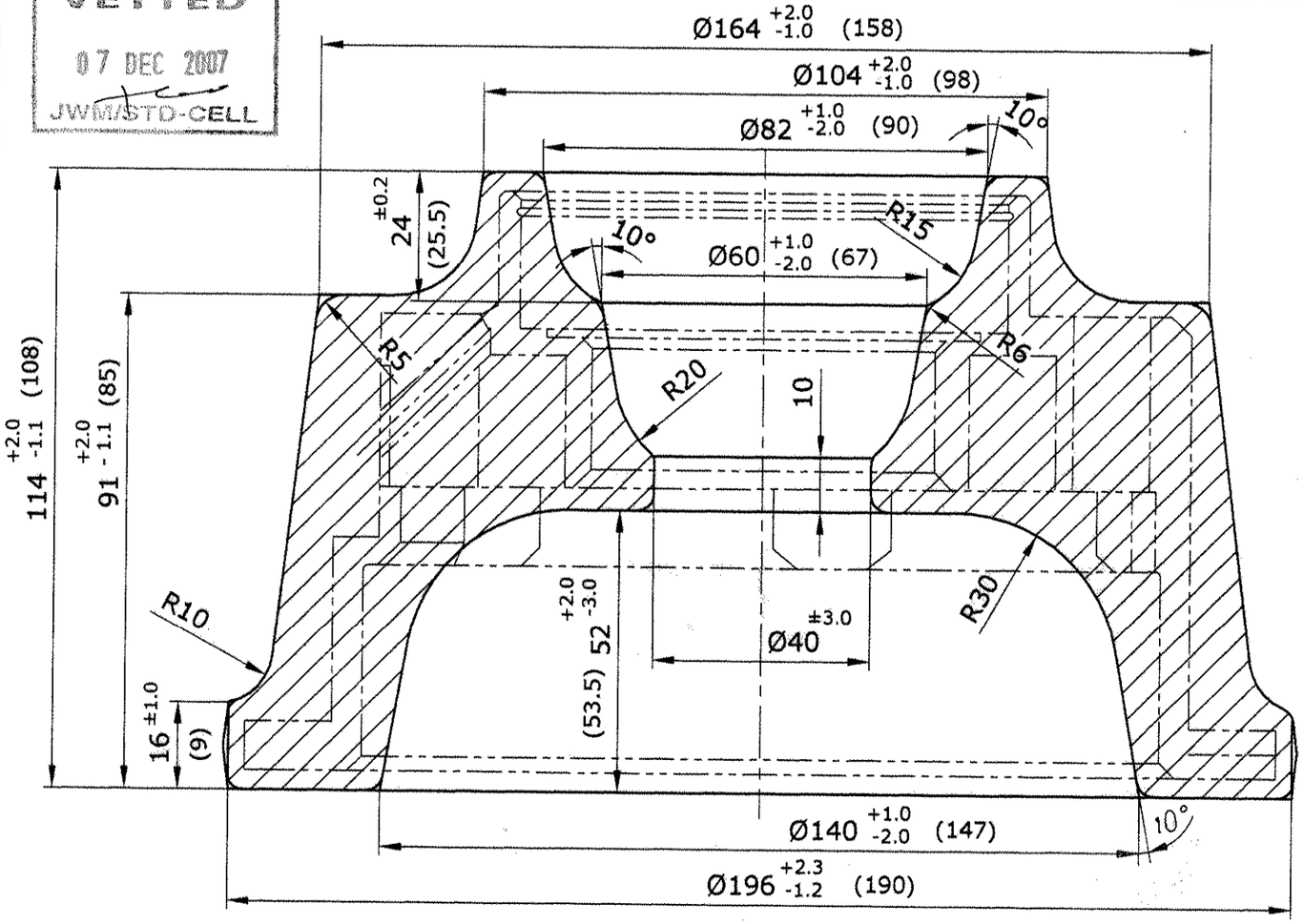
VETTED
07 DEC 2007
JWM/STD-CELL



CHEMICAL COMPOSITION (%)		
ELEMENT	STEEL 38XC GOST 4543-71	STEEL 817M40 (EN-24) BS: 970-83
C	0.34 - 0.42	0.36 - 0.44
Si	1.00 - 1.40	----------
Mn	0.30 - 0.60	0.45 - 0.70
Cr	1.30 - 1.60	1.00 - 1.40
Ni	0.30 MAX.	1.30 - 1.70
Cu	0.30 MAX.	0.025 MAX.
Mo	----------	0.20 - 0.35
S	0.035 MAX.	0.040 MAX.
P	0.035 MAX.	0.035 MAX.

