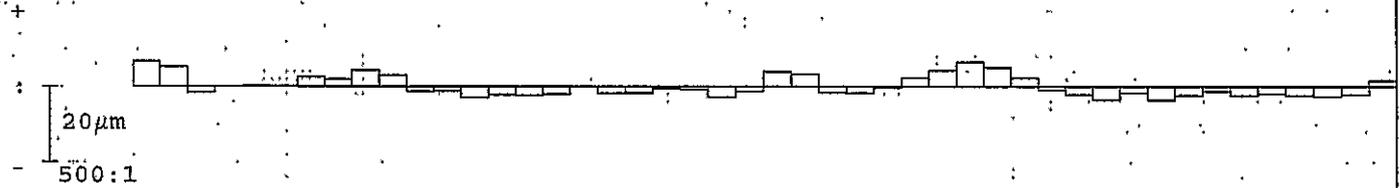
VDI



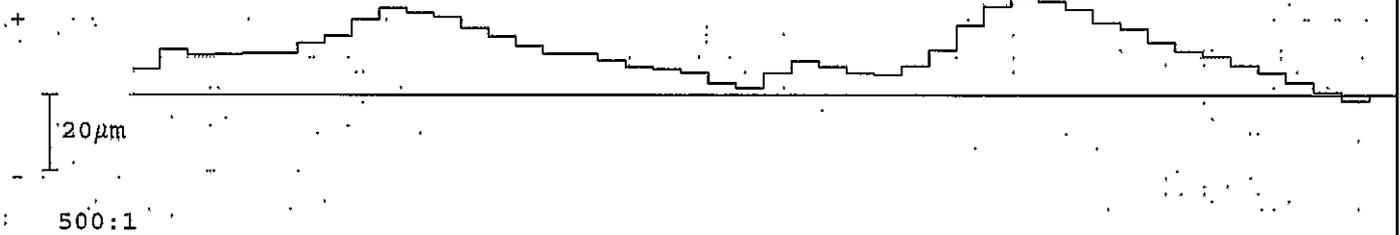
Nr. prog.: STI041005 0	P26 B7590	Controllora: TURNO C	Data: 28.07.2014 16:54
Denominazione: Input Shaft 2 Z46	Numero denti z: 46	Angolo pressione: 30°00'00"	
Numero disegno: 250.6.5176.35-RI H	Modulo m: .79375mm	Angolo elica: 00°00'00"	
Comessa/serie nr.: 4	Untersuchungszweck: Laufende Messung		
Masch.Nr.: M001	Spindel: Form	atzzeig:	Charge:

ANSI 

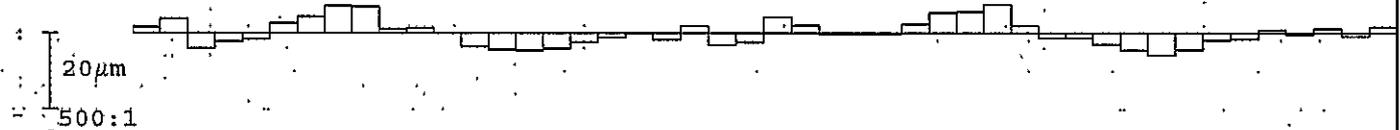
Errori singoli di divisione Vp fianco sinistro



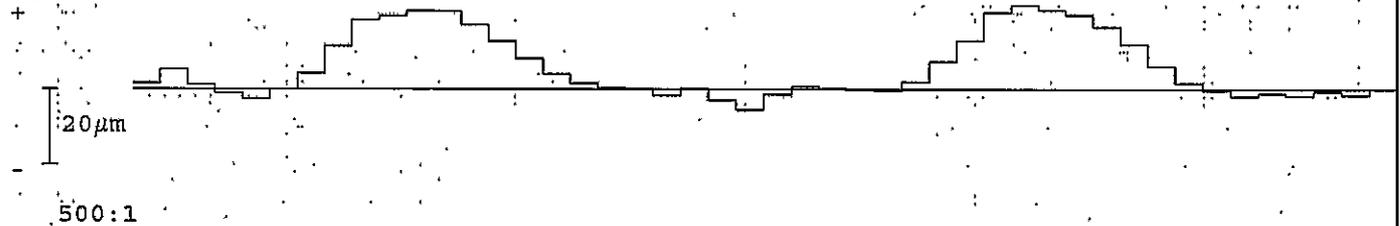
Errore somma di divisione Vap fianco sinistro



