

Part Name **OUTPUT SHAFT 2** Customer Part Number **250.6.3664.35**

Shown on Drawing No. **250.6.3664.35** Organization Part #

Engineering Change Level **F Index ( h )** Dated **30-lug-14**

Additional Engineering Changes Dated

Safety and/or Government Regulation  Yes  No Purchase Order No. Weight (kg) **1,439**

Checking Aid No. Checking Aid Engineering Change Level Dated

**ORGANIZATION MANUFACTURING INFORMATION** **CUSTOMER SUBMITTAL INFORMATION**

**GETRAG MODUGNO** **EDISON/FORD**

Organization Name & Supplier/Vendor Code Customer Name/Division

**VIA DEI CICLAMINI N°4** **EDISON/FORD**

Street Address Buyer/Buyer Code

**MODUGNO BARI 70026 ITALY** **TYP 250 EDISON/FORD**

City Region Postal Code Country Application

**MATERIALS REPORTING**

Has customer-required Substances of Concern information been reported?  Yes  No  n/a

Submitted by IMDS or other customer format:

Are polymeric parts identified with appropriate ISO marking codes?  Yes  No  n/a

**REASON FOR SUBMISSION (Check at least one)**

Initial Submission  Change to Optional Construction or Material

Engineering Change(s)  Supplier or Material Source Change

Tooling: Transfer, Replacement, Refurbishment, or additional  Change in Part Processing

Correction of Discrepancy  Parts Produced at Additional Location

Tooling Inactive > than 1 year  Other - please specify below

**REQUESTED SUBMISSION LEVEL (Check one)**

Level 1 - Warrant only (and for designated appearance items, an Appearance Approval Report) submitted to customer.

Level 2 - Warrant with product samples and limited supporting data submitted to customer.

Level 3 - Warrant with product samples and complete supporting data submitted to customer.

Level 4 - Warrant and other requirements as defined by customer.

Level 5 - Warrant with product samples and complete supporting data reviewed at organization's manufacturing location.

**SUBMISSION RESULTS**

The results for  dimensional measurements  material and functional tests  appearance criteria  statistical process package

These results meet all drawing and specification requirements:  Yes  NO (If "NO" - Explanation Required)

Mold / Cavity / Production Process

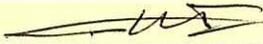
**DECLARATION**

I hereby affirm that the samples represented by this warrant are representative of our parts which were made by a process that meets all Production Part Approval Process Manual 4th Edition Requirements. I further affirm that these samples were produced at the production rate of 2000 / 24 hours.

I also certify that documented evidence of such compliance is on file and available for review. I have noted any deviations from this declaration below.

**EXPLANATION / COMMENTS: ripetizione per smarrimento documentazione precedente**

Is each Customer Tool properly tagged and numbered?  Yes  No  n/a

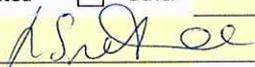
Organization Authorized Signature  Date 20/01/2015

Print Name **Dario Tursi** Phone No. **cell +39-393-9814554** Fax No.

Title **GPS 2 Leader** E-mail **dario.tursi@getrag.com**

**FOR CUSTOMER USE ONLY (IF APPLICABLE)**

Part Warrant Disposition:  Approved  Rejected  Other

Customer Signature  Date 20/01/15

Print Name Customer Tracking Number (optional)



Item	Caracteristic	Tolerance	Part 1	Part 2	Part 3	Part 4	Part 5	Device
1	MDK I	48,904-48,969	48,932	48,934	48,930	48,931	48,928	Calibro a sfere

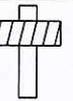
**Misurazioni Manuali**

**OS2 2506366435**

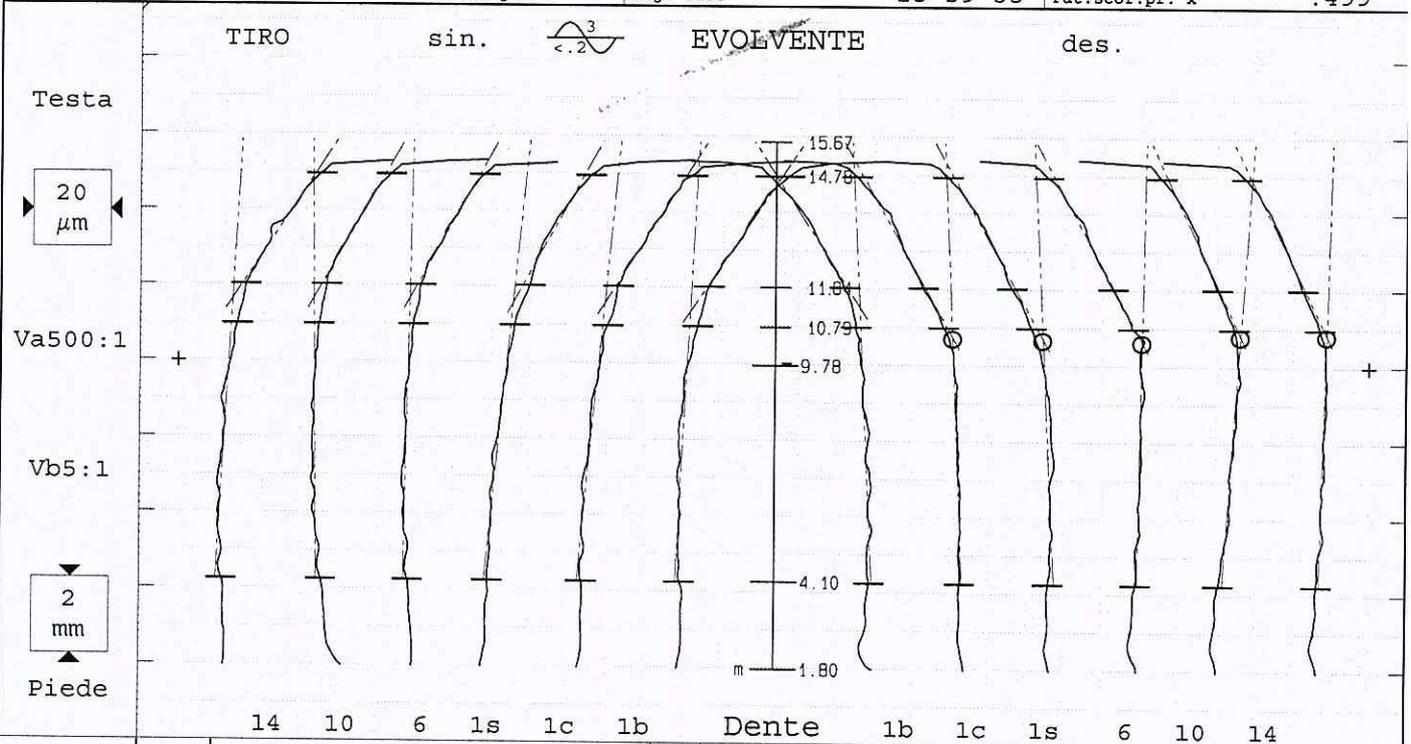
15-dic-14

# GETRAG B7590

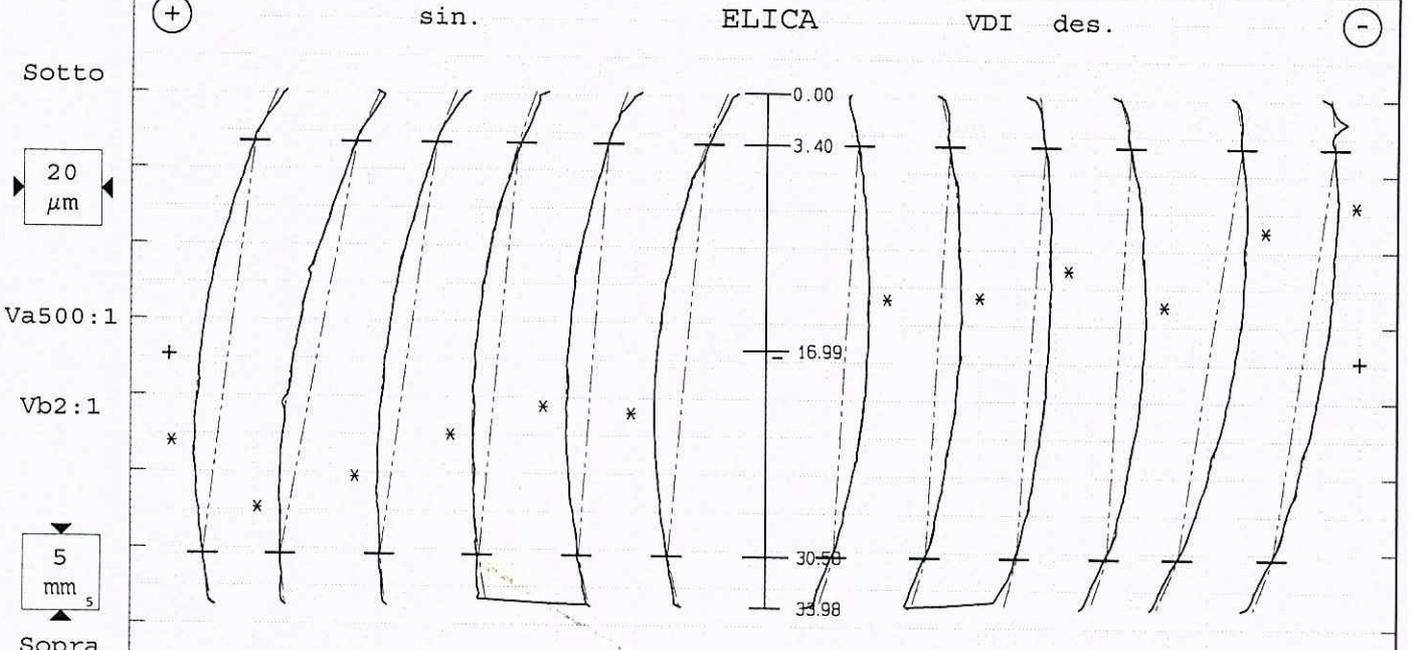
# Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410o05 0	P26 B7590	Controllore:	TURNO C	Data:	09.12.2014 12:43
Denominazione:	Output Shaft 2		Numero denti z	17	Largh.fasc.dent. b	33.98mm
Numero disegno.:	250.6.3664.35-IF		Modulo m	2.25mm	Tratto evolv. La	6.69mm
Commissa/serie nr.:	pezzo 1		Angolo pressione	20°00'00"	Tratto elica Ls	27.18mm
Masch.Nr.:	M001	spindel: Formel	Angolo elica	-27°48'00"	Inizio elab. M1	4.1mm
Untersuchungszweck:	Laufende Messung		Ø Base db	39.9881mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:		Ang. Base	-25°59'35"	Fat.scor.pr. x	.499



Tolerance	Medio	Val. misur [µm]							Qual	Tolerance	Val. misur [µm]							Medio	Qual
fHm ±6	-3	Var 7								±6	Var 8							1	
fHa ±10	-3	-4	1	-1	-7	-6	-3		±10	-3	-3	-3	1	5	2	1			
Fa	5	5	3	3	7	7	5			5	5	6	3	6	3	4			
ffa 4	3	3	2	2	2	3	3		4	3	3	5	3	3	3	3			
fKo -22/-14	-19	-20	-19	-18	-15	-18	-22		-22/-14	-20	-22	-22	-24	-22	-21	-22			



Tolerance	Medio	Val. misur [µm]							Qual	Tolerance	Val. misur [µm]							Medio	Qual
fHSm -18±6	-17	Var 16								-15±6	Var 13							-14	
fHB -18±13	-17	-17	-25	-18	-12	-9	-12		-15±13	-8	-8	-9	-8	-21	-20	-14			
Fß	4	3	6	1	4	7	6			6	6	5	7	5	8	7			
ffß 4	1	1	2	1	1	1	1		4	1	1	1	1	1	1	1			
Cß 5/9	7	7	6	6	6	7	8		5/9	6	6	5	7	7	6	7			
Bd 4±4	0								4±4							1			

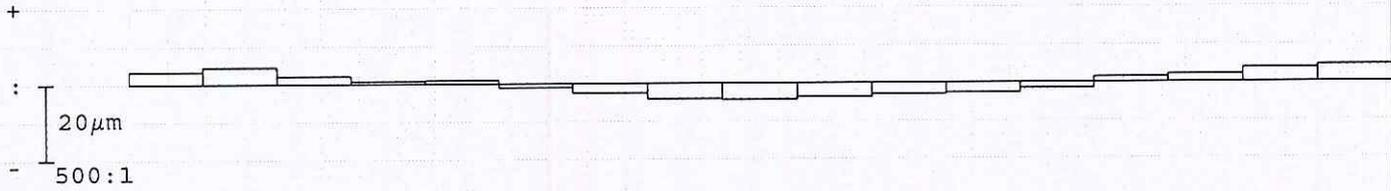




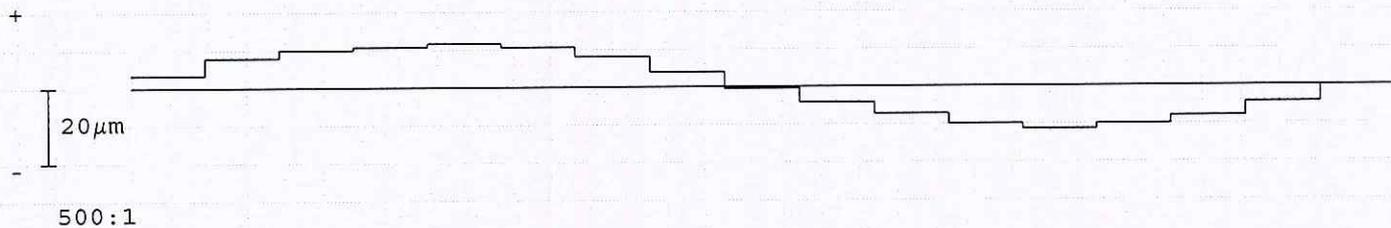
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Denominazione: Output Shaft 2	Numero denti z: 17	Angolo pressione: 20°00'00"	
Numero disegno.: 250.6.3664.35-IF	Modulo m: 2.25mm	Angolo elica: -27°48'00"	
Commessa/serie nr.: pezzo 1	Untersuchungszweck: Laufende Messung		
Masch.Nr.: M001	Spindel: Formelwerkzeug	Charge:	



