

Part Name Ring Gear		Customer Part Number 250.1.3757.51	
Shown on Drawing No. 250.1.3757.51		Organization Part # _____	
Engineering Change Level a 36044-2		Dated 10-feb-14	
Additional Engineering Changes _____		Dated _____	
Safety and/or Government Regulation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Purchase Order No. _____	
Weight (kg) 4,027		Checking Aid No. _____	
Checking Aid Engineering Change Level _____		Dated _____	
ORGANIZATION MANUFACTURING INFORMATION		CUSTOMER SUBMITTAL INFORMATION	
GETRAG MODUGNO		FORD	
Organization Name & Supplier/Vendor Code _____		Customer Name/Division _____	
VIA DEI CICLAMINI N°4		Buyer/Buyer Code _____	
Street Address _____		Application _____	
MODUGNO BARI	70026	ITALY	TYP 250
City	Region	Postal Code	Country
MATERIALS REPORTING		Has customer-required Substances of Concern information been reported? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a	
Submitted by IMDS or other customer format: _____		Are polymeric parts identified with appropriate ISO marking codes? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> n/a	
REASON FOR SUBMISSION (Check at least one)			
<input type="checkbox"/> Initial Submission	<input type="checkbox"/> Change to Optional Construction or Material		
<input checked="" type="checkbox"/> Engineering Change(s)	<input type="checkbox"/> Supplier or Material Source Change		
<input type="checkbox"/> Tooling: Transfer, Replacement, Refurbishment, or additional	<input type="checkbox"/> Change in Part Processing		
<input type="checkbox"/> Correction of Discrepancy	<input type="checkbox"/> Parts Produced at Additional Location		
<input type="checkbox"/> Tooling Inactive > than 1 year	<input checked="" type="checkbox"/> Other - please specify below		
REQUESTED SUBMISSION LEVEL (Check one)			
<input type="checkbox"/> Level 1 - Warrant only (and for designated appearance items, an Appearance Approval Report) submitted to customer.			
<input type="checkbox"/> Level 2 - Warrant with product samples and limited supporting data submitted to customer.			
<input checked="" type="checkbox"/> Level 3 - Warrant with product samples and complete supporting data submitted to customer.			
<input type="checkbox"/> Level 4 - Warrant and other requirements as defined by customer.			
<input type="checkbox"/> Level 5 - Warrant with product samples and complete supporting data reviewed at organization's manufacturing location.			
SUBMISSION RESULTS			
The results for <input checked="" type="checkbox"/> dimensional measurements <input checked="" type="checkbox"/> material and functional tests <input type="checkbox"/> appearance criteria <input checked="" type="checkbox"/> statistical process package			
These results meet all drawing and specification requirements: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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 _____ / _____ 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: New documentation for first PPAP lost			
Is each Customer Tool properly tagged and numbered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> n/a			
Organization Authorized Signature _____		Date 12 Jan 2015	
Print Name Pennacchia Vincenzo	Phone No. tel 390805858580	Fax No. _____	
Title GPS 1 Leader	E-mail vincenzo.pennacchia@getrag.com		
FOR CUSTOMER USE ONLY (IF APPLICABLE)			
Part Warrant Disposition: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Rejected <input type="checkbox"/> Other			
Customer Signature _____		Date 12.01.2015	
Print Name _____		Customer Tracking Number (optional) _____	

Istruzioni di controllo



PP Produzione GPS

Materiale: 2501375751

Descrizione: Corona

Operazione: 0230 Rettifica dentatura

Centro di lavoro: SLW14850 RETTIFICA DENTI RG

Indice del disegno finito:

Data emissione:

Data aggiornamento:

A

25.11.2014 / Vito Fiore

09.01.2015 / Rocco Tanzella

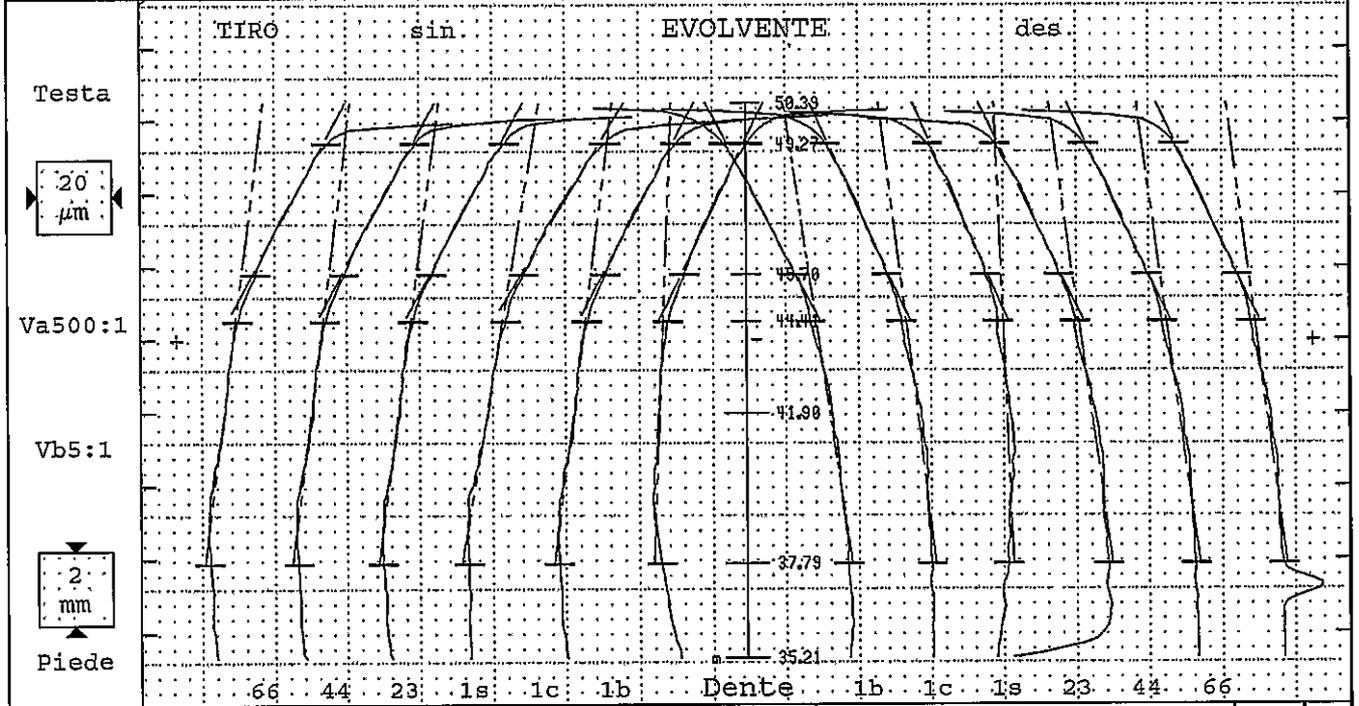
0000	Caratteristica	Misura nomin.	LTI	LTS	Strumento di controllo	Quantità	Frequenza RK1:	Quantità	Frequenza RK2:	Quantità	Frequenza Sala di misura	Cambio ut	Metodi di gestione / Documentazione
0002	Controllo 1° pz secondo Gear data 250.1.3757.5X				MVZ-400249 EVOLVENTIMETRO						1° pz 2.3.1.1-R 2		Misu: controllo primo pezzo
					MOA-416121 RUGOSIMETRO TIPO PRK						1° pz 2.3.1.1-R 2		
					MZA-450311 Calcolatore di misura E9066 Marposs						1° pz 2.3.1.1-R 2		
0010	Diametro Mdk	228,666 mm	228,632	228,699	MZA-450311 Calcolatore di misura E9066 Marposs	3	pz ogni 100 per macchina						CR1: calcolatore di misura
0020	Evolvente ed elica sec.G.D. con svergolamento				MVZ-400249 EVOLVENTIMETRO						pz ogni 100 per macchina		Misu: diagramma di dentatura
0030	SOMMA DI PASSO Fp	mm		0,045	MVZ-400249 EVOLVENTIMETRO						pz a turno/mac.		Misu: diagramma di dentatura
0040	OSCILLAZIONE RADIALE Fr	mm		0,032	MVZ-400249 EVOLVENTIMETRO						pz a turno/mac.		Misu: diagramma di dentatura
0042	Controllo ammacature del materiale da rettificare con ingranometro automatico (RZ303C)	mm		0,300	MRA-450155 Ingranometro automatico Reishauer RZ303C	1	100% di pezzi						CR1: calcolatore di misura
0050	RUGOSITA' Rz	0,0 µm	0,0	4,0	MOA-416121 RUGOSIMETRO TIPO PRK						1° pz 2.3.1.1-R 2		Misu: controllo primo pezzo
0060	RUGOSITA' Rmax	0,0 µm	0,0	6,3	MOA-416121 RUGOSIMETRO TIPO PRK						1° pz 2.3.1.1-R 2		Misu: controllo primo pezzo
0070	Controllo chimico bruciature secondo procedura WTL 3.4.10.01					1	pz cambio mola rettifica						CR1: controllo primo pezzo
0080	PRESENZA RETTIFICA INCOMPLETA					4	pz. per rack / macchina						

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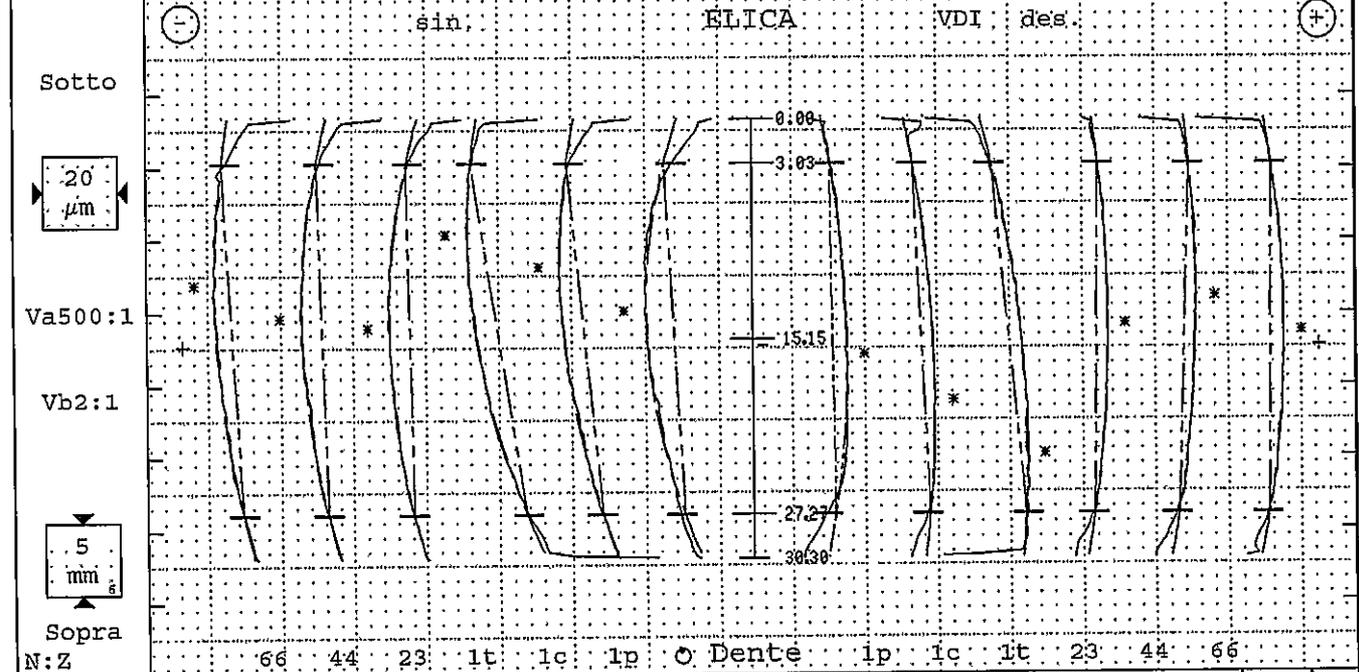
Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410o05 0	PNC35 B4784	Controllere:	TURNO c	Data:	08.01.2015 13:01
Denominazione:	ring gear		Numero denti z	87	Largh.fasc.dent. b	30.3mm
Numero disegno.:	250.1.3757.50-IF		Modulo m	2.25mm	Tratto evolv. La	6.62mm
Comessa/serie nr.:	ppap 1		Angolo pressione	20°	Tratto elica Lb	24.24mm
Masch.Nr.:	M001	Spindel: Form	Angolo elica	29°	Inizio elab. Ml	37.79mm
Untersuchungszweck:	Laufende Messung		Ø Base db	206.6334mm	Palpatore Ø	(#1)1mm
Werkzeug:	Charge:		Ang. Base	27.102°	Fat.scor.pr. x	-.186