Errori singoli di divisione Vp fianco destro



Errore somma di divisione Vap fianco destro

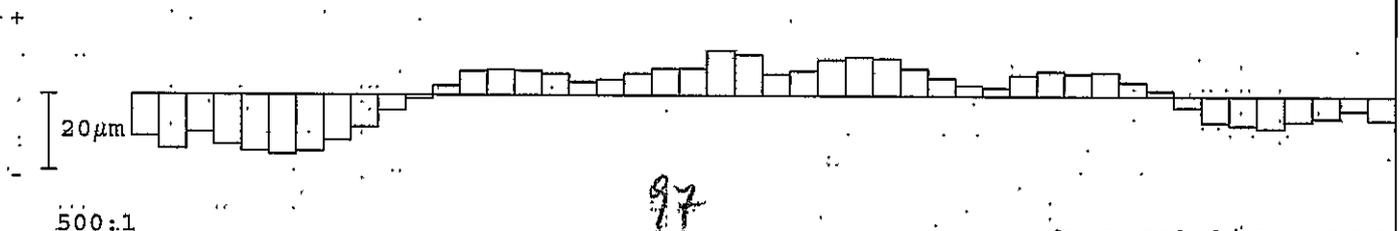


Corsa per misura divis.: 36.254 z=13.1mm	fianco sinistro				fianco destro			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione Vp max	7				7			
Gr. salto di passo Vs max	7				8			
Scarto di divisione Rp	11				13			
Err. globale di divisione Vap-e	27	4			28	4		
Err. cordale di divisione Vapz/8	20				23			

ANSI

Centricità Vr (Ø-sfera = 1.5mm)

⊙ : 21µm



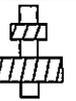
MdK 38.511 [mm] / Sfere-Ø 1.5

Err. di concentricità Vr	27	50	Val. amm	38.441	38.382
Variaz. spessore dente tn			Val.	38.396	38.408 38.386



GETRAG B7590

Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410005 0	P26 B7590	Controllore:	TURNO C	Data:	28.07.2014 16:58
Denominazione:	Input Shaft 2 Z46		Numero denti z	46	Largh.fasc.dent. b	26.1mm
Numero disegno.:	250.6.5176.35-RI H		Modulo m	.79375mm	Tratto evolv. La	1.81mm
Commessa/serie nr.:	5		Angolo pressione	30°00'00"	Tratto elica L8	20.88mm
Masch.Nr.:	M001	Spindel: FORM 6	Angolo elica	00°00'00"	Inizio elab. M1	7.5mm
Untersuchungszweck:	Laufende Messung		Ø Base db	31.6208mm	Palpatore Ø (#4F)	.5mm
Werkzeug:	Charge:		Ang. Base	00°00'00"	Fat.scor.pr. x	-.209


