

Fan Selection Order

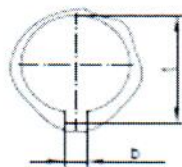
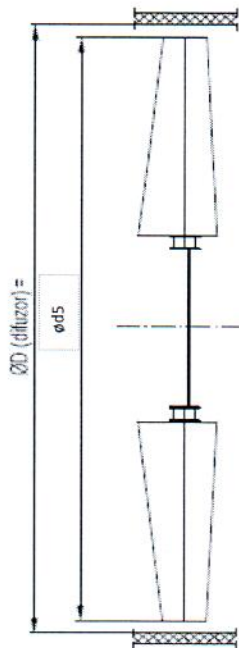
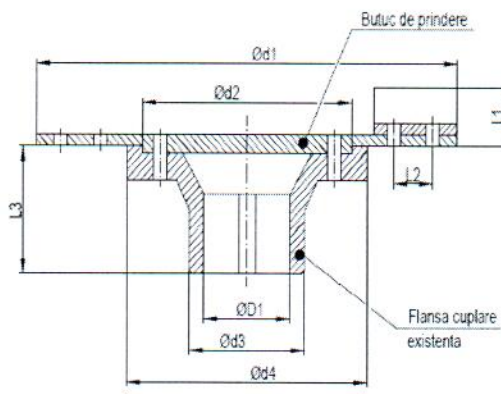
SECTION 1: Customer Details

Pos: 76-A3/1÷6

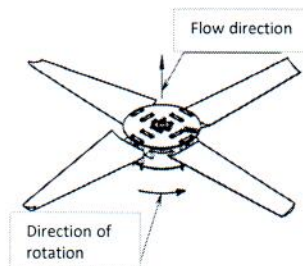
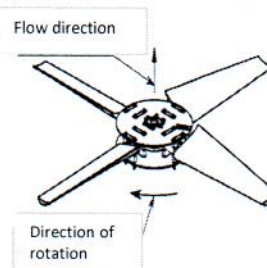
API information required (Mandatory)

End User	Petrotel-Lukoil S.A.	Location:	Onshore-outdoor			
Industry sector	Refinery	Ambient temperature:	min -35°C	x	x	max +45°C
Location	Ploiesti, Prahova-Romania	Position:	Horizontal	-	x	Vertical
Area of Plant *	Isomerisation	Direction of rotation:	CCW	-	x	CW
Fan Duty *	Axial fan					
Company:	PETROTEL-LUKOIL S.A.	Phone no:	+40-766257243			
Engineer:	IORGIOU CIPRIAN	Email:	ciorgoiu@petrotel.lukoil.com			

SECTION 2: Dimensional & Type Details



	Value	Units
d1 (Fan hub OD):	600	mm
d2 (Clamping hub OD):	290	mm
d3 (Flange coupling OD):	140	mm
d4 (Flange coupling shaft side OD):	345	mm
d5 (Fan ring ID):	3500	mm
D1 (Flange coupling shaft side ID)	85	mm
L1 (Dist First Obstr.):	60	mm
L2 (Dist Between Blade's Clamping Bolts):	90	mm
L3 (Flange coupling height):	150	mm
b (key channel width):	22	mm
t (key channel height):	90,4	
Blades No:	6	buc
Blades Type:	FRP	
Is the shaft harder than AISI 316L (160 HB)?:	No	
If yes state value or material spec:	NA	
Direction of rotation of the impeller when viewed against the air flow (mark the necessary with the “V” sign):		
		V



SECTION 3: Fan Details

Manufacturer:	SC COMPANIA DE VENTILATOARE	Size / Type:	VPV 3500
Serial No:	NA	Shaft Speed (rpm):	264
Tag Number:	76-A3/1÷6	Driver Type::	Electrical motor
Typical Drive Arrangements:	Suspended belt drive, motor shaft up	Driver Speed (rpm):	1000
Typical Plenum Arrangements:	Forced draught-box-type plenum	Driver Power*:	22 kW
Static Pressure*:	17 mm water	Transmission Type:	Belt
Air Flow*:	75 m3/sec		
Air Temperature*:	-30°÷53,06° Celsius degree		
Altitude*:	170 m		
Blade Pitch Adjustment:	Manual		

* Please state units, e.g. psia, psig, barg, inches, mm

SECTION 4: Customer Suggestions

Size:	-
Type:	-
Hub Material:	-
Blades Ring Material(s):	FRP
Blade Pitch Adjustment:	Manual
Other Specification (e.g.API, ATEX):	ATEX; PED
Quantity:	-
Price:	-
Delivery:	DDP Ploiesti

Remarks:	

