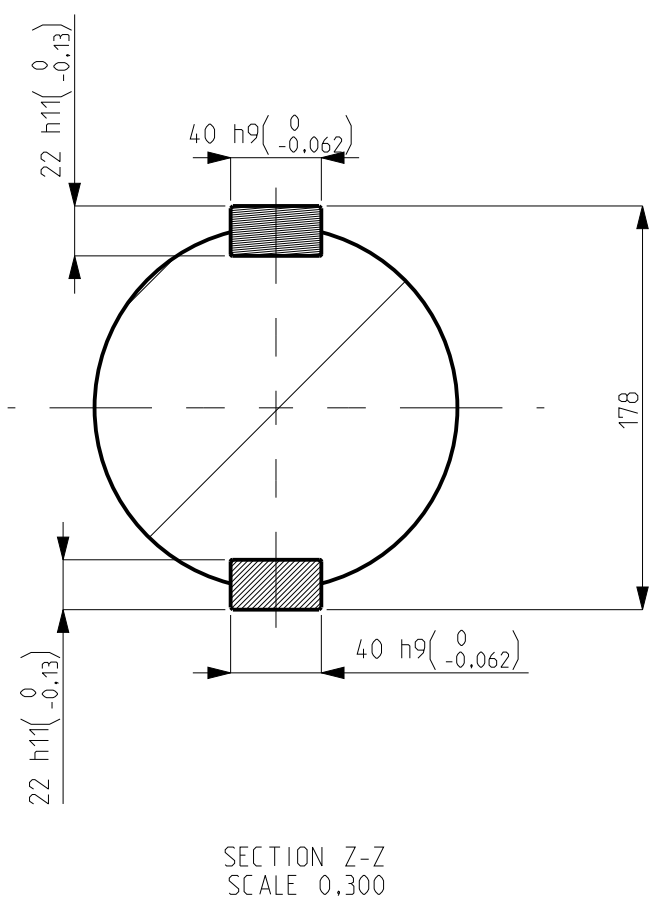



N	LUPKIN ITEM	PROBE	TAG
O	TE11	HS NDE RADIAL BEARING RTD'S	SEE TABLE ON WIRING DIAGRAM
	TE12	HS DE RADIAL BEARING RTD'S	
	TE13	LS NDE RADIAL BEARING RTD'S	
	TE22	LS DE RADIAL BEARING RTD'S	
	TE31	HS NDE THRUST BEARING RTD'S	
	TE32	HS DE THRUST BEARING RTD'S	
	VE11	HS NDE RADIAL VIBRATION PROBE "X"	
	VE13	HS NDE RADIAL VIBRATION PROBE "Y"	
	VE14	HS DE RADIAL VIBRATION PROBE "X"	
	VE15	HS DE RADIAL VIBRATION PROBE "Y"	
	VE21	LS NDE RADIAL VIBRATION PROBE "X"	
	VE22	LS NDE RADIAL VIBRATION PROBE "Y"	
	VE23	LS DE RADIAL VIBRATION PROBE "X"	
	VE24	LS DE RADIAL VIBRATION PROBE "Y"	
P	KF11	HS KEYPHASOR	
	KF21	LS KEYPHASOR	
	AC12	HS DE ACCELEROMETER	
	AC22	LS DE ACCELEROMETER	
	ZE11	HS AXIAL VIBRATION "Z"	
	ZE13	HS AXIAL VIBRATION "Z"	
	ZE21	LS AXIAL VIBRATION PROVISION "Z"	



AMBIENT TEMP. °C	ALIGNMENT DATA (MM)					
	RADIAL MECHANICAL & THERMAL MOVEMENT				AXIAL THERMAL GROWTH	
	HS HORI "B"	HS VERT "A"	HS HORI "D"	LS VERT "C"	HS AX "E"	LS AX "F"
-36 °C / 113 °C	-0.044	+1.206	+0.667	+0.983	+0.629	-1.219
0 °C / 75.2 °C	-0.044	+0.886	+0.451	+0.663	+0.296	-0.843
45 °C / 30.2 °C	-0.044	+0.506	+0.195	+0.283	+0.140	-0.398

NOTE:

- 2. Estimated unit weight: 3804 Kg
- 3. Heaviest maintenance weight: 1202Kg (Assembly Shaft)
- 3. Connecting piping must be cleaned before operation
- 4.  Denotes center of gravity
- 5. Vibration equipment set points:
 - HS pinion radial displacement:
 - Alarm: 50.8 μ m peak to peak
 - Shutdown: 76.2 μ m peak to peak
 - LS shaft radial displacement:
 - Alarm: 63.5 μ m peak to peak
 - Shutdown: 101.6 μ m peak to peak
 - HS axial displacements into babbit
 - Alarm 127 μ m INTO BABBIT
 - Shutdown 254 μ m INTO BABBIT

PLEASE REFER TO DOC NO: NTF19221 FOR THE MONITORING OF THE REAL AXIAL PROBES SET POINTS". THESE VALUES ARE ESTIMATES ONLY. END USER MAY DICTATE FINAL ALARM AND SHUTDOWN VALUES WHICH MAY BE HIGHER OR LOWER THAN THESE STARTING VALUES. FOR ANY CHANGES LUFKIN HAS TO BE CONSULTED

6. Lasing vibration Set points:

- Alarm: 6 g's
- Shutdown: Shutdown on Acceleration not recommended

7. Temperature monitoring equipment set points.

- Embedded temperature sensor in bearing shell load zone
- Alarm: 107 °C
- Shutdown: 116 °C

STATIC & DYNAMIC (EACH BOLT):

