

Fan Selection Order

SECTION 1: Customer Details

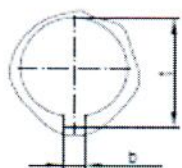
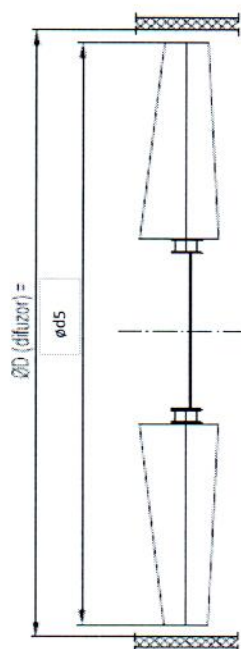
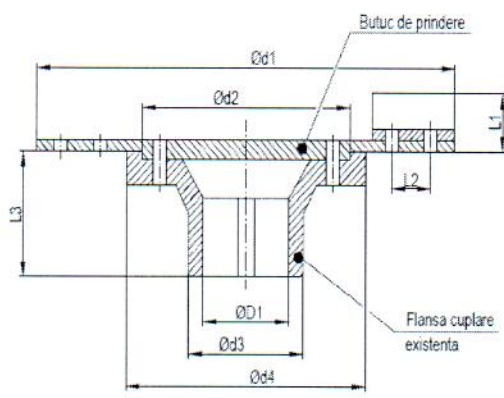
Pos:

03-A2/1÷4

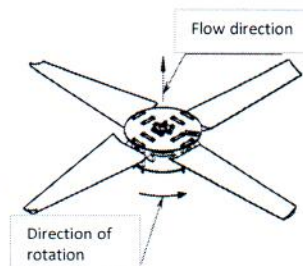
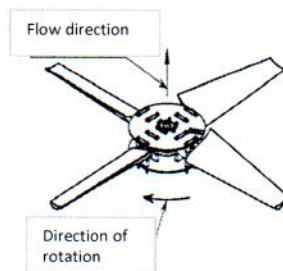
API information required (Mandatory)

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 *	Catalytic Reforming	Direction of rotation:	CCW	-	x	CW
Fan Duty *	Axial fan					
Company:	PETROTEL-LUKOIL S.A.	Phone no:	+40-766257243			
Engineer:	IORGOIU 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):	-
Tag Number:	03-A2/1÷4	Driver Type::	Electrical motor
Typical Drive Arrangements:	Suspended belt drive, motor shaft up	Driver Speed (rpm):	735
Typical Plenum Arrangements:	Forced draught-box-type plenum	Driver Power*:	40 kW
Static Pressure*:	16 mm water	Transmission Type:	Belt
Air Flow*:	100 m3/sec		
Air Temperature*:	-30°÷49,4° 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] 15.11.2022

Senior Mechanical Specialist Engineer

[Signature] 14.11.22

Chief Unit 07.11.2022

[Signature]

Mechanical Engineer

[Signature] 07.11.2022

[Signature]



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

FISA TEHNICA

Nr. U.309.38-FT-1

RACITOARE CU AER

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	03.2004	TIL	ATG	DME
2				
3				
4				

1	Funcția:	CONDENSATOR PRODUS DE VARF COLOANA SPLITER	Poz. de montaj	03-A2
2	Dimensiune si tip	9800x9000 mm	Nr. de comp.	2
3	Supraf. pe unit.-tub cu aripiore	8345 m ²	Teava	367 m ²
4	Sarcina termica	6210000 kcal/h	MTDE	43,19 °C
5	Rota de transfer.-tub cu aripiore	4,36	Funcție	17,23
			Curat	19,18 kcal/m ² h°C