Head Mechanical Engineer

[Signature] 14.11.2022

Senior Mechanical Specialist Engineer

[Signature] 14.11.22

Chief Unit 07.11.2022

Mechanical Engineer

[Signature] 07.11.2022



INSTITUTUL DE PROIECTARE
INSTALATII PETROLIERE
STR. DILIGENTEI NR.18
PLOIESTI - ROMANIA

FISA TEHNICA

RACITOARE CU AER

Nr. U.309.37-FT-0

Pag. 1 din 2

COMANDA 157/2002 Ad.20/2003 76-DDE-DEU

BENEFICIAR SC PETROTEL-LUKOIL SA

INSTALATIA MODERNIZARE IZOMERIZARE

REV	DATA	Intocmit	Verificat	Aprobat
1	01.2004	TIL	ATG	DME
2				
3				
4				

1	Funcția:	CONDENSATOR COLOANA DEIZOHEXANIZARE	Poz. de montaj	76-A3
2	Dimensiune si tip	12690x9000	Nr. de comp.	3
3	Supraf. pe unit.-tub cu oripioare	17852	Teava	755
4	Sarcina termica	8260000	MTDE	28,44
5	Rata de transfer.-tub cu oripioare	433	Funcție	16,27
			Curat	18,3
				kcal/m ² h°C

DATE DE PERFORMANTA - SPATIUL TUBULAR

7	Fluid circulat	HCBN *)	Greutate spec(lichid/vap.)	607/6,04	kg/m ³
8	Total fluid intrare	99323	Punct congelare		°C
9		Intrare	Iesire	Punct fierbere	°C
10	Temperatura	°C	80	63	Caldura specifica
11	Lichid	kg/h	0	99323	0,58
12	Vapor	kg/h	99323	0	Caldura latentă
13	Noncond	kg/h			75,8
14	Abur	kg/h			Cond. termica
15	Apa	kg/h			0,10
16	Visc.(lichid/vap.)	Cp	0,19/0,0082		Pres. iesire
17					kg/cm ²
					Codere de pres. adm.
					0,39
					Codere de pres. proiectata
					0,3069
					Rez. int. la murdorie
					0,0002
					kcal/m ² h°C

SPATIUL AER

19	Debit de aer	1260670	Nm ³ /h	Altitudine	170
20	Debit de aer pe ventilator	66,53	m ³ /s	Temperatura intrare	32
21	Presiune statica	17	mm Apa	Temperatura iesire	53,06
22	Viteza front	m/min(STD)	Viteza de masa	kg/hm ²	Temperatura minima
23					-30

PROIECTARE- MATERIALE- CONSTRUCTIE

24	Pres. de calcul	4	bar(G)	Pres. de proba	5	bar(G)	Temperatura de calcul	120	°C
25	FASCICUL TUBULAR			CAMERA			TEVI		
26	Dimens. 2115x9000	mm	Nr.rond. 6	Tip:	CU DOPURI		Material:	OLT 35R	
27	Nr./compartiment	2		Material:	R510-5b				
28	Disponere :			Nr.treceri/Nr.tevi pe rand	2/30		Trase/Sudate		
29	Fascicule 6 in paralel	-	in serie	Buson/Proiect :			De	25	mm
30	Compart. in paralel		in serie	Material	R510-5b		Nr./fasc. 180	Lung. 9	m
31	Codru fascicul	DA		Material.garnit.:	OL34.1		Distrib. △	Pos 64	mm
32	Structura montaj -constr. metalica			Adaos coroziune	3	mm		ARIPIOARE	
33	Pregatire supraf.	Panta		Stut intrare:	2xDN150-B 40		Tipul:	Incastrote	
34	Jaluzele	-DA-	NU	Stut iesire:	2xDN100-B 40		Material:	EAI 99,5	
35	Actionare	Auto	Manual				De	59	mm
36	Norma:	C4-90; AD-Merkblatt B5,B9; API-1992;					Gr.med	0,35	mm
							Nr.oripioare/m	400	

ECHIPAMENTUL MECANIC

37	VENTILATOR			MOTOR			REDUCTOR VITEZA		
38	Fabric. model:			Tipul :	Motor electric ASA IMV1		Tipul/Model:	cu curele V/SPB3550	
39	Nr/comp. 2	Putere 18,66	kw	Nr./comp 2	Puterea 22	kw	Nr./compart.	1	
40	Diam 3,500	m	RPM 264	rot/min	Turatie	1000	rot/min	Putere	
41	Nr palete 6	Inclin: 50	Adj 50	Auto	Carcasa		Raport		
42	Motor. palete	EAI99,5	Unghi		Volt/Fazo/Ciclu:	380/3/50	Fabric.		
43	Material butuc	EAI99,5			Protectie:	Exd. II CT4/IPW 54	Intrep. vibratii	DA	-NU-
44	Actione reglare la lipsa aer	Inclin. ventil			Min/Max.		Jaluzele	Deschis/Inchis	
45	Serpentino	Fluid	Temp.max.°C	Temp.min.°C	Pres.max.(MPa)		Supr. schimb caldura	Nr. si dimensiunile tevelor	
46	-DA-	NU					(tevi cu oripioare) m ²	si oripioarelor	mm
47									
48									