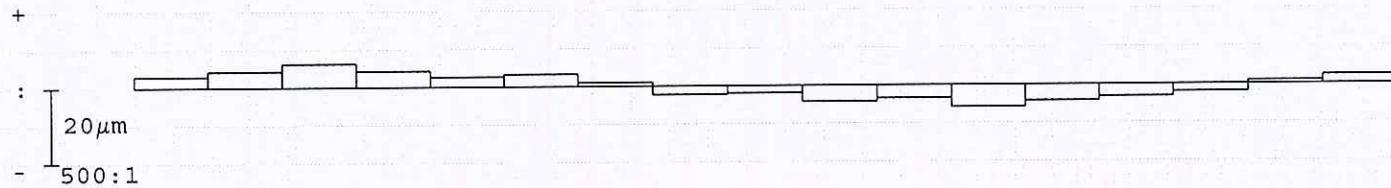
### Errori singoli di divisione fp fianco sinistro



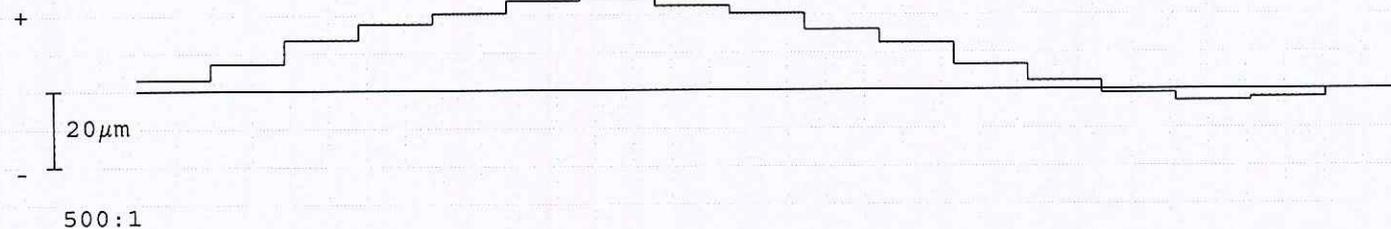
### Errore somma di divisione Fp fianco sinistro



### Errori singoli di divisione fp fianco destro



### Errore somma di divisione Fp fianco destro

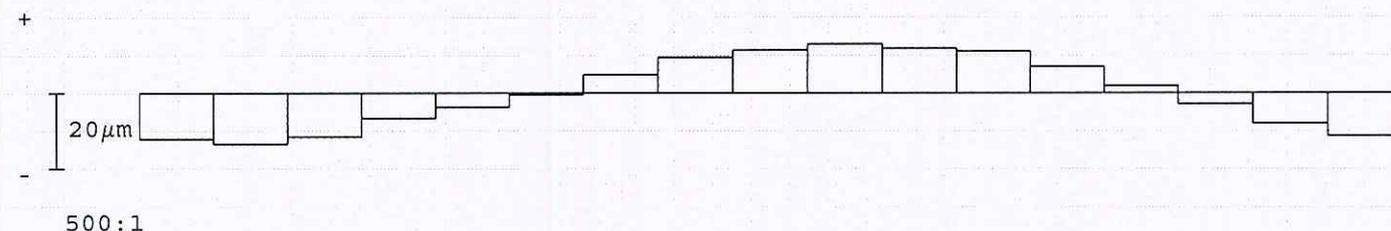


Corsa per misura divis.: 44.516 z=17mm

	fianco sinistro / TIRO				fianco destro			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	4		14		6		14	
Gr. salto di passo fu max	3		18		3		18	
Scarto di divisione Rp	8				12			
Err. globale di divisione Fp	23		40		28		40	
Err. cordale di divisione Fpz/8	9				11			

Centricità Fr (Ø-sfera = 3.75mm)

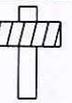
⊙ : 26µm



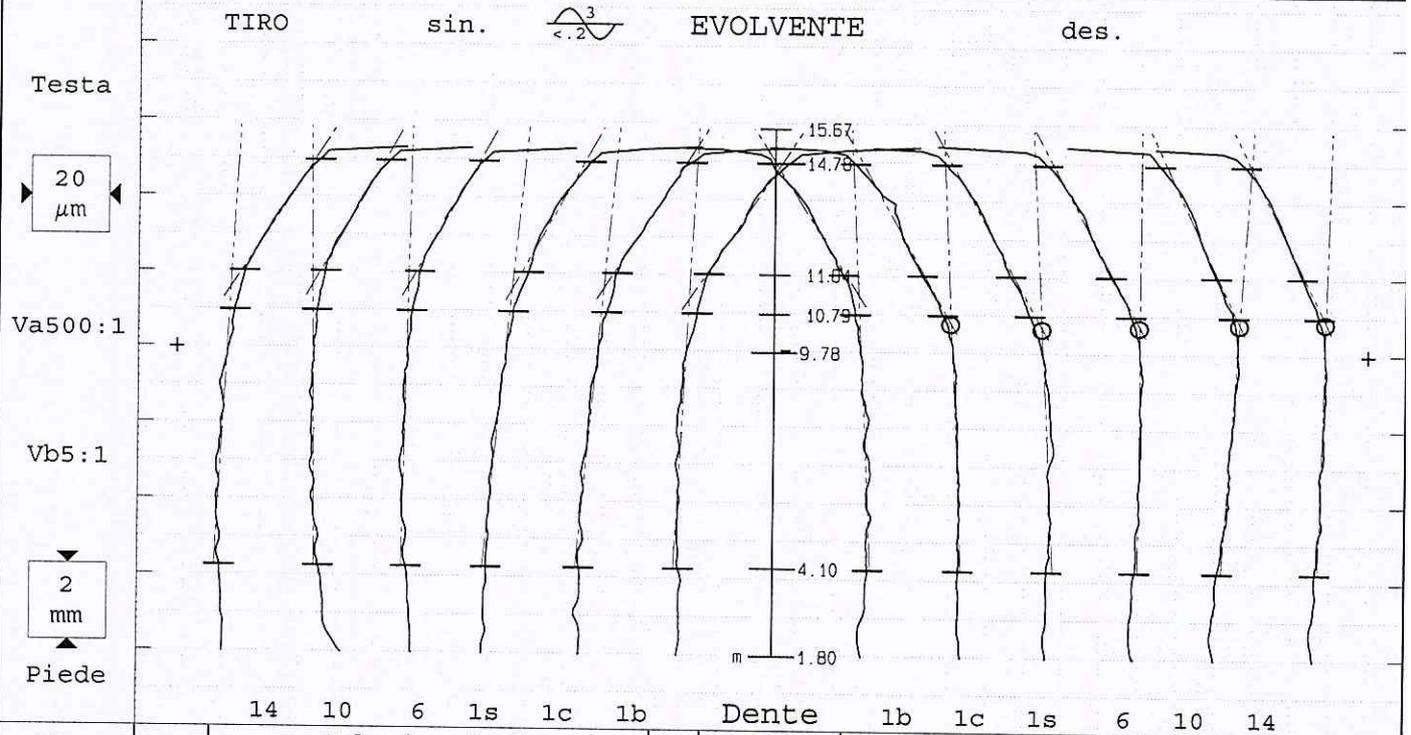
Err. di concentricità Fr	26	32	
Variab. spessore dente Rs			

# GETRAG B7590

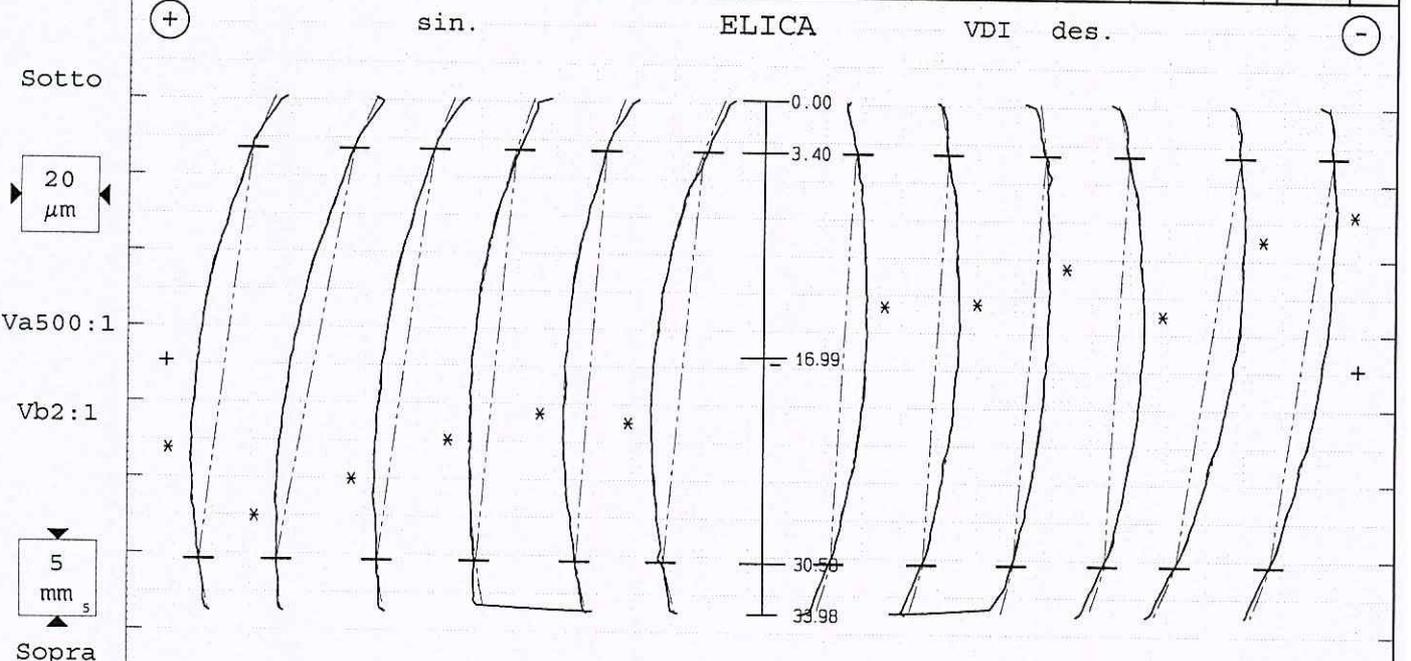
# Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410o05 0 P26 B7590	Controllore:	TURNO C	Data:	09.12.2014 12:52
Denominazione:	Output Shaft 2	Numero denti z	17	Largh. fasc. dent. b	33.98mm
Numero disegno.:	250.6.3664.35-IF	Modulo m	2.25mm	Tratto evolv. La	6.69mm
Commessa/serie nr.:	pezzo 2	Angolo pressione	20°00'00"	Tratto elica LE	27.18mm
Masch.Nr.:	M001	spindel: Formn	Angolo elica	Inizio elab. M1	4.1mm
Untersuchungszweck:	Laufende Messung	Ø Base db	39.9881mm	Palpatore Ø	(#8D) 1mm
Werkzeug:	Charge:	Ang. Base	-25°59'35"	Fat. scor. pr. x	.499

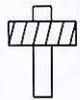


Tolerance	Medio	Val. misur [µm]							Qual	Tolerance	Val. misur [µm]							Medio	Qual	
		Var									Var									
fH <sub>0m</sub>	±6	-3	7								±6	8							1	
fH <sub>a</sub>	±10	-3	-4	1	-1	-7	-6	-3		±10	-3	-3	-3	0	5	2	1			
F <sub>a</sub>		5	5	3	3	7	7	5			5	5	7	3	5	3	4			
ff <sub>a</sub>	4	3	3	2	2	2	3	4		4	3	3	5	3	2	2	3			
fK <sub>0</sub>	-22/-14	-19	-20	-19	-18	-15	-18	-22		-22/-14	-20	-22	-22	-23	-22	-21	-22			



N:Z		Val. misur [µm]							Qual	N:Z	Val. misur [µm]							Qual	
		Var									Var								
fH <sub>Bm</sub>	-18±6	-17	16								-15±6	14							-14
fH <sub>B</sub>	-18±13	-17	-17	-25	-18	-12	-9	-12		-15±13	-8	-8	-10	-7	-21	-20	-14		
F <sub>B</sub>		4	3	6	1	4	7	5			6	6	4	7	5	5	6		
ff <sub>B</sub>	4	1	1	1	1	1	1	2		4	1	1	2	1	1	1	1		
C <sub>B</sub>	5/9	7	7	6	6	6	7	8		5/9	6	6	4	7	7	6	7		
B <sub>d</sub>	4±4	0									4±4								2