DATE DE PERFORMANTA - SPATIUL TUBULAR

7	Fluid circulat	HCBN: C5/C6	Greutate spec(lichid/vap.)	624,4/7,84 kg/m ³
8	Total fluid intrare	68614 kg/h	Punct congelare	°C
9		Intrare	Iesire	Punct fierbere °C
10	Temperatura °C	98	71	Caldura specifica kcal/kg°C
11	Lichid kg/h	0	68614	Caldura latentă kcal/kg
12	Vapor kg/h	68614	0	Cond. termica kcal/mh°C
13	Noncond kg/h			Pres. iesire kg/cm ²
14	Abur kg/h			Cadere de pres. adm. 0,56 kg/cm ²
16	Apo kg/h			Cadere de pres. proiectata 0,4441 kg/cm ²
17	Visc.(lichid/vap.) Cp	0,2/0,0086	Rez. int. la murdarire	0,0004 kcal/m ² h°C

SPATIUL AER

19	Debit de aer	1146636 Nm ³ /h	Altitudine	170 m
20	Debit de aer pe ventilator	91 m ³ /s	Temperatura intrare	32 °C
21	Presiune statica	16 mm Ap	Temperatura iesire	49,4 °C
22	Viteza front m/min(STD)	Viteza de masa kg/hm ²	Temperatura minima	-30 °C

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. 2450x9000 mm	Nr.rond. 4	Tip: CAPACE DEMONTABILE
27	Nr./compartiment 2		Material: OLT35R
28	Disponere :		Trase/Sudate
29	Fascicule 2 in paralel -- in serie	Material dopuri: -	De 25 mm Gr.min 2,5 mm
30	Compart. In paralel in serie	Material placi tubulare: R52-7b	Nr/fosc. 136 Lung. 9 m
31	Cadru fascicul DA	Material garnit.: OL34,1	Distrib. Pos 64 mm
32	Structura montaj -constr. metalica	Adoos corozione 3 mm	Tipul: ARIPIOARE
33	Pregatire supraf. Panto	Stut intrare: 2xDN200-PU 25	Material: Al 99,5
34	Jaluzele -DA- NU	Stut iesire: 2xDN150-PU 40	De 58 mm Gr.med 0,35 mm
35	Actionare Auto Manual		Nr.aripioare/m 400
36	Norma: C4-73; NID 6490-75 IPROCHIM Bucuresti; AD-Merkblatt B5,B9; API 661		

ECHIPAMENTUL MECANIC

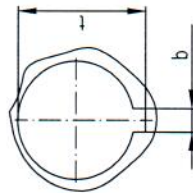
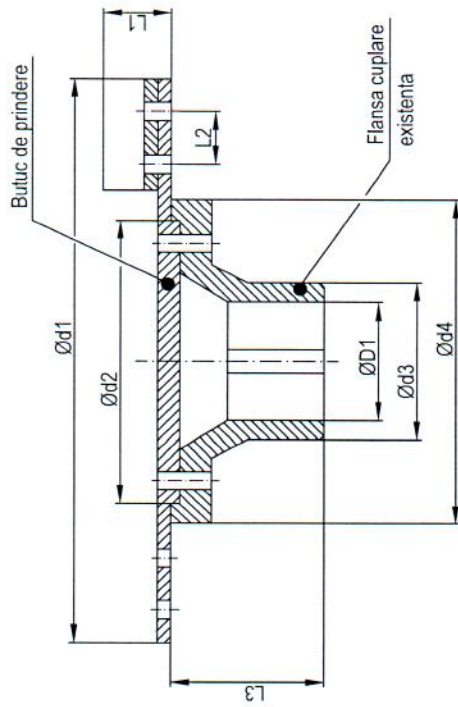
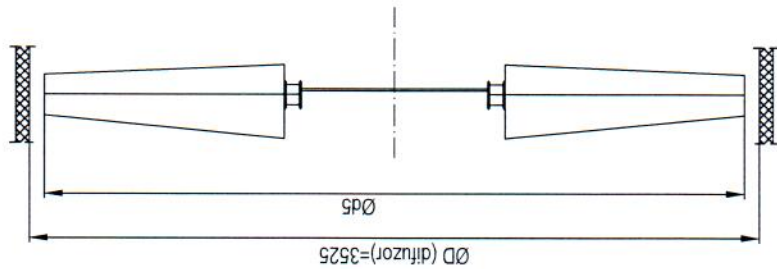
38	VENTILATOR	MOTOR	REDUCTOR VITEZA
39	Fabric. model:	Tipul : Motor electric	Tipul/Model: cu curele V
40	Nr/comp. 2 Putere kw	Nr./comp 2 Putere 40 kw	Nr. compart. 1
41	Diam 3,500 m RPM	rot/min Turatia 735 rot/min	Putere
42	Nr polete 6 Incln: 50%Adj 50% Auto	Carcasa	Raport
43	Moter. polete A199,5 Unghi	Volt/Faza/Ciclu: 380/3/50	Fabric.
44	Material butuc A199,5	Protectie: Exd. II BT3	Intrep. vibratii DA -NU-
45	Actione reglare la lipsa aer Incln. ventil	Min/Max.	Jaluzele Deschis/Inchis
46	Serpentina Fluid	Temp.max. °C Temp.min. °C	Pres.max.(MPa)
47	-DA- NU		Supr. schimb caldura (tevi cu aripiore) m ²
48			Nr. si dimensiunile tevilor si aripiorelor mm