HS SIDE : -1161 N
LS SIDE : -17512 N
(EACH BOLT)
HS SIDE : +15253 N
LS SIDE : -33927 N

9. Thrust bearing clearance:
0.254/0.356 mm

PRESSURE DAM ORIENTATION

LUFKIN FRANCE

FLOWSEWER

144209

CUSTOMER / CLIENT
CUSTOMER ORDER #
N° COMMANDE CLIENT
LUFKIN ORDER #
N° COMMANDE LUFKIN
SERIAL NUMBER / MATRICULE

353190 to 353192

30-760 30-761 30-762 30-763 30-764
30-765 30-766 30-767 30-768 30-769

INPUT RPM. OUTPUT 33821 RPM. RATIO
ENTRÉE TR/min. SORTIE Tr/min. RAPPORT 3.4843

NORMAL POWER TO BE TRANSMITTED
PUISSANCE NORMALE A TRANSMETTRE

6700 kW

NORMAL TORQUE @ 1/5 SHAFT
COUPLE NORMAL SUR ARBRE PV

16917 mNm

EXCEPTIONAL TORQUE @ 1/5 SHAFT
COUPLE EXCEPTIONNEL SUR ARBRE PV

56750 mNm

SERVICE FACTOR / FACTEUR DE SERVICE

20 API 613 5TH

RECOND. LUBE OIL

AGMA - 1

HUILE OIL CONSILLÉE

ISO VG 46

MAX OIL FLOW

655

GPM. @

PSI. @

DEBIT D'HUILE MAXI

