



DET NORSKE
VERITAS

Certificate No.:
ABG-MIC-0492

PRODUCT CERTIFICATE OF CONFORMITY

THIS IS TO CERTIFY THAT:

Product description: *1 off 225/40 kW wind turbine*

Type designation: *Micon M700*

Serial No: *12390* Marking: *Serial No.*
Nacelle No. 416 (For blades see separate certificate)

Tower No.: 153
Manufactured by: *Micon A/S*
(manufacturer and location) *Milskovvej 8, Helstrup*
DK-8900 Randers

Ordered by: *UWE GmbH.*
Hauptstrasse 57.
D-01774 Beerwalde.

Conforms with the following specification/standard:
(if necessary use Appendix to certificates form no. 20.90a)

Micon Design Documentation. Ref. Veritas Design Statement of Compliance
No. WTG/94/001/rev.0 dated 1994.05.02 under the following provisions:

As per Design Verification Report 145-9400255 dated 94.03.18.

Following data/test results annexed:

None (see Micon General Equipment file and checklist for Nacelle/Tower)

For Det norske Veritas Classification A/S



E.S. Tarber
Surveyor: *E.S. Tarber*

Place: *Helstrup*

Date: *01-05-95.*

Declaration by manufacturer (when applicable)

The undersigned manufacturer declares that the specified product has been manufactured in conformity with the specification/standard stated above and the conditions referred to in:

Type Approval Certificate No.:

Quality System Certificate No.:

Manufacturing Survey Arrangement No.:

Manufacturer:

Name: Place: Date:

It is agreed that save as provided below Det norske Veritas, its subsidiaries, bodies, officers, directors, employees and agents shall have no liability for any loss, damage or expense allegedly caused directly or indirectly by their mistake or negligence, breach of warranty, or any other act, omission or error by them, including gross negligence or willful misconduct by any such person with the exception of gross negligence or willful misconduct by the governing bodies or senior executive officers of Det norske Veritas. This applies regardless of whether the loss, damage or expense has affected anyone with whom Det norske Veritas has a contract or a third party who has acted or relied on decisions made or information given by or on behalf of Det norske Veritas. However, if any person uses the services of Det norske Veritas or its subsidiaries or relies on any decision made or information given by or on behalf of them and in consequence suffers a loss, damage or expense proved to be due to their negligence, omission or default, then Det norske Veritas will pay by way of compensation to such person a sum representing his proved loss. In the event Det norske Veritas or its subsidiaries may be held liable in accordance with the sections above, the amount of compensation shall under no circumstances exceed the amount of the fee, if any, charged for that particular service, decision, advice or information. Under no circumstances whatsoever shall the individual or individuals who have personally caused the loss, damage or expense be held liable. In the event that any provision in this section shall be invalid under the law of any jurisdiction, the validity of the remaining provisions shall not in any way be affected.



Micon

Micon A/S
Milskovvej 8, Helstrup
DK-8900 Randers, Denmark
Phone: +45 86 46 76 00
Telefax: +45 86 46 77 18

Giro nr.: 6 75 01 41
A/S Reg.nr. 110.190
Bankers: Unibank A/S
Sankt Mathiasgade 68
8800 Viborg

Nachtrag zum GUTACHTEN für die Maschinenkonstruktion

der MICON M 700 - 225/40 kW Windkraftanlage

Windkraftanlage : Micon M 700 - 225 / 40 kW.
 Seriennummer : 12390
 Hersteller : Micon A/S
 Bauherr : UWE GmbH, Hauptstr. 57, D-01774 Beerwalde.

Hiermit wird bestätigt, dass die obengenannte Windkraftanlage im Einverständnis mit den geltenden Bestimmungen der

DET NORSKE VERITAS

ausgeführt und überprüft wurde.

Helstrup 95.05.01

Ort/Datum

E. Stig Tarber

Unterschrift
(Ebbe Stig Tarber)



UWe GmbH.
Hauptstr. 57
01774 Beerwalde



4.

7

TITEL: DATAKORT FOR M700-225/40 KW	Molle nr: 12390	Side: 1 Af: 1
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Dato: 21-11-94	Udarbejdet af: Benny Brogaard	Godkendt af: LFH	NR: QF-0810	REV: A
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GEARKASSE

Fabrikat : FLENDER
Type : SZAK 2425
Fab.nr : 421405109-1-1
Omdr : n1=1810 n2=45,2

GEAROLIE

Fabrikat : TRIBOL.: TL 1510 / 320
Mængde : LITER 55

KROJEGEAR

Fabrikat : BONFIGLIOLI
Type : 306-L2-HZ-
MAS 30/DF-82-025-4
Fab.nr : 94033061

GENERATOR : (400 v) (690 v) (el-værk)

Fabrikat : ELIN
Type : MCT-435 L21 F3R-9
Fab.nr : 50381294051

VINGENAV OG FORLÆNGER

Tegn.nr : 52-601 + 52-606
Vingenav : 4-6325
Forlænger : 4-3710, 4-5492, 4-2862

KROJEKRANS

Fabrikat : ROTHER ERDE
Tegn.nr : 062.30.1158.000.34.1403
Fab.nr : 63432824-7
Los nr. : _____

SPÆNDEELEMENTER

Hovedleje : RINGFEDER
Fabrikat : RFN 4073 o 235

Gearkasse : STÜWE
Type nr : HSD 280-22

FRIKTIONSBREMSE BIKON

Type nr : 1006 - o 60 x 90

BREMSESKIVE

Fabrikat : MICON
Tegn.nr : 52-323

GEARFUNDAMENT

Fab.nr : 416

VINGER

Type : LM 13.3 H
Fab.nr : 433 - 478 - 454

KOBLING

Fabrikat : CENTAFLEX
Type : BF-A-250-G1

BREMSE

Fabrikat : SIME 3T a 25
Fab.nr : 33329

LEJEHUS

Fabrikat : FINKENRATH
Fab.nr : 1406

INDUKTIVE FOLERE

Fabrikat : AECO
Vingenav : SI 18 C5 PNP

HOVEDLEJE

Fabrikat : FAG 24044 BMB

KONTAKTER

Rystefol : Bernstein GC-SU1Z
Twist : Bernstein SIEK-UV1

VINDMÅLER

Fabrikat : ELECTROMATIC
Type : PV 01-1

VINDFANE

Fabrikat : ELECTROMATIC
Type : OD 04-1

HOVEDKABLER

Leveran. : CONTROL SYSTEMS
Type : 3 stk. 4x50 mm2

MOLLETÅRN

Tegn.nr : 51-047
Tårn nr : 153 - 94

HOVEDAKSEL

Tegn.nr : 52-609
Serie nr : 5-421

FRIKTIONSBREMSE

Fabrikat : MICON
Fab.nr : 1371 - 1372

IMPULSGIVERE

Krojning : Induktiv foler
Generator : Induktiv foler

STYRING

Fab.nr : 87052-572

OPSTART

DATO : 8/4-1995

DATO:	UNDERSKRIFT:	KONTROL DATO/INIT: 22-12-94 <u>BD</u>
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CERTIFICATE OF QUALITY