Observatii :

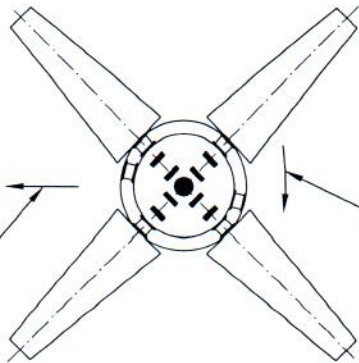
50 - UTILAJ EXISTENT: se folosesc 4 fascicule tubulare si 4 ventilatoare de la bateria 08-A1 (conf. desene
51 IPROCHIM nr.Ch.309.ST 711E si nr. Ch.309.39-0) montate pe o constructie metalica noua .
52 RACITORUL 03-A2 va functiona in baterie comuna cu racitoarele 76-A1 si 76-A3 .

55	Greutate fascicul	4x7277=29108 kg	Greutate constr. metalica	12275 kg
56	Greutate ventilator	4x3058=12232 kg	Greutate totala	61175

COD : 32.604R-0
NOTA : Acest document este proprietatea IPIP-SA si nu poate fi in nici un fel reprodus, modificat sau transmis in intregime sau partial unei cite persoane sau organizatii decat cu aprobarea scrisa a proprietarului.

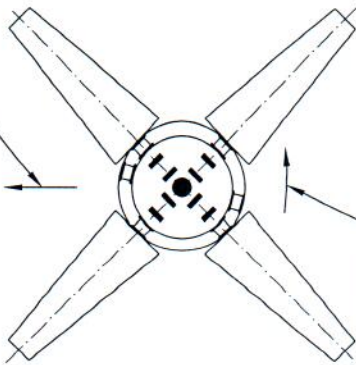


Flow direction



Direction of rotation

Flow direction



Direction of rotation

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

V

Pozitie montaj : 03 - A2/3
Sectorul : 1
Instalatia : HB

Value	Units
d1 (Fan hub OD) :	mm
d2(Clamping hub OD) :	mm
d3(Flange coupling OD) :	mm
d4(Flange coupling shaft side OD) :	mm
d5(Fan ring ID) :	mm
D1(Flange coupling shaft side ID) :	mm
L1(Dist First Obstr.) :	mm
L2(Dist Between Blade's Clamping bolts) :	mm
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	No
AISI 316L (160 HB)? :	
If yes state value or material spec.	NA

Intocmit (nume, semnatura) Ene Ion	Vizat (nume, semnatura) Alin Ionita	Aprobat (nume, semnatura) ing. C. Iorgoiti	Data : 02.11.2022
TEP TURBOENERGY® POWER FISA SELECTIE VENTILATOR TEP 0248 - 00/BD			