248

L/min. @

200

80 °F

UNITS LESS LUBE SYSTEM

APPAREILS SANS INSTALLATION DE GRAISSAGE

REQ'D. WATER FLOW

GPM. @

°F MAX

DEBIT D'EAU REQUIS

L/min. @

°C MAX

HEAT REJECTION RATE


491540

KJ/Hr

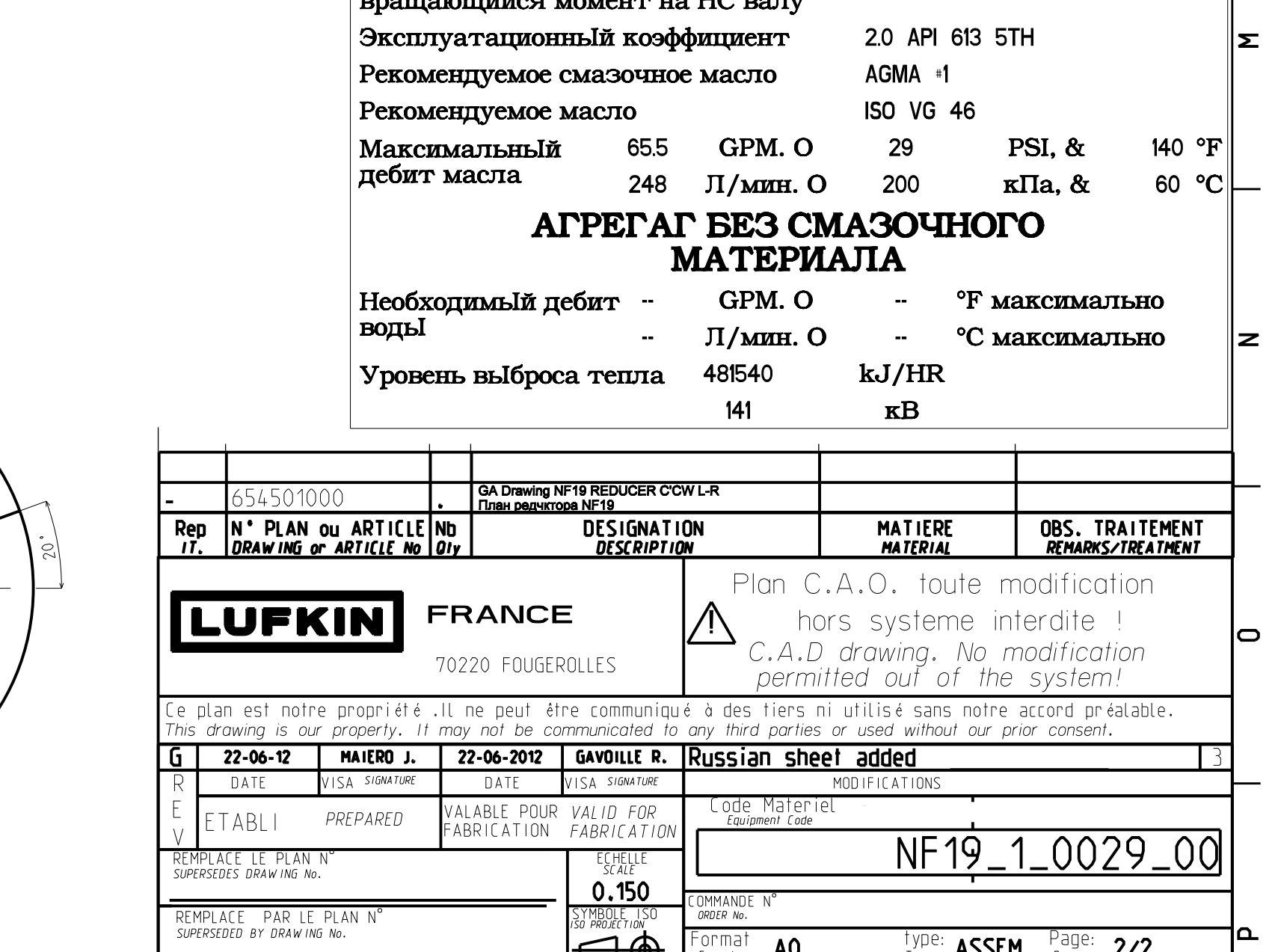
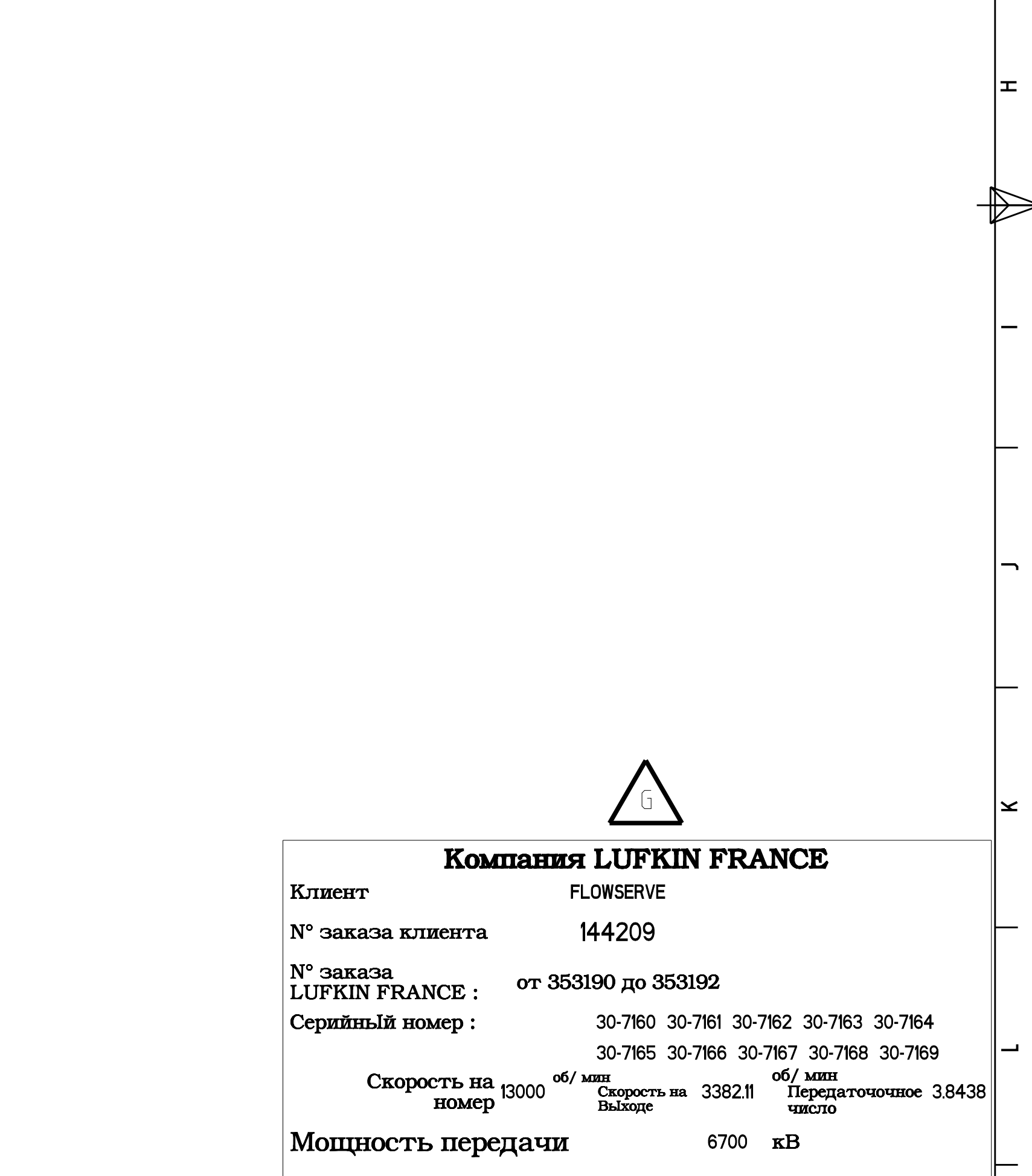
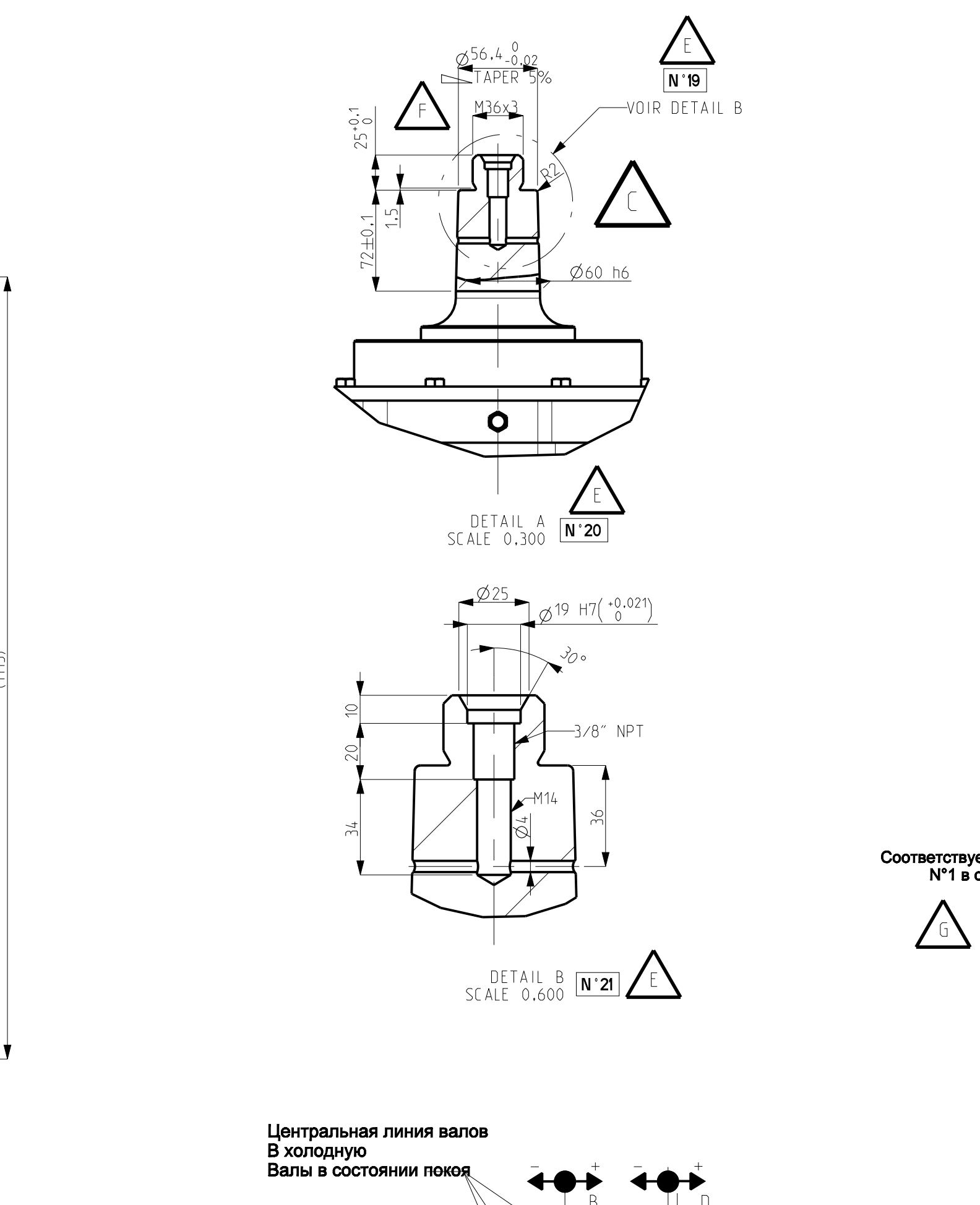
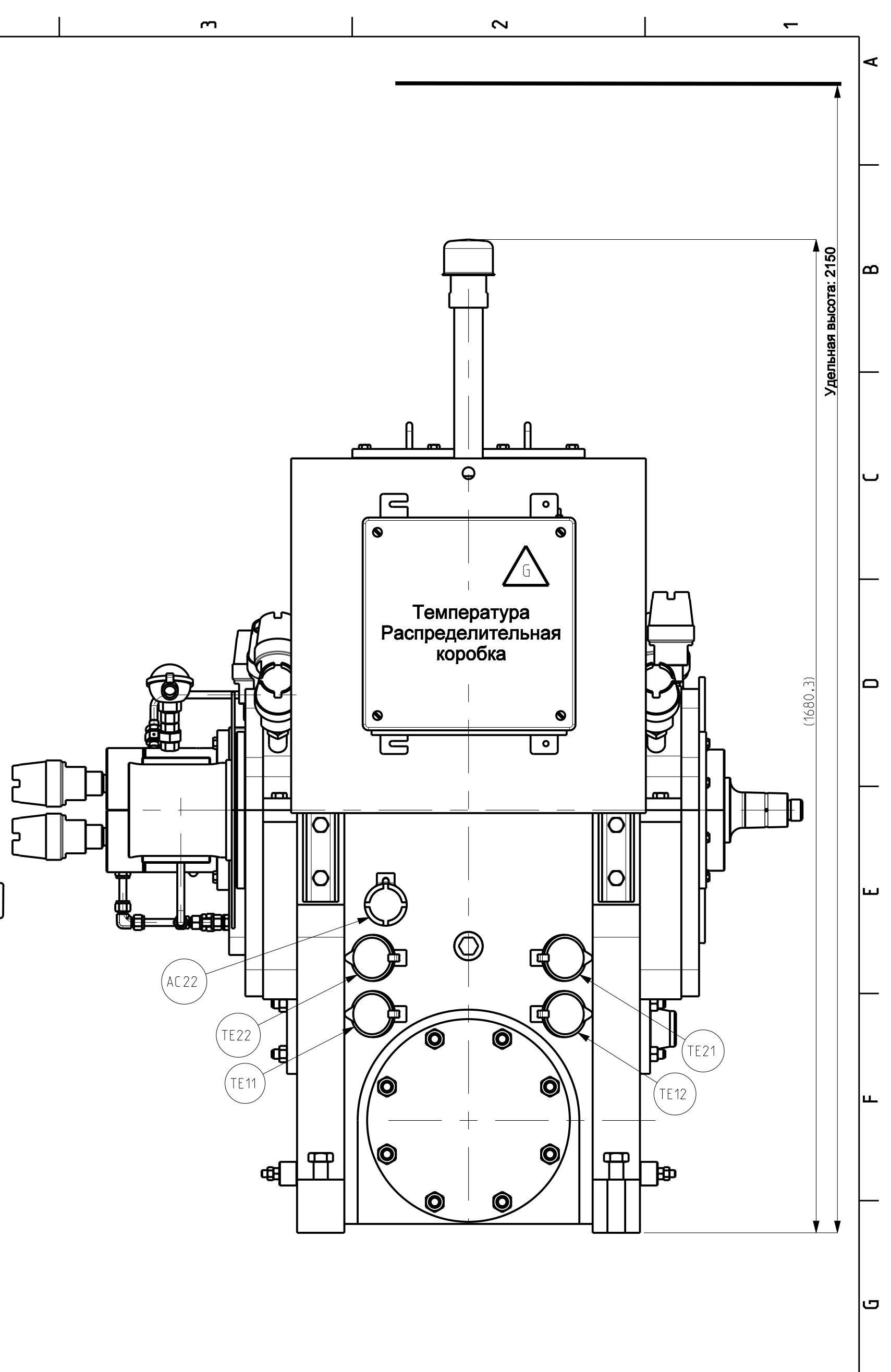
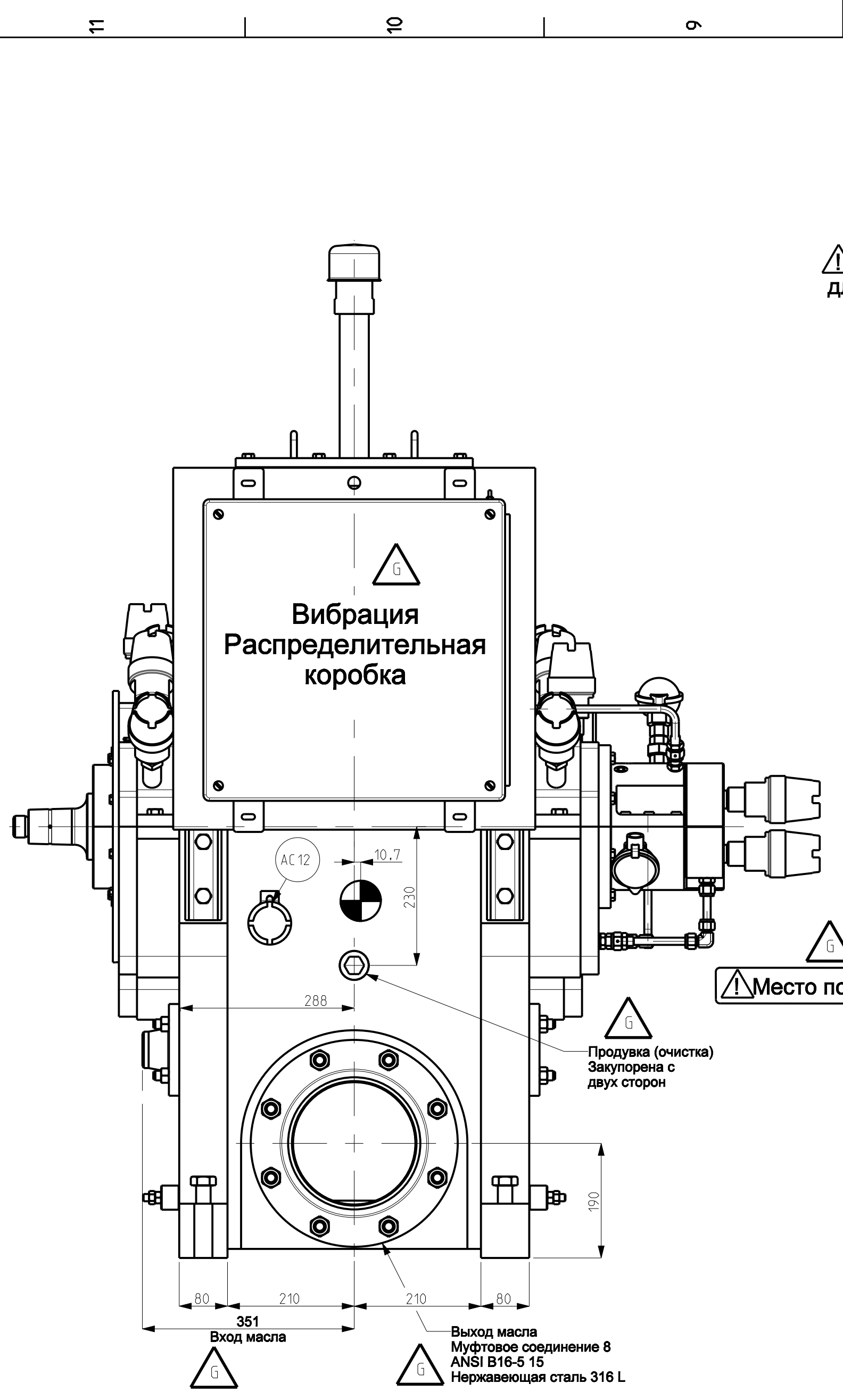
CALORIES A EVACUER

