



OUTSIDE CYLINDRICAL TOOTHING DATA		
- HELICAL GEAR -		
NUMBER OF TEETH	Z	43
NORMAL MODULE	m	2.75
FRONTAL MODULE	m _f	2.89871
CORRECTION FACTOR	x	0.75078
PITCH DIAMETER	d	12.89446
OUTSIDE DIAMETER	d _a	13.862.3
INSIDE DIAMETER	d _i	12.57.8
BASE DIAMETER	d _b	11.845029
NORMAL PRESSURE ANGLE	α _n	20°
FRONTAL PRESSURE ANGLE	α _f	21°38' 51"
NORMAL TOOTH THICKNESS ARC ON PITCH CYL	s _n	5.842363
CHORDAL ADDENDUM		13.393993
CHORDAL THICKNESS		5.00
DIAMETER OF THE CONTROL BALLS		
HELIX ANGLE	β	23°30'
HAND OF HELIX		LEFT
BACKLASH	j	0.12
NUMBER OF TEETH IN MATING GEAR	Z	43
REF. NO. OF MATING GEAR		
CHORDAL ADDENDUM AT RANGE OF ENGAGEMENT	a	132.502
CENTER DISTANCE W/O BACKLASH		
MAX DIAMETER AT START OF ACTIVE PROFILE	d _a	12.812443
CROWNING		
TOOTH FACE WIDTH	b	20
REF. DISTANCE TO CHECK G. ON MAG INVOLUTE TESTER		22.64827
HELIX ANGLE ON G	β	22°00' 21"
TOOTH CENTER LINE DISTORTION		0.03

OPTIONAL MATERIAL: SAE 8620H

DIN 17210 20MnCr5 or 16MnCr5 STEEL FORGING

PHOSPHATE TREATMENT FOR SCUFF RESISTANCE


CHANGE IN DESIGN, COMPOSITION OR
PROCESSING FROM THE PART PREVIOUSLY
APPROVED FOR PART PRODUCTION REQUIRES
PRIOR ENGINEERING APPROVAL



HEAT TREATMENT		
CARBONIZING		
SURFACE HARDNESS	HRC	58 ± 62
CASE DEPTH	mm	0.6-0.8
CASE DEPTH	HRC	52
HARDNESS	HRC	
TOOTH CORE OR ROOT	HRC	35-40
HARDNESS	HRC	
TOOTH CORE OR ROOT	HRC	115-130
STRENGTH	kgf/mm ²	
RETAINED AUSTENITE	%	20

DATE LET IN	REVISIONS	DR CR
7-2-86	RELEASED	L743
7-6-87	CNT-E-022574	N YLS
AI	ADDED NOTE	
11-3-89	CNT-E-024038	37
WAS CAR-122491		
CID-1316		

FOR APPROVED PART SOURCE SEE ENGINEERING APPROVED
SOURCE LIST

RESTRICTIONS TO HELP SAFEGUARD HEALTH, SAFETY AND THE ENVIRONMENT APPLY TO SUBSTANCES USED IN THE ITEM(S) ADDRESSED BY THIS DOCUMENT. ENGINEERING MATERIAL SPECIFICATION 82872328 APPLIES

 <h1>PRODUCT ENGINEERING</h1>														
MILLIMETRES OR ORIGINAL FORMAT														
10	20	30	40	50	60	70	80	90	100	120	150	200	300	400
DO NOT SCALE ABOVE SCALE FOR REFERENCE ONLY														
REF														
DRAWN BY DATE					CHECKED SCALE					APPROVED COW				
<i>Boydell 12.11.88</i>					<i>W. J. 12.11.88</i>					<i>W. J. 12.11.88</i>				
UNLESS OTHERWISE SPECIFIED														
DIMENSIONS ARE IN MILLIMETRES														
MACHINED DIM :														
ANGULAR DIM :														
1st ANGLE PROJECTION														
STAMPED DIM :														
DIM A														
MATERIAL U7846-78					1st ANGLE PROJECTION					DATE				
Steel forging					(See note)					12.11.88				
NAME					DRAWN BY					DATE				
										12.11.88				

03	AGGIORNATO DISEGNO / GRAPHIC UPDATED.			
03	AGGIORNATO DISEGNO COME DA DISEGNO CNH/UPDATED DRAWING AS PER CNH DESIGN			
REV. REV.	DESCRIZIONE CHANGE			
NOTE / ISTRUZIONI PRELIMINARI E MODIFICHE AL CARBONO S.P.A. SONO IL COMPONENTE ESISTENTE IL CARBONO S.P.A. QUESTO DOCUMENTO NON E' UNO DEI DOCUMENTI ESISTENTI IN ALCUN MODO ESISTE UTILIZZATO ALL INFORMATION PRELIMINARY AND MODIFICATIONS TO CARBON S.P.A. ARE THE COMPONENTS EXISTING IN CARBON S.P.A. THIS DOCUMENT IS NOT ONE OF THE DOCUMENTS EXISTING IN ANY MANNER EXISTS UTILIZED AND NOT BE RELAYED TO OTHER PARTIES WITHOUT WRITTEN CONSENT BY CARBON S.P.A. ANY INFORMATION WILL BE LEGALLY FORGIVEN				
MATERIALE STD STD MATERIAL	DISEGNATO DRAWN	SAINATH MUKTA		
MATERIALE OPT OPT MATERIAL	APPROVATO APPROVED	PEDRO DI DONATO		
TREAT. TERM. HEAT TREAT.	DATA DATE	15/05/2014CLFUNK FUNCTION.		
TREAT.SUPERF. SURF.TREAT.	RIF. GENERALI GENERAL REFS.	CARRARO STD. 0-20-90		
PRODOTTO ASSEMBLY	DROP BOX 4WD			
INDICAZIONE DESCRIPTION	GEAR-OUTPUT Z=43			
 CARRARO DRIVETECH CARRARO DRIVETECH S.p.A. - Via Olmo, 37 35011 CAMPODARSEGO (PD)-ITALY		MODELLO N. CASTING REF. SOST. / REPLACES BISEGNO N. PART N. CA122491	A1  SCALA SCALE TRAY SHEET	da 1:1 1/1