Tolerance	Medio	Val.misur[µm]							Qual	Tolerance	Val.misur[µm]							Medio	Qual	
fHm	-6±4	-9	Var 1								-6±4	Var 1							-9	
fHr	-6±7	-9	-9	-9	-9	-11	-8	-3		-6±7	-10	-8	-3	-9	-9	-9	-9			
Fa		3	3	3	4	6	3	5			5	4	5	4	4	4	4			
ffa	5	2	2	3	2	3	2	3		5	2	3	3	3	3	2	3			
FKo	-22/-14	-18	-18	-19	-18	-18	-18	-20		-22/-14	-17	-15	-18	-15	-15	-15	-15			



fHSm	-5±4	-6	Var 10						±4	Var 10						0
fHS	-5±8	-6	-7	-4	-2	-19	-12	-6	±8	-1	-6	-11	2	4	1	0
FS	11	5	4	5	5	12	7	7	11	4	5	10	3	4	3	4
ffb	5	1	2	1	1	1	1	3	5	3	1	1	1	1	1	1
CB	2/5	5	4	5	5	6	5	7	2/5	4	3	3	3	3	4	3
Bd	15±5	13							10±5							10

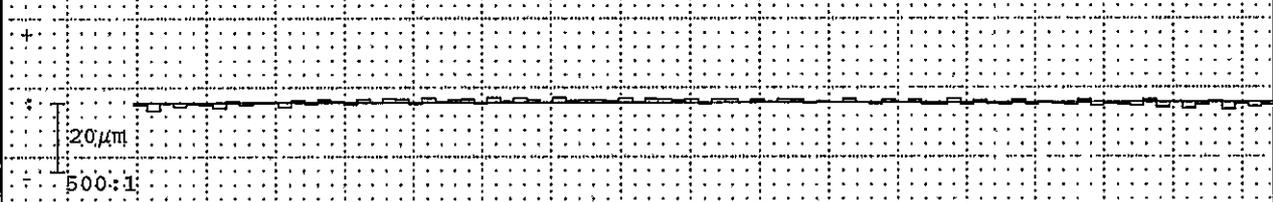
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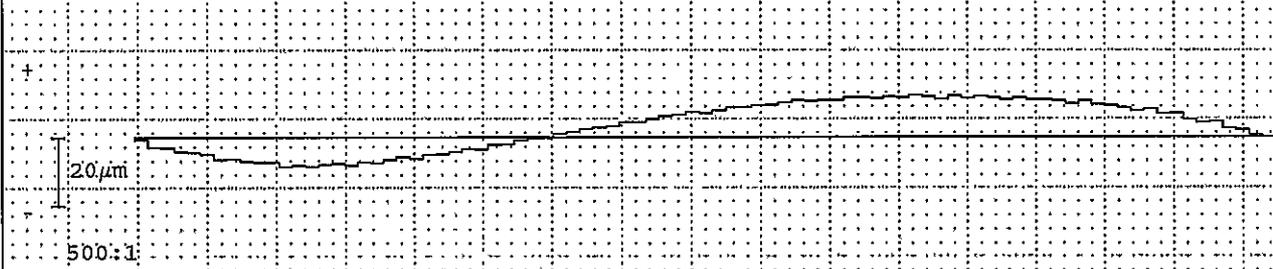


Nr. prog.: STI0410005 0	PNC35 B4784	Controllore: TURNO c	Data: 08.01.2015 13:01
Denominazione: ring gear		Numero denti z 87	Angolo pressione 20°
Numero disegno: 250.1.3757.50-IF		Modulo m 2.25mm	Angolo elica 29°
Commessa/serie nr.: ppap 1		Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	Spindel: Form	Größe: 1	Charge:

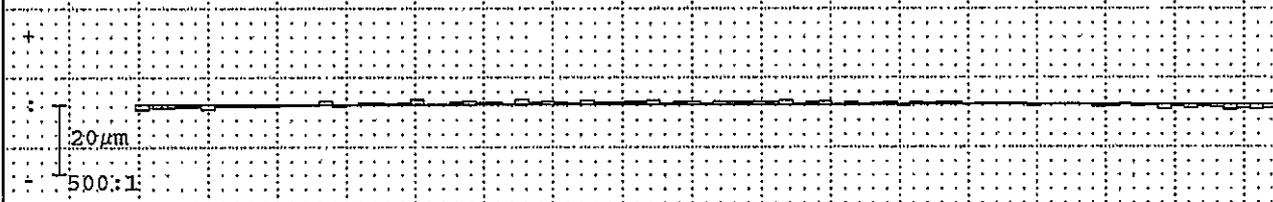
Errori singoli di divisione fp fianco sinistro



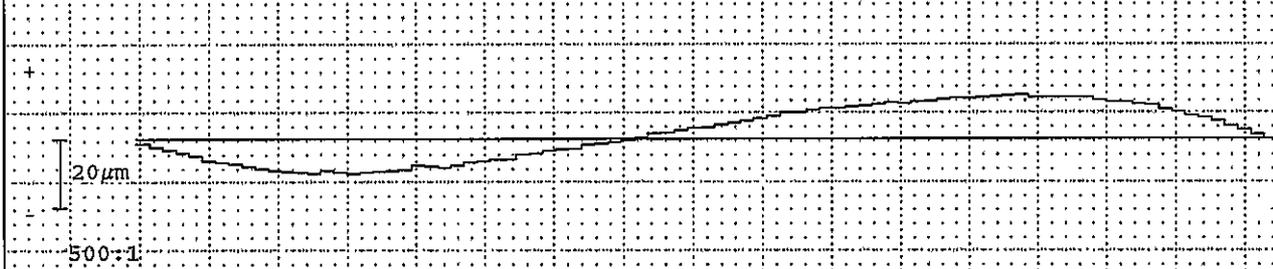
Errore somma di divisione Fp fianco sinistro



Errori singoli di divisione fp fianco destro

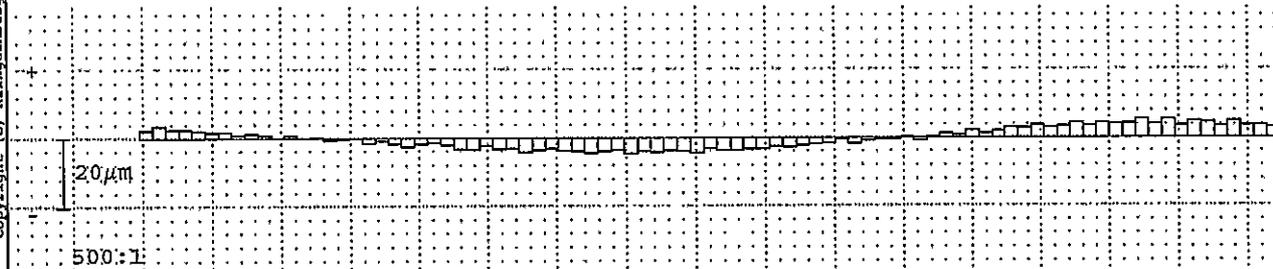


Errore somma di divisione Fp fianco destro



	Corso per misura divis.: 222.979 z=15.2mm							
	fianco sinistro / TIRO				fianco destro			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	2		11		2		11	
Gr. salto di passo fu max	2		14		2		14	
Scarto di divisione Rp	3				3			
Err. globale di divisione Fp	21		45		23		45	
Err. cordale di divisione Fpz/8	11				12			

Centricità Fr (Ø-sfera = 4mm) © : 8µm



Err. di concentricità Fr	10	32	
Variac. spessore dente Rs			

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Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410005 0	PNC35 B4784	Controllore:	TURNO c	Data:	08.01.2015 12:58
Denominazione:	ring gear		Numero denti z	87	Largh.fasc.dent. b	30.3mm
Numero disegno.:	250.1.3757.50-IF		Modulo m	2.25mm	Tratto evolv. La	6.62mm
Comessa/serie nr.:	ppap 1		Angolo pressione	20°	Tratto elica LB	24.24mm
Masch.Nr.:	M001	Spindel: Form	Angolo elic	29°	Inizio elab. M1	37.79mm
Untersuchungszweck:	Laufende Messung		Ø Base db	206.6334mm	Palpatore Ø	(#1) 1mm
Werkzeug:	Charge:		Ang. Base	27.102°	Fat.scor.pr. x	- .186

TIRO

Piede-Ø: 216.186mm [215.75/216.2]
 Testa-Ø: 229.682mm [229.6/229.9]