141

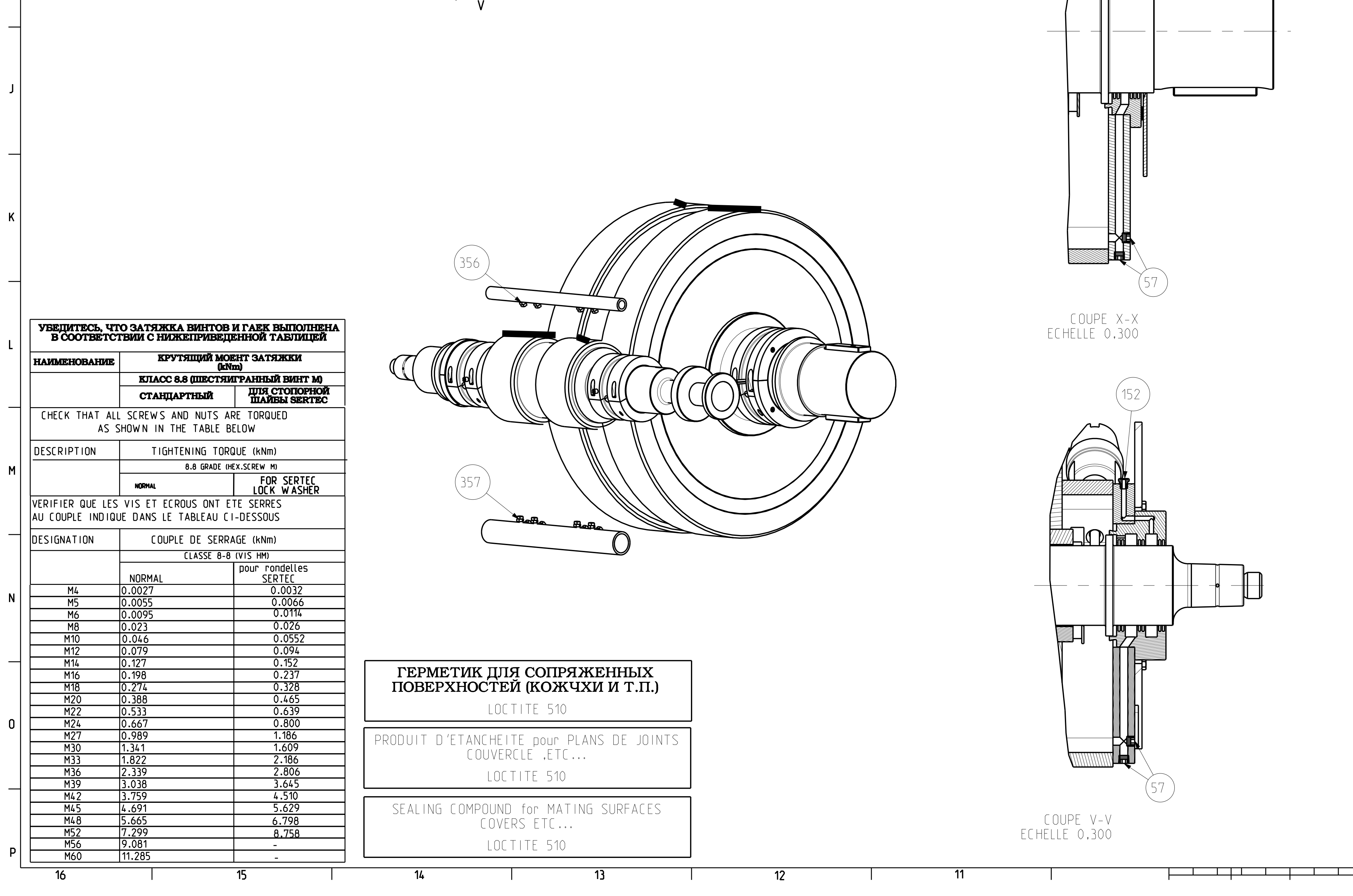
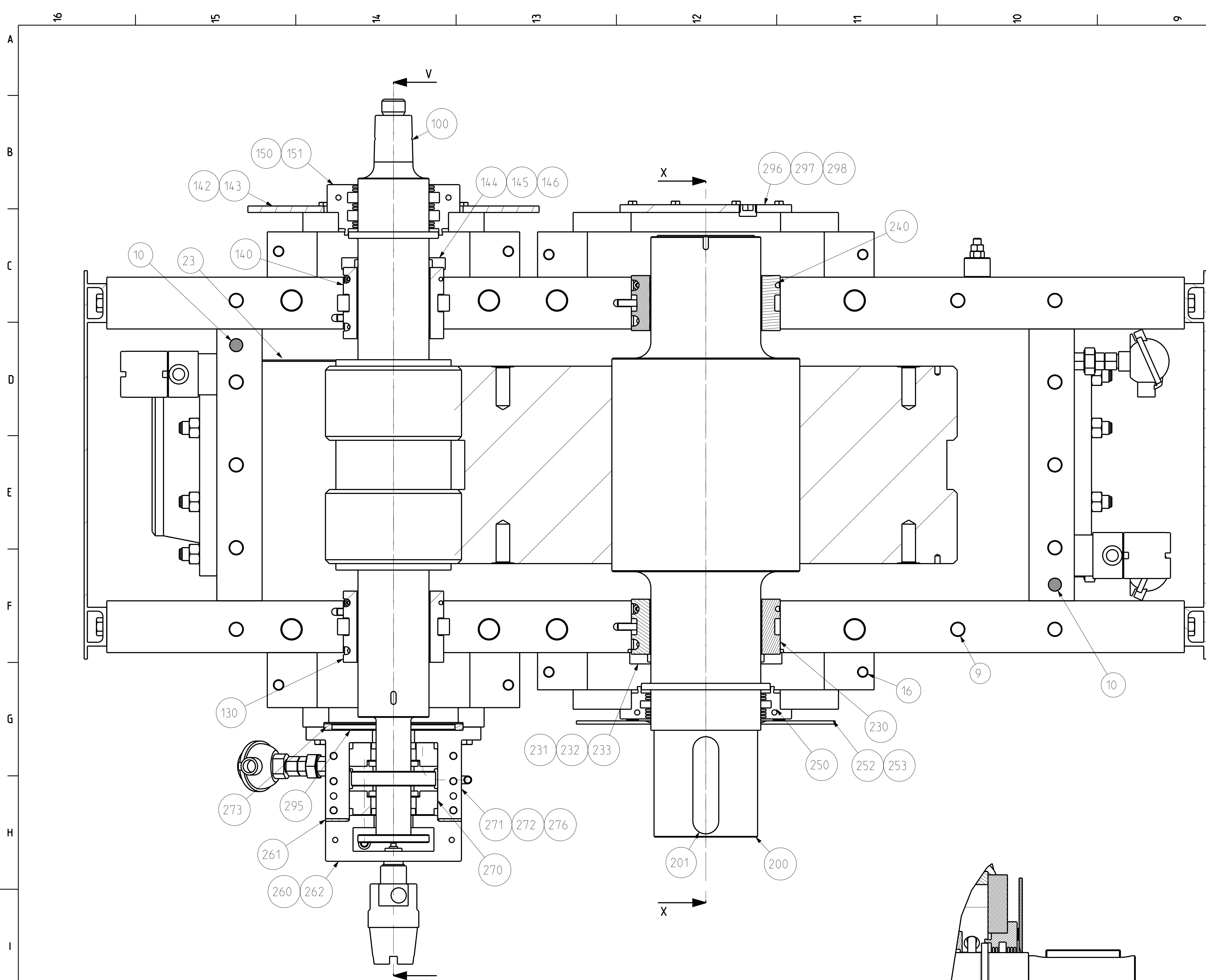
KW

054501000		04 Drawing No REPRODUCIBLE COWI	
Rep. IT	N° PLAN ou ARTICLE No	DESIGNATION	MATIERE MATER
	Describing an article No. (by)		OBS. TRAITEMENT
			RECHERCHES/INVENT
		FRANCE	
70220 FOURGEOULES			
Le plan est notre propriété. Il ne peut être communiqué à des tiers ni utilisé sans notre accord préalable. Ce drawing is our property. It may not be communicated to other parties or used without our prior consent.			
G	DATE 15/04/2010	MURERO J	22-06-2010
G	DATE 15/04/2010	GAVOILLE R	RUSSEAN THOMAS
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/04/2010	SIGNED	SIGNED
G	DATE 15/		