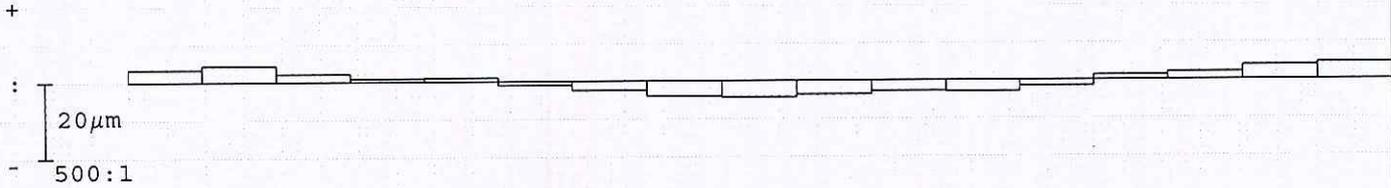




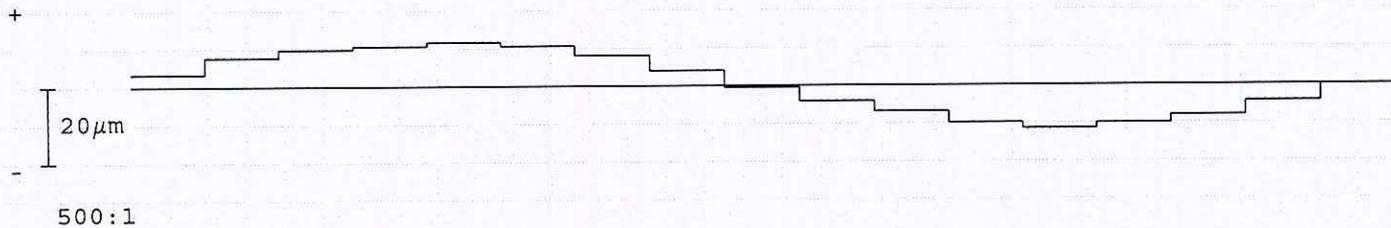
Nr. prog.: STI0410005 0	P26 B7590	Controllore: TURNO C	Data: 09.12.2014 12:52
Denominazione: Output Shaft 2		Numero denti z 17	Angolo pressione 20°00'00"
Numero disegno.: 250.6.3664.35-IF		Modulo m 2.25mm	Angolo elica -27°48'00"
Comessa/serie nr.: pezzo 2		Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	Spindel: FORMER	Arbeitszeug:	Charge:



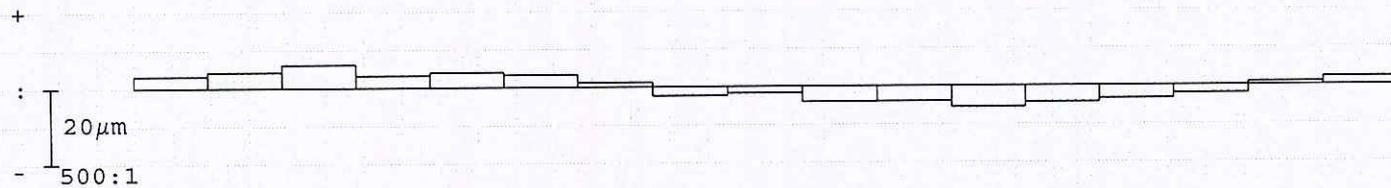
### Errori singoli di divisione fp fianco sinistro



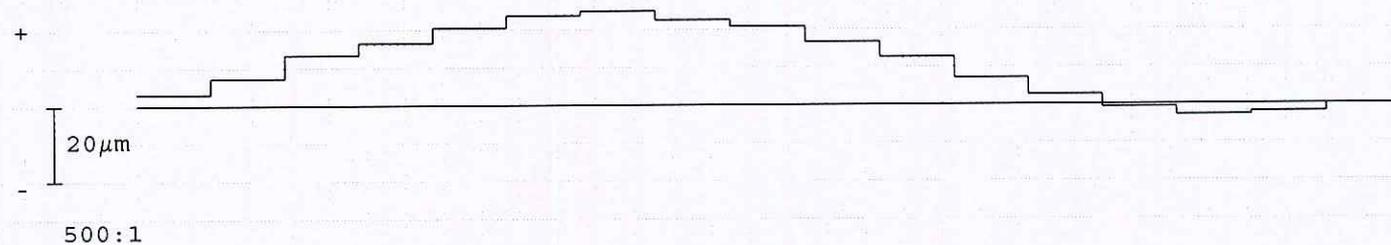
### Errore somma di divisione Fp fianco sinistro



### Errori singoli di divisione fp fianco destro



### Errore somma di divisione Fp fianco destro

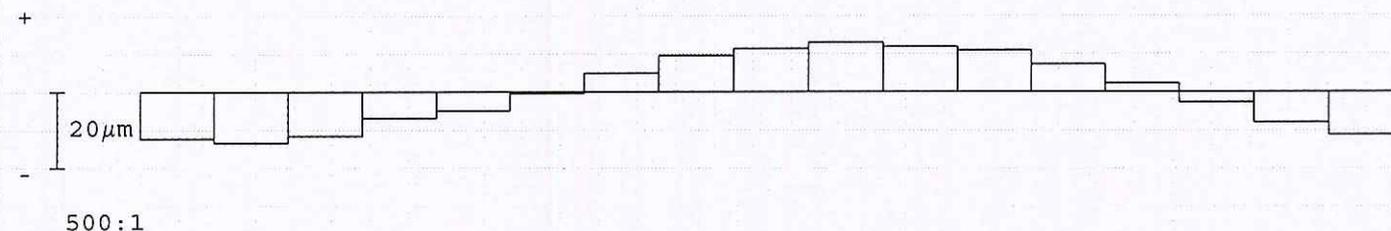


Corsa per misura divis.: 44.516 z=17mm

	fianco sinistro / TIRO				fianco destro			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	4		14		6		14	
Gr. salto di passo fu max	3		18		4		18	
Scarto di divisione Rp	8				12			
Err. globale di divisione Fp	23		40		28		40	
Err. cordale di divisione Fpz/8	9				10			

Centricità Fr (Ø-sfera = 3.75mm)

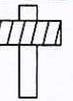
⊙ : 26µm



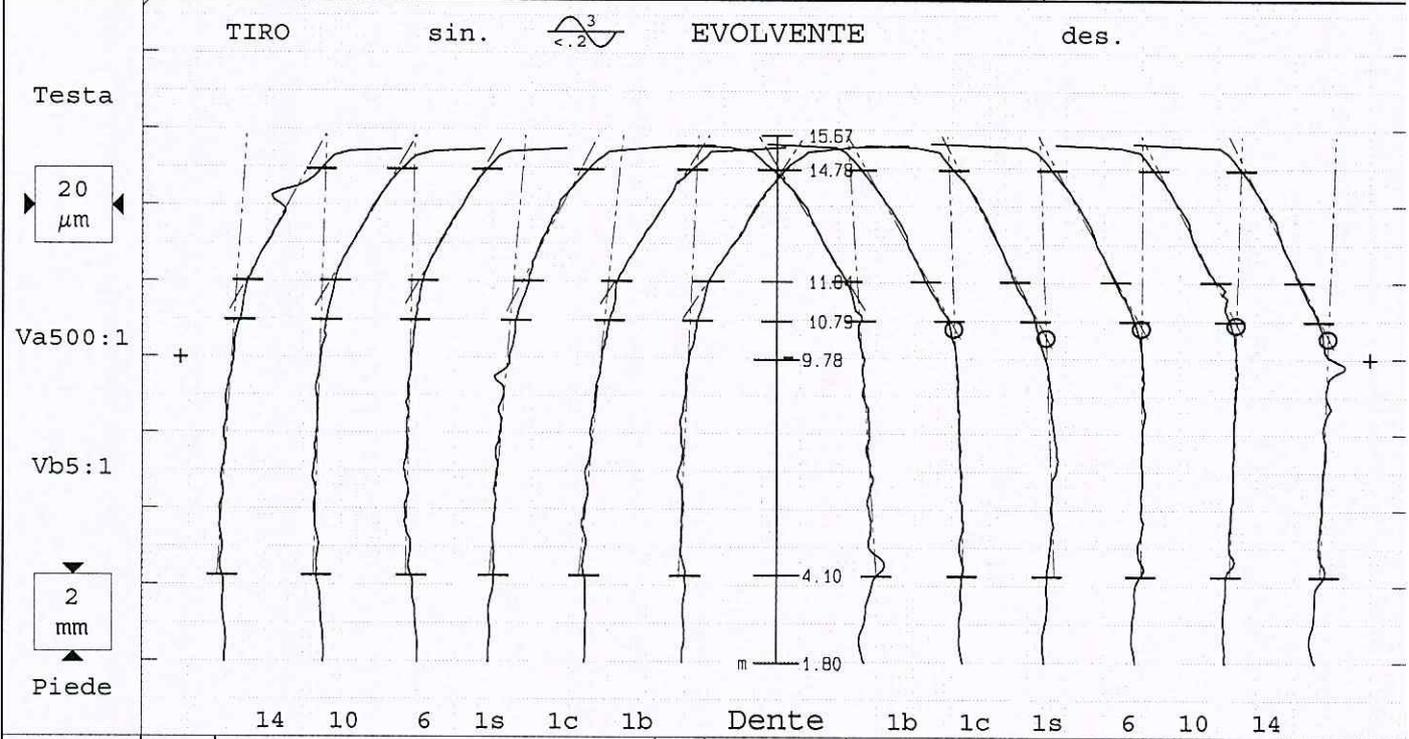
Err. di concentricità Fr	26	32	
Variab. spessore dente Rs			

# GETRAG B7590

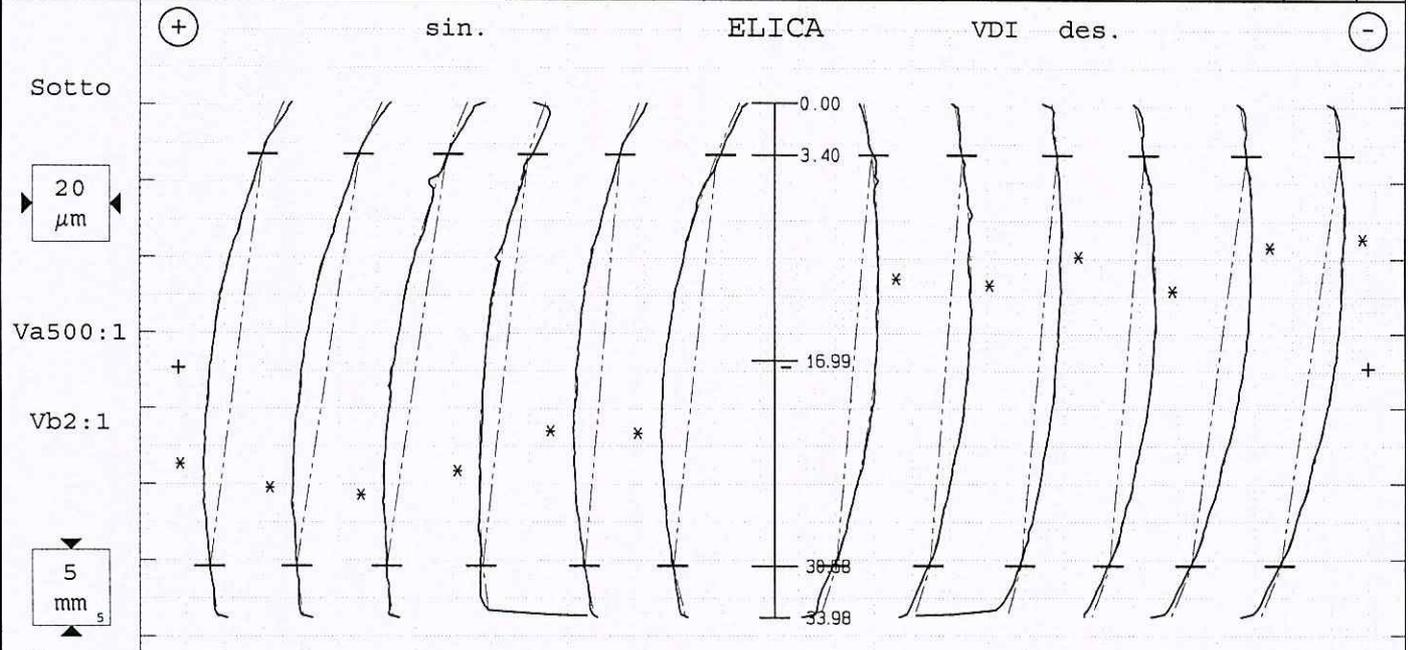
# Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410o05 0	P26 B7590	Controllore:	TURNO C	Data:	09.12.2014 13:49
Denominazione:	Output Shaft 2		Numero denti z	17	Largh. fasc. dent. b	33.98mm
Numero disegno.:	250.6.3664.35-IF		Modulo m	2.25mm	Tratto evolv. La	6.69mm
Commessa/serie nr.:	pezzo 3		Angolo pressione	20°00'00"	Tratto elica L8	27.18mm
Masch.Nr.:	M001	Spindel: Formm	Angolo elica	-27°48'00"	Inizio elab. M1	4.1mm
Untersuchungszweck:	Laufende Messung		Ø Base db	39.9881mm	Palpatore Ø	(#8D) 1mm
Werkzeug:	Charge:		Ang. Base	-25°59'35"	Fat. scor. pr. x	.499



Tolerance	Medio	Val. misur [µm]							Qual	Tolerance	Val. misur [µm]							Medio	Qual	
fH <sub>am</sub>	±6	-4	Var 6								±6	Var 4								1
fH <sub>a</sub>	±10	-4	-4	-2	-1	-5	-7	-3		±10	-4	-2	-2	0	2	2	1			
F <sub>a</sub>	5	5	4	3	6	8	5		4	7	4	6	3	3	7	4				
ff <sub>a</sub>	4	3	2	3	3	5	3	3	4	4	2	5	3	3	8	4				
fK <sub>o</sub>	-22/-14	-18	-17	-19	-18	-15	-18	-22		-22/-14	-19	-22	-21	-22	-22	-23	-22			



N:Z		14	10	6	1t	1c	1p	Qual	Tolerance	Val. misur [µm]							Medio	Qual		
fH <sub>8m</sub>	-18±6	-18	Var 9								-15±6	Var 8								-15
fH <sub>8</sub>	-18±13	-18	-17	-21	-20	-15	-12	-14		-15±13	-12	-11	-12	-11	-18	-19	-15			
F <sub>B</sub>	4	4	2	3	3	6	6	5		4	3	4	3	4	3	5	4			
ff <sub>B</sub>	4	2	1	1	3	3	1	2		4	2	2	1	1	1	1	1			
C <sub>B</sub>	5/9	7	7	7	6	5	7	8		5/9	6	6	5	7	7	7	7			
B <sub>d</sub>	4±4	1									4±4									0

