

313012



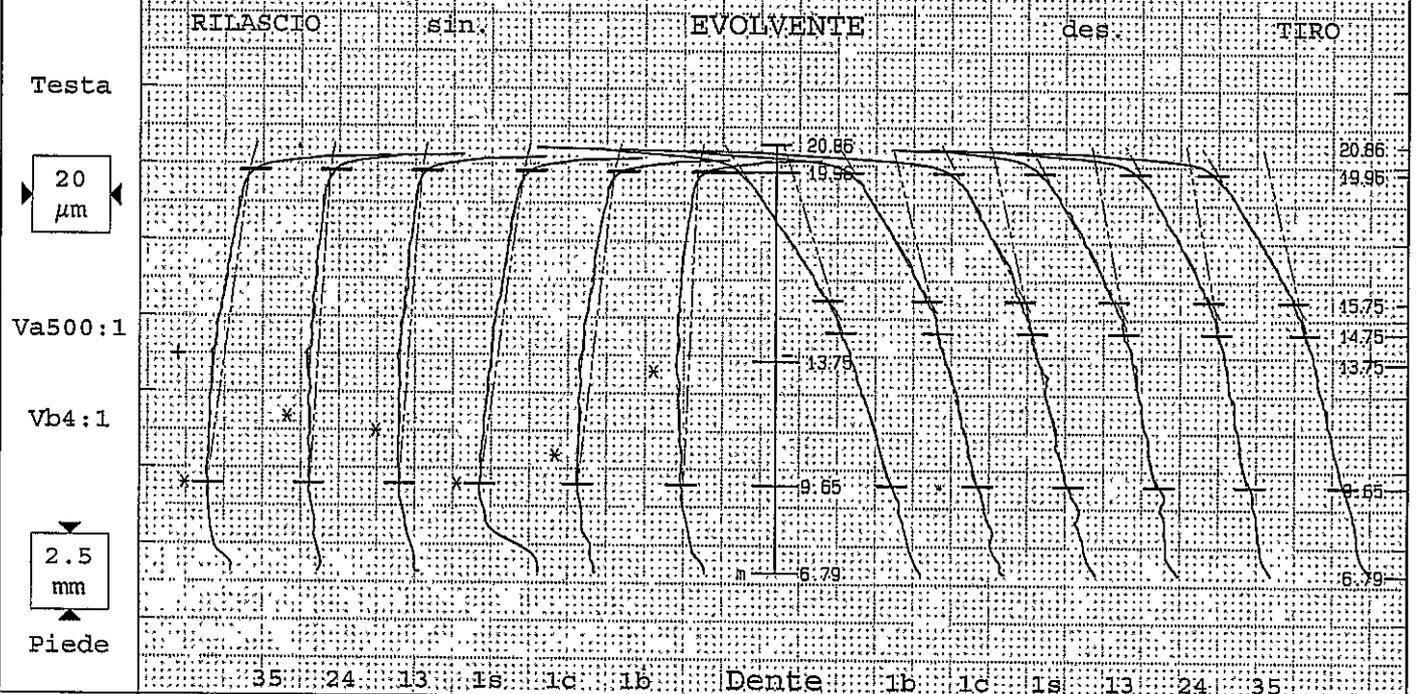
Part Submission Warrant

Part Name Fix Gear 5		Customer Part Number 250.1.3654.36	
Shown on Drawing No. 250.1.3654.36		Organization Part # _____	
Engineering Change Level e 35670		Dated 23-lug-14	
Additional Engineering Changes _____		Dated _____	
Safety and/or Government Regulation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Purchase Order No. _____	
Weight (kg) 0.4350		Checking Aid No. _____	
Checking Aid Engineering Change Level _____		Dated _____	
ORGANIZATION MANUFACTURING INFORMATION		CUSTOMER SUBMITTAL INFORMATION	
GETRAG MODUGNO		Customer Name/Division _____	
Organization Name & Supplier/Vendor Code _____		Buyer/Buyer Code _____	
VIA DEI CICLAMINI N°4		DCT250	
Street Address _____		Application _____	
MODUGNO BARI 70026 ITALY		Application _____	
City	Region	Postal Code	Country
MODUGNO	BARI	70026	ITALY
MATERIALS REPORTING		Has customer-required Substances of Concern information been reported? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" 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	
Are polymeric parts identified with appropriate ISO marking codes? _____		REASON FOR SUBMISSION (Check at least one)	
<input type="checkbox"/> Initial Submission <input checked="" type="checkbox"/> Engineering Change(s) <input type="checkbox"/> Tooling: Transfer, Replacement, Refurbishment, or additional <input type="checkbox"/> Correction of Discrepancy <input type="checkbox"/> Tooling Inactive > than 1 year		<input type="checkbox"/> Change to Optional Construction or Material <input type="checkbox"/> Supplier or Material Source Change <input type="checkbox"/> Change in Part Processing <input type="checkbox"/> Parts Produced at Additional Location <input 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 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: Gear Data change: ca left flank change (see Gear Data, no change on final drawing)			
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 12/01/2015	
Print Name Pennacchia Vincenzo		Phone No. tel 390805858580	
Title GPS 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 12.01.15	
Print Name _____		Customer Tracking Number (optional) _____	