FABRICATION



Температура окружающей среды	Данные по центрированию (в мм)					
	Радиально-механические и термические движения				Осевые термические возрастание	
	ВС горизонтально вдВ	ВС вертикально вдВ	НС горизонтально вдВ	НС вертикально вдВ	ВС аксиально вдВ	НС аксиально вдВ
-38 °C / +11 °C	-0.044	+1.206	+0.667	+0.983	-0.629	-1.219
0 °C / +75.2 °C	-0.044	+0.886	+0.451	+0.663	-0.296	-0.843
45 °C / +92.2 °C	-0.044	+0.506	+0.195	+0.283	+0.740	-0.398

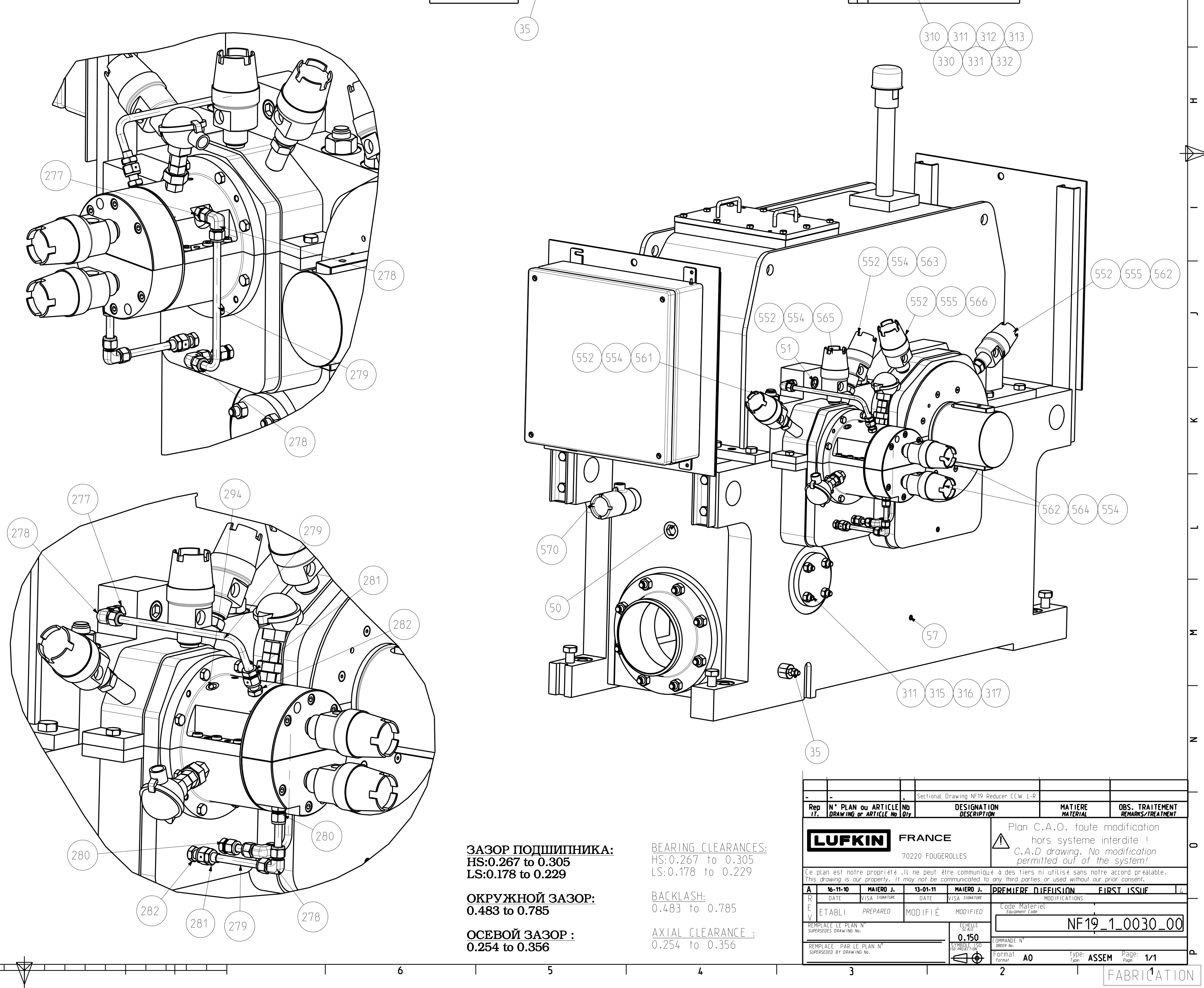
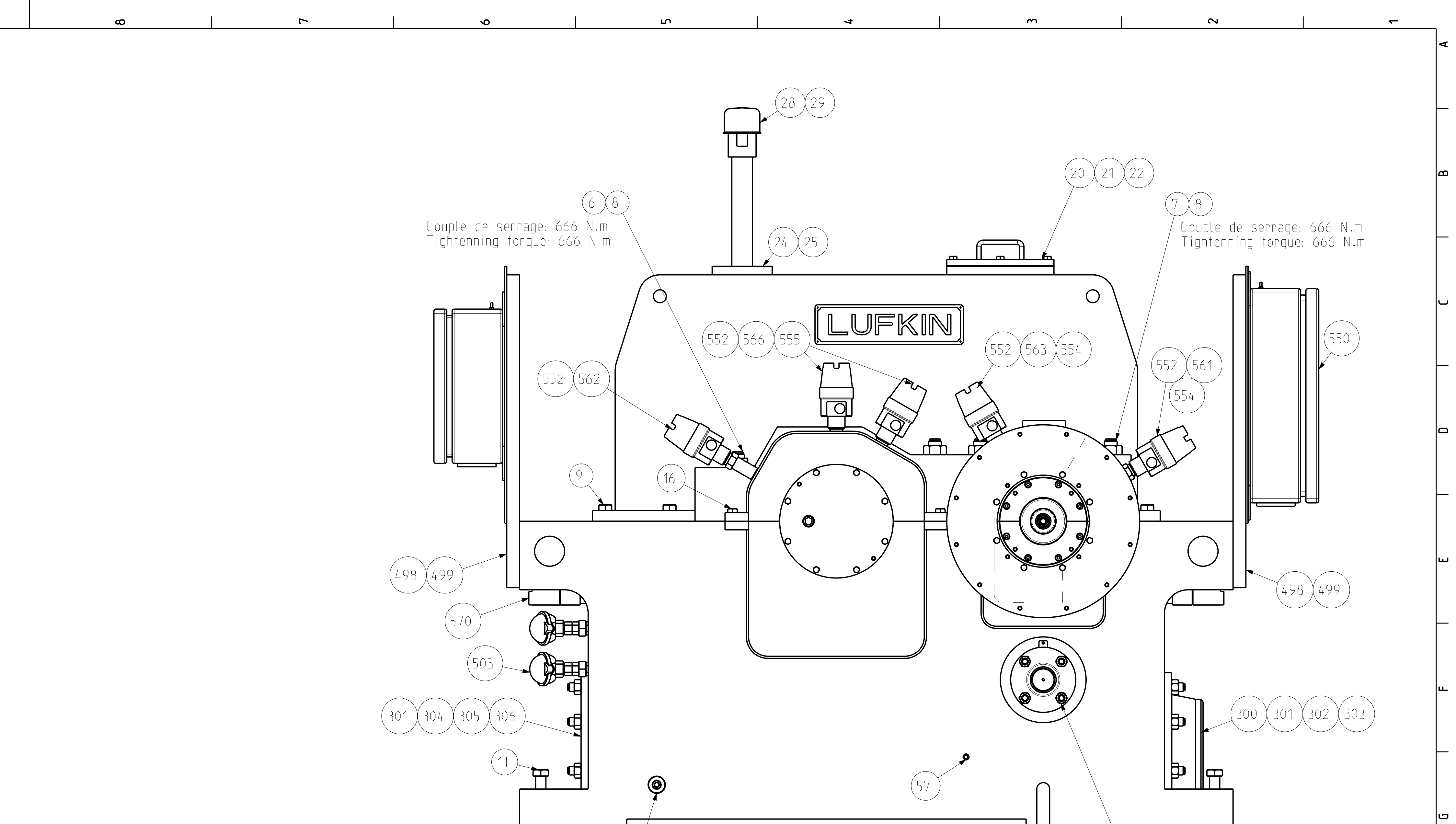