LM-ROTOR BLADE CERTIFICATE

Conforming to the requirements of DIN 50049 - 3.1 B

Type: LM 13.4

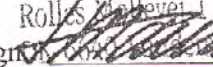
P/O Acknowledgment No.: C002748

Warranty Certificate No.: G-23396

Gelcoat colour	: 8091
Weight of tip	: 34,5 kg
Weight	: 725,9 kg
Momentum of rootbase	: 3127 kgm
α -measurement ref. drawing No. 013527/022227	: 8,5° (\pm 0,5°)
α measured (1st bolt hole clockwise seen from tip)	: 8,4°
Serial No. of brake	: A
Tip plane deviation from "0-blade"	: -20 mm
Hydraulic test pressure	: 120 bar
ROTOR BLADE No.	: 433
	: 454
Matched with blades No.	: 478

The figures are certified by LM Glasfiber A/S and comply with the current rotor blade specifications.

Date: 19. december 1994

LM Glasfiber A/S
 Rolles Møllevej 1
 Sign: 
 QA-Dept.

LM GLASFIBER A/S - ROLLES MØLLEVEJ 1 - DK-6640 LUNDERSKOV



CERTIFICATE OF QUALITY

LM-ROTOR BLADE CERTIFICATE

Conforming to the requirements of DIN 50049 - 3.1 B

Type: LM 13.4

P/O Acknowledgment No.: C002748

Warranty Certificate No.: G-23396

Gelcoat colour	: 8091
Weight of tip	: 34,5 kg
Weight	: 725,9 kg
Momentum of rootbase	: 3127 kgm
α -measurement ref. drawing No. 013527/022227	: 8,5° (\pm 0,5°)
α measured (1st bolt hole clockwise seen from tip)	: 8,8°
Serial No. of brake	: A
Tip plane deviation from "0-blade"	: +10 mm
Hydraulic test pressure	: 120 bar
ROTOR BLADE No.	: 454
	: 433
Matched with blades No.	: 478

The figures are certified by LM Glasfiber A/S and comply with the current rotor blade specifications.

Date: 19. december 1994

LM Glasfiber A/S
 Rolles Møllevej 1
 4640 Lunderskov
 QA-Dept.

LM GLASFIBER A/S - ROLLES MØLLEVEJ 1 - DK-6640 LUNDERSKOV



CERTIFICATE OF QUALITY

LM-ROTOR BLADE CERTIFICATE

Conforming to the requirements of DIN 50049 - 3.1 B

Type: LM 13.4

P/O Acknowledgment No.: C002748

Warranty Certificate No.: G-23396

Gelcoat colour	: 8091
Weight of tip	: 36,6 kg
Weight	: 725,9 kg
Momentum of rootbase	: 3127 kgm
α -measurement ref. drawing No. 013527/022227	: 8,5° (\pm 0,5°)
α measured (1st bolt hole clockwise seen from tip)	: 8,5°
Serial No. of brake	: A
Tip plane deviation from "0-blade"	: 0 mm
Hydraulic test pressure	: 120 bar
ROTOR BLADE No.	: 478
	: 433
Matched with blades No.	: 454

The figures are certified by LM Glasfiber A/S and comply with the current rotor blade specifications.

Date: 19. december 1994

Sign.: 

QA-Dept.

LM GLASFIBER A/S - ROLLES MØLLEVEJ 1 - DK-6640 LUNDERSKOV



DET NORSKE
VERITAS

PRODUCT CERTIFICATE OF CONFORMITY

Certificate No.:

ABG-MIC-0510

THIS IS TO CERTIFY THAT:

Product description: *1 off 225/40 kW wind turbine*

Micon M700

Type designation:

Serial No: *12392* Marking: *Serial No.*
Nacelle No. 418 (*For blades see separate certificate*)
Tower No.: 198

Manufactured by: *Micon A/S*
 (manufacturer and location) *Milskovvej 8, Helstrup*
DK-8900 Randers

Ordered by: *Uwe GmbH.*
Hauptstr. 57
D-01774 Beerwalde

Conforms with the following specification/standard:
 (if necessary use Appendix to certificates form no. 20.90a)

Micon Design Documentation. Ref. Veritas Design Statement of Compliance
No. WTG/94/001/rev.0 dated 1994.05.02 under the following provisions:

As per Design Verification Report 145-9400255 dated 94.03.18.

Following data/test results annexed:

None (see Micon General Equipment file and checklist for Nacelle/Tower)

For Det norske Veritas Classification A/S

E.S. Tarber



Surveyor: *E.S. Tarber* Place: *Helstrup* Date: *17-05-95.*

Declaration by manufacturer (when applicable)

The undersigned manufacturer declares that the specified product has been manufactured in conformity with the specification/standard stated above and the conditions referred to in:

Type Approval Certificate No.:
 Quality System Certificate No.:
 Manufacturing Survey Arrangement No.:

Manufacturer:

Name: Place: Date:

It is agreed that save as provided below Det norske Veritas, its subsidiaries, bodies, officers, directors, employees and agents shall have no liability for any loss, damage or expense allegedly caused directly or indirectly by their mistake or negligence, breach of warranty, or any other act, omission or error by them, including gross negligence or wilful misconduct by any such person with the exception of gross negligence or wilful misconduct by the governing bodies or senior executive officers of Det norske Veritas. This applies regardless of whether the loss, damage or expense has affected anyone with whom Det norske Veritas has a contract or a third party who has acted or relied on decisions made or information given by or on behalf of Det norske Veritas. However, if any person uses the services of Det norske Veritas or its subsidiaries or relies on any decision made or information given by or on behalf of them and in consequence suffers a loss, damage or expense proved to be due to their negligence, omission or default, then Det norske Veritas will pay by way of compensation to such person a sum representing his proved loss. In the event Det norske Veritas or its subsidiaries may be held liable in accordance with the sections above, the amount of compensation shall under no circumstances exceed the amount of the fee, if any, charged for that particular service, decision, advice or information. Under no circumstances whatsoever shall the individual or individuals who have personally caused the loss, damage or expense be held liable. In the event that any provision in this section shall be invalid under the law of any jurisdiction, the validity of the remaining provisions shall not in any way be affected.