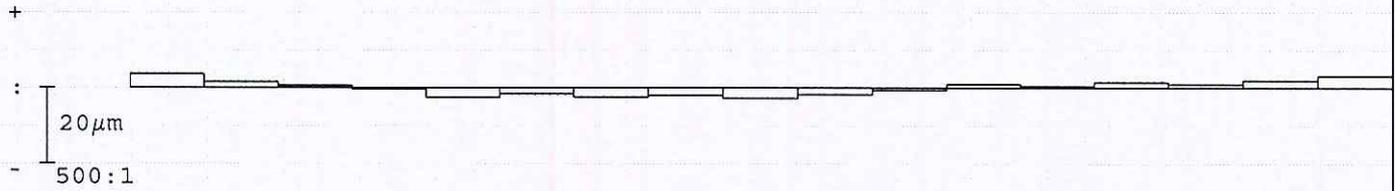




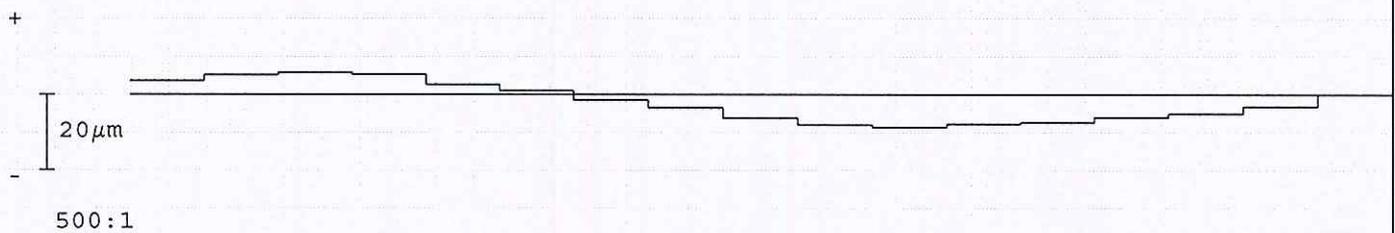
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Denominazione: Output Shaft 2	Numero denti z	17	Angolo pressione 20°00'00"
Numero disegno: 250.6.3664.35-IF	Modulo m	2.25mm	Angolo elica -27°48'00"
Comessa/serie nr.: pezzo 3	Untersuchungszweck:	Laufende Messung	
Masch.Nr.: M001	Spindel: FORMER	Arbeitszeug:	Charge:



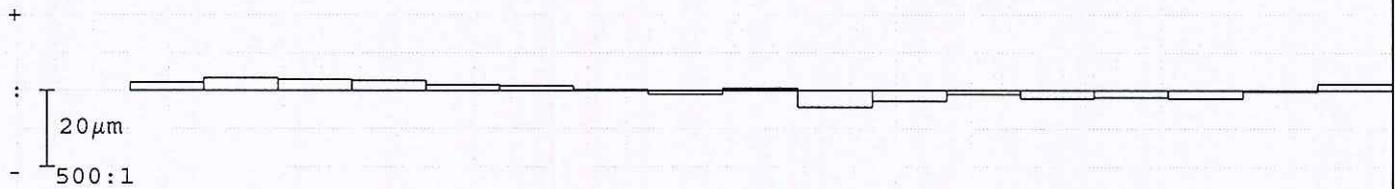
### Errori singoli di divisione fp fianco sinistro



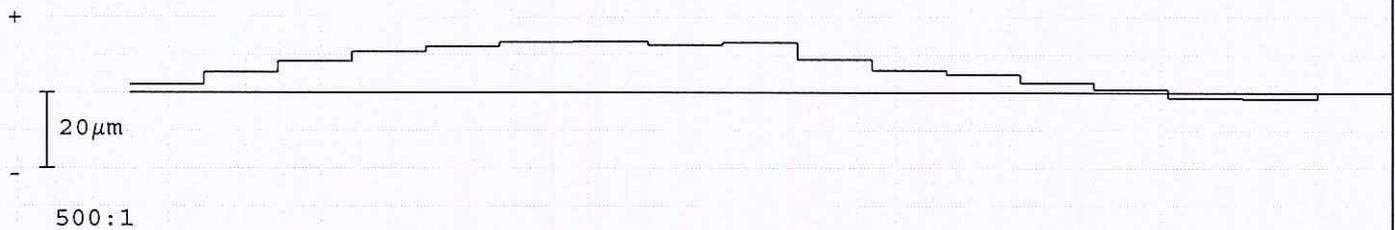
### Errore somma di divisione Fp fianco sinistro



### Errori singoli di divisione fp fianco destro

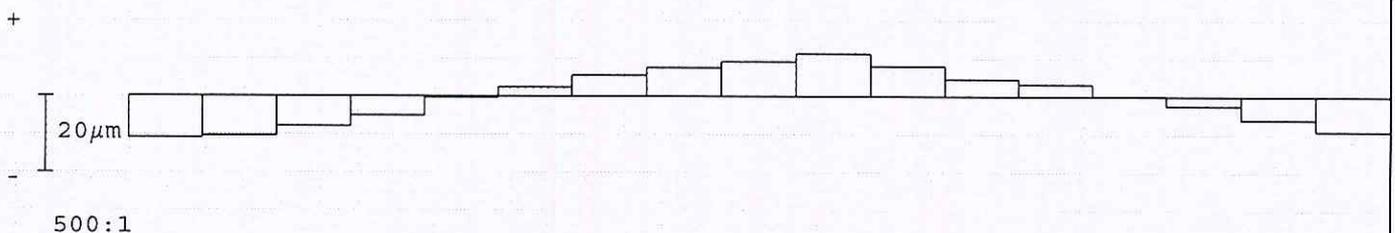


### Errore somma di divisione Fp fianco destro



	Corso per misura divis.: 44.516 z=17mm							
	fianco sinistro / TIRO				fianco destro			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	4		14		4		14	
Gr. salto di passo fu max	2		18		5		18	
Scarto di divisione Rp	7				7			
Err. globale di divisione Fp	14		40		15		40	
Err. cordale di divisione Fpz/8	7				7			

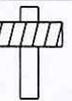
### Centricità Fr (Ø-sfera = 3.75mm) ☉ : 20µm



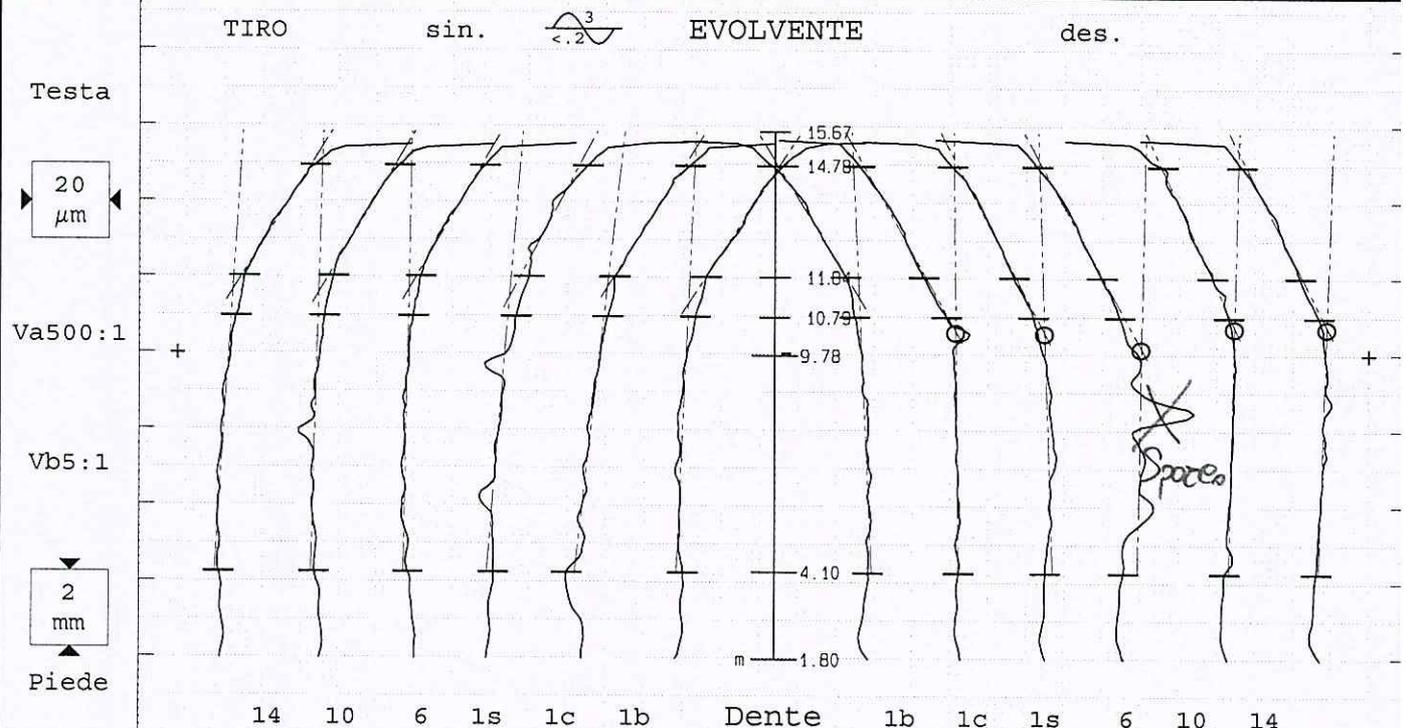
Err. di concentricità Fr	22	32	
Variab. spessore dente Rs			

# GETRAG B7590

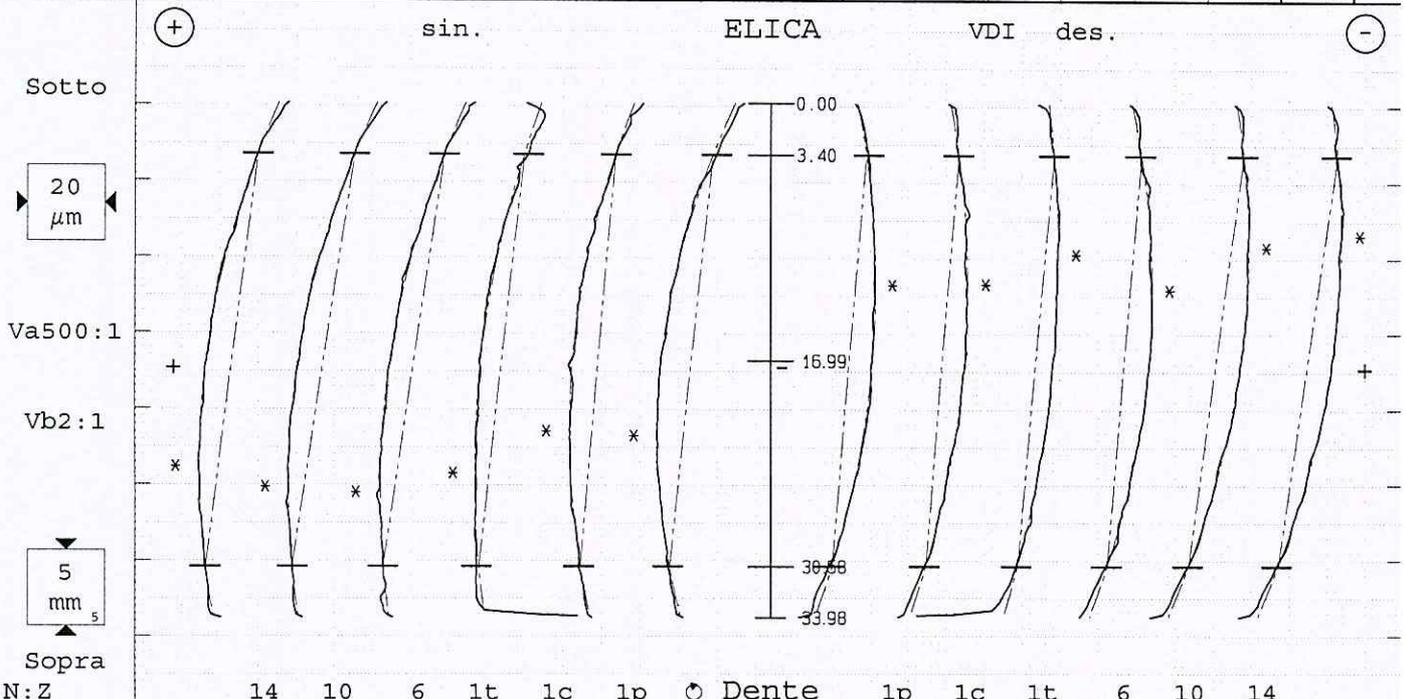
# Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410o05 0	P26 B7590	Controllore:	TURNO c	Data:	09.12.2014 13:54
Denominazione:	Output Shaft 2		Numero denti z	17	Largh.fasc.dent. b	33.98mm
Numero disegno.:	250.6.3664.35-IF		Modulo m	2.25mm	Tratto evolv. La	6.69mm
Commessa/serie nr.:	pezzo 4		Angolo pressione	20°00'00"	Tratto elica Ls	27.18mm
Masch.Nr.:	M001	Spindel: Formn	Angolo elica	-27°48'00"	Inizio elab. M1	4.1mm
Untersuchungszweck:	Laufende Messung		Ø Base db	39.9881mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:	Ang. Base	-25°59'35"	Fat.scor.pr. x	.499	

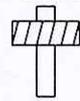


Tolerance	Medio	Val.misur [µm]							Qual	Tolerance	Val.misur [µm]							Medio	Qual	
fH <sub>am</sub>	±6	-4	Var 6								±6	Var 3								1
fH <sub>a</sub>	±10	-4	-4	-2	-1	-5	-7	-3		±10	-3	-1	-2	1	1	2	1			
F <sub>a</sub>	7	5	7	3	10	11	5			5	6	6	20	3	4	8				
ff <sub>a</sub>	4	4	2	6	2	7	4	3		4	3	6	5	20	2	4	8			
fK <sub>o</sub>	-22/-14	-19	-19	-19	-19	-15	-17	-22		-22/-14	-20	-24	-21	-27	-20	-23	-24			