VDI

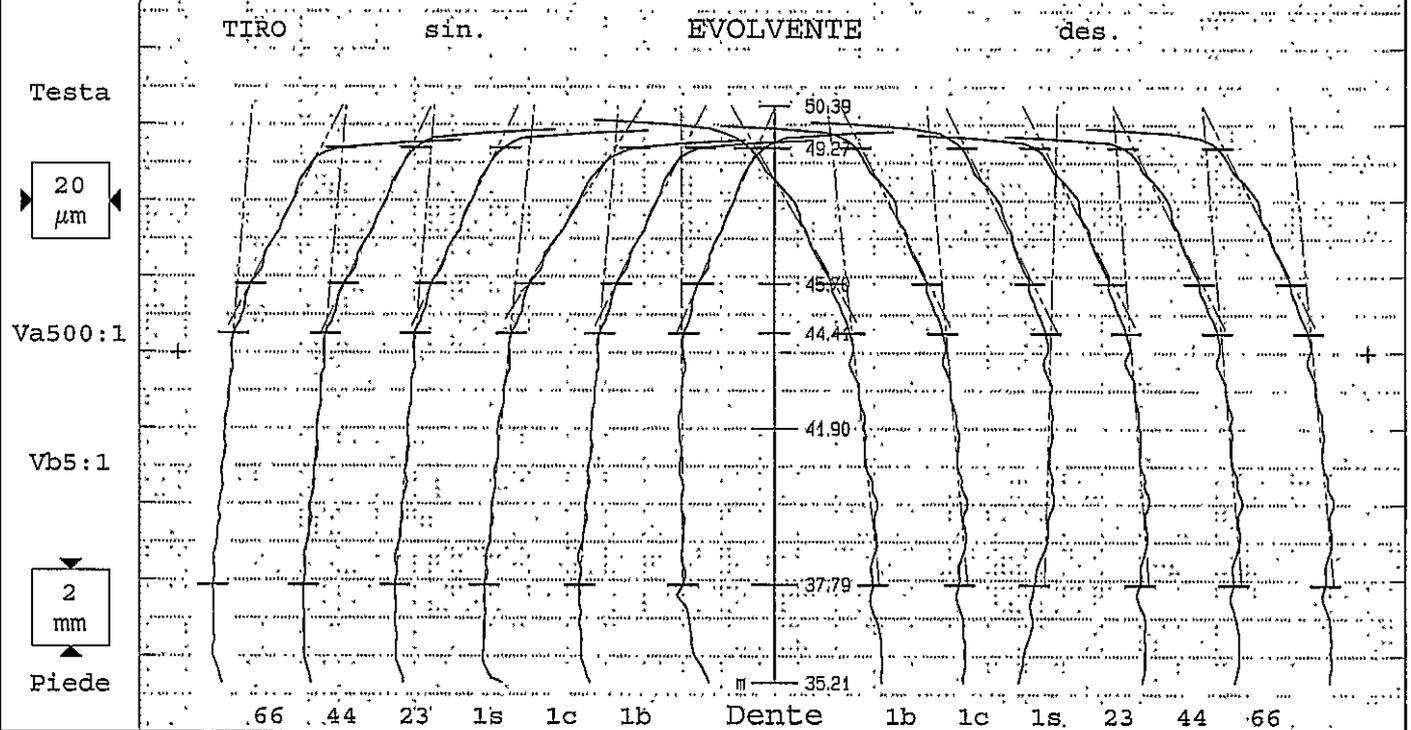


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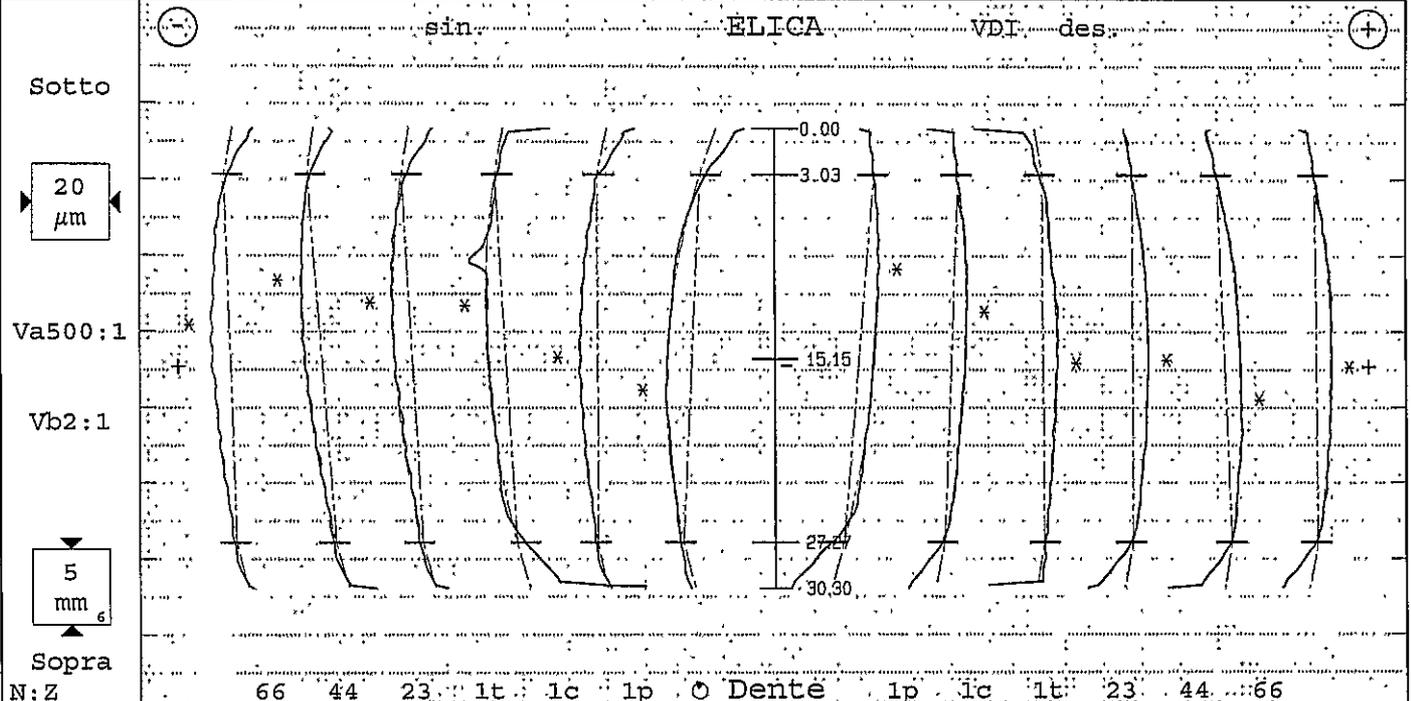
Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410005 0	PNC35 B4784	Controllore:	TURNO C	Data:	08.01.2015 13:53
Denominazione:	ring gear		Numero denti z	87	Largh.fasc.dent. b	30.3mm
Numero disegno.:	250.1.3757.50-IF		Modulo m	2.25mm	Tratto evolv. La	6.62mm
Commessa/serie nr.:	ppap 2		Angolo pressione	20°	Tratto elica L&S	24.24mm
Masch.Nr.:	M001	Spindel: Forming	Angolo elicoidale	29°	Inizio elab. M1	37.79mm
Untersuchungszweck:	Laufende Messung		Ø Base db	206.6334mm	Palpatore Ø	(#1) 1mm
Werkzeug:	Charge:		Ang. Base	27.102°	Fat.scor.pr. x	-.186



Tolerance	Medio	Val. misur [µm]							Qual	Tolerance	Val. misur [µm]							Medio	Qual
		Var							1		Var							1	
fH _{am} -6±4	-5									-6±4									-6
fH _a -6±7	-5	-5	-6	-5	-7	-5	0		-6±7	-7	-6	2	-5	-5	-6	-6		-6	
F _a	2	1	1	2	2	2	6			4	4	9	4	4	4	4		4	
ff _a	5	1	1	2	2	2	2		5	4	4	5	4	4	4	4		4	
fK _o -22/-14	-18	-19	-18	-17	-22	-18	-20		-22/-14	-20	-18	-24	-19	-19	-18	-19		-19	



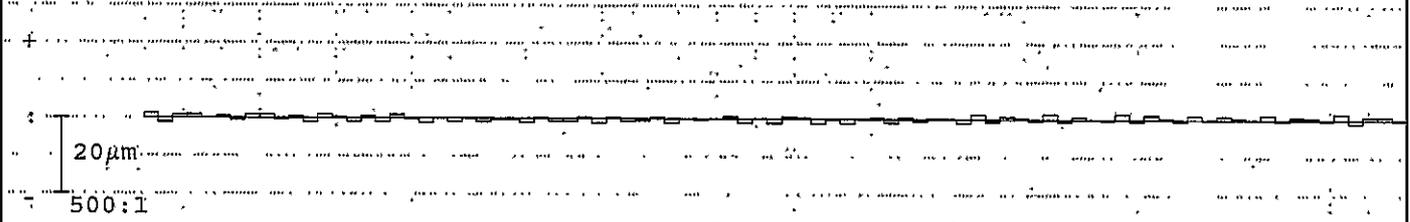
N:Z		Var							9		Var							10	
fH _{sm} -5±4	-5									±4								0	
fH _s -5±8	-5	-4	-9	-7	-7	0	5		±8	10	5	0	0	-5	-1	0		0	
F _S	11	4	4	4	10	5	11		11	12	5	3	3	5	3	4		4	
ff _S	5	2	2	1	2	7	1	2		5	4	1	1	1	1	1		1	
CS	2/5	5	5	4	5	4	6		2/5	4	4	4	4	4	4	4		4	
Bd	15±5	12							10±5									10	



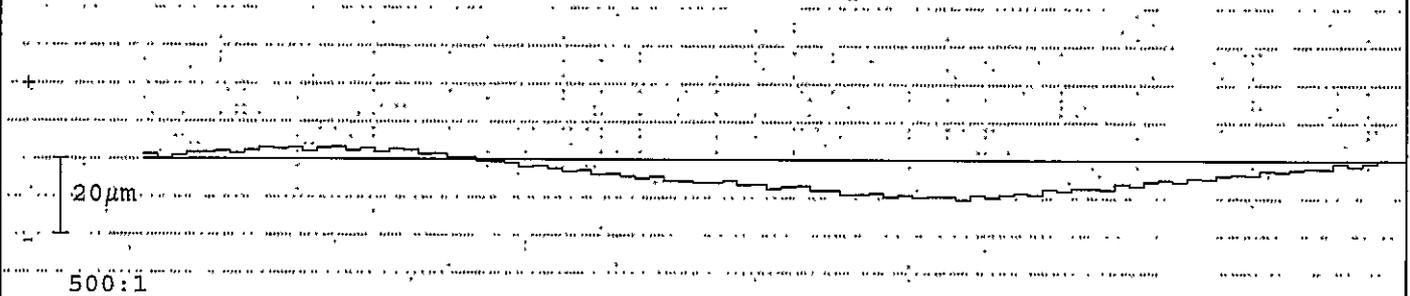


Nr. prog.: STI0410005 0 PNC35 B4784	Controllora: TURNO C	Data: 08.01.2015 13:53
Denominazione: ring gear	Numero denti z 87	Angolo pressione 20°
Numero disegno: 250.1.3757.50-IF	Modulo m 2.25mm	Angolo elicita 29°
Comessa/serie nr.: ppap 2	Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	Spindel: FOXM 64 Ezedg	Charge:

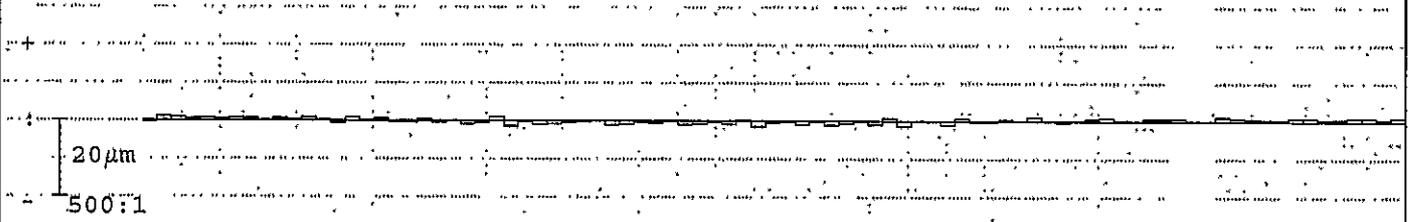
Errori singoli di divisione fp fianco sinistro



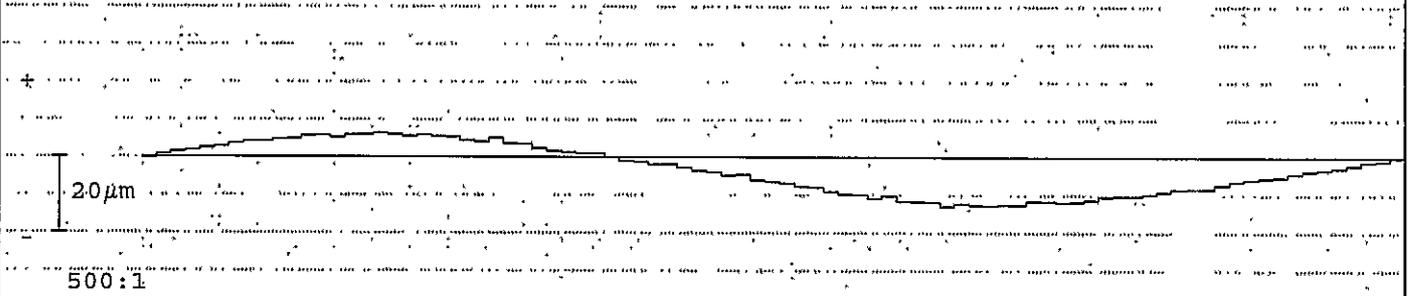
Errore somma di divisione Fp fianco sinistro



Errori singoli di divisione fp fianco destro

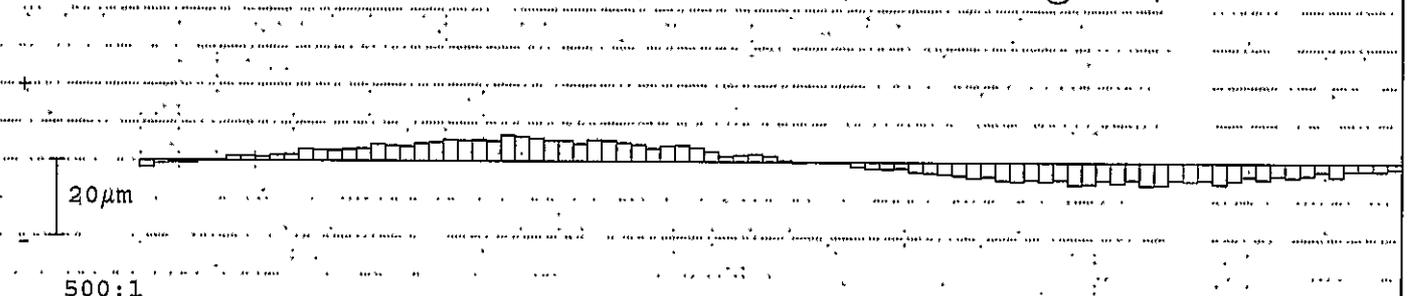


Errore somma di divisione Fp fianco destro



Corsa per misura divis.: 222.979 z=15.2mm	fianco sinistro / TIRO				fianco destro			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	2		11		1		11	
Gr. salto di passo fu max	2		14		2		14	
Scarto di divisione Rp	3				2			
Err. globale di divisione Fp	14		45		19		45	
Err. cordale di divisione Fpz/8	6				7			

Centricità Fr (Ø-sfera =4mm) © : 11µm



Err. di concentricità Fr	13	32	
Variab. spessore dente Rs			

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Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410005 0	PNC35 B4784	Controllore:	TURNO C	Data:	08.01.2015 13:35
Denominazione:	ring gear		Numero denti z	87	Largh.fasc.dent. b	30.3mm
Numero disegno:	250.1.3757.50-IF		Modulo m	2.25mm	Tratto evolv. La	6.62mm
Comessa/serie nr.:	ppap 2		Angolo pressione	20°	Tratto elica L&S	24.24mm
Masch.Nr.:	M001	spindel: Form	Angolo elica	29°	Inizio elab. M1	37.79mm
Untersuchungszweck:	Laufende Messung		Ø Base db	206.6334mm	Palpatore Ø	(#1) 1mm
Werkzeug:	Charge:		Ang. Base	27.102°	Fat.scor.pr. x	- .186

TIRO

Piede-Ø: 215.96mm [215.75/216.2]

Testa-Ø: 229.7mm [229.6/229.9]

VDI

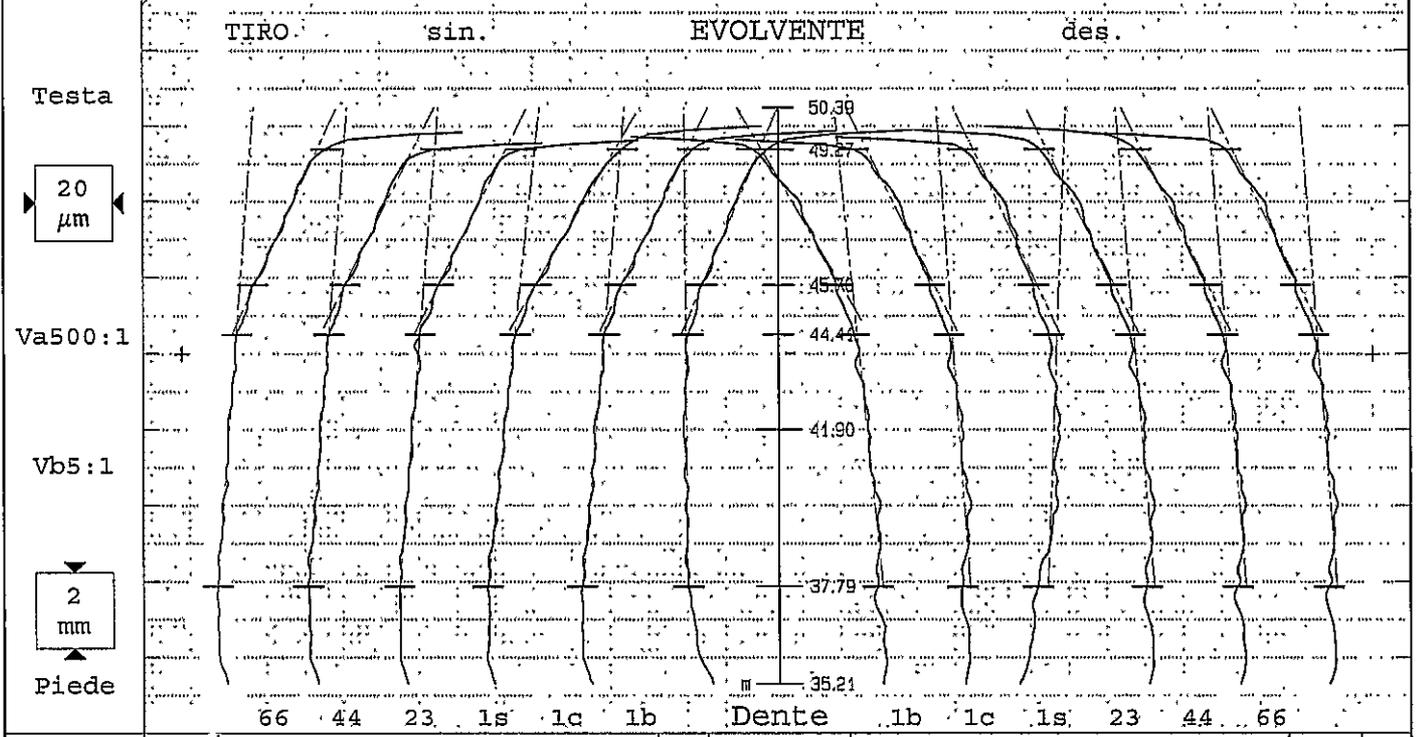


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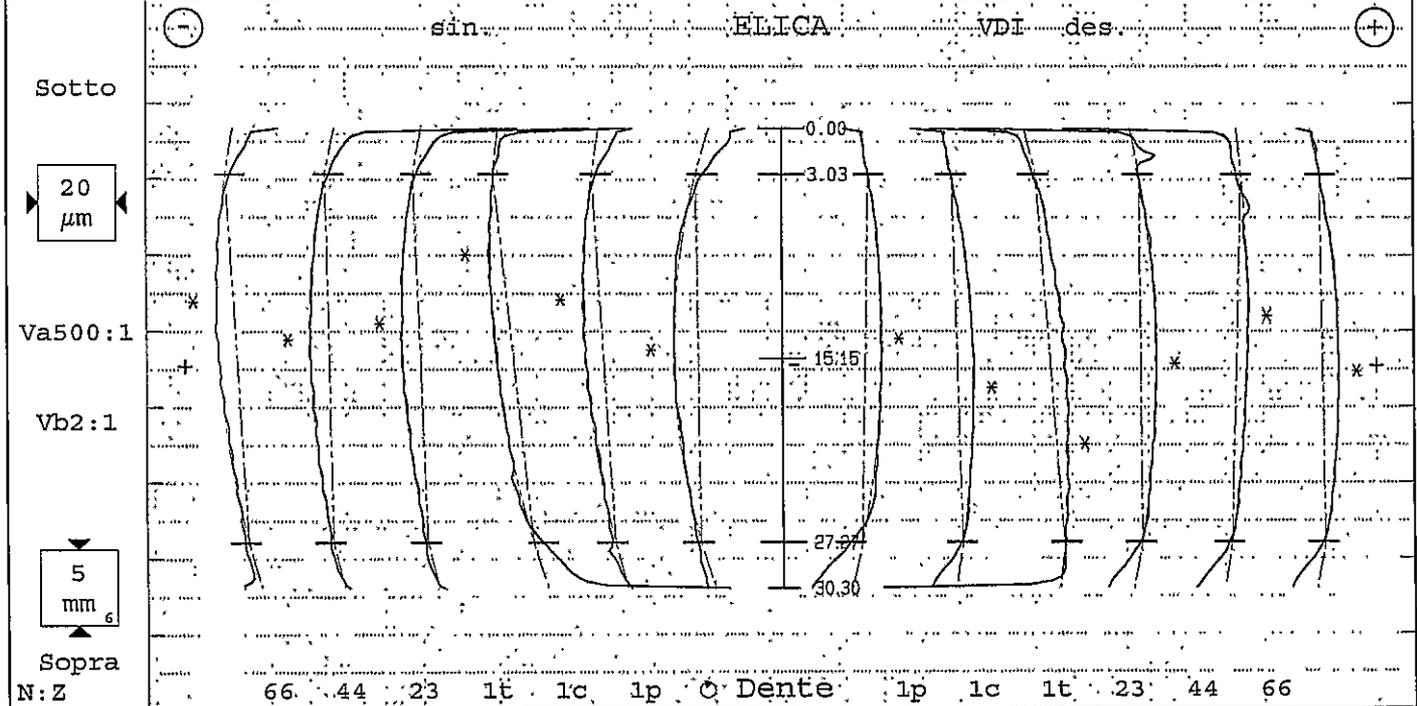
Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410005 0	PNC35 B4784	Controllore:	TURNO C	Data:	08.01.2015 12:44
Denominazione:	ring gear		Numero denti z	87	Largh.fasc.dent. b	30.3mm
Numero disegno.:	250.1.3757.50-IF		Modulo m	2.25mm	Tratto evolv. La	6.62mm
Commessa/serie nr.:	ppap 3		Angolo pressione	20°	Tratto elica Ls	24.24mm
Masch.Nr.:	M001	spindel: Formel	Angolo elica	29°	Inizio elab. M1	37.79mm
Untersuchungszweck:	Laufende Messung		Ø Base db	206.6334mm	Palpatore Ø	(#1) 1mm
Werkzeug:	Charge:		Ang. Base	27.102°	Fat.scor.pr. x	- .186