Micon

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DK-8900 Randers, Denmark
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Giro nr.: 6 75 01 41
A/S Reg.nr. 110.190
Bankers: Unibank A/S
Sankt Mathiasgade 68
8800 Viborg

Nachtrag zum GUTACHTEN für die Maschinenkonstruktion

der MICON M 700 - 225/40 kW Windkraftanlage

Windkraftanlage : Micon M 700 - 225 / 40 kW.
 Seriennummer : 12392
 Hersteller : Micon A/S
 Bauherr : UWe GmbH, Hauptstr. 57, D-01774 Beerwalde.

Hiermit wird bestätigt, dass die obengenannte Windkraftanlage im Einverständnis mit den geltenden Bestimmungen der

DET NORSKE VERITAS

ausgeführt und überprüft wurde.



Randers 95.05.17

Ort/Datum

E. Stig Tarber

Unterschrift
(Ebbe Stig Tarber)

UWe GmbH
 Hauptstr. 57
 01774 Beerwalde



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3.

TITEL: DATAKORT FOR M700-225/40 KW		Molle nr: 12392	Side: 1 Af: 1
Dato: 21-11-94	Udarbejdet af: Benny Brogaard	Godkendt af: LFH	NR: QF-0810 REV: A
GEARKASSE		KOBLING	
Fabrikat : FLENDER	Type : SZAK 2425	Fabrikat : CENTAFLEX	Type : BF-A-250-G1
Fab.nr : 421 403 109-3-3	Omdr : n1=1810 n2=45,2	BREMSE	
GEAROLIE		Fabrikat : SIME 3T a 25	Fab.nr : 33103
Fabrikat : TRIBOL.: TL 1510 / 320	Mængde : LITER 55	LEJEHUS	
KROJEGEAR		Fabrikat : FINKENRATH	Fab.nr : 1404
Fabrikat : BONFIGLIOLI	Type : 306-L2-HZ-	INDUKTIVE FOLERE	
	: MAS 30/DF-82-025-4	Fabrikat : AECO	Vingenav : SI 18 C5 PNP
Fab.nr : 94014571		HOVEDLEJE	
GENERATOR : (400 v) (690 v) (el-værk)		Fabrikat : FAG 24044 BMB	
Fabrikat : ELIN	Type : MCT-435 L21 F3R-9	KONTAKTER	
Fab.nr : 50381294031		Rystefol : Bernstein GC-SU1Z	Twist : Bernstein SIEK-UV1
VINGENAV OG FORLÆNGER		VINDMÅLER	
Tegn.nr : 52-601 + 52-606	Vingenav : 4-6358	Fabrikat : ELECTROMATIC	Type : PV 01-1
Forlænger : 4-1542, 4-6332, 4-5462		VINDFANE	
KROJEKRANS		Fabrikat : ELECTROMATIC	Type : OD 04-1
Fabrikat : ROTHE ERDE	Tegn.nr : 062.30.1158.000.34.1403	HOVEDKABLER	
Fab.nr : 63432829-1	Los nr. :	Leveran. : CONTROL SYSTEMS	Type : 3 stk. 4x50 mm2
SPÆNDEELEMENTER		MOLLETÅRN	
Hovedleje : RINGFEDER	Fabrikat : RFN 4073 o 235	Tegn.nr : 51-047	Tårn nr : 198-94
Gearkasse : STÜWE		HOVEDAKSEL	
Type nr : HSD 280-22		Tegn.nr : 52-609	Serie nr : 5-420
FRIKTIONS BREMSER BIKON		FRIKTIONS BREMSER	
Type nr : 1006 - o 60 x 90		Fabrikat : MICON	Fab.nr : 1475 - 1476
BREMSESKIVE		IMPULSGIVERE	
Fabrikat : MICON	Tegn.nr : 52-323	Krojning : Induktiv foler	Generator : Induktiv foler
GEARFUNDAMENT		STYRING	
Fab.nr : 418		Fab.nr : 87052-574	
VINGER		OPSTART	
Type : LM 13.3 H	Fab.nr : 426 - 163 - 188	DATO : 7/4-1995	
DATO:	UNDERSKRIFT:	KONTROL DATO/INIT: 22-12-94 BD	

UWe GmbH

Hauptstr. 57

D-01774 Beerwalde



3.

TITEL: DATAKORT FOR M700-225/40 KW		Molle nr: 12392	Side: 1 Af: 1	
Dato: 21-11-94	Udarbejdet af: Benny Brogaard	Godkendt af: LFH	NR: QF-0810 REV: A	
GEARKASSE		KOBLING		
Fabrikat : FLENDER	Type : SZAK 2425	Fabrikat : CENTAFLEX	Type : BF-A-250-G1	
Fab.nr : 421 403 109-3-3	Omdr : n1=1810 n2=45,2	BREMSE		
GEAROLIE		Fabrikat : SIME 3T a 97 25	Fab.nr : 33103	
Fabrikat : TRIBOL.: TL 1510 / 320	Mængde : LITER 55	LEJEHUS		
KROJEGEAR		Fabrikat : FINKENRATH	Fab.nr : 1404	
Fabrikat : BONFIGLIOLI	Type : 306-L2-HZ-	INDUKTIVE FOLERE		
	: MAS 30/DF-82-025-4	Fabrikat : AECO	Vingenav : SI 18 C5 PNP	
Fab.nr : 94014571	HOVEDLEJE		Fabrikat : FAG 24044 BMB	
GENERATOR : (400 v) (690 v) (el-værk)		KONTAKTER		
Fabrikat : ELIN	Type : MCT-435 L21 F3R-9	Rystefol : Bernstein GC-SU1Z	Twist : Bernstein SIEK-UV1	
Fab.nr : 50381294031	VINDMÅLER		Fabrikat : ELECTROMATIC	
VINGENAV OG FORLÆNGER		Type : PV 01-1	VINDFANE	
Tegn.nr : 52-601 + 52-606	Vingenav : 4-6356	Fabrikat : ELECTROMATIC	Type : OD 04-1	
Forlænger : 4-1542, 4-6332, 4-5462	KROJEKRANS		HOVEDKABLER	
Fabrikat : ROTHE ERDE	Tegn.nr : 062.30.1158.000.34.1403	Leveran. : CONTROL SYSTEMS	Type : 3 stk. 4x50 mm2	
Fab.nr : 63432829-1	Los nr. :	MOLLETÅRN		
SPÆNDEELEMENTER		Tegn.nr : 51-047	Tårn nr : 198-94	
Hovedleje : RINGFEDER	Fabrikat : RFN 4073 o 235	HOVEDAKSEL		
Gearkasse : STÜWE	Type nr : HSD 280-22	Tegn.nr : 52-609	Serie nr : 5-420	
FRIKTIONS BREMSER BIKON		FRIKTIONS BREMSER		
Type nr : 1006 - o 60 x 90	Fabrikat : MICON		Fab.nr : 1475 - 1476	
BREMSESKIVE		IMPULSGIVERE		
Fabrikat : MICON	Tegn.nr : 52-323	Krojning : Induktiv foler	Generator : Induktiv foler	
GEARFUNDAMENT		STYRING		
Fab.nr : 418	Fab.nr : 87052-574		OPSTART	
VINGER		DATO : 7/4-1995		
Type : LM 13.3 H	Fab.nr : 426 - 163 - 188			
DATO:	UNDERSKRIFT:	KONTROL DATO/INIT: 22-12-94 30		