N:Z	Tolerance	Medio	Val.misur [µm]							Qual	Tolerance	Val.misur [µm]							Medio	Qual
fH <sub>Bm</sub>	-18±6	-17	Var 10								-15±6	Var 9								-15
fH <sub>B</sub>	-18±13	-17	-17	-21	-20	-15	-11	-14		-15±13	-11	-11	-12	-11	-18	-20	-15			
F <sub>B</sub>	4	2	3	3	6	6	4			3	4	3	4	4	5	4				
ff <sub>B</sub>	4	2	1	1	2	2	2	2		4	2	2	1	2	1	2				
c <sub>B</sub>	5/9	7	7	7	6	5	7	8		5/9	6	6	5	6	7	6				
B <sub>d</sub>	4±4	1									4±4									1

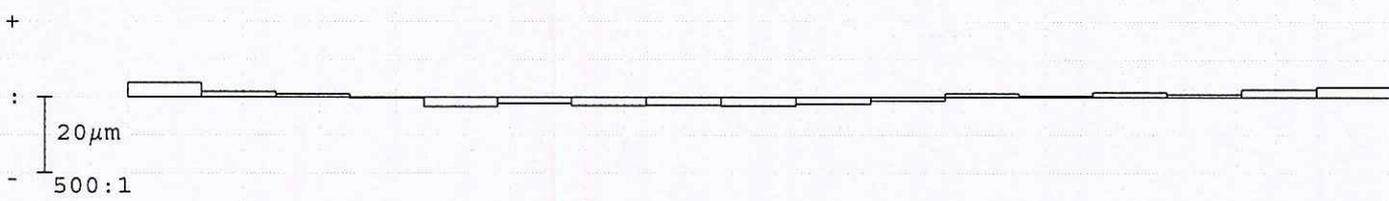




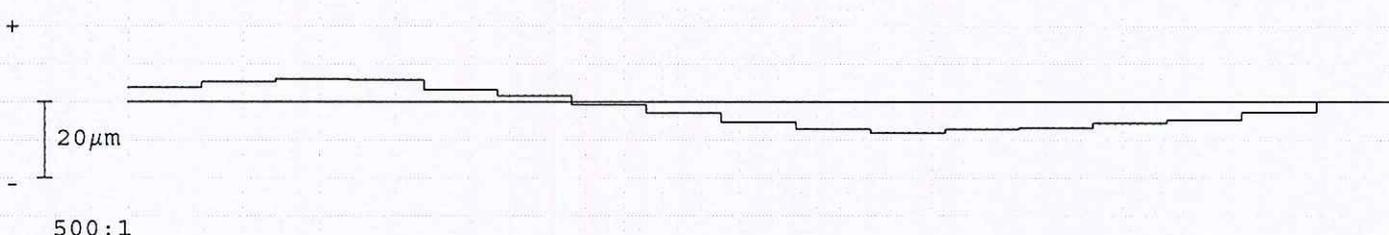
Nr. prog.:	STI0410005 0 P26 B7590	Controllore:	TURNO c	Data:	09.12.2014 13:54
Denominazione:	Output Shaft 2	Numero denti z	17	Angolo pressione	20°00'00"
Numero disegno.:	250.6.3664.35-IF	Modulo m	2.25mm	Angolo elica	-27°48'00"
Commessa/serie nr.:	pezzo 4	Untersuchungszweck:	Laufende Messung		
Masch.Nr.:	M001	Spindel:	Formel	Charge:	



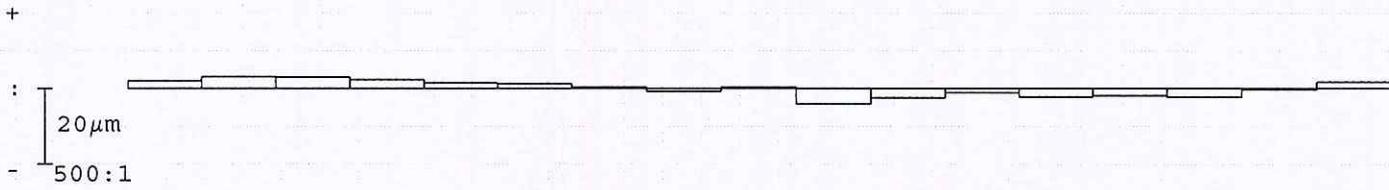
### Errori singoli di divisione fp fianco sinistro



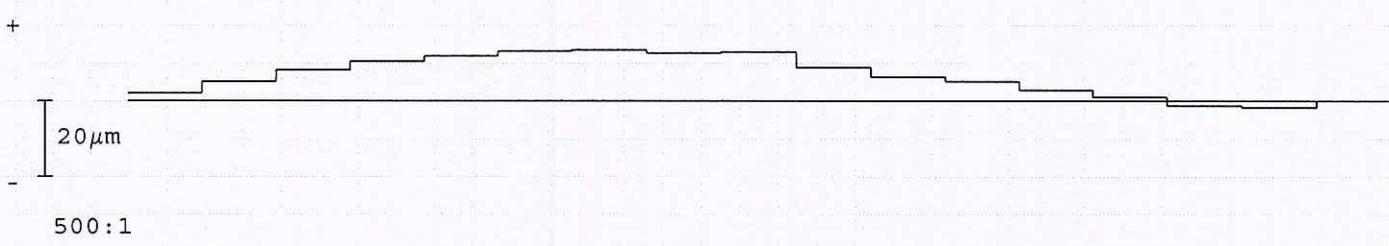
### Errore somma di divisione Fp fianco sinistro



### Errori singoli di divisione fp fianco destro

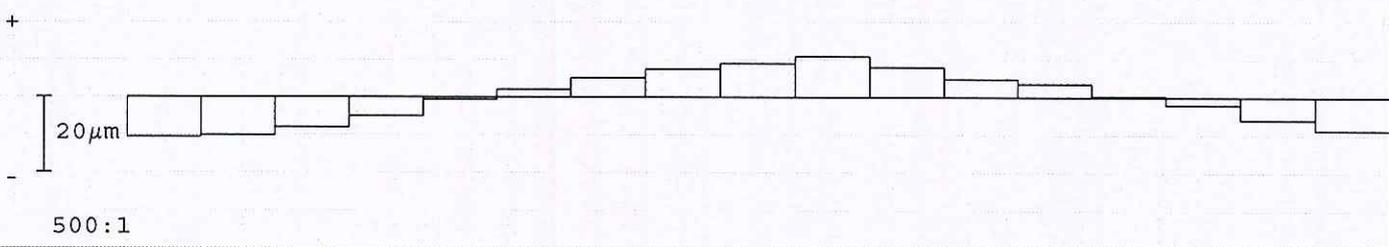


### Errore somma di divisione Fp fianco destro



Corsa per misura divis.:44.516 z=17mm	fianco sinistro / TIRO				fianco destro			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	4		14		4		14	
Gr. salto di passo fu max	2		18		4		18	
Scarto di divisione Rp	7				7			
Err. globale di divisione Fp	14		40		15		40	
Err. cordale di divisione Fpz/8	6				7			

### Centricità Fr (Ø-sfera =3.75mm) ☉ : 19µm

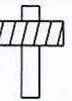


Err. di concentricità Fr	22	32	
Variaz. spessore dente Rs			

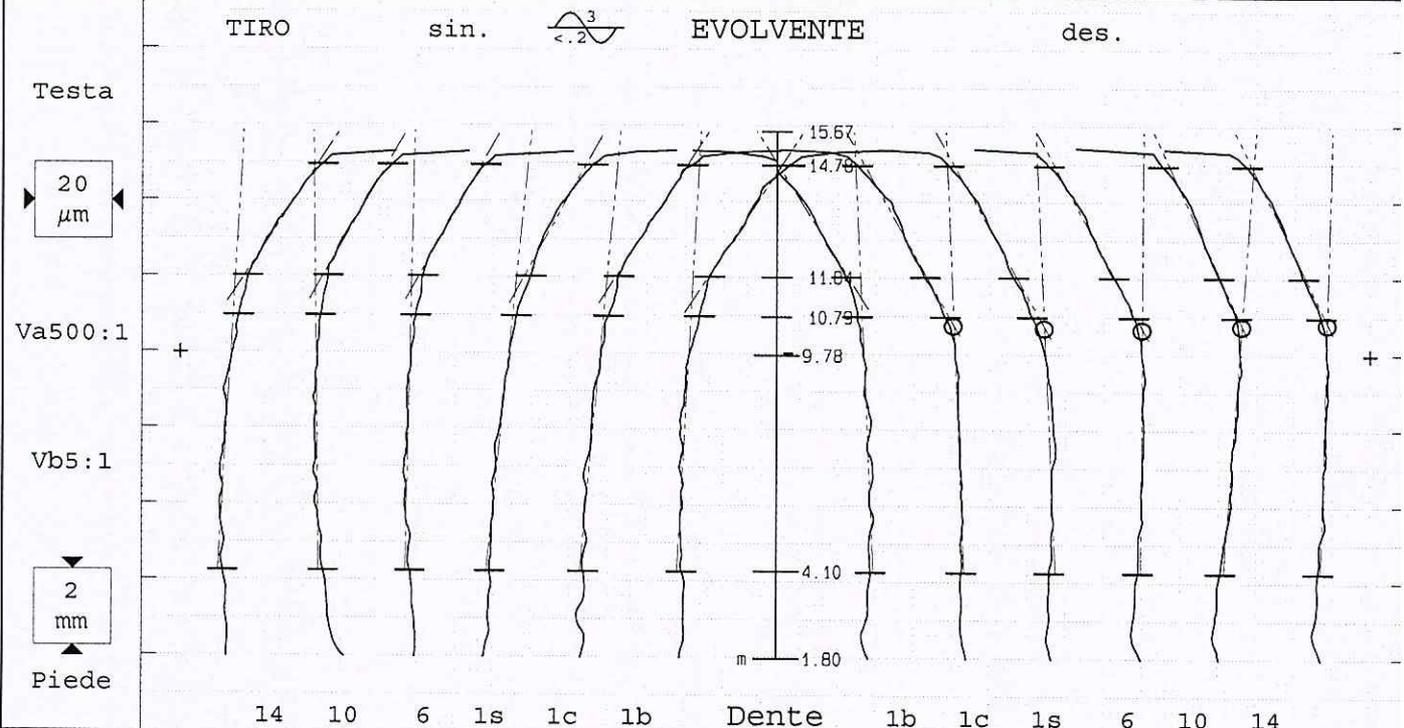


# GETRAG B7590

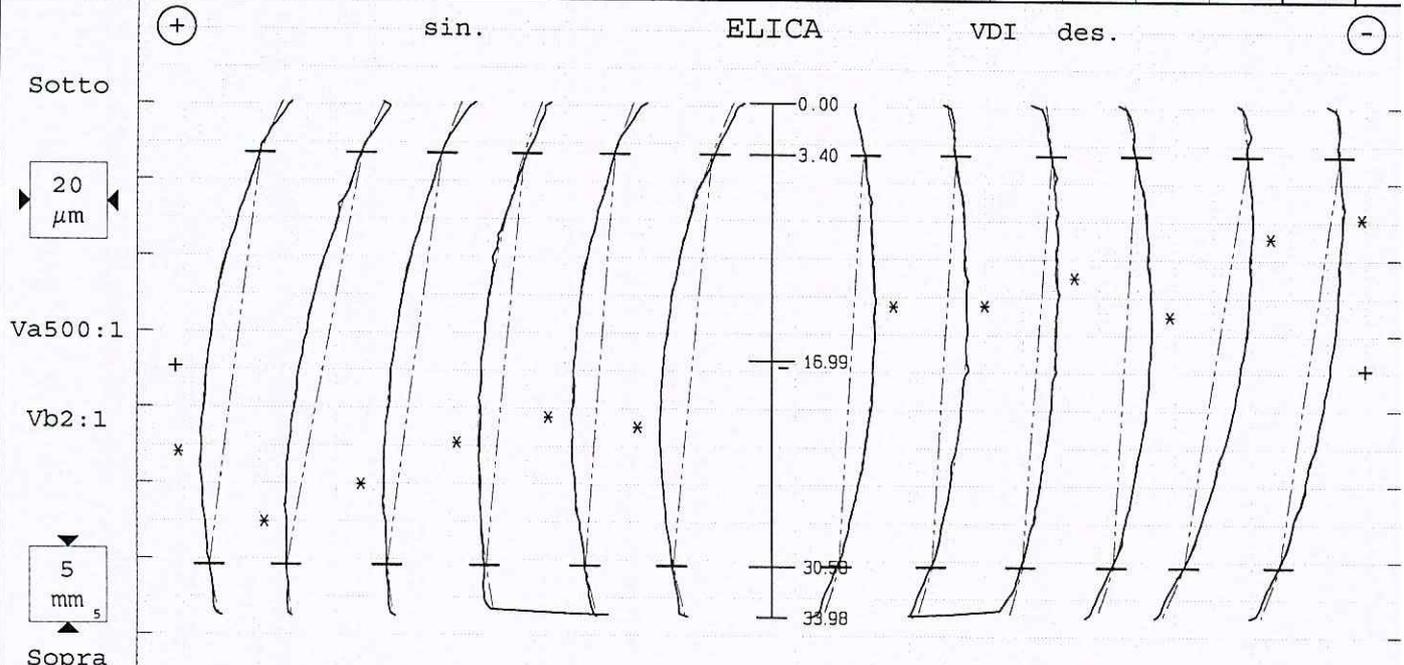
# Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410o05 0	P26 B7590	Controllore:	TURNO C	Data:	09.12.2014 14:00
Denominazione:	Output Shaft 2		Numero denti z	17	Largh.fasc.dent. b	33.98mm
Numero disegno.:	250.6.3664.35-IF		Modulo m	2.25mm	Tratto evolv. La	6.69mm
Commessa/serie nr.:	pezzo 5		Angolo pressione	20°00'00"	Tratto elica L <sub>S</sub>	27.18mm
Masch.Nr.:	M001	Spindel: Formmest. Elica	Angolo elica	-27°48'00"	Inizio elab. M1	4.1mm
Untersuchungszweck:	Laufende Messung		Ø Base db	39.9881mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:	Ang. Base	-25°59'35"	Fat.scor.pr. x	.499	