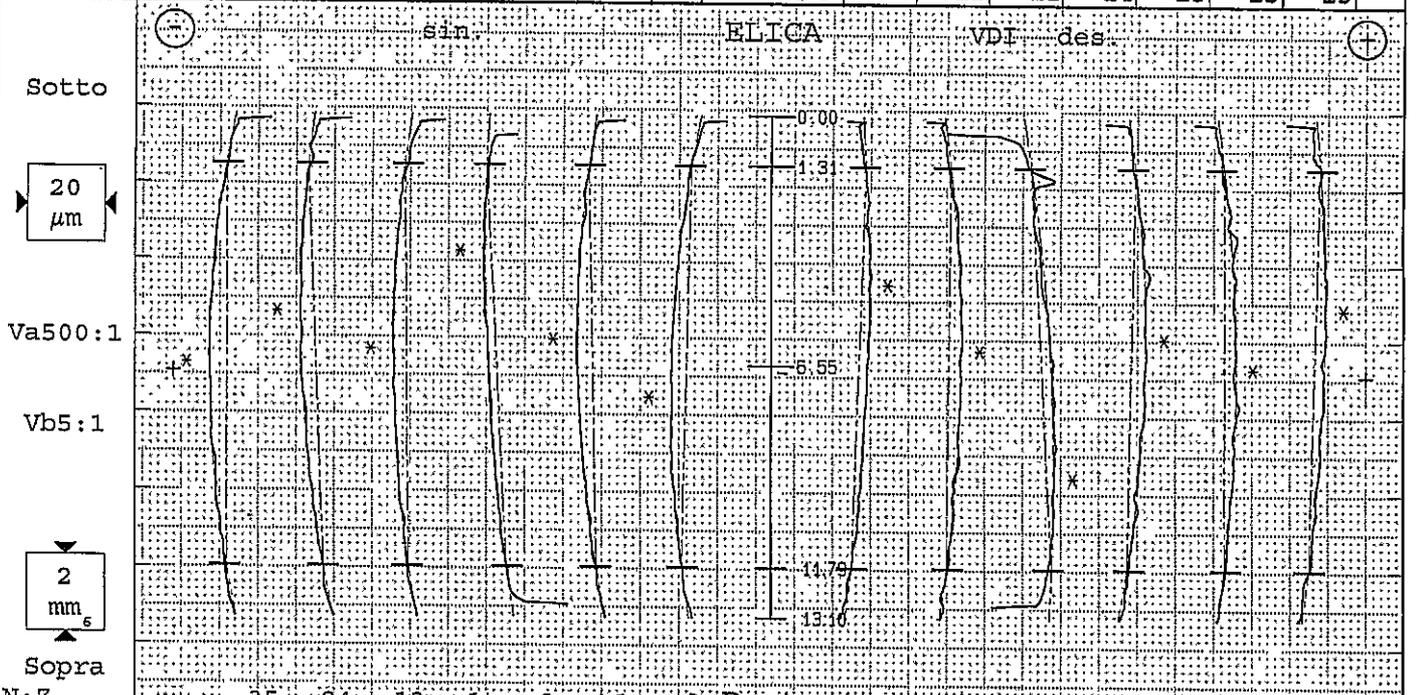
Ruota cilindrica Evolvente/Elica



Nr. prog.: STI0412 06 0	P26 B7681	Controllore: turno c	Data: 12.01.2015 12:48
Denominazione: ZR5		Numero denti z 45	Largh.fasc.dent. b 13.1mm
Numero disegno.: 250.1.3654.36-IPA		Modulo m 1.65mm	Tratto evolv. La 10.31/5.1mm
Connessa/serie nr.: 1		Angolo pressione 17°30'00"	Tratto elica Lβ 10.48mm
Masch.Nr.: M001	Spindel: Form	Angolo elica 29°00'00"	Inizio elab. M1 9.65mm
Untersuchungszweck: Laufende Messung		Ø Base db 79.863mm	Palpatore Ø (#2C) 1mm
Werkzeug:	Charge:	Ang. Base 27°32'25"	Fat.scor.pr. x .17



Tolerance	Medio	Val. misur [µm]						Qual	Tolerance	Val. misur [µm]						Medio	Qual	
fHm	-6±6	-8	Var a 6							-6±6	Var a 3						-9	
fHa	-6±10	-8	-11	-5	-6	-11	-9	-3	-6±10	-13	-10	-9	-8	-7	-10	-9		
Fa	4	4	6	2	2	7	6	3	8	5	4	3	3	4	4			
ffa	4	2	2	2	2	2	3	3	4	1	1	2	2	2	1	2		
Ca'	2/6	3	3	2	2	2	3	3										
fKo	0	0	0	0	0	0	0	0	-22/-14	-13	-12	-11	-14	-13	-13	-13		



N:Z		35	24	13	1t	1c	1p	Ø	Dente	1p	1c	1t	13	24	35		
fHsm	±6	-2	Var β 5							±6	Var β 4						2
fHs	±13	-2	0	-5	-1	-7	-2	3	±13	5	1	-7	3	0	4	2	
Fβ	4	4	4	5	3	6	4	4	4	3	6	5	4	4	4		
ffβ	4	1	1	1	1	1	1	1	4	1	1	7	2	2	1	2	
CB	1/5	4	4	4	3	2	4	4	1/5	2	3	2	4	3	3	3	