Tolerance	Medio	Val. misur [µm]							Qual	Tolerance	Val. misur [µm]							Medio	Qual	
fH _{cm}	-6±4	-5	Var 1								-6±4	Var 0							-5	
fH _a	-6±7	-5	-5	-5	-7	-6	0		-6±7	-7	-5	3	-5	-5	-5	-5				
F _a	2	2	1	2	2	1	6		3	4	10	4	4	4	4					
ffa	5	1	1	1	2	1	1		5	3	4	5	4	4	4	4				
fK _o	-22/-14	-18	-18	-18	-19	-21	-17	-20		-22/-14	-20	-19	-24	-19	-18	-19	-19			



FH _{sm}	FH _B	F _B	ffa	C _S	B _d	Tolerance	Medio	Val. misur [µm]							Qual							
-5±4	-5	4	2	5	12	±4	-1	Var 5														
-5±8	-5	11	5	2/5	15±5	±8	-1	-7	-2	-4	-13	-7	-1		2	-3	-9	-1	3	-2	-1	
11	4	4	4	5	5	11	5	4	5	4	10	3	8		7	4	8	6	5	3	5	
5	2	2	2	2	2	5	2	2	2	2	4	2	3		4	1	1	1	3	1	2	
2/5	5	5	5	5	5	2/5	4	5	5	5	5	5	6		4	4	4	4	3	4	4	
15±5	12					10±5																11

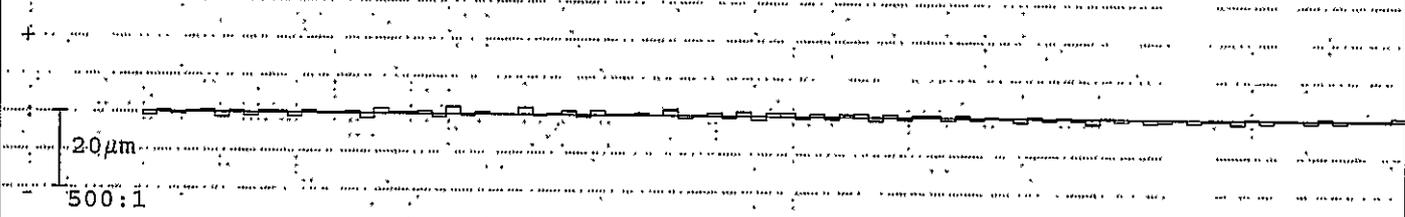
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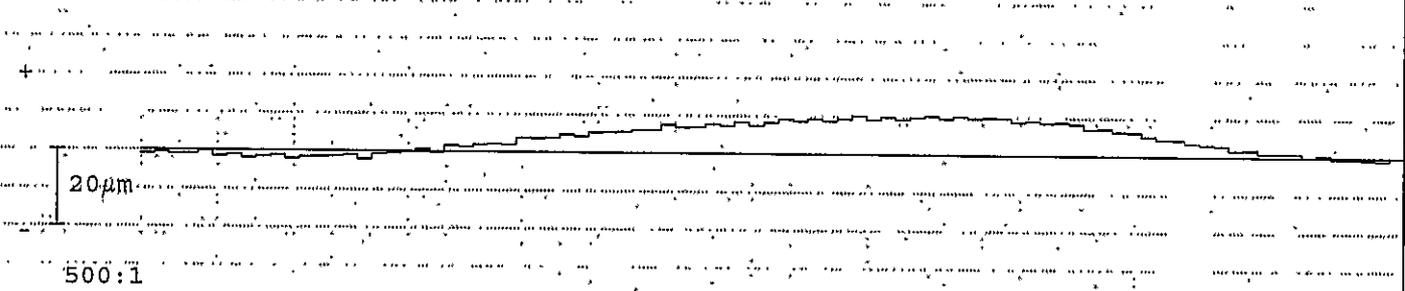


Nr. prog.: STI0410005 0	PNC35 B4784	Controllore: TURNO c	Data: 08.01.2015 12:44
Denominazione: ring gear		Numero denti z 87	Angolo pressione 20°
Numero disegno: 250.1.3757.50-IF		Modulo m 2.25mm	Angolo elica 29°
Commessa/serie nr.: ppap 3		Untersuchungszweck: Laufende Messung	
Masch.Nr.: M001	Spindel: FORMERKZEDG	Charge:	

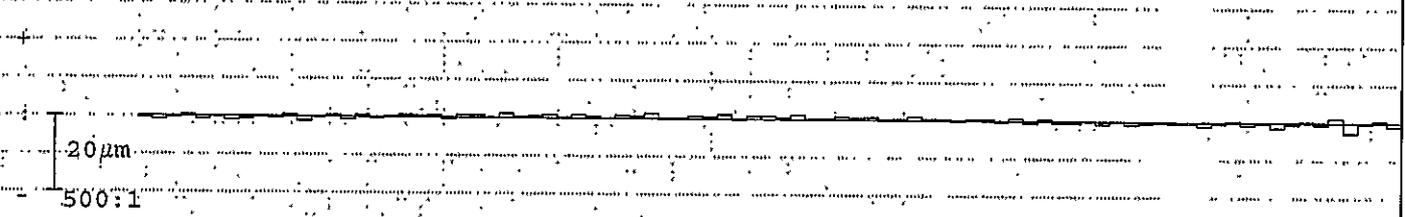
Errori singoli di divisione fp fianco sinistro



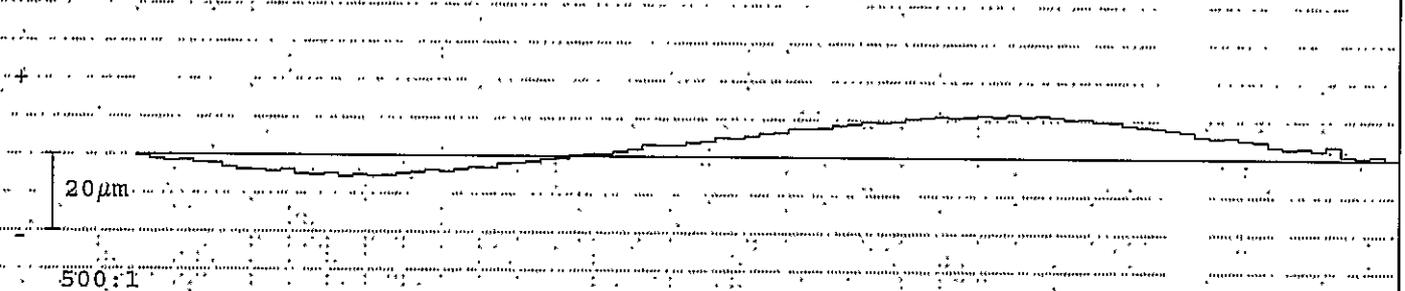
Errore somma di divisione Fp fianco sinistro



Errori singoli di divisione fp fianco destro



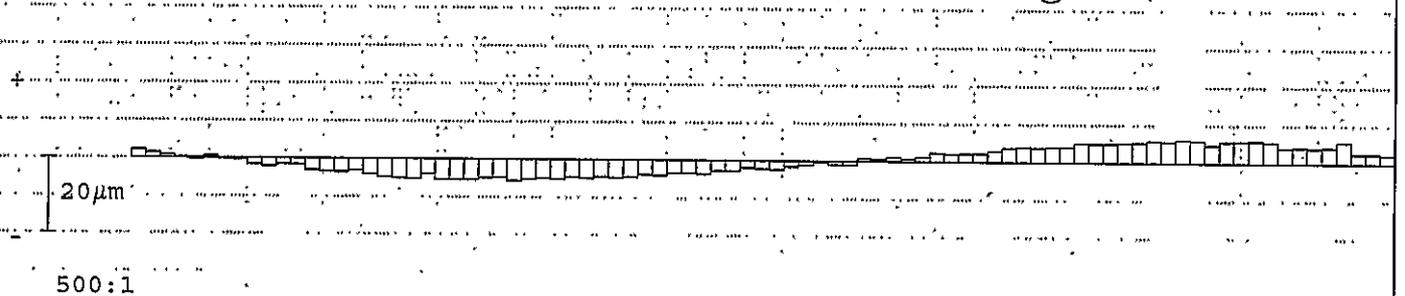
Errore somma di divisione Fp fianco destro



Corsa per misura divis.: 222.979 z=15.2mm	fianco sinistro / TIRO				fianco destro			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	2		11		3		11	
Gr. salto di passo fu max	3		14		4		14	
Scarto di divisione Rp	3				4			
Err. globale di divisione Fp	12		45		17		45	
Err. cordale di divisione Fpz/8	7				7			

Centricità Fr (Ø-sfera =4mm)

⊙ : 11µm



Err. di concentricità Fr	12	32		
Variaz. spessore dente Rs				

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GETRAG

Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410005 0	PNC35 B4784	Controllore:	TURNO C	Data:	08.01.2015 12:55
Denominazione:	ring gear		Numero denti z	87	largh. fasc. dent. b	30.3mm
Numero disegno.:	250.1.3757.50-IF		Modulo m	2.25mm	Tratto evolv. La	6.62mm
Comessa/serie nr.:	ppap 3		Angolo pressione	20°	Tratto elica L8	24.24mm
Masch.Nr.:	M001	Spindel: Formel	Angolo elica	29°	Inizio elab. M1	37.79mm
Untersuchungszweck:	Laufende Messung		Ø Base db	206.6334mm	Salpatore Ø	(#1) 1mm
Werkzeug:	Charge:		Ang. Base	27.102°	Fat. scor. pr. x	- .186