Piede=Ø: 34.433mm [34.4/34.6]
Y3

VDI

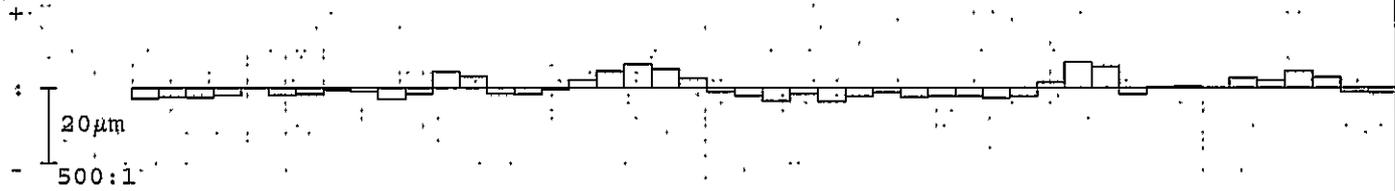




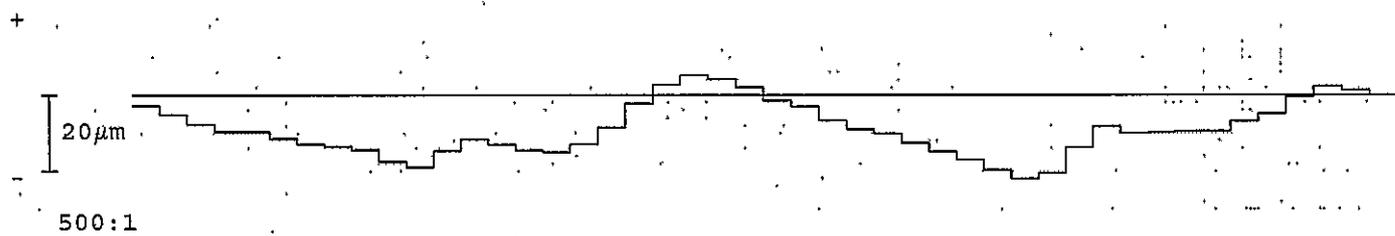
Nr. prog.: STI0410005 0	P26 B7590	Controllore: TURNO C	Data: 28.07.2014 16:58
Denominazione: Input Shaft 2 Z46		Numero denti z 46	Angolo pressione 30°00'00"
Numero disegno.: 250.6.5176.35-RI H		Modulo m .79375mm	Angolo elica 00°00'00"
Comessa/serie nr.: 5		Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	Spindel: FORMER	Arbeitszeug:	Charge:

ANSI 

Errori singoli di divisione Vp fianco sinistro



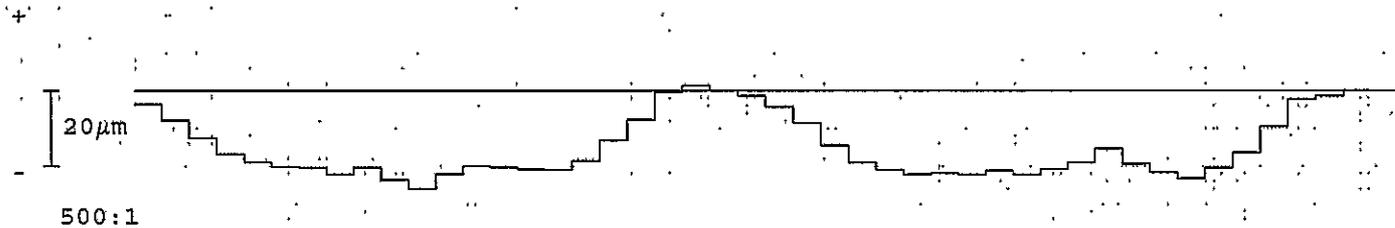
Errore somma di divisione Vap fianco sinistro



Errori singoli di divisione Vp fianco destro



Errore somma di divisione Vap fianco destro



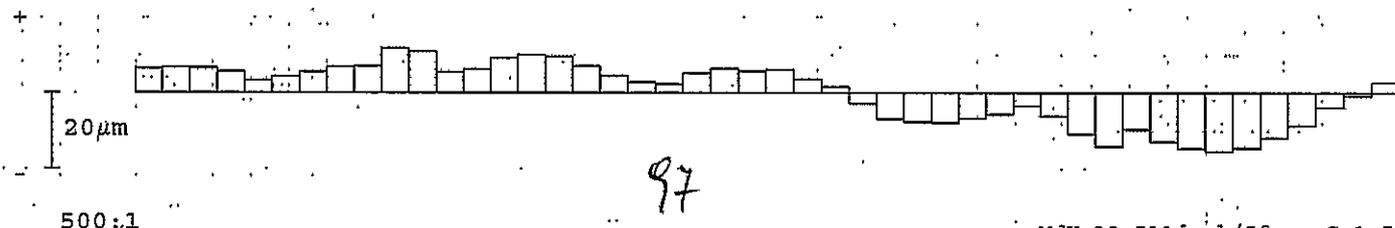
Corsa per misura divis.: 36.254 z=13.1mm

	fianco sinistro				fianco destro			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione Vp max	7				7			
Gr. salto di passo Vs max	7				8			
Scarto di divisione Rp	11				13			
Err. globale di divisione Vap-e	27	4			27	4		
Err. cordale di divisione Vapz/8	20				23			

ANSI

Centricità Vr (Ø-sfera =1.5mm)

⊙ : 20µm



MdK 38.511 [mm] / Sfere-Ø 1.5

Err. di concentricità Vr	27	50	Val. amm	38.441	38.382	
Variaz. spessore dente tn			Val.	38.396	38.409	38.386