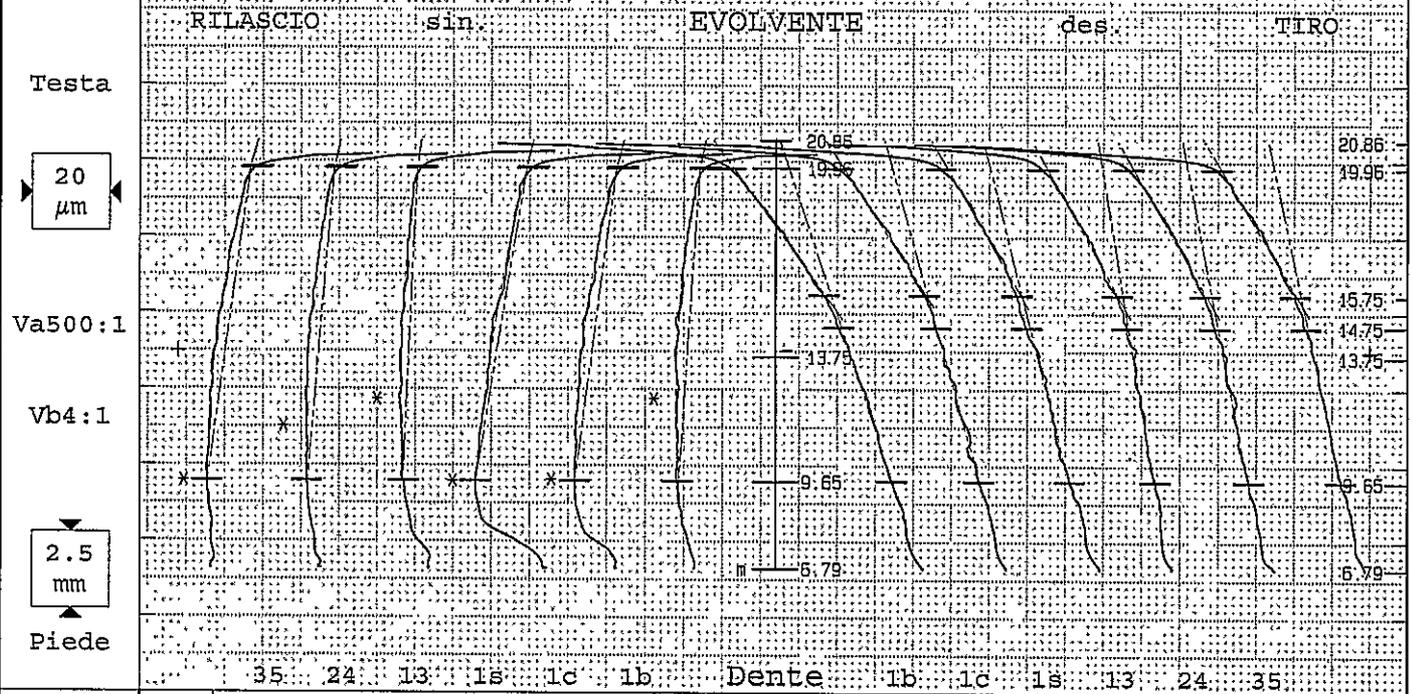


Docum. archiviato elettronicamente. Archiviazione cartacea non necessaria

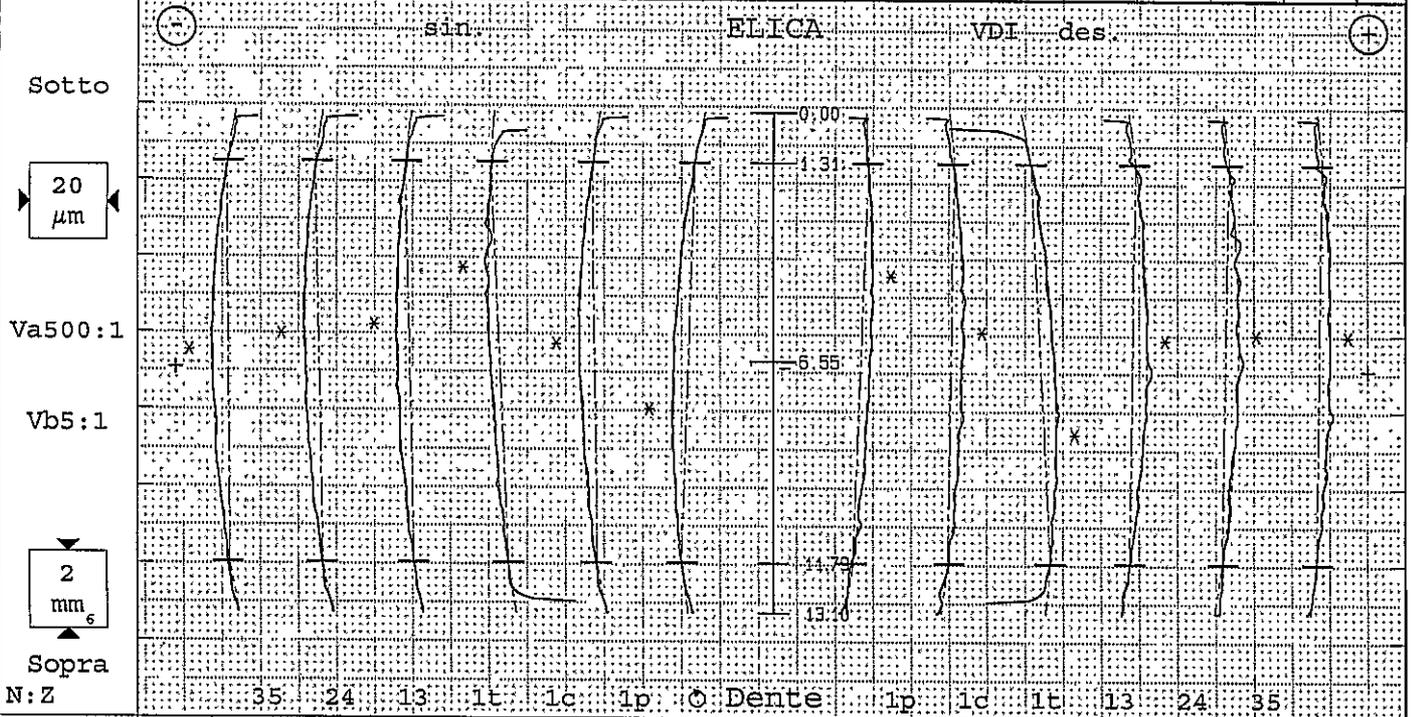
Ruota cilindrica Evolvente/Elica



Nr. prog.: STI0412 06 0	P26 B7681	Controllore: turno c	Data: 12.01.2015 12:50
Denominazione: ZR5	Numero denti z	45	Largh. fasc. dent. b
Numero disegno.: 250.1.3654.36-IPA	Modulo m	1.65mm	Tratto evolv. La
Comessa/serie nr.: 2	Angolo pressione	17°30'00"	Tratto elica Lb
Masch. Nr.: M001	Spindel: Formaggio elica	29°00'00"	Inizio elab. M1
Untersuchungszweck: Laufende Messung	Ø Base db	79.863mm	Palpatore Ø (#2C) 1mm
Werkzeug: Charge:	Ang. Base	27°32'25"	Fat. scor. pr. x
			.17