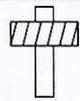


Tolerance	Medio	Val.misur [µm]							Qual	Tolerance	Val.misur [µm]							Medio	Qual	
		Var									Var									
fH <sub>am</sub>	±6	-3									±6									
fH <sub>a</sub>	±10	-3	-4	1	-1	-7	-6	-3		±10	-3	-3	-3	0	5	2	1			
F <sub>a</sub>	5	5	3	3	7	7	5			5	5	6	3	6	3	4				
ff <sub>a</sub>	4	3	3	2	2	2	3	4		4	3	3	5	3	2	3				
fK <sub>o</sub>	-22/-14	-19	-20	-19	-18	-15	-18	-22		-22/-14	-20	-22	-22	-23	-22	-21	-22			



N:Z		Val.misur [µm]							Qual	Tolerance	Val.misur [µm]							Medio	Qual	
		Var									Var									
fH <sub>Sm</sub>	-18±6	-17									-15±6									
fH <sub>R</sub>	-18±13	-17	-17	-25	-18	-12	-9	-12		-15±13	-8	-8	-10	-7	-21	-20	-14			
F <sub>B</sub>	4	3	6	1	5	7	5			5	6	4	7	6	5	6				
ff <sub>B</sub>	4	1	1	1	2	1	1		4	2	2	1	1	1	1	1				
C <sub>B</sub>	5/9	7	7	6	6	7	8		5/9	6	6	5	7	7	6	7				
B <sub>d</sub>	4±4	0									4±4									2

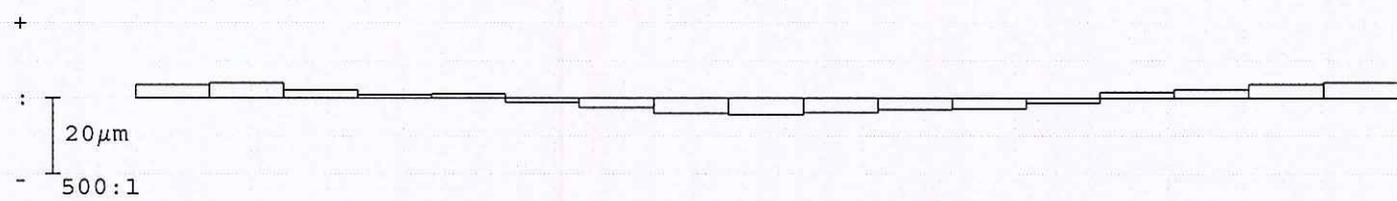




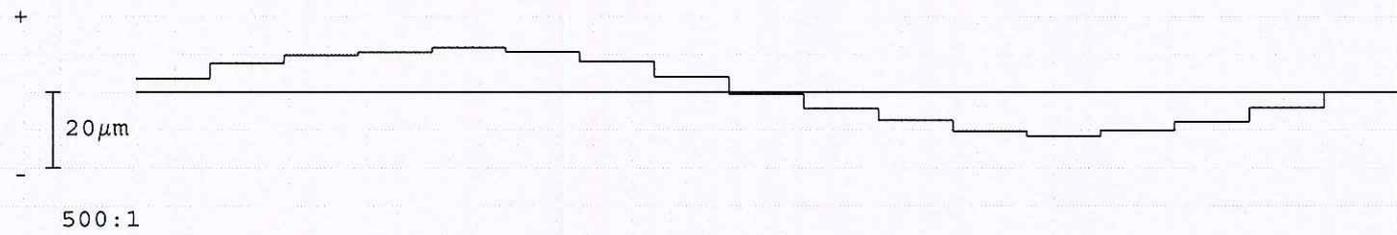
Nr. prog.:	STI0410005 0 P26 B7590	Controllore:	TURNO c	Data:	09.12.2014 14:00
Denominazione:	Output Shaft 2	Numero denti z	17	Angolo pressione	20°00'00"
Numero disegno.:	250.6.3664.35-IF	Modulo m	2.25mm	Angolo elica	-27°48'00"
Commessa/serie nr.:	pezzo 5	Untersuchungszweck:	Laufende Messung		
Masch.Nr.:	M001	Spindel:	Formelwerk	Charge:	



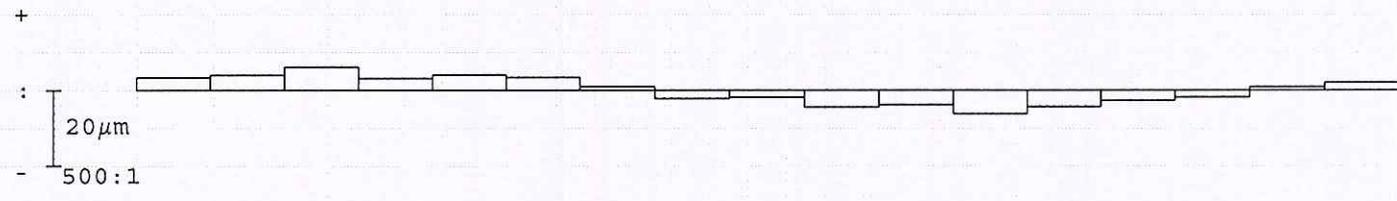
### Errori singoli di divisione fp fianco sinistro



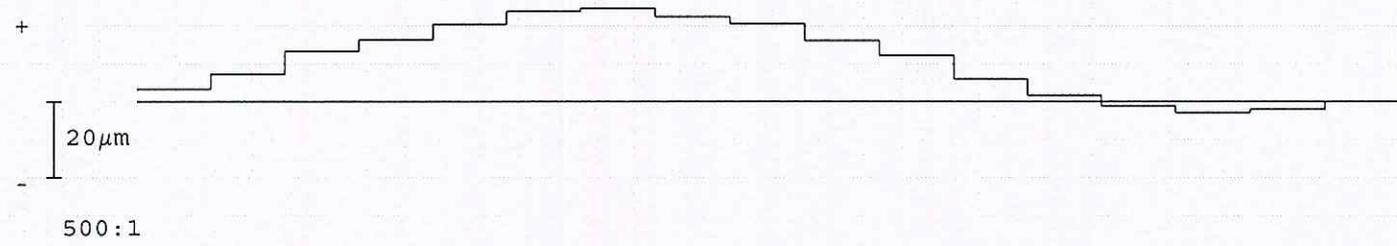
### Errore somma di divisione Fp fianco sinistro



### Errori singoli di divisione fp fianco destro

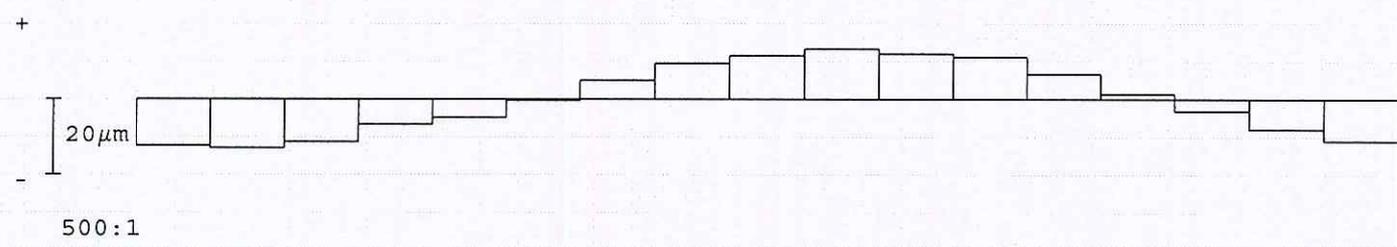


### Errore somma di divisione Fp fianco destro



	Corsa per misura divis.:44.516 z=17mm							
	fianco sinistro / TIRO				fianco destro			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	5		14		6		14	
Gr. salto di passo fu max	3		18		3		18	
Scarto di divisione Rp	9				12			
Err. globale di divisione Fp	23		40		28		40	
Err. cordale di divisione Fpz/8	9				11			

### Centricità Fr (Ø-sfera =3.75mm) ⊙ : 26µm



Err. di concentricità Fr	26	32	
Variaz. spessore dente Rs			



# GETRAG B7590

# Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410005 0 P26 B7590	Controllore:	TURNO c	Data:	09.12.2014 14:07
Denominazione:	Output Shaft 2	Numero denti z	17	Largh.fasc.dent. b	33.98mm
Numero disegno.:	250.6.3664.35-IF	Modulo m	2.25mm	Tratto evolv. La	6.69mm
Comessa/serie nr.:	pezzo 1	Angolo pressione	20°00'00"	Tratto elica L8	27.18mm
Masch.Nr.:	M001 Spindel: Forme	Angolo elica	-27°48'00"	Inizio elab. M1	4.1mm
Untersuchungszweck:	Laufende Messung	Ø Base db	39.9881mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:	Ang. Base	-25°59'35"	Fat.scor.pr. x	.499

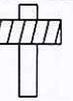
TIRO

Testa-Ø: 50.635mm [50.54/50.8]

VDI

# GETRAG B7590

# Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410005 0 P26 B7590	Controllore:	TURNO C	Data:	09.12.2014 14:09
Denominazione:	Output Shaft 2	Numero denti z	17	Largh. fasc. dent. b	33.98mm
Numero disegno.:	250.6.3664.35-IF	Modulo m	2.25mm	Tratto evolv. La	6.69mm
Commessa/serie nr.:	pezzo 2	Angolo pressione	20°00'00"	Tratto elica LS	27.18mm
Masch.Nr.:	M001 Spindel: Formn	Ang. elica	-27°48'00"	Inizio elab. M1	4.1mm
Untersuchungszweck:	Laufende Messung	Ø Base db	39.9881mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:	Ang. Base	-25°59'35"	Fat. scor. pr. x	.499

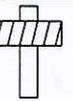
TIRO

Testa-Ø: 50.669mm [50.54/50.8]

VDI

# GETRAG B7590

# Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410005 0	P26 B7590	Controllore:	TURNO C	Data:	09.12.2014 14:12
Denominazione:	Output Shaft 2		Numero denti z	17	Largh.fasc.dent. b	33.98mm
Numero disegno.:	250.6.3664.35-IF		Modulo m	2.25mm	Tratto evolv. La	6.69mm
Comessa/serie nr.:	pezzo 3		Angolo pressione	20°00'00"	Tratto elica L8	27.18mm
Masch.Nr.:	M001	Spindel: Formn	Angolo elica	-27°48'00"	Inizio elab. M1	4.1mm
Untersuchungszweck:	Laufende Messung		Ø Base db	39.9881mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:		Ang. Base	-25°59'35"	Fat.scor.pr. x	.499

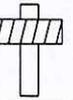
TIRO

Testa-Ø: 50.606mm [50.54/50.8]

VDI

# GETRAG B7590

# Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410005 0 P26 B7590	Controllore:	TURNO C	Data:	09.12.2014 14:13
Denominazione:	Output Shaft 2	Numero denti z	17	Largh.fasc.dent. b	33.98mm
Numero disegno.:	250.6.3664.35-IF	Modulo m	2.25mm	Tratto evolv. La	6.69mm
Comessa/serie nr.:	pezzo 4	Angolo pressione	20°00'00"	Tratto elica LS	27.18mm
Masch.Nr.:	M001 Spindel: Formn	Angolo elica	-27°48'00"	Inizio elab. M1	4.1mm
Untersuchungszweck:	Laufende Messung	Ø Base db	39.9881mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:	Ang. Base	-25°59'35"	Fat.scor.pr. x	.499

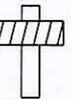
TIRO

Testa-Ø: 50.61mm [50.54/50.8]

VDI

# GETRAG B7590

# Ruota cilindrica Evolvente/Elica

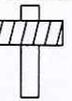


Nr. prog.:	STI0410005 0 P26 B7590	Controllore:	TURNO c	Data:	09.12.2014 14:14
Denominazione:	Output Shaft 2	Numero denti z	17	Largh.fasc.dent. b	33.98mm
Numero disegno.:	250.6.3664.35-IF	Modulo m	2.25mm	Tratto evolv. La	6.69mm
Comessa/serie nr.:	pezzo 5	Angolo pressione	20°00'00"	Tratto elica LS	27.18mm
Masch.Nr.:	M001 Spindel: Formn	Angolo elica	-27°48'00"	Inizio elab. M1	4.1mm
Untersuchungszweck:	Laufende Messung	Ø Base db	39.9881mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:	Ang. Base	-25°59'35"	Pat.scor.pr. x	.499

TIRO

Testa-Ø: 50.671mm [50.54/50.8]

VDI

**GETRAG B7590****Ruota cilindrica Evolvente/Elica**

Nr. prog.:	STI0410005 0	P26 B7590	Controllore:	TURNO c	Data:	09.12.2014 14:15
Denominazione:	Output Shaft 2		Numero denti z	17	Largh.fasc.dent. b	33.98mm
Numero disegno.:	250.6.3664.35-IF		Modulo m	2.25mm	Tratto evolv. La	6.69mm
Commessa/serie nr.:	pezzo 1		Angolo pressione	20°00'00"	Tratto elica L&	27.18mm
Masch.Nr.:	M001	Spindel: Formn	Angolo elica	-27°48'00"	Inizio elab. M1	4.1mm
Untersuchungszweck:	Laufende Messung		Ø Base db	39.9881mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:		Ang. Base	-25°59'35"	Fat.scor.pr. x	.499

TIRO

Piede-Ø: 37.829mm [37.55/38]