Observatii :

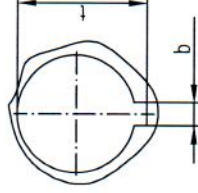
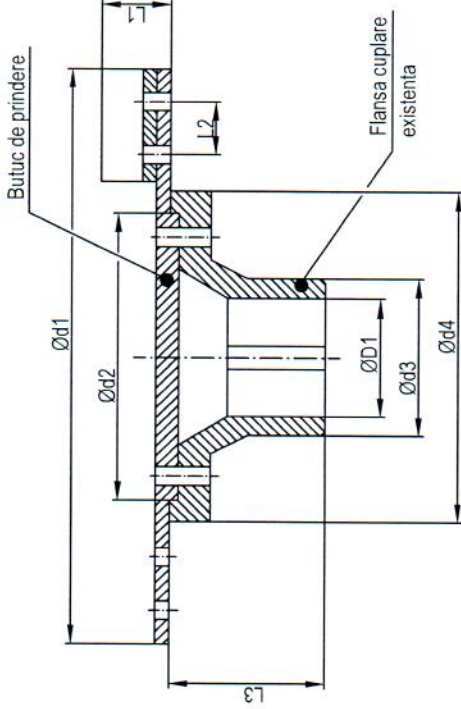
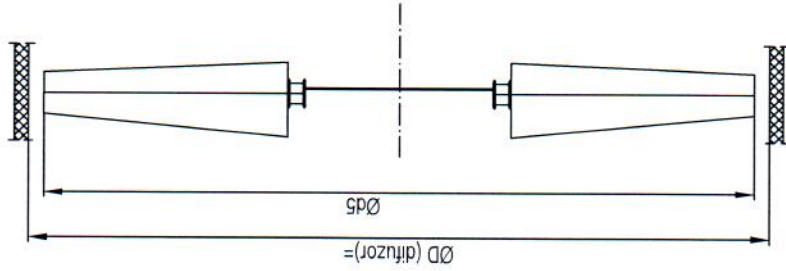
- UTILAJ NOU

*) IZOHEXAN

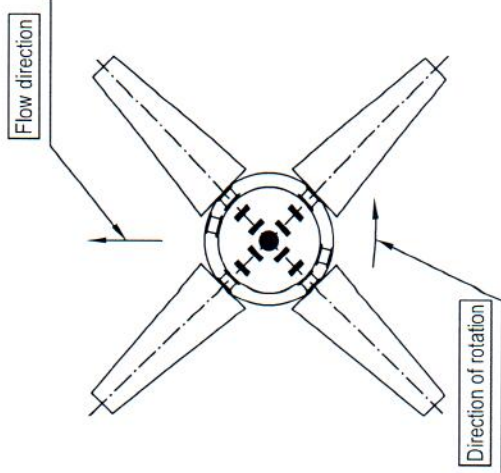
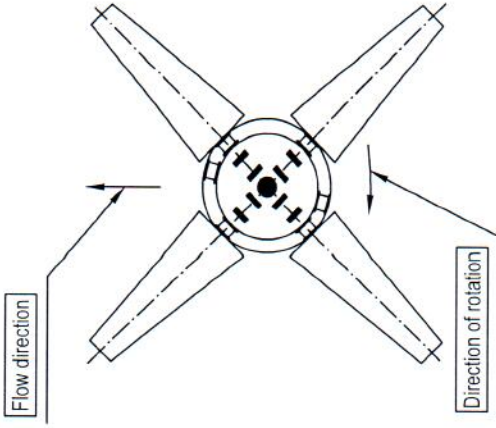
54	Greutate fascicul	6x7440=44640	kg		
55	Greutate constr. metalica	14100	kg	Greutate totala	84600
56	Greutate ventilator	6x2740=16440	kg		

COD : 32.604R-0

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d5 (Fan ring ID) :	mm
D1 (Flange coupling shaft side ID) :	mm
L1 (Dist First Obstr.) :	mm
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L3 (Flange coupling height) :	mm
b (key channel width) :	mm
t (key channel height) :	mm
Blades No :	buc.
Blades Type :	FRP
Is the shaft harder than AISI 316L (160 HB) ?	No
If yes state value or material spec.	NA



Directionn of rotation of the impeller when viewed against the air flow (mark the necessary with the "V" sing) :

V

Pozitie montaj : 76 - A3/6
Sectorul : 1
Instalatia : Izomerizare

Intocmit (nume, semnatura)	Vizat (nume, semnatura)	Aprobat (nume, semnatura)	Data :
Ene Ion	Alin Ionita	ing. C. Iorgoiu	02.11.2022
TURBOENERGY® TEP POWER			
FISA SELECTIE VENTILATOR TEP 0249 - 00/BD			