Tolerance	Medio	Val. misur [µm]							Qual	Tolerance	Val. misur [µm]							Medio	Qual	
fHm	-6±6	-8	Var a							7	-6±6	Var a							4	-9
fHa	-6±10	-8	-11	-7	-4	-13	-11	-5	-6±10	-13	-11	-10	-7	-8	-9	-9				
Fa		5	7	3	3	9	6	3		8	5	5	2	3	3					
ffa	4	2	2	2	2	2	2	2	4	1	2	2	2	1	2					
Ca	2/6	3	3	3	2	2	3	3												
fKo		0	0	0	0	0	0	0	-22/-14	-14	-13	-11	-14	-14	-14					



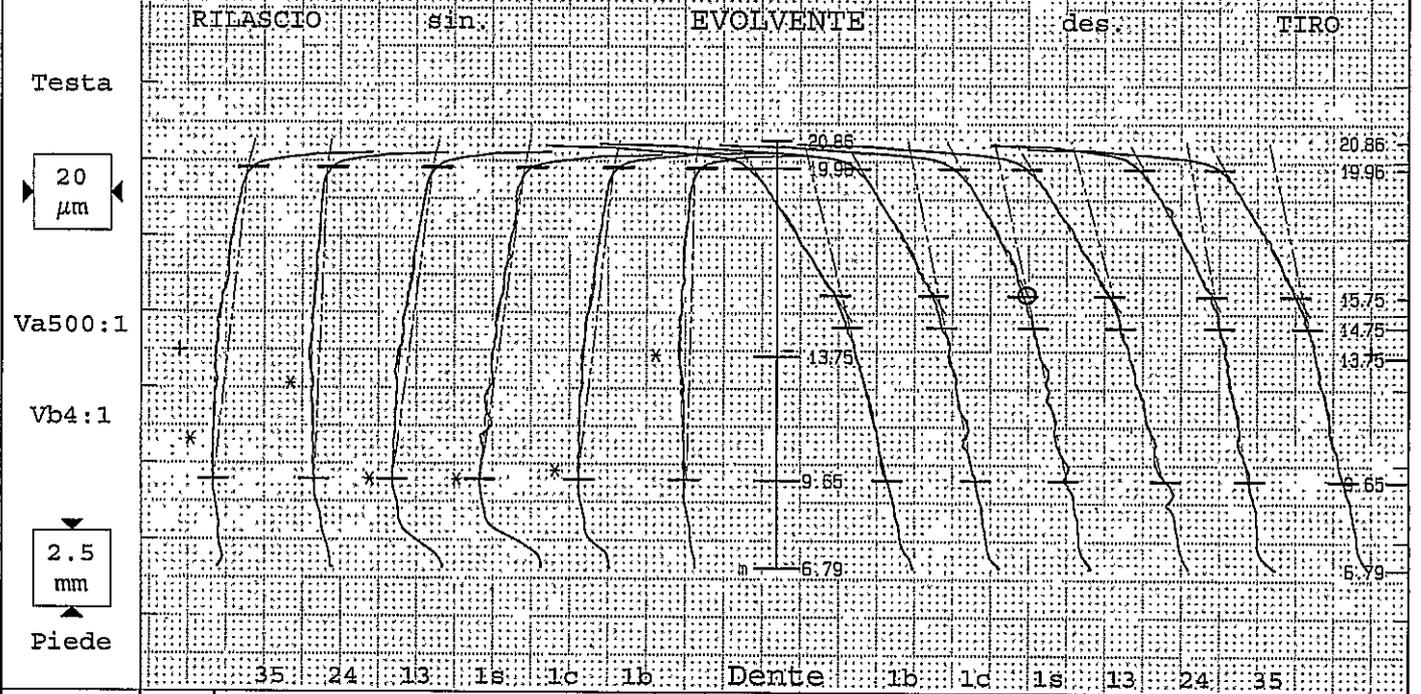
N:Z		Var β								Var β									
fHSm	±6	-2	Var β							2	±6	Var β							0
fHs	±13	-2	-1	-3	-3	-6	-2	4	±13	5	2	-6	2	2	2	2			
Fβ		4	3	4	4	5	4	5		5	4	6	5	4	3				
fFβ	4	1	1	1	1	2	1	1	4	1	1	1	2	2	3				
CB	1/5	4	4	4	3	2	4	4	1/5	2	3	4	4	3	3				