VDI

# GETRAG B7590

# Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410005 0 P26 B7590	Controllore:	TURNO c	Data:	09.12.2014 14:17
Denominazione:	Output Shaft 2	Numero denti z	17	Largh.fasc.dent. b	33.98mm
Numero disegno.:	250.6.3664.35-IF	Modulo m	2.25mm	Tratto evolv. La	6.69mm
Commessa/serie nr.:	pezzo 2	Angolo pressione	20°00'00"	Tratto elica L8	27.18mm
Masch.Nr.:	M001 Spindel: Formmest. elica	Angolo elica	-27°48'00"	Inizio elab. M1	4.1mm
Untersuchungszweck:	Laufende Messung	Ø Base db	39.9881mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:	Ang. Base	-25°59'35"	Fat.scor.pr. x	.499

TIRO

Piede-Ø: 37.828mm [37.55/38]

VDI

# GETRAG B7590

# Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410005 0	P26 B7590	Controllore:	TURNO C	Data:	09.12.2014 14:18
Denominazione:	Output Shaft 2		Numero denti z	17	Largh.fasc.dent. b	33.98mm
Numero disegno.:	250.6.3664.35-IF		Modulo m	2.25mm	Tratto evolv. La	6.69mm
Commessa/serie nr.:	pezzo 3		Angolo pressione	20°00'00"	Tratto elica L8	27.18mm
Masch.Nr.:	M001	Spindel: Formn	Ang. elica	-27°48'00"	Inizio elab. M1	4.1mm
Untersuchungszweck:	Laufende Messung		Ø Base db	39.9881mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:		Ang. Base	-25°59'35"	Fat.scor.pr. x	.499

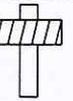
TIRO

Piede-Ø: 37.829mm [37.55/38]

VDI

# GETRAG B7590

# Ruota cilindrica Evolvente/Elica

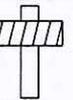


Nr. prog.:	STI0410005 0	P26 B7590	Controllore:	TURNO C	Data:	09.12.2014 14:20
Denominazione:	Output Shaft 2		Numero denti z	17	Largh. fasc. dent. b	33.98mm
Numero disegno.:	250.6.3664.35-IF		Modulo m	2.25mm	Tratto evolv. La	6.69mm
Commessa/serie nr.:	pezzo 4		Angolo pressione	20°00'00"	Tratto elica LS	27.18mm
Masch.Nr.:	M001	Spindel: Formnet	Angolo elica	-27°48'00"	Inizio elab. M1	4.1mm
Untersuchungszweck:	Laufende Messung		Ø Base db	39.9881mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:		Ang. Base	-25°59'35"	Fat. scor. pr. x	.499

TIRO

Piede-Ø: 37.962mm [37.55/38]

VDI

**GETRAG B7590****Ruota cilindrica Evolvente/Elica**

Nr. prog.:	STI0410005 0	P26 B7590	Controllore:	TURNO C	Data:	09.12.2014 14:21
Denominazione:	Output Shaft 2		Numero denti z	17	Largh. fasc. dent. b	33.98mm
Numero disegno.:	250.6.3664.35-IF		Modulo m	2.25mm	Tratto evolv. La	6.69mm
Commessa/serie nr.:	pezzo 5		Angolo pressione	20°00'00"	Tratto elica L8	27.18mm
Masch.Nr.:	M001	Spindel: Formn	Angolo elica	-27°48'00"	Inizio elab. M1	4.1mm
Untersuchungszweck:	Laufende Messung		Ø Base db	39.9881mm	Palpatore Ø	(#2C) 1mm
Werkzeug:	Charge:		Ang. Base	-25°59'35"	Fat. scor. pr. x	.499

TIRO

Piede-Ø: 37.96mm [37.55/38]

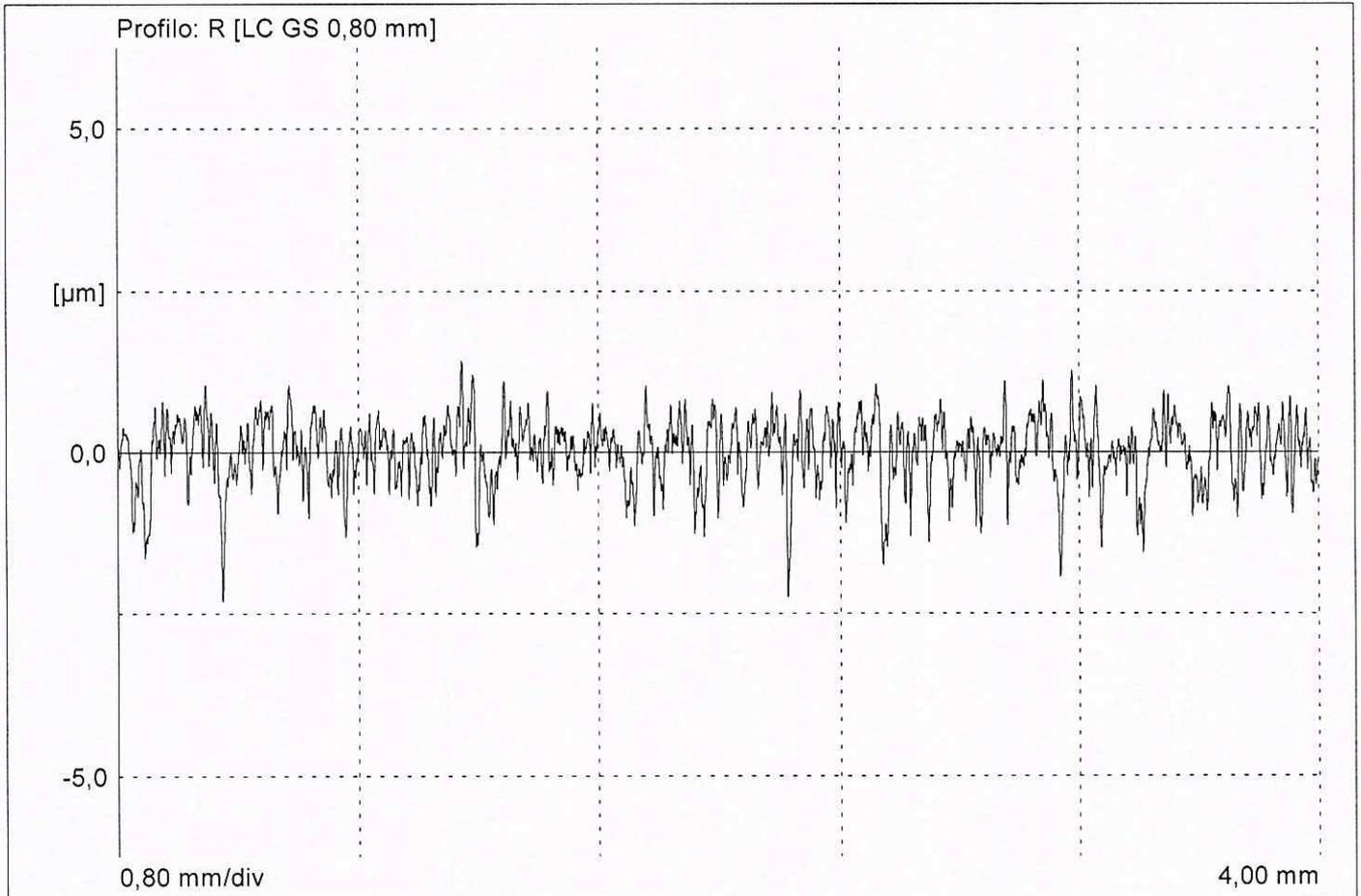
VDI

Via dei Ciclamini,4 Modugno (BA)

Sala Metrologica GPS5

Oggetto: OUTPUT 2  
Numero: 3664 PPAP PZ.1  
Operatore: TURNO B  
Data, ora: 26/11/2014, 22:10  
Nota: DENTE  
Tastatore: MFW-250 CAL

MACCHINA: MOA 416121 001



LT	5,60	mm
LM	4,00	mm
Z	5	
VB	±250,0	µm
Ra	0,40	µm
Rmax	3,36	µm
Rz	3,07	µm

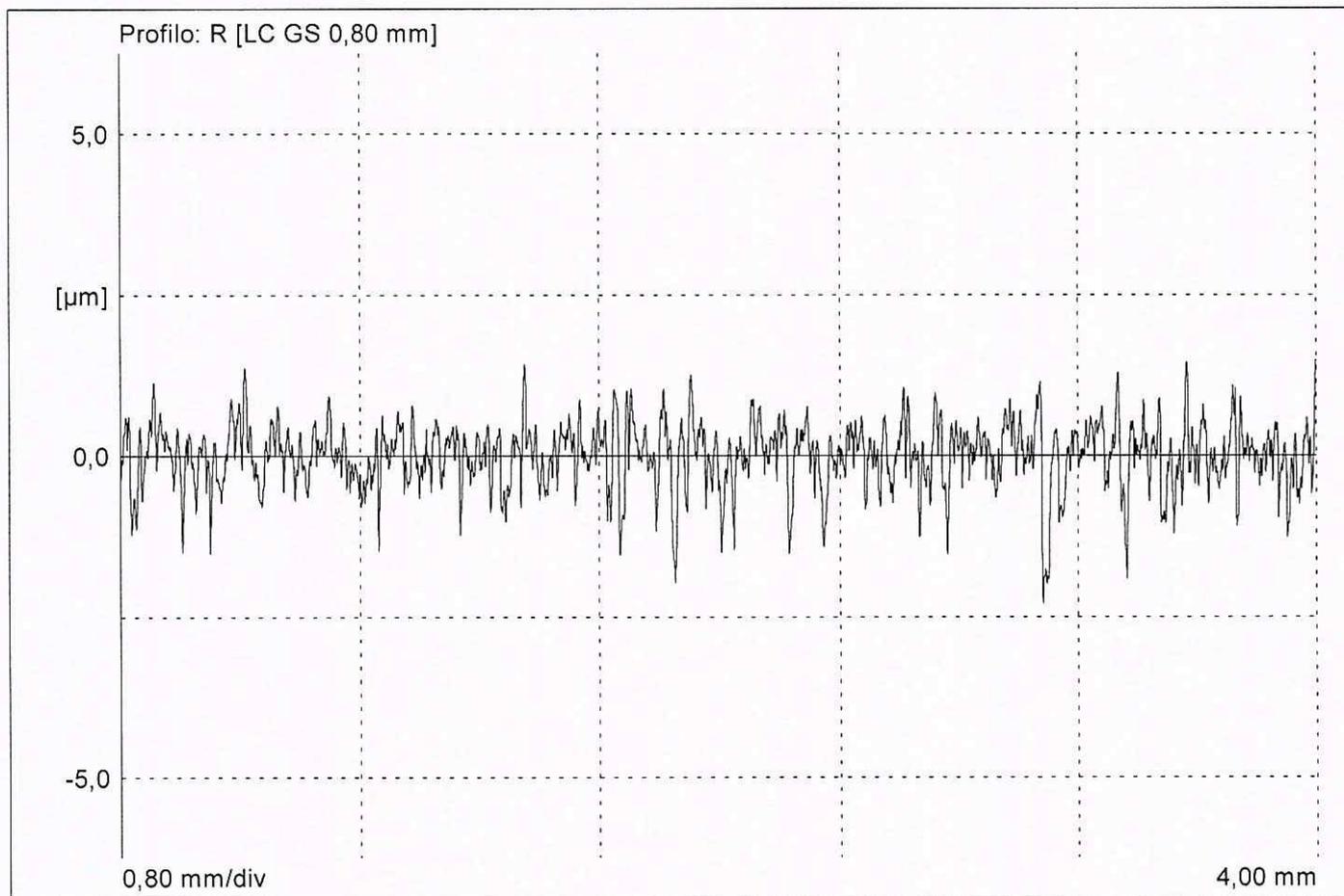
PERTHOMETER CONCEPT

Via dei Ciclamini,4 Modugno (BA)

Sala Metrologica GPS5

Oggetto: OUTPUT 2  
Numero: 3664 PPAP PZ.2  
Operatore: TURNO B  
Data, ora: 26/11/2014, 22:11  
Nota: DENTE  
Tastatore: MFW-250 CAL