Konsol 4-9812, 4-9754

Gearstag 4-9596, 4-9733, 4-9832, 4-9825



CERTIFICATE OF QUALITY

LM-ROTOR BLADE CERTIFICATE

Conforming to the requirements of DIN 50049 - 3.1 B

Type: LM 13.4

P/O Acknowledgment No.: C001906

Warranty Certificate No.: G-23425

Gelcoat colour	: 8091
Weight of tip	: 36,1 kg
Weight	: 713,1 kg
Momentum of rootbase	: 3075 kgm
α -measurement ref. drawing No. 013527/022227	: 8,5° (\pm 0,5°)
α measured (1st bolt hole clockwise seen from tip)	: 9,0°
Serial No. of brake	: A
Tip plane deviation from "0-blade"	: 0 mm
Hydraulic test pressure	: 120 bar
ROTOR BLADE No.	: 163
	: 188
Matched with blades No.	: 426

The figures are certified by LM Glasfiber A/S and comply with the current rotor blade specifications.

Date: 22. december 1994

LM Glasfiber A/S
 P.O. Box 100
 DK-6640 Lunderskov
 QA-Dept.

LM GLASFIBER A/S - ROLLES MØLLEVEJ 1 - DK-6640 LUNDERSKOV



CERTIFICATE OF QUALITY

LM-ROTOR BLADE CERTIFICATE

Conforming to the requirements of DIN 50049 - 3.1 B

Type: LM 13.4


P/O Acknowledgment No.: C001906

Warranty Certificate No.: G-23425

Gelcoat colour	: 8091
Weight of tip	: 36,5 kg
Weight	: 713,1 kg
Momentum of rootbase	: 3075 kgm
α -measurement ref. drawing No. 013527/022227	: 8,5° ($\pm 0,5^\circ$)
α measured (1st bolt hole clockwise seen from tip)	: 8,5°
Serial No. of brake	: A
Tip plane deviation from "0-blade"	: +10 mm
Hydraulic test pressure	: 120 bar
ROTOR BLADE No.	: 188
	: 163
Matched with blades No.	: 426

The figures are certified by LM Glasfiber A/S and comply with the current rotor blade specifications.

Date: 22. december 1994

Sign.: 
 ROLLES MØLLEVEJ 1
 DK-6640 LUNDERSKOV

LM GLASFIBER A/S - ROLLES MØLLEVEJ 1 - DK-6640 LUNDERSKOV



CERTIFICATE OF QUALITY

LM-ROTOR BLADE CERTIFICATE

Conforming to the requirements of DIN 50049 - 3.1 B

Type: LM 13.4

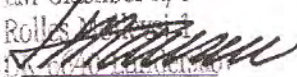
P/O Acknowledgment No.: C001906

Warranty Certificate No.: G-23425

Gelcoat colour	: 8091
Weight of tip	: 33,1 kg
Weight	: 713,1 kg
Momentum of rootbase	: 3075 kgm
α -measurement ref. drawing No. 013527/022227	: 8,5° (\pm 0,5°)
α measured (1st bolt hole clockwise seen from tip)	: 9,0°
Serial No. of brake	: A
Tip plane deviation from "0-blade"	: -10 mm
Hydraulic test pressure	: 120 bar
ROTOR BLADE No.	: 426
	: 163
Matched with blades No.	: 188

The figures are certified by LM Glasfiber A/S and comply with the current rotor blade specifications.

Date: 22. december 1994

LM Glasfiber A/S
 Rolles Møllevej 1
 Sign. 
 QA-Dept.

LM GLASFIBER A/S - ROLLES MØLLEVEJ 1 - DK-6640 LUNDERSKOV



DET NORSKE
VERITAS

Certificate No.:
ABG-MIC-0493

PRODUCT CERTIFICATE OF CONFORMITY

THIS IS TO CERTIFY THAT:

Product description: **1 off 225/40 kW wind turbine**

Type designation: **Micon M700**

Serial No: **12393** Marking: **Serial No.**
Nacelle No. 417 (For blades see separate certificate)

Tower No.: 190
Manufactured by: **Micon A/S**
(manufacturer and location) **Milskovvej 8, Helstrup**
DK-8900 Randers

Ordered by: **UWE GmbH.**
Hauptstrasse 57.
D-01774 Beerwalde.

Conforms with the following specification/standard:
(if necessary use Appendix to certificates form no. 20.90a)

Micon Design Documentation. Ref. Veritas Design Statement of Compliance
No. WTG/94/001/rev.0 dated 1994.05.02 under the following provisions:

As per Design Verification Report 145-9400255 dated 94.03.18.

Following data/test results annexed:

None (see Micon General Equipment file and checklist for Nacelle/Tower)

For Det norske Veritas Classification A/S



E.S. Tarber
Surveyor: **E.S. Tarber**

Place: **Helstrup**

Date: **01-05-95.**

Declaration by manufacturer (when applicable)

The undersigned manufacturer declares that the specified product has been manufactured in conformity with the specification/standard stated above and the conditions referred to in:

Type Approval Certificate No.:

Quality System Certificate No.:

Manufacturing Survey Arrangement No.:

Manufacturer:

Name:

Place:

Date:

It is agreed that save as provided below Det norske Veritas, its subsidiaries, bodies, officers, directors, employees and agents shall have no liability for any loss, damage or expense allegedly caused directly or indirectly by their mistake or negligence, breach of warranty, or any other act, omission or error by them, including gross negligence or wilful misconduct by any such person with the exception of gross negligence or wilful misconduct by the governing bodies or senior executive officers of Det norske Veritas. This applies regardless of whether the loss, damage or expense has affected anyone with whom Det norske Veritas has a contract or a third party who has acted or relied on decisions made or information given by or on behalf of Det norske Veritas. However, if any person uses the services of Det norske Veritas or its subsidiaries or relies on any decision made or information given by or on behalf of them and in consequence suffers a loss, damage or expense proved to be due to their negligence, omission or default, then Det norske Veritas will pay by way of compensation to such person a sum representing his proved loss. In the event Det norske Veritas or its subsidiaries may be held liable in accordance with the sections above, the amount of compensation shall under no circumstances exceed the amount of the fee, if any, charged for that particular service, decision, advice or information. Under no circumstances whatsoever shall the individual or individuals who have personally caused the loss, damage or expense be held liable. In the event that any provision in this section shall be invalid under the law of any jurisdiction, the validity of the remaining provisions shall not in any way be affected.