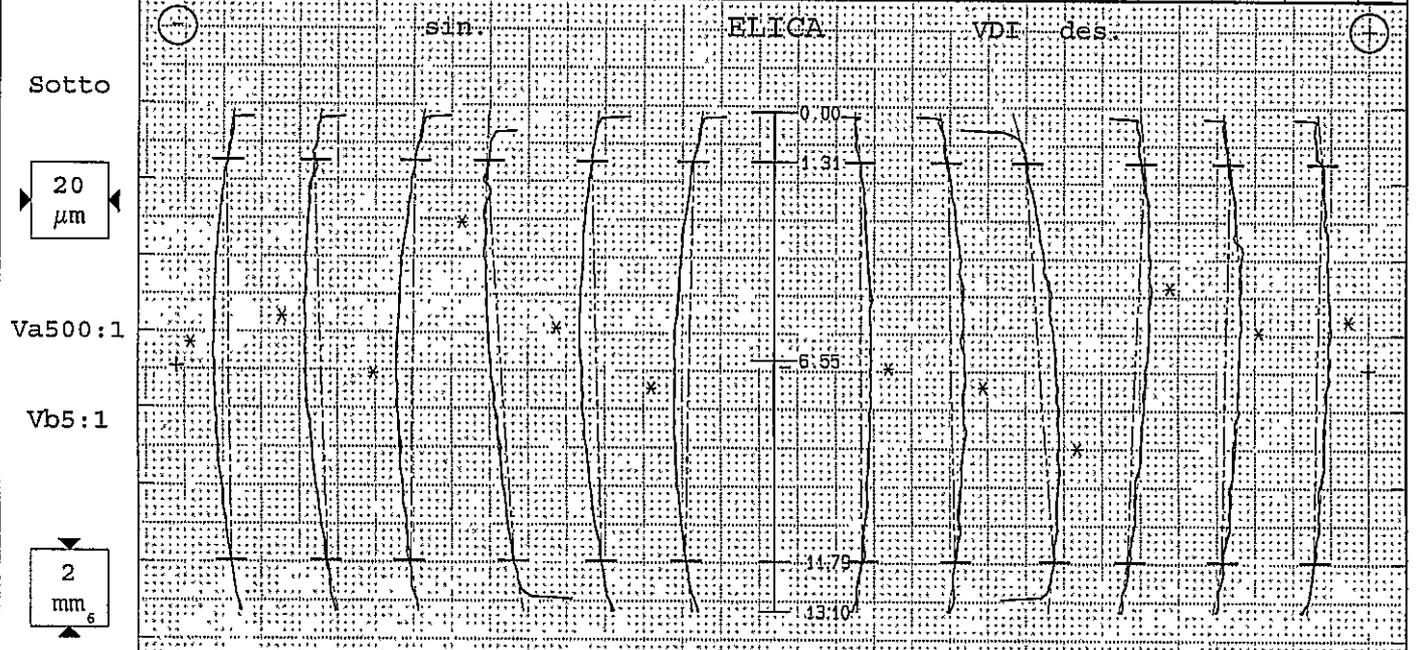
Ruota cilindrica Evolvente/Elica



Nr. prog.: STI0412 06 0	P26 B7681	Controllore: turno c	Data: 12.01.2015 12:53
Denominazione: ZR5	Numero denti z 45	Largh.fasc.dent. b 13.1mm	
Numero disegno.: 250.1.3654.36-IPA	Modulo m 1.65mm	Tratto evolv. La 10.31/5.1mm	
Comessa/serie nr.: 3	Angolo pressione 17°30'00"	Tratto elica LS 10.48mm	
Masch.Nr.: M001	Spindel: Form. ev. elica 29°00'00"	Inizio elab. M1 9.65mm	
Untersuchungszweck: Laufende Messung	Ø Base db 79.863mm	Palpatore Ø (#2C) 1mm	
Werkzeug: Charge:	Ang. Base 27°32'25"	Fat.scor.pr. x .17	



Tolerance	Medio	Val.misur [µm]							Qual	Tolerance	Val.misur [µm]							Medio	Qual
fHm	-6±6	Var a 7								-6±6	Var a 4							-9	
fHa	-6±10	-8	-9	-3	-10	-11	-9	-2		-6±10	-10	-8	-9	-11	-7	-9	-9		
fα		5	5	3	6	8	4	4			5	3	4	6	2	4	4		
ffa	4	2	2	2	2	3	2	2		4	1	3	2	2	2	1	2		
ca	2/6	2	3	2	2	1	2	3											
fko		0	0	0	0	0	0	0		-22/-14	-15	-14	-10	-13	-12	-13	-13		