MACCHINA: MOA 416121 001



LT	5,60	mm
LM	4,00	mm
Z	5	
VB	±250,0	µm
Ra	0,38	µm
Rmax	3,43	µm
Rz	3,16	µm

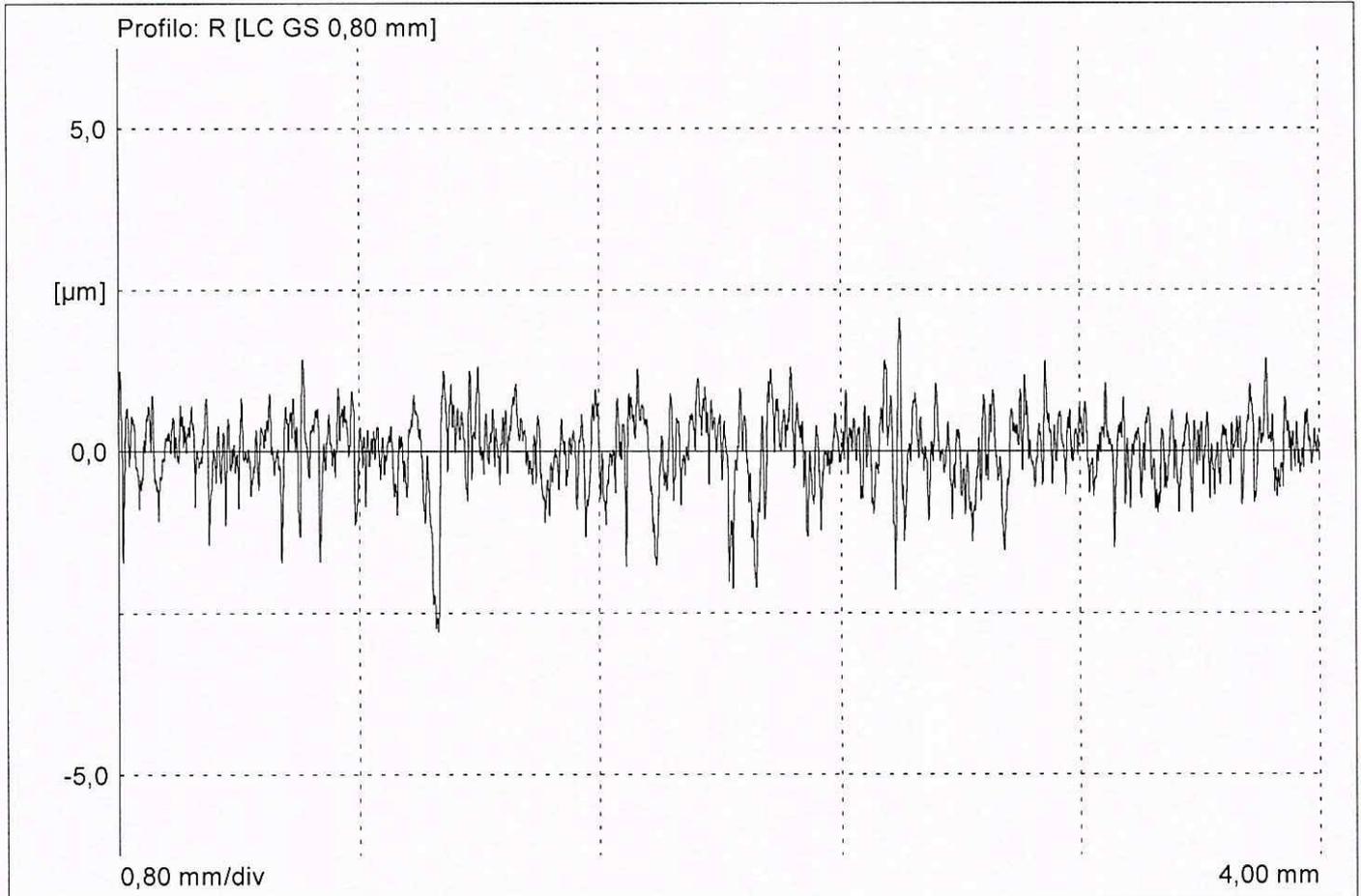
PERTHOMETER CONCEPT

Via dei Ciclamini,4 Modugno (BA)

Sala Metrologica GPS5

Oggetto: OUTPUT 2  
Numero: 3664 PPAP PZ.3  
Operatore: TURNO B  
Data, ora: 26/11/2014, 22:12  
Nota: DENTE  
Tastatore: MFW-250 CAL

MACCHINA: MOA 416121 001



LT	5,60	mm
LM	4,00	mm
Z	5	
VB	±250,0	µm
Ra	0,44	µm
Rmax	4,19	µm
Rz	3,56	µm

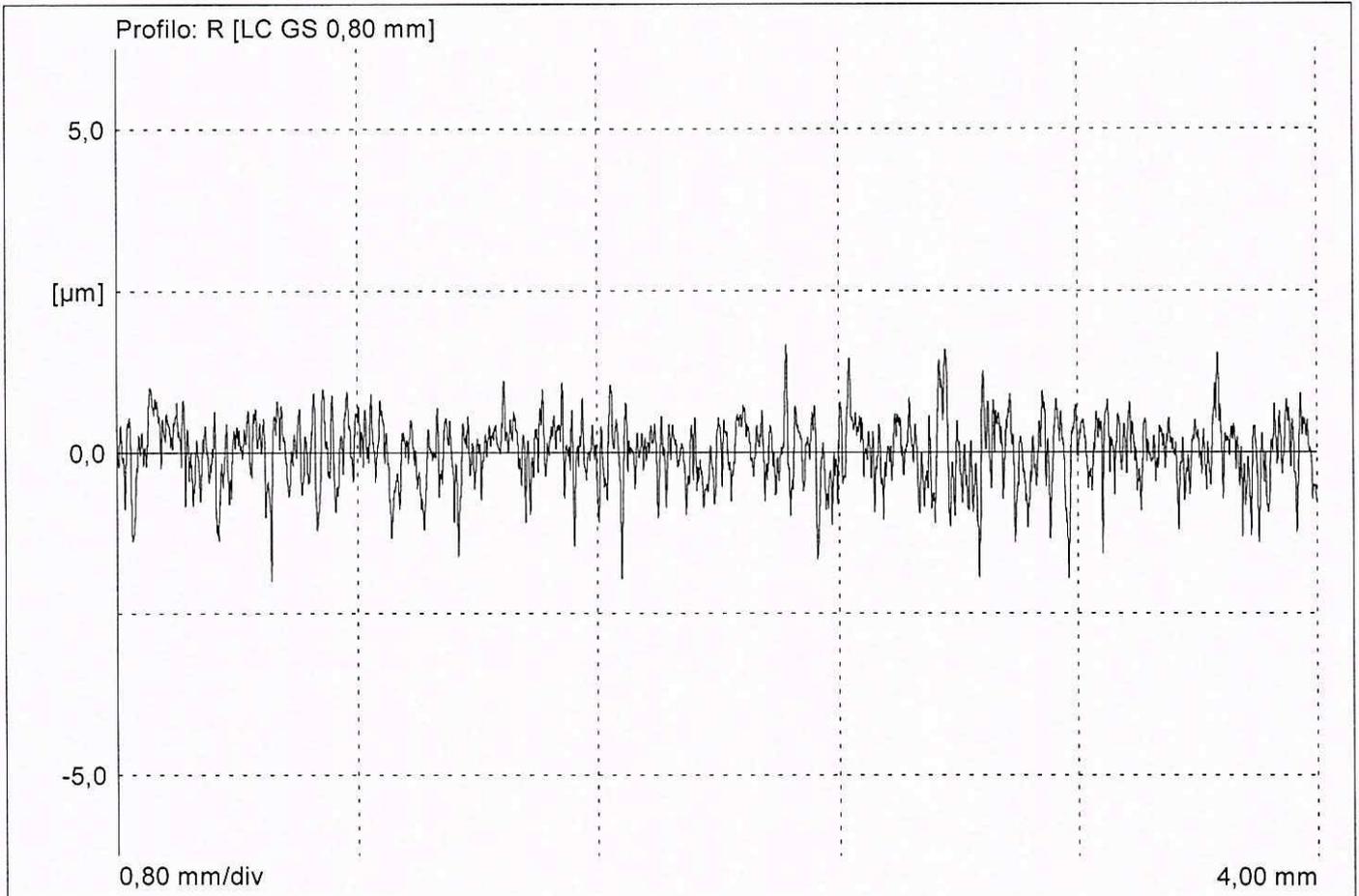
PERTHOMETER CONCEPT

Via dei Ciclamini,4 Modugno (BA)

Sala Metrologica GPS5

Oggetto: OUTPUT 2  
Numero: 3664 PPAP PZ.4  
Operatore: TURNO B  
Data, ora: 26/11/2014, 22:13  
Nota: DENTE  
Tastatore: MFW-250 CAL

MACCHINA: MOA 416121 001



LT	5,60	mm
LM	4,00	mm
Z	5	
VB	±250,0	µm
Ra	0,40	µm
Rmax	3,63	µm
Rz	3,21	µm

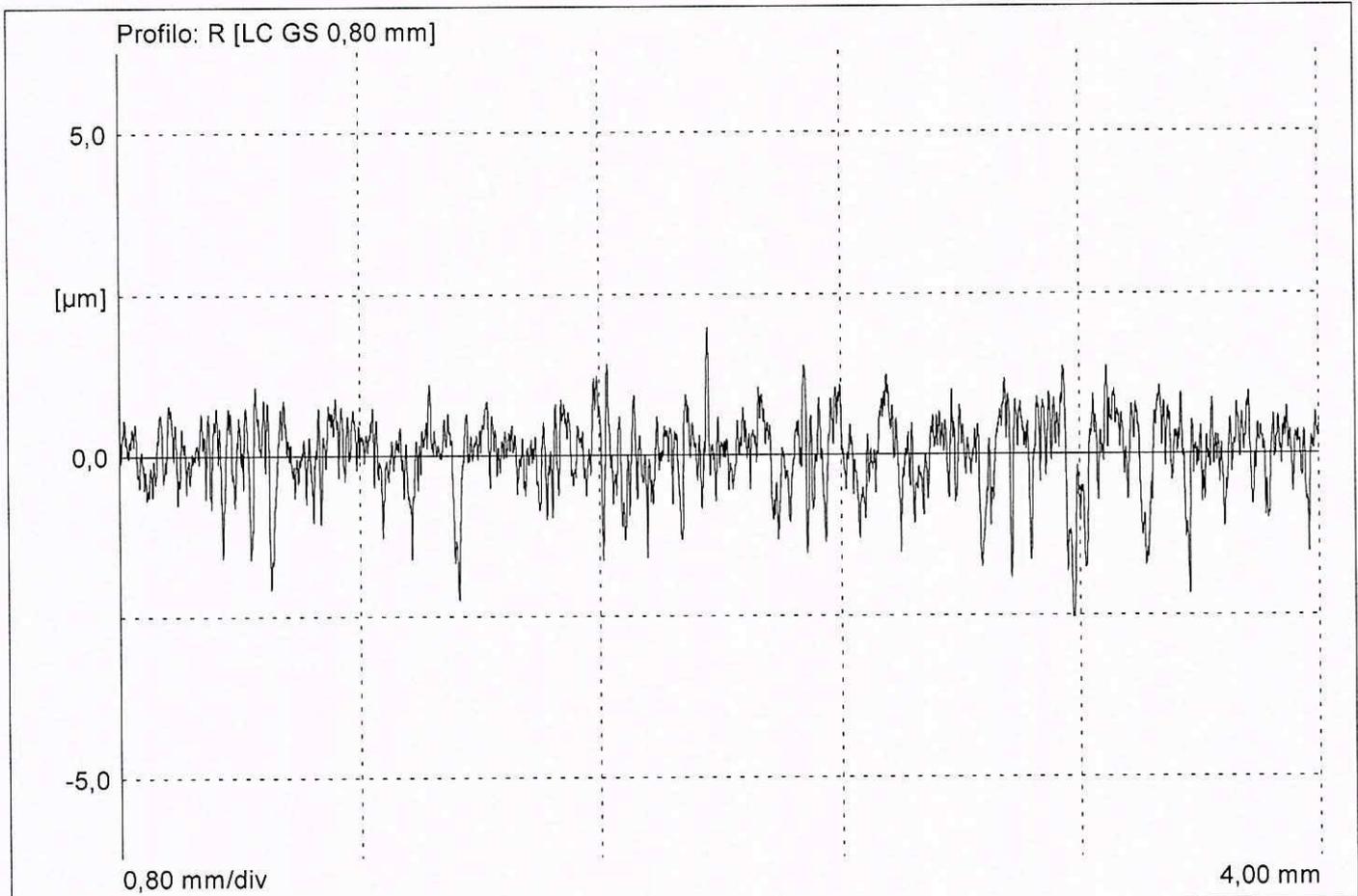
PERTHOMETER CONCEPT

Via dei Ciclamini,4 Modugno (BA)

Sala Metrologica GPS5

Oggetto:	OUTPUT 2
Numero:	3664 PPAP PZ.5
Operatore:	TURNO B
Data, ora:	26/11/2014, 22:14
Nota:	DENTE
Tastatore:	MFW-250 CAL

MACCHINA:	MOA 416121 001
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LT	5,60	mm
LM	4,00	mm
Z	5	
VB	±250,0	µm
Ra	0,45	µm
Rmax	3,90	µm
Rz	3,53	µm

PERTHOMETER CONCEPT

## Istruzioni di controllo



PP Produzione GPS

Materiale: 2506366435

Descrizione: Albero di uscita 2

Operazione: 0200 Levigatura di potenza

Centro di lavoro: HNW15340 LEVIGATURA OS2

Indice del disegno finito:

Data emissione:

Data aggiornamento:

A

21.12.2011 / Stefano Billi

05.12.2014 / Emiliano Zella

n. Sfr. interno	Caratteristica	Misura nomin.	LTI	LTS	Strumento di controllo	Quantità	Frequenza RK1:	Quantità	Frequenza RK2:	Quantità	Frequenza Sala di misura	Cambio ut	Metodi di gestione / Documentazione
0002	Controllo 1° pz sec. VBZ 450_803446				MVZ-400249 EVOLVENTIMETRO					1	1° pz 2.3.1.1-R 2		Misu: controllo primo pezzo
0004	Aspetto, privo di bava, senza danno Controllo visivo				MOA-416121 RUGOSIMETRO TIPO PRK		pz per rack			1	1° pz 2.3.1.1-R 2		CR1: no documentazione
0012	DIAMETRO Mdk DA G. T. sfere 3.5 mm	48,936 mm	48,904	48,969	MZA-450311 Calcolatore di misura E9066 Marposs	3	pz ogni 100 per macchina						CR1: no documentazione
0018	DIAGRAMMA DENTATURA CON SVERGOLAMENTO DA	mm			MVZ-400249 EVOLVENTIMETRO					1	1 pezzo ogni cambio parametri macchina		Misu: diagramma di dentatura
0020	DIAGRAMMA DENTATURA CON SVERGOLAMENTO DA GEAR TESTING	mm			MVZ-400249 EVOLVENTIMETRO					1	Ultimo PZ. prima ravvivatu ra		Misu: diagramma di dentatura
0025	Oscillazione Fr			0,032	MVZ-400249 EVOLVENTIMETRO					1	pz a turno/mac .		Misu: diagramma di dentatura
0030	Somma Passo Fp			0,040	MVZ-400249 EVOLVENTIMETRO					1	pz a turno/mac .		Misu: diagramma di dentatura
0060	Controllo visivo per pulizia denti					8	pz per rack						CR1: no documentazione