Micon

Micon A/S
Milskovvej 8, Helstrup
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Giro nr.: 6 75 01 41
A/S Reg.nr. 110.190
Bankers: Unibank A/S
Sankt Mathiasgade 68
8800 Viborg

Nachtrag zum GUTACHTEN für die Maschinenkonstruktion

der MICON M 700 - 225/40 kW Windkraftanlage


Windkraftanlage : Micon M 700 - 225 / 40 kW.
Seriennummer : 12393
Hersteller : Micon A/S
Bauherr : UWE GmbH, Hauptstr. 57, D-01774 Beerwalde.

Hiermit wird bestätigt, dass die obengenannte Windkraftanlage im Einverständnis mit den geltenden Bestimmungen der

DET NORSKE VERITAS

ausgeführt und überprüft wurde.

Helstrup 95.05.01
.....
Ort/Datum


Ebbe Stig Tarber
.....
Unterschrift
(Ebbe Stig Tarber)

UWe GmbH
 Hauptstr. 57
 01774 Beerwalde



2.

TITEL: DATAKORT FOR M700-225/40 KW		Molle nr: 12393	Side: 1 Af: 1				
Dato: 21-11-94	Udarbejdet af: Benny Brogaard	Godkendt af: LFH	NR: QF-0810 REV: A				
GEARKASSE		KOBLING					
Fabrikat : FLENDER	Type : SZAK 2425	Fabrikat : CENTAFLEX	Type : BF-A-250-G1				
Fab.nr : 421 405 109-1-4	Omdr : n1=1810 n2=45,2	BREMSE					
GEAROLIE		Fabrikat : SIME 3T a 3725	Fab.nr : 33130				
Fabrikat : TRIBOL.: TL 1510 / 320	Mængde : LITER 55	LEJEHUS					
KROJEGEAR		Fabrikat : FINKENRATH	Fab.nr : 1409				
Fabrikat : BONFIGLIOLI	Type : 306-L2-HZ-	INDUKTIVE FOLERE					
	MAS 30/DF-82-025-4	Fabrikat : AECO	Vingenav : SI 18 C5 PNP				
Fab.nr : 94030619	HOVEDLEJE		Fabrikat : FAG 24044 BMB				
GENERATOR : (400 v) (690 v) (el-værk)		KONTAKTER					
Fabrikat : ELIN	Type : MCT-435 L21 F3R-9	Rystefol : Bernstein GC-SU1Z	Twist : Bernstein SIEK-UV1				
Fab.nr : 503812 94033	VINDMÅLER		Fabrikat : ELECTROMATIC				
VINGENAV OG FORLÆNGER		Type : PV 01-1	VINDFANE				
Tegn.nr : 52-601 + 52-606	Vingenav : 4-7052	Fabrikat : ELECTROMATIC	Type : OD 04-1	HOVEDKABLER			
Forlænger : 4-3766, 4-4958, 4-2823	KROJEKRANS		Leveran. : CONTROL SYSTEMS	Type : 3 stk. 4x50 mm2	MOLLETÅRN		
Fabrikat : ROTHE ERDE	Tegn.nr : 062.30.1158.000.34.1403	HOVEDAKSEL		Tegn.nr : 51-047	Tårn nr : 190-94	FRIKTIONSbremser	
Fab.nr : 63432824-1	Los nr. :	SPÆNDEELEMENTER		Tegn.nr : 52-609	Serie nr : 5-424	FRIKTIONSbremser	
Hovedleje : RINGFEDER		Fabrikat : RFN 4073 o 235		FRIKTIONSbremser		FRIKTIONSbremser	
Gearkasse : STÜWE		Type nr : HSD 280-22		Fabrikat : MICON		Fab.nr : 1513-1516	
FRIKTIONSbremser BIKON		Type nr : 1006 - o 60 x 90		IMPULSGIVERE		Krojning : Induktiv foler	
BREMSEKIVE		Fabrikat : MICON		Tegn.nr : 52-323		Generator : Induktiv foler	
GEARFUNDAMENT		Fab.nr : 417		STYRING		Fab.nr : 87052-571	
VINGER		Type : LM 13.3 H		OPSTART		DATO : 4/4-1995	
Fab.nr : 315 - 348 - 349		DATO :		DATO :		DATO :	
DATO:	UNDERSKRIFT:	KONTROL DATO/INIT: 22-12-94 BD					



CERTIFICATE OF QUALITY

LM-ROTOR BLADE CERTIFICATE

Conforming to the requirements of DIN 50049 - 3.1 B

Type: LM 13.4


P/O Acknowledgment No.: C001903

Warranty Certificate No.: G-23324

Gelcoat colour	: 8091
Weight of tip	: 34,1 kg
Weight	: 718,6 kg
Momentum of rootbase	: 3110 kgm
α -measurement ref. drawing No. 013527/022227	: 8,5° ($\pm 0,5^\circ$)
α measured (1st bolt hole clockwise seen from tip)	: 8,4°
Serial No. of brake	: A
Tip plane deviation from "0-blade"	: -20 mm
Hydraulic test pressure	: 120 bar
ROTOR BLADE No.	: 315
	: 348
Matched with blades No.	: 349

The figures are certified by LM Glasfiber A/S and comply with the current rotor blade specifications.

Date: 9. december 1994


 Sign.: DK-6640 Lunderskov
 QA-Dept.

LM GLASFIBER A/S - ROLLES MØLLEVEJ 1 - DK-6640 LUNDERSKOV



CERTIFICATE OF QUALITY

LM-ROTOR BLADE CERTIFICATE

Conforming to the requirements of DIN 50049 - 3.1 B

Type: LM 13.4

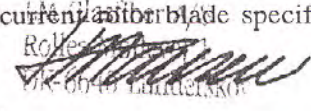
P/O Acknowledgment No.: C001903

Warranty Certificate No.: G-23324

Gelcoat colour	: 8091
Weight of tip	: 35,6 kg
Weight	: 718,6 kg
Momentum of rootbase	: 3110 kgm
α -measurement ref. drawing No. 013527/022227	: 8,5° (\pm 0,5°)
α measured (1st bolt hole clockwise seen from tip)	: 9,2°
Serial No. of brake	: A
Tip plane deviation from "0-blade"	: 0 mm
Hydraulic test pressure	: 120 bar
ROTOR BLADE No.	: 348
	: 315
Matched with blades No.	: 349

The figures are certified by LM Glasfiber A/S and comply with the current rotor blade specifications.

Date: 9. december 1994

Sign.: 
QA-Dept.