TIRO

Piede-Ø: 215.948mm [215.75/216.2]

Testa-Ø: 229.695mm [229.6/229.9]

VDI

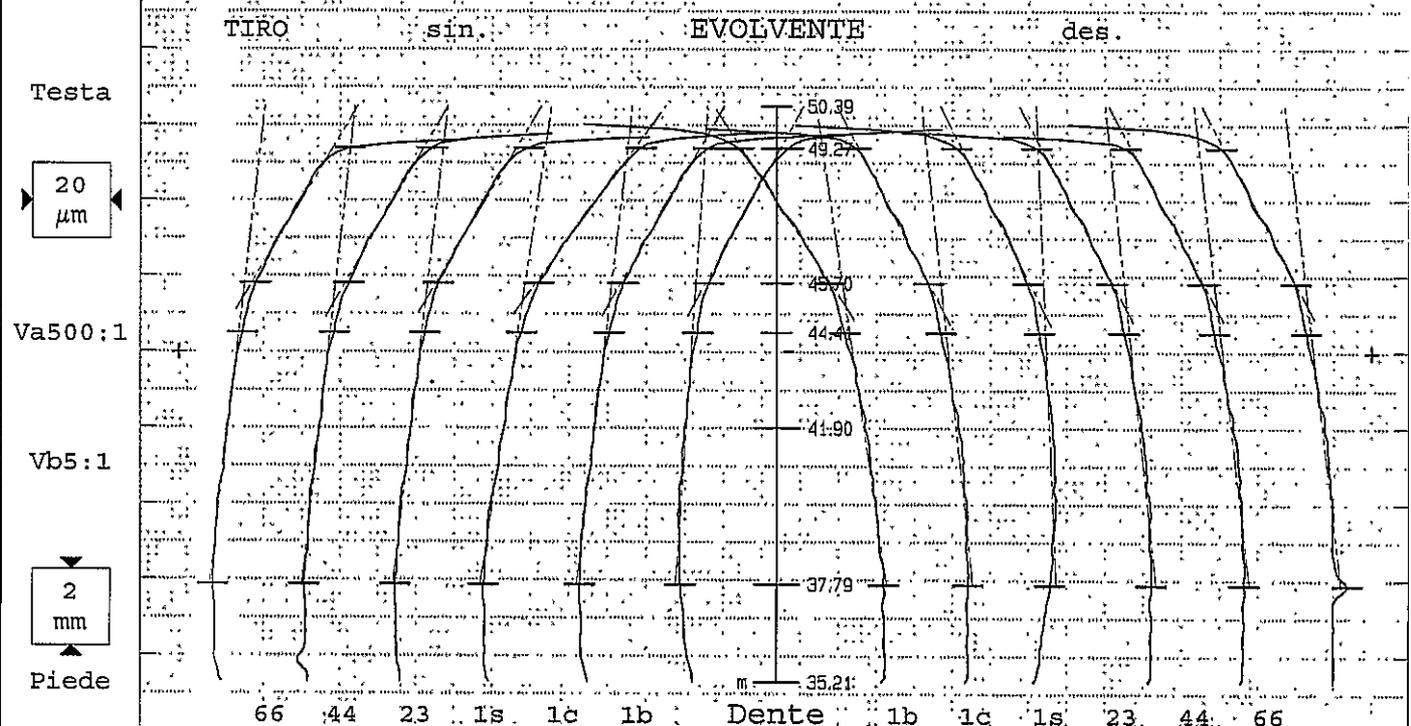


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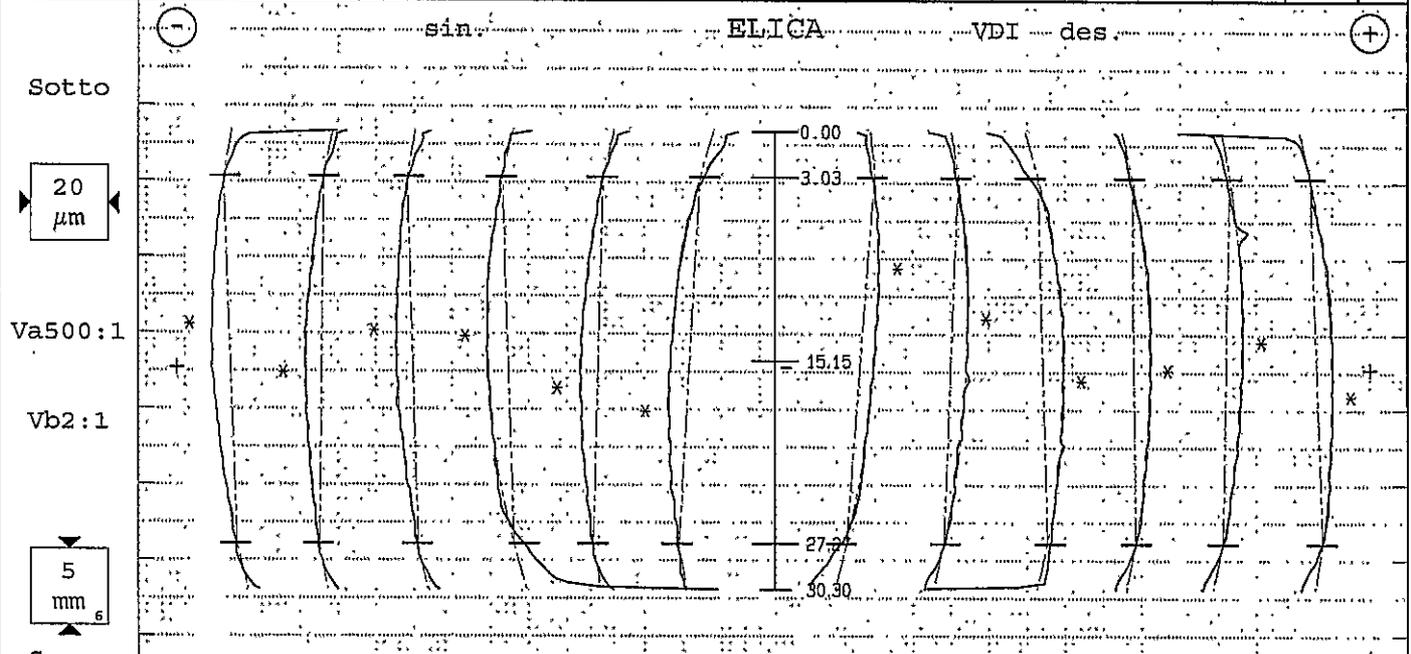
Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410o05 0	PNC35 B4784	Controllore:	TURNO C	Data:	08.01.2015 13:10
Denominazione:	ring gear		Numero denti z	87	Largh.fasc.dent. b	30.3mm
Numero disegno.:	250.1.3757.50-IF		Modulo m	2.25mm	Tratto evolv. La	6.62mm
Commessa/serie nr.:	ppap 4		Angolo pressione	20°	Tratto elica Ls	24.24mm
Masch.Nr.:	M001	Spindel: FORMULA	Angolo elica	29°	Inizio elab. M1	37.79mm
Untersuchungszweck:	Laufende Messung		Ø Base db	206.6334mm	Palpatore Ø	(#1) 1mm
Werkzeug:	Charge:		Ang. Base	27.102°	Fat.scor.pr. x	-.186



Tolerance	Medio	Val.misur [μ m]							Qual	Tolerance	Val.misur [μ m]							Medio	Qual	
fHcm	-6±4	-8	Var 1								-6±4	Var 1							-8	
fHa	-6±7	-8	-8	-7	-8	-10	-8	-4		-6±7	-10	-7	-3	-7	-8	-8	-8			
Fa		2	3	2	2	4	2	3		5	3	5	3	3	5	4				
ffa	5	1	1	2	1	2	1	2		5	2	3	3	2	3	3				
fKo	-22/-14	-19	-19	-19	-19	-23	-19	-20		-22/-14	-21	-18	-20	-18	-18	-17				



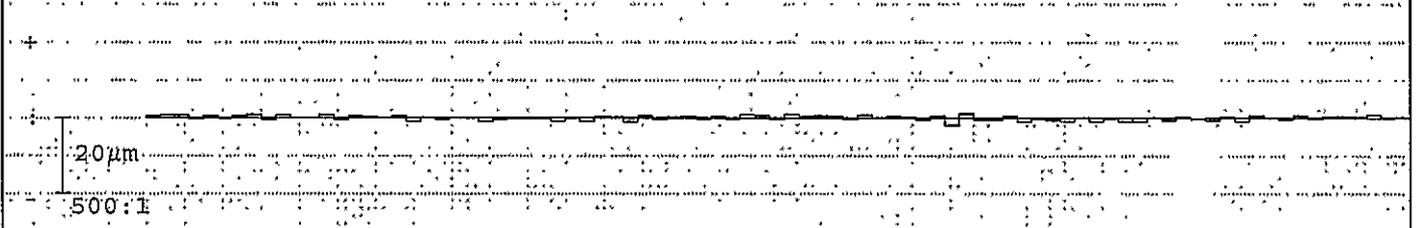
N:Z		Var 7								Var 9									
fH3m	-5±4	-1																1	
fH3	-5±8	-1	-4	1	-3	-4	3	7		±4	±8	9	5	-3	-1	2	-4	1	
F3	11	5	4	6	4	6	7	11		11	9	5	8	4	6	4	5		
ff3	5	1	1	1	1	4	1	2		5	2	2	3	1	4	1	2		
CS	2/5	4	5	4	4	6	4	5		2/5	4	4	6	4	4	4	4		
Bd	15±5	11									10±5								12



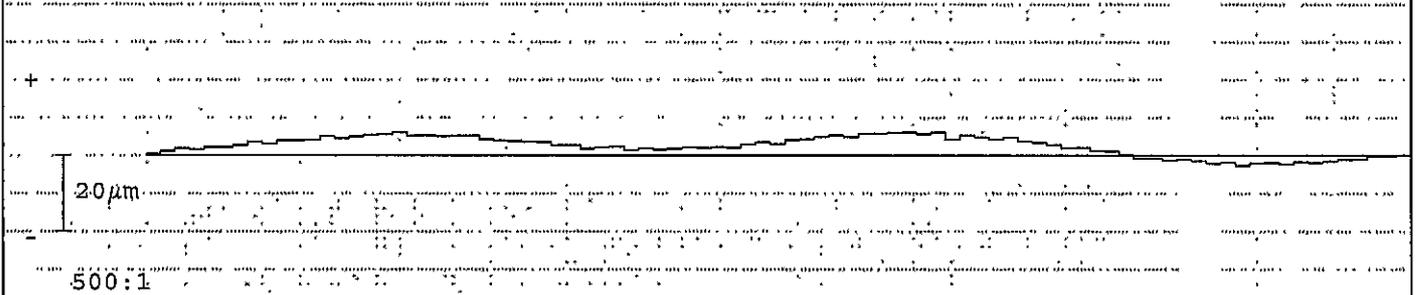


Nr. prog.: STI0410o05 0	PNC35 B4784	Controllore: TURNO c	Data: 08.01.2015 13:10
Denominazione: ring gear	Numero denti z 87	Angolo pressione 20°	
Numero disegno.: 250.1.3757.50-IF	Modulo m 2.25mm	Angolo elica 29°	
Comessa/serie nr.: ppap 4	Untersuchungszweck: Laufende Messung		
Maach.Nr.: M001	Spindel: Formelwerkzeug:	Charge:	