MECHANICAL PROPERTIES		
DESCRIPTION	STEEL 38XC GOST 4543-71	STEEL 817M40 (EN-24) BS: 970-83
LIMITING RULING SECTION	------	63 mm
HEAT TREATMENT CONDITION	------	V
TENSILE STRENGTH	95 Kgf/mm ^{2} MIN.	1000-1150 MPa
YIELD STRENGTH	75 Kgf/mm ^{2} MIN.	850 MPa MIN.
RELATIVE ELONGATION	12 % MIN.	12 % MIN.
RELATIVE COMPRESSION	------	
REDUCTION OF AREA	50 % MIN.	------
HARDNESS BHN	285 - 341	285 - 341
IMPACT STRENGTH	7 Kgf.m/cm ^{2} MIN.	------
IZOD	------	35 MIN.
KCV (CHARPY)	------	42 MIN.
0.2% PROOF STRESS	------	835 MPa MIN.

ALTERNATE MATERIAL :-
STEEL 817M40 (EN-24) TO BS: 970-83

AUTHORITY :-
CQA(HV) LETTER No.
O91/IFD/IND-V/MTPF/OE
DATED 17.03.2005

TECHNICAL REQUIREMENTS.

1. HEAT TREAT.DIA.OF IND. ≥ 3.8 (BHN 285-341)
2. DESCALE.
3. SURFACE DEFECTS AND SCALE PITS UPTO 0.5 OF ACTUAL ALLOWANCE ARE ALLOWED.
4. MISMATCH SHOULD NOT EXCEED 1.2 MM.
5. RESIDUAL FIN SHOULD NOT EXCEED 1.5MM.
6. BUCKLING SHOULD NOT EXCEED 1.2 MM.
7. UNSPECIFIED DRAFTS = 7°
8. UNSPECIFIED RADII = R 3.0 MM.
9. MARK PART NO.
10. FOLDING OF FIN ALLOWED IN PIERCED HOLE.
11. MACHINING DIMENSIONS ARE SHOWN IN BRACKETS.
12. UNTOLERANCE DIMENSIONS ARE FOR CONSTRUCTION.
13. ECCENTRICITY OF PIERCED SHOULD NOT EXCEED 2 mm.
14. PAINT RED OXIDE.
15. PILOT SAMPLE SHOULD BE APPROVED BEFORE BULK SUPPLY.

@ 16. FORGING TO BE SUPPLIED IN SHOT BLASTED AND NORMALISED CONDITION (HARDNESS: 236 BHN MAX)

VETTED
18 NOV 2005
JWM/QC

AF/RC

इन आरेखणो तथा इसके साथ की सम्पूर्ण सामग्री का स्वत्वाधिकार भारत सरकार रक्षा मंत्रालय की भारतीय आयुध निर्माणियों के पास है। भारतीय आयुध निर्माणियों के महानिदेशक की लिखित अनुमति के बिना इनकी नकल या किसी भी रूप में इनके उद्धरण या इनमें समाहित सूचना किसी अनधिकृत व्यक्ति को उपलब्ध नही कराई जानी चाहिए ।

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मूलमाप व अन्वायोजन NOMINAL SIZE & FIT	विचलन DEVIATION

BODY (FORGING)		STEEL 38XC	GOST 4543-71		MASS = 13.0 Kg.
संख्या NO.OFF	विवरण DESCRIPTION	पुर्जा क्र. PART NO.	पदार्थ MATERIAL	मानक STANDARD	परिमाप DIMENSIONS	अभ्यक्ति REMARKS

सामान्य सहिष्णुता GENERAL TOLERANCE	
रेखिक परिमाप LINEAR DIMENSION	
0-6	±0.1
6-30	±0.2
30-120	±0.3
120-315	±0.5
315-1000	±0.8
1000-2000	±1.2
कोणिक परिमाप ANGULAR DIMENSION	
1-10	±1°
10-50	±30'
50-100	±20'
>100	±10'
मापांक 'म्यू एम' में VALUE IN "um"	
~	>25
▽	8-25
▽▽	1.6-6
▽▽▽	0.025-1.6
▽▽▽▽	<0.025

			@	NOTE NO.16 added		21/10/05	
संख्या NO.OFF	संबंधित पुर्जोका आरेखण क्र. DRG. NO. OF ASSOCIATED PART	सूचक INDEX	संशोधन ALTERATION		2005	दिनांक DATE	नाम NAME

BODY (FORGING DRG.)
FOR COMPONENT DRG. NO. 175-47-027
TRANSMISSION GEAR UNIT (CODE-45 / T-72 & T-90)

मापमान SCALE 1:1

आरेखित DRAWN	17.11.05	krb
जाँचा CHECKED	21.11	
अनुमोदित APPROVED		
द्वारा बदला REPLACED BY		
हेतु बदला REPLACED FOR		

मशीनी औजार आदिरूप फैक्टरी, अम्बरनाथ
MACHINE TOOL PROTOTYPE FACTORY, AMBERNATH

कार्यालय OFFICE D.O

आरेखण क्र. DRAWING NO. 175-47-027 / F

J.T.6M/D Shri S. Saladen confirmed BHN 285-341 machinable, 21.11.05

DEVELOPED AS PER CQA(HV) DRG.