

SIEMENS

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45473 Muelheim an der Ruhr, Germany

FLUITEC International
Mr. Jo Ameye
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Our reference	TEST MLH/2017/309
Date	December 5, 2017

Turbine Oil Approval according to Siemens TLV 901304 and TLV 901305 "Infinity TO 32" and "Infinity TO 46"

Dear Mr. Ameye,

We carried out approval testing on the products "Infinity TO 32" and "Infinity TO 46" according to Siemens turbine oil specification TLV 901304 and TLV 901305. The results are in accordance with these specifications. They are listed in the enclosed test certificates.

Herewith we give the formal approval for the products "Infinity TO 32" and "Infinity TO 46" for use in Siemens turbo sets without gearbox. The products will be published in the corresponding lists of approved turbine oils.

Sincerely yours,

Enclosure
2 Test Certificates



Dr. Ludger Quick

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Janina Kugel, Cedrik Neike, Michael Sen, Ralf P. Thomas
Registered offices: Berlin and Munich, Germany; Commercial registries: Berlin Charlottenburg, HRB 12300, Munich, HRB 6684
WEEE-Reg.-No. DE 23691322

SIEMENS**Test Certificate**
Lube Oil Analysis**No. S4983**
32579

Code word:	Approval TLV901304 and TLV901305	Customer:	Jo Ameye
Turbine type:		Department:	Fluitec International
Serial No:		Telephone:	+32 (475) 73 08 30
Oil type:	Infinity TO 32	SAP account no:	70036512
Manufacturer/Supplier:	Fluitec	Date of receipt:	2017-10-16
Sampling date:		Sampling:	sample for approval test

Test Results:

Air release at 50°C	DIN ISO 9120	2 min
Neutralization Number	DIN 51558-1	0.12 mg KOH/g
Water content	DIN 51777-1	< 0.01 %
Foaming tendency at 25°C	ISO 6247	0 ml
Foam stability at 25°C	ISO 6247	0 s
Rest after 600 s at 25°C	ISO 6247	0 ml
Water separability	DIN 51589-1	55 s
Viscosity at 40°C	DIN 51562-1	33.1 mm²/s
Density at 15°C	DIN 51757	0.855 g/ml
Colour (ASTM scale)	DIN ISO 2049	<0.5
Flash point (Cleveland open cup)	DIN EN ISO 2592	222 °C
Pour point	DIN ISO 3016	< -12 °C
Cleanliness code	ISO 4406	18/16/12
Corrosiveness to copper	DIN EN ISO 2160	passed

Comments:Elaborator: **Henrichs**Testing date: **2017-11-29**Counter-signature: **sgd. Quick**

SIEMENS**Test Certificate**
Lube Oil Analysis**No. S4984**
32579

Code word:	Approval TLV901304 and TLV901305	Customer:	Jo Ameye
Turbine type:		Department:	Fluitec International
Serial No:		Telephone:	+32 (475) 73 08 30
Oil type:	Infinity TO 46	SAP account no:	70036512
Manufacturer/Supplier:	Fluitec	Date of receipt:	2017-10-16
Sampling date:		Sampling:	sample for approval test

Test Results:

Air release at 50°C	DIN ISO 9120	4 min
Neutralization Number	DIN 51558-1	0.10 mg KOH/g
Water content	DIN 51777-1	< 0.01 %
Foaming tendency at 25°C	ISO 6247	0 ml
Foam stability at 25°C	ISO 6247	0 s
Rest after 600 s at 25°C	ISO 6247	0 ml
Water separability	DIN 51589-1	45 s
Viscosity at 40°C	DIN 51562-1	43.9 mm ² /s
Density at 15°C	DIN 51757	0.863 g/ml
Colour (ASTM scale)	DIN ISO 2049	<0.5
Flash point (Cleveland open cup)	DIN EN ISO 2592	222 °C
Pour point	DIN ISO 3016	< -12 °C
Cleanliness code	ISO 4406	18/16/12
Corrosiveness to copper	DIN EN ISO 2160	passed

Comments:Elaborator: **Henrichs**Testing date: **2017-11-29**Counter-signature: **sgd. Quick**