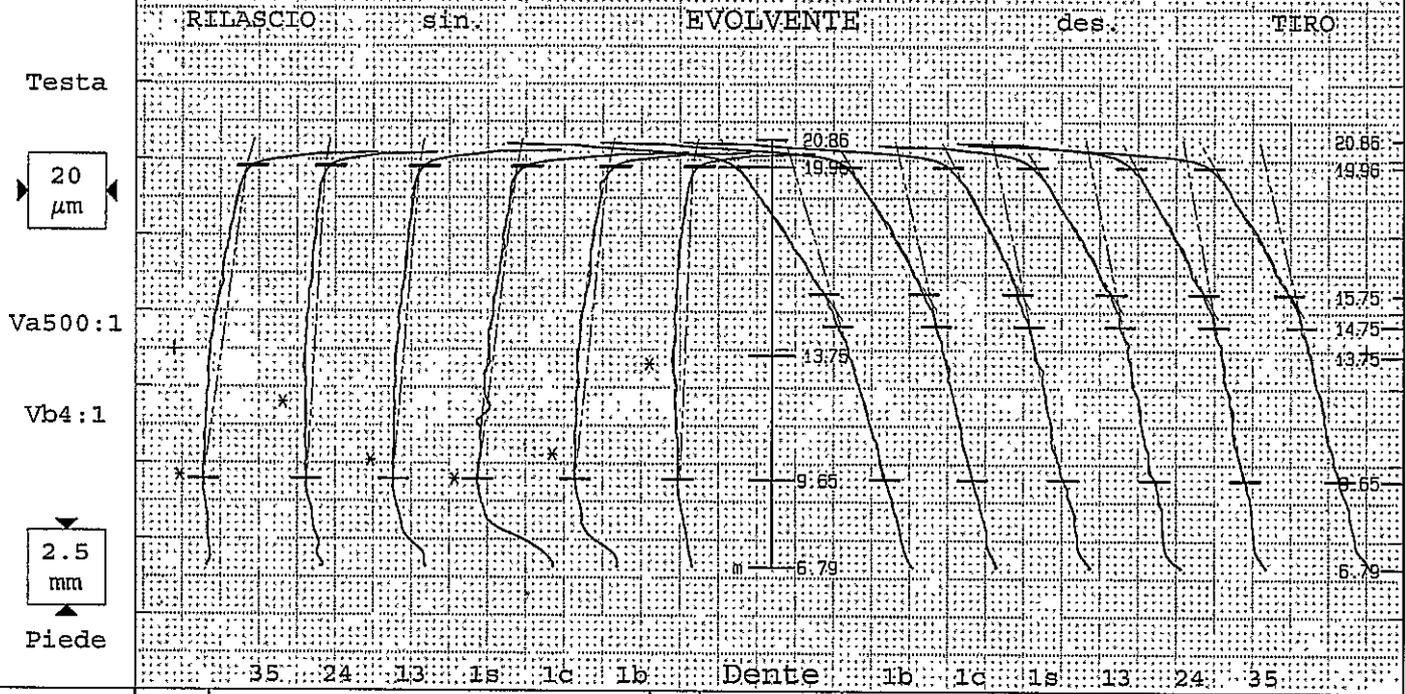
N:Z	sin.							Dente	des.									
fHβm	±6	Var β 5								±6	Var β 8							3
fHβ	±13	-2	-2	-4	1	-9	-3	3		±13	-1	-2	-9	6	3	3	3	
fβ		5	4	5	4	8	5	4			2	5	8	5	5	3	5	
ffβ	4	1	1	1	1	2	1	1		4	1	1	1	2	2	1	2	
CS	1/5	4	4	4	4	3	4	4		1/5	3	3	4	3	4	3	3	



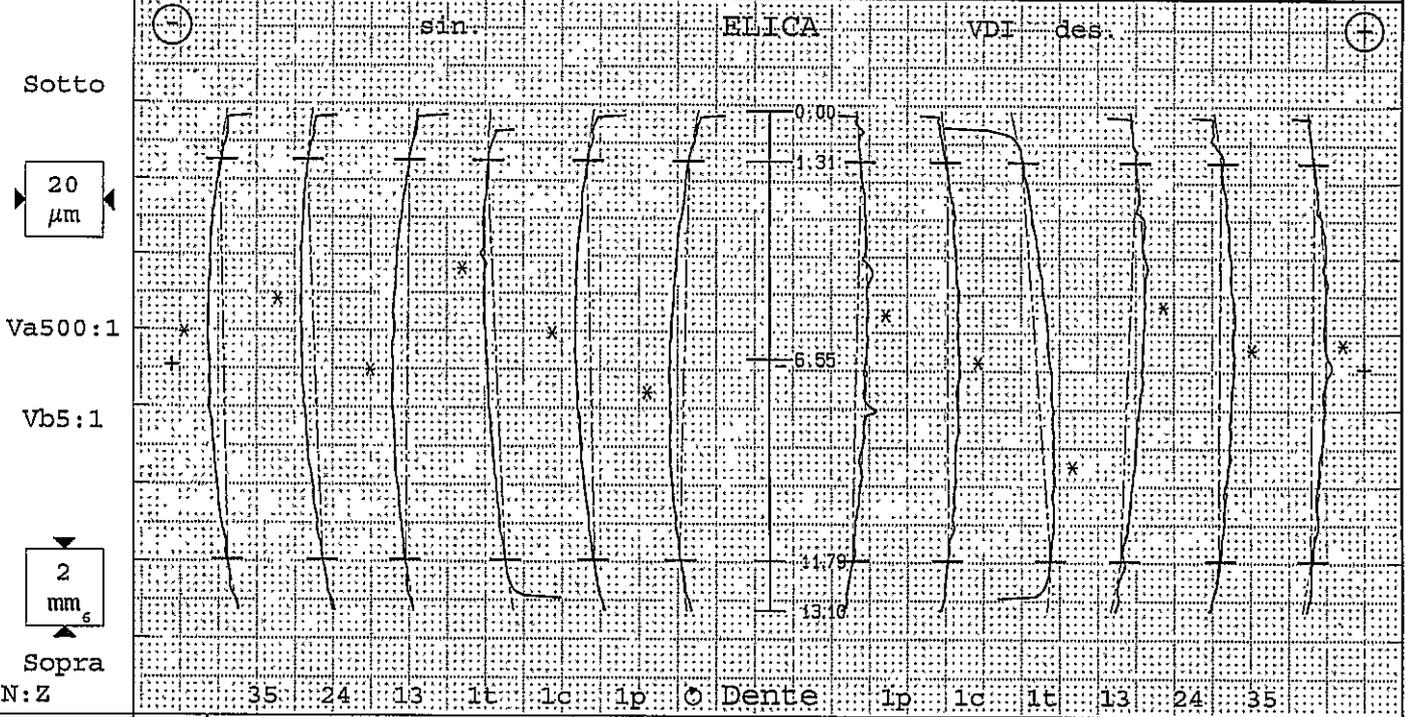
Ruota cilindrica Evolvente/Elica



Nr. prog.: STI0412 06 0	P26 B7681	Controllore: turno c	Data: 12.01.2015 12:55
Denominazione: ZR5		Numero denti z 45	Largh.fasc.dent. b 13.1mm
Numero disegno.: 250.1.3654.36-IPA		Modulo m 1.65mm	Tratto evolv. La 10.31/5.1mm
Commessa/serie nr.: 4		Angolo pressione 17°30'00"	Tratto elica Ls 10.48mm
Masch.Nr.: M001	Spindel: Forme	Angolo elica 29°00'00"	Inizio elab. M1 9.65mm
Untersuchungszweck: Laufende Messung		Ø Base db 79.863mm	Palpatore Ø (#2C) 1mm
Werkzeug:	Charge:	Ang. Bass 27°32'25"	Fat.scor.pr. x .17