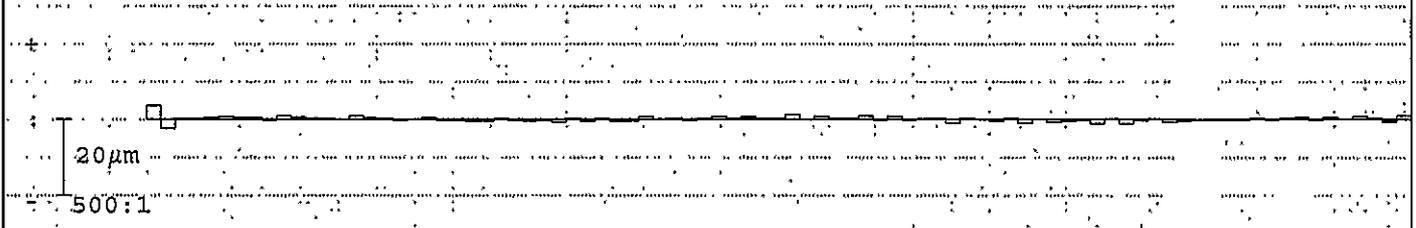
Errori singoli di divisione fp fianco sinistro



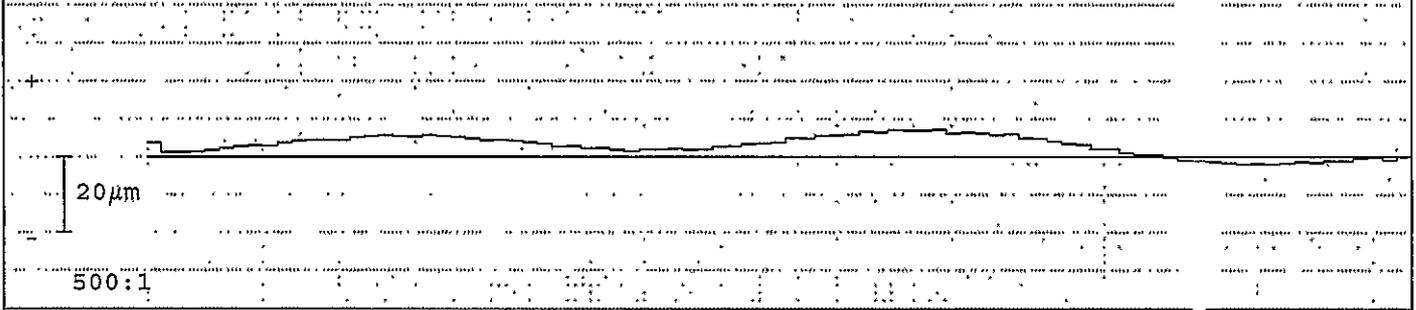
Errore somma di divisione Fp fianco sinistro



Errori singoli di divisione fp fianco destro

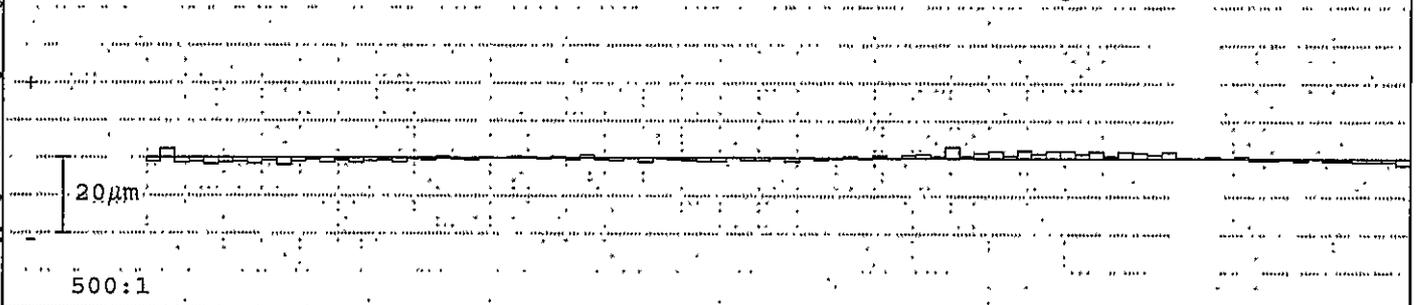


Errore somma di divisione Fp fianco destro



Corsa per misura divis.: 222.979 z=15.2mm	fianco sinistro / TIRO				fianco destro			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. arr. singoli divisione fp max	2		11		4		11	
Gr. salto di passo fu max	3		14		6		14	
Scarto di divisione Rp	3				6			
Err. globale di divisione Fp	9		45		9		45	
Err. cordale di divisione Fpz/8	6				6			

Centricità Fr (Ø-sfera =4mm) Ⓞ : 2µm



Err. di concentricità Fr	5	32		
Variac. spessore dente Rs				

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Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410005 0	PNC35 B4784	Controllore:	TURNO C	Data:	08.01.2015 13:32
Denominazione:	ring gear		Numero denti z	87	Largh.fasc.dent. b	30.3mm
Numero disegno.:	250.1.3757.50-IF		Modulo m	2.25mm	Tratto evolv. La	6.62mm
Commessa/serie nr.:	ppap 4		Angolo pressione	20°	Tratto elica LS	24.24mm
Masch.Nr.:	M001	Spindel: Forming	Angolo elica	29°	Inizio elab. MI	37.79mm
Untersuchungszweck:	Laufende Messung		Ø Base db	206.6334mm	Palpatore Ø	(#1) 1mm
Werkzeug:	Charge:		Ang. Base	27.102°	Pat.scor.pr. x	- .186

TIRO

Piede-Ø: 215.948mm [215.75/216.2]
 Testa-Ø: 229.687mm [229.6/229.9]

VDI



GETRAG

Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410005 0 PNC35 B4784	Controllore:	TURNO C	Data:	08.01.2015 14:08
Denominazione:	ring gear	Numero denti z	87	Largh.fasc.dent. b	30.3mm
Numero disegno.:	250.1.3757.50-IF	Modulo m	2.25mm	Tratto evolv. La	6.62mm
Comessa/serie nr.:	ppap 5	Angolo pressione	20°	Tratto elica L8	24.24mm
Masch.Nr.:	M001 Spindel: FORMER	Angolo elica	29°	Inizio elab. M1	37.79mm
Untersuchungszweck:	Laufende Messung	Ø Base db	206.6334mm	Palpatore Ø	(#1) 1mm
Werkzeug:	Charge:	Ang. Base	27.102°	Fat.scor.pr. x	-.186

TIRO:

Piede-Ø: 215.934mm [215.75/216.2]

Testa-Ø: 229.68mm [229.6/229.9]

VDI:

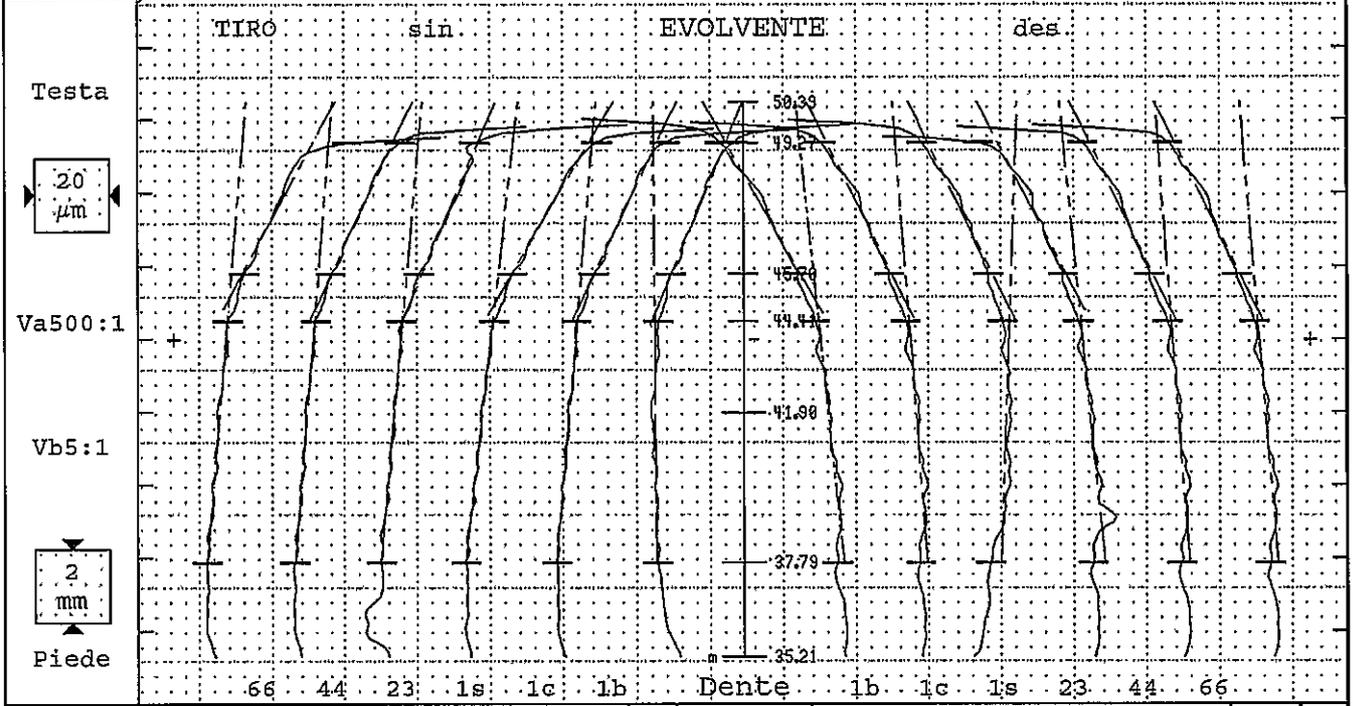


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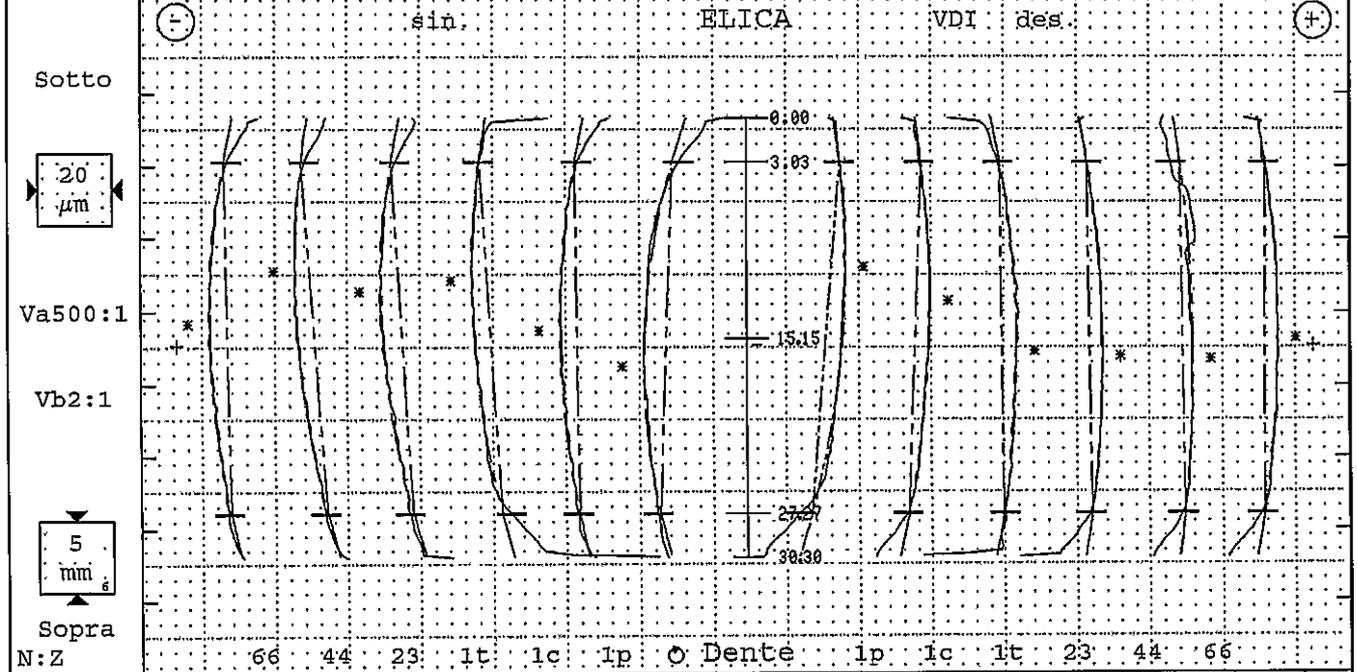
Ruota cilindrica Evolvente/Elica



Nr. prog.:	STI0410o05 0	PNC35 B4784	Controller:	TURNO c	Data:	08.01.2015 14:01
Denominazione:	ring gear		Numero denti z	87	Largh.fasc.dent. b	30.3mm
Numero disegno.:	250.1.3757.50-IF		Modulo m	2.25mm	Tratto evolv. La	6.62mm
Commessa/serie nr.:	ppap 5		Angolo pressione	20°	Tratto elica Lb	24.24mm
Masch.Nr.:	M001	Spindel: Formm	Angolo elica	29°	Inizio elab. Ml	37.79mm
Untersuchungszweck:	Laufende Messung		Ø Base db	206.6334mm	Palpatore Ø	(#1)1mm
Werkzeug:	Charge:		Ang. Base	27.102°	Fat.scor.pr. x	-.186



Tolerance	Medio	Val. misur [µm]							Qual	Tolerance	Val. misur [µm]							Medio	Qual	
fHm	-6±4	-6	Var 1								-6±4	Var 1							-5	
fHa	-6±7	-6	-6	-5	-6	-8	-6	0		-6±7	-7	-5	2	-6	-5	-5	-5			
Fa		2	1	2	2	2	1	6			4	4	10	8	4	4	5			
fFa	5	1	1	1	2	1	1	2		5	4	4	5	5	4	4	5			
fKo	-22/-14	-18	-19	-18	-16	-21	-17	-20		-22/-14	-20	-19	-24	-18	-19	-19	-19			



Tolerance	Medio	Val. misur [µm]							Qual	Tolerance	Val. misur [µm]							Medio	Qual	
fHm	-5±4	-5	Var 8								±4	Var 6							1	
fHs	-5±8	-5	-2	-9	-7	-8	-1	4		±8	10	5	-1	-1	-1	0	1			
Fb	11	5	5	4	4	6	5	10		11	12	5	4	3	5	3	4			
fFb	5	2	2	2	2	3	1	3		5	4	1	1	1	5	1	2			
Cs	2/5	5	5	4	5	4	4	6		2/5	5	4	4	4	3	4	4			
Bd	15±5	12									10±5									11

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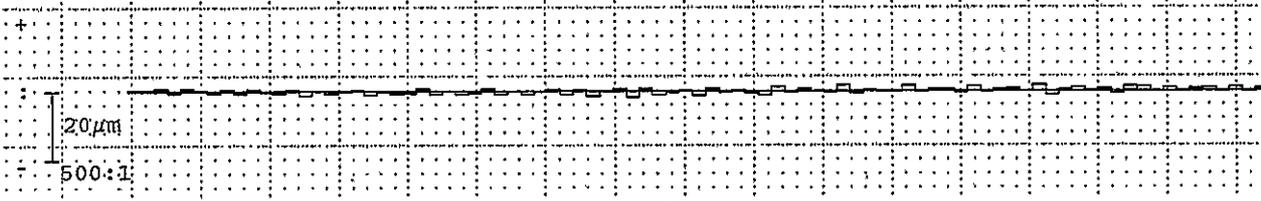
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Ruota cilindrica Divisione

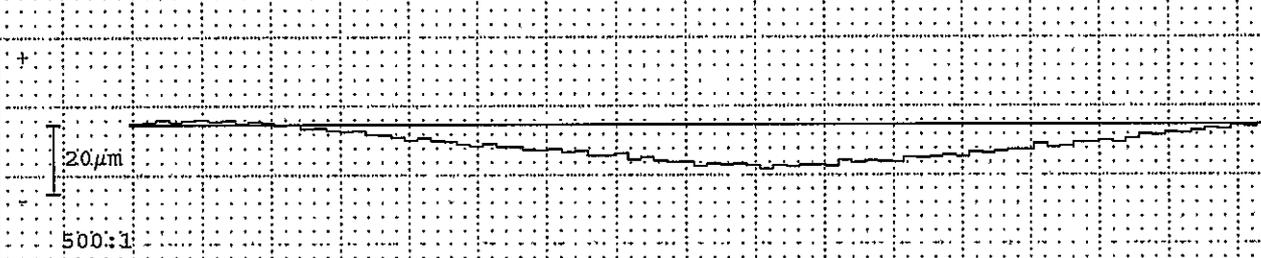


Nr. prog.:	STI0410005 0 PNC35 B4784	Controllora:	TURNO c	Data:	08.01.2015 14:01
Denominazione:	ring gear	Numero denti z	87	Angolo pressione	20°
Numero disegno.:	250.1.3757.50-IF	Module m	2.25mm	Angolo elica	29°
Commessa/serie nr.:	ppap 5	Untersuchungszweck:	Laufende Messung		
Masch.Nr.:	M001	Spindel: Formu	Getzsdg:	Charge:	

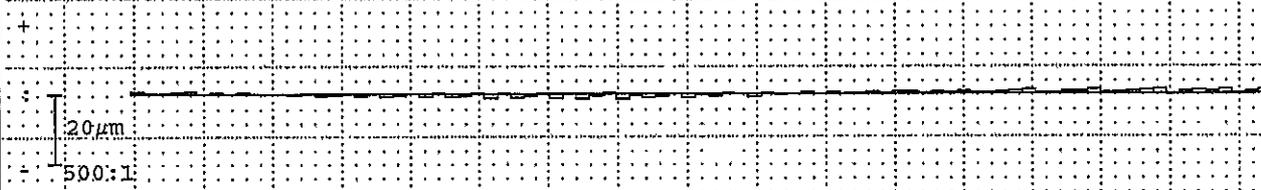
Errori singoli di divisione fp fianco sinistro



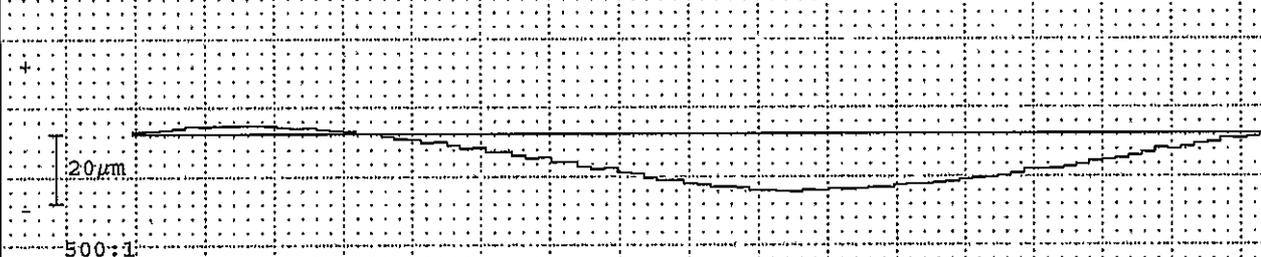
Errore somma di divisione Fp fianco sinistro



Errori singoli di divisione fp fianco destro

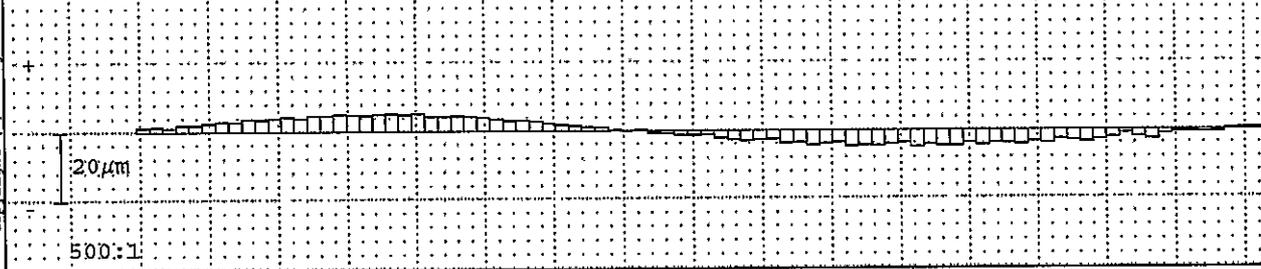


Errore somma di divisione Fp fianco destro



Corso per misura divis. : 222.979 z=15.2mm	fianco sinistro / TIRO				fianco destro			
	Val. misur	Qual.	Val. amm	Qual.	Val. misur	Qual.	Val. amm	Qual.
Gr. err. singoli divisione fp max	2		11		1		11	
Gr. salto di passo fu max	3		14		2		14	
Scarto di divisione Rp	4				2			
Err. globale di divisione Fp	14		45		19		45	
Err. cordale di divisione Fpz/8	5				8			

Centricità Fr (Ø-sfera = 4mm) © : 9µm



Err. di concentricità Fr	10	32	
Variaz. spessore dente Rs			

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Point	Characteristic	Tolerance	Part 1	Part 2	Part 3	Part 4	Part 5
4	MDK	228,699/228,632	228,657	228,647	228,636	228,658	228,656

Manual measures by Marposs

RG 250 1 3757 51

12,Jan 2015