CERTIFICATE OF QUALITY

LM-ROTOR BLADE CERTIFICATE

Conforming to the requirements of DIN 50049 - 3.1 B

Type: LM 13.4

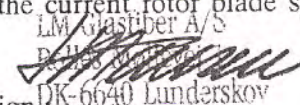
P/O Acknowledgment No.: C001903

Warranty Certificate No.: G-23324

Gelcoat colour	: 8091
Weight of tip	: 34,5 kg
Weight	: 718,6 kg
Momentum of rootbase	: 3110 kgm
α -measurement ref. drawing No. 013527/022227	: 8,5° (\pm 0,5°)
α measured (1st bolt hole clockwise seen from tip)	: 8,0°
Serial No. of brake	: A
Tip plane deviation from "0-blade"	: -60 mm
Hydraulic test pressure	: 120 bar
ROTOR BLADE No.	: 349
	: 315
Matched with blades No.	: 348

The figures are certified by LM Glasfiber A/S and comply with the current rotor blade specifications.

Date: 9. december 1994


 Sign.: Erik S. Madsen
 DK-6640 Lunderskov
 QA-Dept.

LM GLASFIBER A/S - ROLLES MØLLEVEJ 1 - DK-6640 LUNDERSKOV



DET NORSKE
VERITAS

Certificate No.:

ABG-MIC-0509

PRODUCT CERTIFICATE OF CONFORMITY

THIS IS TO CERTIFY THAT:

Product description: *1 off 225/40 kW wind turbine*
Micon M700

Type designation:

Serial No: *12387* Marking: *Serial No.*
Nacelle No. 413 (*For blades see separate certificate*)
Tower No.: 197

Manufactured by: *Micon A/S*
(manufacturer and location) *Milskovvej 8, Helstrup*
DK-8900 Randers

Ordered by: *Uwe GmbH.*
Hauptstr. 57
D-01774 Beerwalde

Conforms with the following specification/standard:
(if necessary use Appendix to certificates form no. 20.90a)

Micon Design Documentation. Ref. Veritas Design Statement of Compliance
No. WTG/94/001/rev.0 dated 1994.05.02 under the following provisions:

As per Design Verification Report 145-9400255 dated 94.03.18.

Following data/test results annexed:

None (see Micon General Equipment file and checklist for Nacelle/Tower)

For Det norske Veritas Classification A/S



E.S. Tarber
Surveyor: ***E.S. Tarber***

Place: ***Helstrup***

Date: ***17-05-95.***

Declaration by manufacturer (when applicable)

The undersigned manufacturer declares that the specified product has been manufactured in conformity with the specification/standard stated above and the conditions referred to in:

Type Approval Certificate No.:

Quality System Certificate No.:

Manufacturing Survey Arrangement No.:

Manufacturer:

Name:

Place:

Date:

It is agreed that save as provided below Det norske Veritas, its subsidiaries, bodies, officers, directors, employees and agents shall have no liability for any loss, damage or expense allegedly caused directly or indirectly by their mistake or negligence, breach of warranty, or any other act, omission or error by them, including gross negligence or wilful misconduct by any such person with the exception of gross negligence or wilful misconduct by the governing bodies or senior executive officers of Det norske Veritas. This applies regardless of whether the loss, damage or expense has affected anyone with whom Det norske Veritas has a contract or a third party who has acted or relied on decisions made or information given by or on behalf of Det norske Veritas. However, if any person uses the services of Det norske Veritas or its subsidiaries or relies on any decision made or information given by or on behalf of them and in consequence suffers a loss, damage or expense proved to be due to their negligence, omission or default, then Det norske Veritas will pay by way of compensation to such person a sum representing his proved loss. In the event Det norske Veritas or its subsidiaries may be held liable in accordance with the sections above, the amount of compensation shall under no circumstances exceed the amount of the fee, if any, charged for that particular service, decision, advice or information. Under no circumstances whatsoever shall the individual or individuals who have personally caused the loss, damage or expense be held liable. In the event that any provision in this section shall be invalid under the law of any jurisdiction, the validity of the remaining provisions shall not in any way be affected.



Micon

Micon A/S
Milskovvej 8, Helstrup
DK-8900 Randers, Denmark
Phone: +45 86 46 76 00
Telefax: +45 86 46 77 18

Giro nr.: 6 75 01 41
A/S Reg.nr. 110.190
Bankers: Unibank A/S
Sankt Mathiasgade 68
8800 Viborg

Nachtrag zum GUTACHTEN für die Maschinenkonstruktion

der MICON M 700 - 225/40 kW Windkraftanlage

Windkraftanlage : Micon M 700 - 225 / 40 kW.
Seriennummer : 12387
Hersteller : Micon A/S
Bauherr : UWe GmbH, Hauptstr. 57, D-01774 Beerwalde.

Hiermit wird bestätigt, dass die obengenannte Windkraftanlage im Einverständnis mit den geltenden Bestimmungen der

DET NORSKE VERITAS

ausgeführt und überprüft wurde.



Randers 31.05.17
.....
Ort/Datum

Ebbe Stig Tarber
.....
Unterschrift
(Ebbe Stig Tarber)

OVE AMON
Hauptstr. 57
01774 Beerwalde



5.

TITEL: DATAKORT FOR M700-225/40 KW		Mølle nr: 12387	Side: 1 Af: 1
Dato: 10-01-94	Udarbejdet af: Benny Brogaard	Godkendt af: <i>BD</i>	NR: QF-0810
GEARKASSE Fabrikat : FLENDER Type : SZAK 2425 Fab.nr : 421 405 108-1-1 Omdr : n1=1810 n2=45,2 GEAROLIE Fabrikat : TRIBOL.: TL 1510 / 320 Mængde : LITER 55 KRØJEGEAR Fabrikat : BONFIGLIOLI Type : 306-L2-HZ- : MAS 30/DF-82-025-4 Fab.nr : 94030620 GENERATOR : (400 v) (690 v) (el-værk) Fabrikat : ELIN Type : MCT-435 L21 F3R-9 Fab.nr : 50381294046 VINGENAV OG FORLÆNGER Tegn.nr : 52-601 + 52-606 Vingenav : 4-8612 Forlænger : 4-2865, 4-6384, 4-2650 KRØJEKRANS Fabrikat : ROTHE ERDE Tegn.nr : 062.30.1158.000.34.1403 Fab.nr : 63432829-9 SPÆNDEELEMENTER Hovedleje : RINGFEDER Fabrikat : RFN 4073 ø 235 Gearkasse : STÜWE Type nr : HSD 280-22 FRIKTIONSBREMSE BIKON Type nr : 1006 - ø 60 x 90 BREMSESKIVE Fabrikat : MICON Tegn.nr : 52-323 GEARFUNDAMENT Fab.nr : 413/94 VINGER Type : LM 13.3 H Fab.nr : 361 - 309 - 380		KOBLING Fabrikat : CENTAFLEX Type : BF-A-250-G1 BREMSE Fabrikat : SIME 3T a 87 25 Fab.nr : 32952 LEJEHUS Fabrikat : FINKENRATH Fab.nr : 1400 INDUKTIVE FØLERE Fabrikat : AECO Vingenav : SI 18 C5 PNP HOVEDLEJE Fabrikat : FAG 24044 BMB KONTAKTER Rysteføl : Bernstein GC-SU1Z Twist : Bernstein SIEK-UV1 VINDMÅLER Fabrikat : ELECTROMATIC Type : PV 01-1 VINDFANE Fabrikat : ELECTROMATIC Type : OD 04-1 HOVEDKABLER Leveran. : CONTROL SYSTEMS Type : 3 stk. 4x50 mm2 MØLLETÅRN Tegn.nr : 51-047 Tårn nr : 197-94 HOVEDAKSEL Tegn.nr : 52-609 Serie nr : 5-406 FRIKTIONSBREMSE Fabrikat : MICON Fab.nr : 1313-1314 IMPULSGIVERE Krøjning : Induktiv føler Generator : Induktiv føler STYRING Fab.nr : 87052-573 OPSTART DATO : 7/4-1995	
DATO:	UNDERSKRIFT:	KONTROL DATO/INIT: 25/10-94 BD	