УБЕДИТЕСЬ, ЧТО ЗАТЯЖКА ВИНТОВ И ГАЕК ВЫПОЛНЕНА В СООТВЕТСТВИИ С НИЖЕПРИБЕДЕННОЙ ТАБЛИЦЕЙ		
НАИМЕНОВАНИЕ	КРУТЯЩИЙ МОМЕНТ ЗАТЯЖКИ (N.m)	
	КЛАСС 8.8 (ШЕСТИГРАННЫЙ ВИНТ М)	СТАНДАРТНЫЙ
CHECK THAT ALL SCREWS AND NUTS ARE TORQUED AS SHOWN IN THE TABLE BELOW		
DESCRIPTION	TIGHTENING TORQUE (N.m)	
	8.8 GRADE (HEX.SCREW M)	FOR SERTEC LOCK WASHER
VERIFIER QUE LES VIS ET ECROUS ONT ETE SERRES AU COUPLE INDIQUE DANS LE TABLEAU CI-DESSOUS		
DESIGNATION	COUPLE DE SERRAGE (N.m)	
	(CLASSE 8-8 (VIS M))	pour rondelles SERTEC
M6	0.0027	0.0032
M5	0.0055	0.0066
M6	0.0095	0.0114
M8	0.023	0.026
M10	0.046	0.0552
M12	0.079	0.094
M14	0.127	0.152
M16	0.198	0.237
M18	0.274	0.328
M20	0.388	0.465
M22	0.533	0.639
M24	0.667	0.800
M27	0.989	1.186
M30	1.341	1.609
M33	1.822	2.186
M36	2.339	2.806
M39	3.038	3.645
M42	3.759	4.510
M45	4.691	5.629
M48	5.665	6.798
M52	7.299	8.758
M56	9.081	-
M60	11.285	-

ГЕРМЕТИК ДЛЯ СОПРЯЖЕННЫХ ПОВЕРХНОСТЕЙ (КОЖЧХИ И Т.П.)
LOCTITE 510

PRODUIT D'ETANCHEITE pour PLANS DE JOINTS COUVERCLE ,ETC....
LOCTITE 510

SEALING COMPOUND for MATING SURFACES COVERS ETC...
LOCTITE 510



ЗАЗОР ПОДШИПНИКА:
HS:0.267 to 0.305
LS:0.178 to 0.229

ОКРУЖНОЙ ЗАЗОР:
0.483 to 0.785

ОСЕВОЙ ЗАЗОР :
0.254 to 0.356

BEARING CLEARANCES:
HS:0.267 to 0.305
LS:0.178 to 0.229

BACKLASH:
0.483 to 0.785

AXIAL CLEARANCE :
0.254 to 0.356

-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Project : 353191 NF1919E KROPOT- 3382RPM

Manufactured Item: 35319100

NF19_1_0030_00

Rev : A

Customer: 3055 FLOWSERVE BV

NF19_1_0029_00 F

Pos.	Item	Drawing Number	Net Quantity
1	6545014900 Housing, machined	NF19_2_0149_00	1 pcs
5	7201926530 Machine-made, threaded rod M30x265	V21.02_0_0265_30	6 pcs
6	7188923530 Threaded rod M30x235 low T°		2 pcs
7	7188926530 Threaded rod M30x265 low T°	V21.02	6 pcs
8	7365200030 Nut H M30 low T°		8 pcs
9	7520205520 Screw H M20x55 low T°		12 pcs
10	7330009020 Taper pin 20x90	V15.04_0_0090_20	2 pcs
11	7503312024 Jacking screw M24x120 low temperature		4 pcs
16	7520204014 Screw H M14x40 low T°		8 pcs
20	6545010701 Inspection cover 393x250x15	NF19_2_0107_01	1 pcs
21	6545011300 Gasket for inspection cover	NF19_2_0113_00	1 pcs
22	7520203010 Screw H M10x30 low T°		10 pcs
23	7888015600 drain cap 156x48	C80_51_2_0156_00	1 pcs
24	6504004300 Baffle for breather		1 pcs
25	7520001006 Screw H M6x10	V01.01_0_0010_06	2 pcs
28	E7079010 Breather, 1"1/2 NPT SST		1 pcs
29	6503006000 Breather adapter	N12_2_0060_00	1 pcs
35	8508000045 NP earth stud without block		2 pcs
45	7137000000 Plate showing rot.direction	SPE01.01	2 pcs
46	7196000502 Rivet LGC-CTR1 2x5	V16.02_0_0005_02	4 pcs
47	8218000001 LUFKIN plate	SPQ01.16	1 pcs
48	8012000804 Grooved rivet 4x8	V16.03_0_0008_04	4 pcs
50	7577004800 Taper plug BRIGGS - 1"1/2	G15.34_0_0048_00	2 pcs
51	7577004200 Taper plug, BRIGGS - 1"1/4	G15.34_0_0042_00	2 pcs
57	7077001400 Taper plug, hex. socket CR-D1/4"	G15.50_0_0014_00	6 pcs
100	6545015800 Pinion HS 32 t mod.: 5.50	NF19_2_0158_00	1 pcs
130	7657011007 Journal bearing HS diam. 110 remachined	C80_16_2_0110_07	1 pcs
140	7657011008 Journal bearing HS diam. 110 remachined	C80_16_2_0110_08	1 pcs
142	6545015400 Adapter for coupling guard	NF19_2_0154_00	1 pcs
143	7557102508 Hex.soc.hd cap screw SSt A4 M08x25		8 pcs
144	7320011000 Oil collector Dia.110	C80_52_2_0110_00	1 pcs
145	7557002006 Hex.soc.hd cap screw M6x20 grade 8.8	V03.21_0_0020_06	4 pcs
146	7769000006 SERTEC lock washer NL M 6	V11.15_0_0000_06	4 pcs
150	8465911000 Labyrinth seal, assembled	C80_48_2_0110_00	1 pcs
151	7557104508 Hex.soc.hd cap screw SSt A4 M8x45		8 pcs
152	7970100109 Protection for vent 1/8" NPT		1 pcs
200	6545016000 Assembly, gear/shaft	NF19_2_0160_00	1 pcs
201	6230023639 Key flat both ends 40x22x115	SR_2_0236_39	2 pcs
230	7890017001 Journal bearing LS Ø170	C80_13_2_0170_01	1 pcs
231	7320017000 Oil collector Dia.170	C80_52_2_0170_00	1 pcs
232	7557002006 Hex.soc.hd cap screw M6x20 grade 8.8	V03.21_0_0020_06	4 pcs
233	7769000006 SERTEC lock washer NL M 6	V11.15_0_0000_06	4 pcs
240	7890017002 Journal bearing LS Ø170	C80_13_2_0170_02	1 pcs
250	7053917000 Labyrinth seal, assembled	C80_49_2_0170_00	1 pcs
252	7254017000 Windage baffle Ø170	C80_47_2_0170_00	1 pcs
253	7724103508 Screw FHc/90 SSt, M8x35		8 pcs
260	6545015300 KTB housing cover JJ-5	NF19_2_0153_00	1 pcs
261	6545016200 Peel shim for KTB 5"	NF19_2_0162_00	1 pcs
262	7557207010 Hex.soc.hd cap screw M10x70 low T°		6 pcs
270	6545015200 Thrust bearing KTB JJ5, remachined	NF19_2_0152_00	1 pcs
271	6545015100 Junction box KTB JJ5	NF19_2_0151_00	1 pcs
272	7520203510 Screw H M10x35 low T°		8 pcs
273	8463021500 Centring ring Ø215*190*10	C80_10_2_0215_00	1 pcs
276	1683085200 Throttle CML - 3/8"	GR_2_3852_00	2 pcs