Tolerance	Medio	Val. misur [µm]						Qual	Tolerance	Val. misur [µm]						Medio	Qual	
fHm	-6±6	-8	Var a 6							-6±6	Var a 2						-8	
fHa	-6±10	-8	-11	-5	-7	-10	-8	-3	-6±10	-12	-9	-8	-8	-7	-9	-8		
Fa	4	4	7	2	2	7	5	3	6	4	3	3	2	4	3			
ffa	4	2	2	2	2	4	3	2	4	1	1	2	1	1	1			
Ca	2/6	3	3	2	2	2	3	3										
fKo		0	0	0	0	0	0	0	-22/-14	-14	-13	-11	-14	-14	-13	-14		



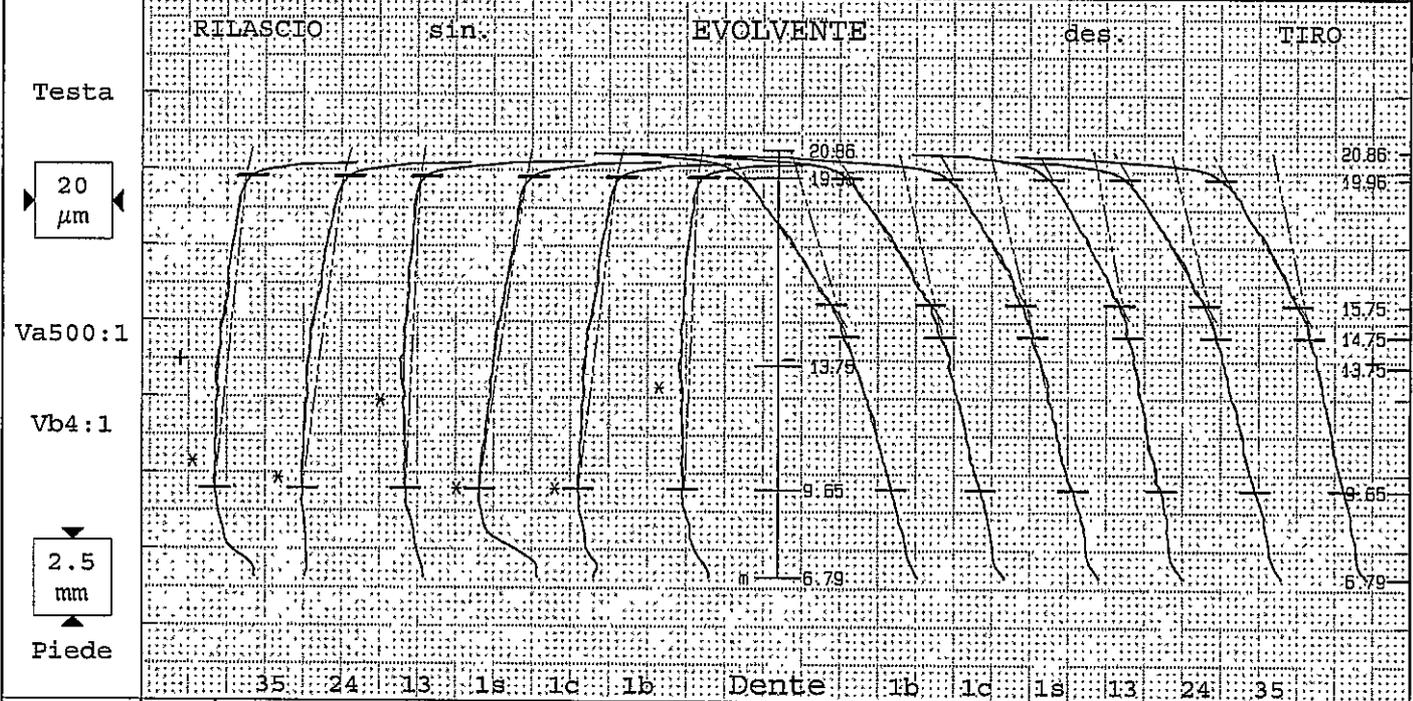
N:Z		35	24	13	1t	1c	1p	0	Dente	1p	1c	1t	13	24	35		
fHBm	±6	-2	Var β 6							±6	Var β 5						2
fHB	±13	-2	-3	-5	1	-6	-2	3	±13	3	0	-9	5	1	1	2	
FB	4	4	5	4	6	4	4		5	3	8	6	3	4	4		
FFB	4	1	1	1	1	1	1		4	4	1	1	2	1	2		
CB	1/5	4	4	3	4	3	4		1/5	3	3	4	4	4	4		