UWe GmbH
Hauptstr. 57
01774 Beerwalde



5.

TITEL: DATAKORT FOR M700-225/40 KW		Mølle nr: 12387	Side: 1 Af: 1
Dato: 10-01-94	Udarbejdet af: Benny Brogaard	Godkendt af: <i>[Signature]</i>	NR: QF-0810
GEARKASSE Fabrikat : FLENDER Type : SZAK 2425 Fab.nr : 421 405 108-1-1 Omdr : n1=1810 n2=45,2 GEAROLIE Fabrikat : TRIBOL.: TL 1510 / 320 Mængde : LITER 55 KRØJEGEAR Fabrikat : BONFIGLIOLI Type : 306-L2-HZ- : MAS 30/DF-82-025-4 Fab.nr : 94030620 GENERATOR : (400 v) (690 v) (el-værk) Fabrikat : ELIN Type : MCT-435 L21 F3R-9 Fab.nr : 50381294046 VINGENAV OG FORLÆNGER Tegn.nr : 52-601 + 52-606 Vingenav : 4-8612 Forlænger : 4-2865, 4-6384, 4-2650 KRØJEKRANS Fabrikat : ROTHE ERDE Tegn.nr : 062.30.1158.000.34.1403 Fab.nr : 63432829-9 SPÆNDEELEMENTER Hovedleje : RINGFEDER Fabrikat : RFN 4073 ø 235 Gearkasse : STÜWE Type nr : HSD 280-22 FRIKTIONSREMSE BIKON Type nr : 1006 - ø 60 x 90 BREMSESKIVE Fabrikat : MICON Tegn.nr : 52-323 GEARFUNDAMENT Fab.nr : 413/94 VINGER Type : LM 13.3 H Fab.nr : 361 - 309 - 380		KOBLING Fabrikat : CENTAFLEX Type : BF-A-250-G1 BREMSE Fabrikat : SIME 3T a 25 Fab.nr : 32952 LEJEHUS Fabrikat : FINKENRATH Fab.nr : 1400 INDUKTIVE FØLERE Fabrikat : AECO Vingenav : SI 18 C5 PNP HOVEDLEJE Fabrikat : FAG 24044 BMB KONTAKTER Rysteføl : Bernstein GC-SU1Z Twist : Bernstein SIEK-UV1 VINDMÅLER Fabrikat : ELECTROMATIC Type : PV 01-1 VINDFANE Fabrikat : ELECTROMATIC Type : OD 04-1 HOVEDKABLER Leveran. : CONTROL SYSTEMS Type : 3 stk. 4x50 mm2 MØLLETÅRN Tegn.nr : 51-047 Tårn nr : 197-94 HOVEDAKSEL Tegn.nr : 52-609 Serie nr : 5-706 FRIKTIONSREMSE Fabrikat : MICON Fab.nr : 1313 - 1314 IMPULSGIVERE Krøjning : Induktiv føler Generator : Induktiv føler STYRING Fab.nr : 87052-573 OPSTART DATO : 7/4-1995	
DATO:	UNDERSKRIFT:	KONTROL DATO/INIT: 25/10-94 BD	



CERTIFICATE OF QUALITY

LM-ROTOR BLADE CERTIFICATE

Conforming to the requirements of DIN 50049 - 3.1 B

Type: LM 13.4

P/O Acknowledgment No.: C002707

Warranty Certificate No.: G-23395

Gelcoat colour	: 8091
Weight of tip	: 35,5 kg
Weight	: 731,3 kg
Momentum of rootbase	: 3172 kgm
α -measurement ref. drawing No. 013527/022227	: 8,5° (\pm 0,5°)
α measured (1st bolt hole clockwise seen from tip)	: 8,6°
Serial No. of brake	: A
Tip plane deviation from "0-blade"	: -30 mm
Hydraulic test pressure	: 120 bar
ROTOR BLADE No.	: 309
	: 361
Matched with blades No.	: 380

The figures are certified by LM Glasfiber A/S and comply with the current rotor blade specifications.

Date: 19. december 1994

LM Glasfiber A/S
 Rolles Møllevej 1
 DK-6640 Lunderskov
 QA-Dept.

LM GLASFIBER A/S - ROLLES MØLLEVEJ 1 - DK-6640 LUNDERSKOV



CERTIFICATE OF QUALITY

LM-ROTOR BLADE CERTIFICATE

Conforming to the requirements of DIN 50049 - 3.1 B

Type: LM 13.4

P/O Acknowledgment No.: C002707

Warranty Certificate No.: G-23395

Gelcoat colour	: 8091
Weight of tip	: 38,8 kg
Weight	: 731,3 kg
Momentum of rootbase	: 3172 kgm
α -measurement ref. drawing No. 013527/022227	: 8,5° (\pm 0,5°)
α measured (1st bolt hole clockwise seen from tip)	: 8,5°
Serial No. of brake	: A
Tip plane deviation from "0-blade"	: 0 mm
Hydraulic test pressure	: 120 bar
ROTOR BLADE No.	: 361
	: 309
Matched with blades No.	: 380

The figures are certified by LM Glasfiber A/S and comply with the current rotor blade specifications.

Date: 19. december 1994

LM Glasfiber A/S
 Rolles Møllevvej
 Sign. O. M. Lunderskov

QA-Dept.