Date : 28/07/11 [10:14]
LUFKIN FRANCE SAS

BILL OF MATERIAL - ENGLISH VERSION

Page : 2
Company : 111
Un. : pcs

Project : 353191 NF1919E KROPOT- 3382RPM

Manufactured Item: 35319100

NF19_1_0030_00

Rev : A

Customer: 3055 FLOWSERVE BV

NF19_1_0029_00 F

Pos.	Item	Drawing Number	Net Quantity
277	7970100405 Adapter 1/2"NPT(M)-1/2" OD		2 pcs
278	7970100303 Elbow 1/2" OD		4 pcs
279	8421100112 Tube 1/2" OD ép. 1.65 mm		1,3 m
280	7970100206 Fitting 1/2"NPT(M)-1/2"OD		2 pcs
281	7970102305 Adapter 1/2"NPT(M)-1/2" OD		2 pcs
282	7970102308 Fitting 1/2" NPT(M)-1/2"NPT(F)		2 pcs
294	7577002100 Taper plug BRIGGS - 1/2"	G15.34_0_0021_00	1 pcs
295	7577001700 Hex. socket taper plug BRIGGS - 3/8"	G15.34_0_0017_00	2 pcs
296	8172024500 Closed end cover	C80_42_2_0245_00	1 pcs
297	7520202508 Screw H M8x25 low T°		8 pcs
298	7577002700 Taper plug BRIGGS - 3/4"	G15.34_0_0027_00	1 pcs
300	8649012200 Flange WELDING NECK 150RF 8"	SCH 40	1 pcs
301	8362020200 Gasket for ANSI flange 8"	PN20	2 pcs
302	8075910520 Threaded rod, SSt A4 M20x105		8 pcs
303	7365100020 SST nut hex., M20		8 pcs
304	8114020200 Blind flange ANSI B16.5 150 RF		1 pcs
305	7188910520 Threaded rod M20x105 déc.BasT°	V21.02	8 pcs
306	7365200020 Nut H M20 low T°		8 pcs
310	8649012050 Flange WELDING NECK 150RF 2"	SCH 40	1 pcs
311	8362020050 Gasket for ANSI flange 2"	PN20	3 pcs
312	8075908516 Threaded rod SST A4 M16x85		4 pcs
313	7365100016 Screw, SSt H, M16		4 pcs
315	8114020050 Blind flange ANSI B16.5 150 RF		1 pcs
316	7188908516 Threaded rod 8.8 M16x85 -40°C		4 pcs
317	7365200016 Nut H M16 low T°		4 pcs
330	8561005020 Throttle for flange 2"		1 pcs
331	8278000001 SSt chain		1 m
332	6231033800 Safety hook	SR_2_1338_00	1 pcs
356	7817051417 Nozzle LECHLER 632.514.17.CC	G12.49_0_0514_17	4 pcs
357	7817080417 Nozzle LECHLER 632.804.17.CC	G12.49_0_0804_17	8 pcs
498	6545015500 Bracket, junction box	NF19_2_0155_00	2 pcs
499	7520203516 Screw H M16x35 low T°		8 pcs
500	8508912000 Wiring NF1919E T°+V°	C80_08_2_0120_00	1 pcs
501	7312008000 Temperature box	C80_09_2_0080_00	1 pcs
502	8508003801 Juntion box SSt AQ-8/FR: 350x350		1 pcs
503	8508006512 Cable gland HAWKE		6 pcs
504	7585109800 RTD's PT100 tête INOX Ex-i		2 pcs
505	7585109801 RTD's PT100 tête INOX Ex-i		2 pcs
506	7585109802 RTD's PT100 tête INOX Ex-i		2 pcs
550	7312008100 Junction box equiped for vibration probes	C80_09_2_0081_00	1 pcs
551	8508004001 Junction box SSt AR-8A/FR:516x5		1 pcs
552	E7082882 Bently Nevada probe 330105		12 pcs
553	E7082884 Bently Nevada ext cable 330130		12 pcs
554	8448000301 Proximitior cal 17CrNiMo6		7 pcs
555	8448000302 Proximitior cal 42/50CrMo4		5 pcs
561	8448005000 Prox. Probe Housing BN 24701		2 pcs
562	8448004800 Prox. Probe Housing BN 24701		2 pcs
563	8448004900 Prox. Probe Housing BN 24701		2 pcs
564	8448005100 Prox. Probe Housing BN 24701		2 pcs
565	8448005200 Prox. Probe Housing BN 24701		1 pcs
566	8448005300 Prox. Probe Housing BN 24701		3 pcs
570	E7087499 Accelerometer BN		2 pcs
571	8448000315 Cable Acc. BN 17ft		2 pcs
591	8508000713 Connector annaconda SSt 1/2"-1/2"M-90°		20 pcs