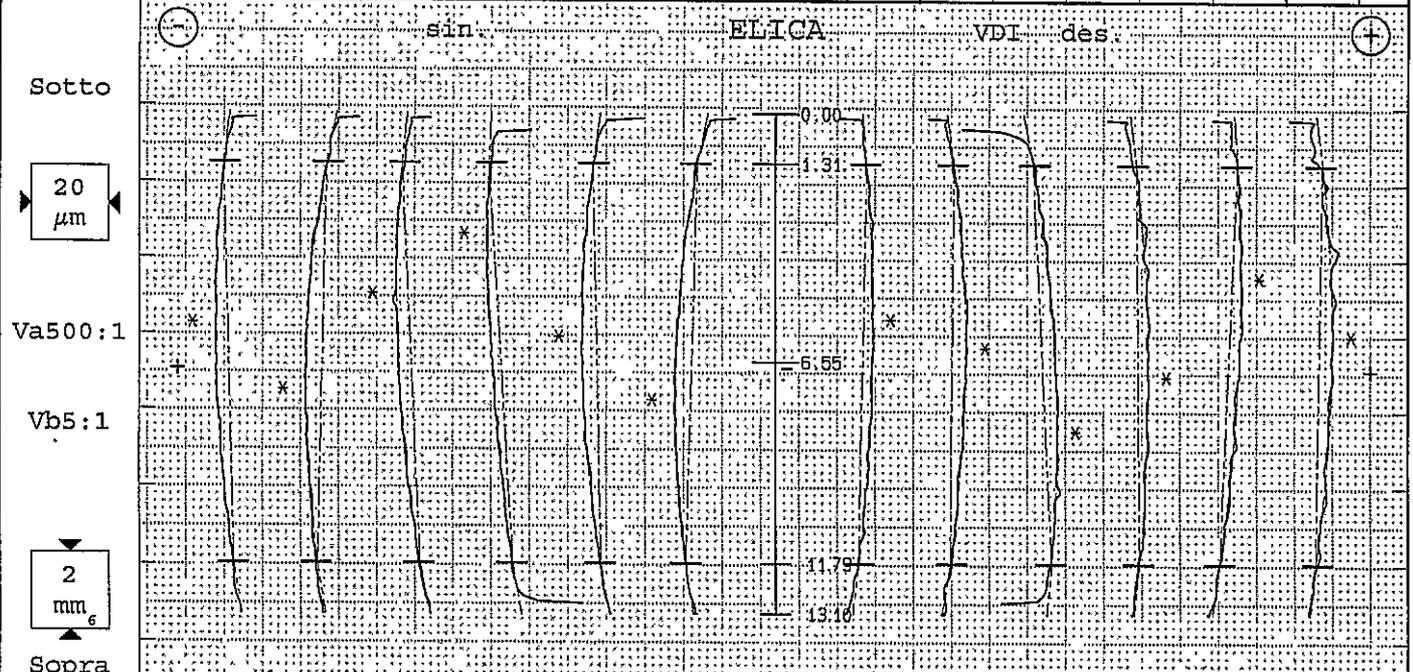
Ruota cilindrica Evolvente/Elica



Nr. prog.: STI0412 06 0	P26 B7681	Controllore: turno c	Data: 12.01.2015 12:58
Denominazione: ZR5		Numero denti z 45	Largh.fasc.dent. b 13.1mm
Numero disegno.: 250.1.3654.36-IPA		Modulo m 1.65mm	Tratto evolv. La 10.31/5.1mm
Comessa/serie nr.: 5		Angolo pressione 17°30'00"	Tratto elica Ls 10.48mm
Masch.Nr.: M001	Spindel: Formest	Angolo elica 29°00'00"	Inizio elab. M1 9.65mm
Untersuchungszweck: Laufende Messung		Ø Base db 79.863mm	Palpatore Ø (#2C) 1mm
Werkzeug:	Charge:	Ang. Base 27°32'25"	Fat.scor.pr. x 17



Tolerance	Medio	Val.misur [µm]							Qual	Tolerance	Val.misur [µm]							Medio	Qual	
FHm	-6±6	-8	Var a 7								-6±6	Var a 2							-9	
FHa	-6±10	-8	-8	-11	-4	-12	-10	-3		-6±10	-12	-10	-10	-8	-10	-8	-9			
Fa		5	4	6	3	8	5	3			6	5	5	3	4	3	4			
ffa	4	2	2	2	2	2	2	2		4	2	1	1	1	1	1	1			
Ca	2/6	2	2	3	2	1	2	2												
Fko		0	0	0	0	0	0	0		-22/-14	-14	-14	-11	-12	-13	-13	-13			

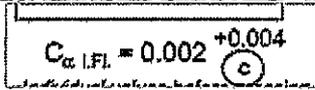


N:Z		Var β 9								Tolerance	Var β 7								
FHSm	±6	-2	Var β 9								±6	Var β 7							2
FHS	±13	-2	-3	3	-6	-8	-2	4		±13	3	1	-6	-1	6	2	2		
FS		5	4	5	6	6	4	5			4	3	6	3	5	5	4		
ffS	4	1	1	1	2	1	1	1		4	1	1	2	2	2	3	2		
CS	1/5	4	3	4	3	2	4	4		1/5	3	4	3	3	3	3	3		



Gear data update from index "b" to "c"
(No change on final Drawing)

Short description:



PPAP Requirements		Required	Note
1	Design Records	Yes	
2	Authorized Engineering change documents	Yes	see dwg
3	Customer Engineering approval	n.a.	
4	DFMEA	NO	
5	Process flow diagram(s)	NO	
6	PFMEA	NO	
7	Control plan	NO	only change on diagram tol.
8	Measurement system analysis studies	NO	
9	Dimensional results	Yes	
10	Records of Material / Performance test results	NO	
11	Initial process studies	NO	
12	Qualified laboratory documentation	NO	
13	Appearance Approval Report (A.A.R.)	n.a.	
14	Sample Production Parts	Yes	
15	Master sample	Yes	
16	Checking aids	n.a.	
17	Customer-Specific Requirements	NO	
18	Part Submission Warrant (PSW)	Yes	

PPAP Docs updated
Yes
Yes
Yes
Yes
Yes
Yes

Other requirements			
1	PSW Raw part	NO	
2	PSW E.P. part	NO	
3	PSW Engagement Rings	NO	