LM GLASFIBER A/S - ROLLES MØLLEVEJ 1 - DK-6640 LUNDERSKOV



CERTIFICATE OF QUALITY

LM-ROTOR BLADE CERTIFICATE

Conforming to the requirements of DIN 50049 - 3.1 B

Type: LM 13.4

P/O Acknowledgment No.: C002707

Warranty Certificate No.: G-23395

Gelcoat colour	: 8091
Weight of tip	: 36,8 kg
Weight	: 731,3 kg
Momentum of rootbase	: 3172 kgm
α -measurement ref. drawing No. 013527/022227	: 8,5° ($\pm 0,5^\circ$)
α measured (1st bolt hole clockwise seen from tip)	: 8,4°
Serial No. of brake	: A
Tip plane deviation from "0-blade"	: +10 mm
Hydraulic test pressure	: 120 bar
ROTOR BLADE No.	: 380
	: 309
Matched with blades No.	: 361

The figures are certified by LM Glasfiber A/S and comply with the current rotor blade specifications.

Date: 19. december 1994

LM Glasfiber A/S
 Rolles Møllevvej 1
 DK-6640 Lunderskov
 QA-Dept.

LM GLASFIBER A/S - ROLLES MØLLEVEJ 1 - DK-6640 LUNDERSKOV



DET NORSKE
VERITAS

Certificate No.:
ABG-MIC-0494

PRODUCT CERTIFICATE OF CONFORMITY

THIS IS TO CERTIFY THAT:

Product description: **1 off 225/40 kW wind turbine**

Type designation: **Micon M700**

Serial No: **12394** Marking: **Serial No.**
Nacelle No. 421 (For blades see separate certificate)

Tower No.: 195
Manufactured by: **Micon A/S**
(manufacturer and location) **Milskovvej 8, Helstrup**
DK-8900 Randers

Ordered by: **UWE GmbH.**
Hauptstrasse 57.
D-01774 Beerwalde.

Conforms with the following specification/standard:
(if necessary use Appendix to certificates form no. 20.90a)

Micon Design Documentation. Ref. Veritas Design Statement of Compliance
No. WTG/94/001/rev.0 dated 1994.05.02 under the following provisions:

As per Design Verification Report 145-9400255 dated 94.03.18.

Following data/test results annexed:

None (see Micon General Equipment file and checklist for Nacelle/Tower)

For Det norske Veritas Classification A/S



E.S. Tarber

Surveyor: **E.S. Tarber** Place: **Helstrup** Date: **01-05-95.**

Declaration by manufacturer (when applicable)

The undersigned manufacturer declares that the specified product has been manufactured in conformity with the specification/standard stated above and the conditions referred to in:

- Type Approval Certificate No.:
- Quality System Certificate No.:
- Manufacturing Survey Arrangement No.:

Manufacturer:

Name: Place: Date:

It is agreed that save as provided below Det norske Veritas, its subsidiaries, bodies, officers, directors, employees and agents shall have no liability for any loss, damage or expense allegedly caused directly or indirectly by their mistake or negligence, breach of warranty, or any other act, omission or error by them, including gross negligence or wilful misconduct by any such person with the exception of gross negligence or wilful misconduct by the governing bodies or senior executive officers of Det norske Veritas. This applies regardless of whether the loss, damage or expense has affected anyone with whom Det norske Veritas has a contract or a third party who has acted or relied on decisions made or information given by or on behalf of Det norske Veritas. However, if any person uses the services of Det norske Veritas or its subsidiaries or relies on any decision made or information given by or on behalf of them and in consequence suffers a loss, damage or expense proved to be due to their negligence, omission or default, then Det norske Veritas will pay by way of compensation to such person a sum representing his proved loss. In the event Det norske Veritas or its subsidiaries may be held liable in accordance with the sections above, the amount of compensation shall under no circumstances exceed the amount of the fee, if any, charged for that particular service, decision, advice or information. Under no circumstances whatsoever shall the individual or individuals who have personally caused the loss, damage or expense be held liable. In the event that any provision in this section shall be invalid under the law of any jurisdiction, the validity of the remaining provisions shall not in any way be affected.



Micon

Micon A/S
Milskovvej 8, Helstrup
DK-8900 Randers, Denmark
Phone: +45 86 46 76 00
Telefax: +45 86 46 77 18

Giro nr.: 6 75 01 41
A/S Reg.nr. 110.190
Bankers: Unibank A/S
Sankt Mathiasgade 68
8800 Viborg

Nachtrag zum GUTACHTEN für die Maschinenkonstruktion

der MICON M 700 - 225/40 kW Windkraftanlage

Windkraftanlage : Micon M 700 - 225 / 40 kW.
Seriennummer : 12394
Hersteller : Micon A/S
Bauherr : UWE GmbH, Hauptstr. 57, D-01774 Beerwalde.

Hiermit wird bestätigt, dass die obengenannte Windkraftanlage im Einverständnis mit den geltenden Bestimmungen der

DET NORSKE VERITAS

ausgeführt und überprüft wurde.

Helstrup 95.05.01

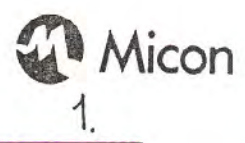
Ort/Datum



Ebbe Stig Tarber

Unterschrift
(Ebbe Stig Tarber)

UWe GmbH
 Hauptstr. 57
 01774 Beerwalde



TITEL: DATAKORT FOR M700-225/40 KW		Molle nr: 12394	Side: 1 Af: 1
Dato: 21-11-94	Udarbejdet af: Benny Brogaard	Godkendt af: LFH	NR: QF-0810
REV: A			
GEARKASSE		KOBLING	
Fabrikat : FLENDER	Type : SZAK 2425	Fabrikat : CENTAFLEX	Type : BF-A-250-G1
Fab.nr : 421 405 109-1-3	Omdr : n1=1810 n2=45,2	BREMSE	
GEAROLIE		Fabrikat : SIME 3T a 225	Fab.nr : 33 324
Fabrikat : TRIBOL.: TL 1510 / 320	Mængde : LITER 55	LEJEHUS	
KROJEGEAR		Fabrikat : FINKENRATH	Fab.nr : 1408
Fabrikat : BONFIGLIOLI	Type : 306-L2-HZ-	INDUKTIVE FOLERE	
	MAS 30/DF-82-025-4	Fabrikat : AECO	Vingenav : SI 18 C5 PNP
Fab.nr : 94033047	HOVEDLEJE		Fabrikat : FAG 24044 BMB
GENERATOR : (400 v) (690 v) (el-værk)		KONTAKTER	
Fabrikat : ELIN	Type : MCT-435 L21 F3R-9	Rystefol : Bernstein GC-SU1Z	Twist : Bernstein SIEK-UV1
Fab.nr : 50405094016	VINDMÅLER		Fabrikat : ELECTROMATIC
VINGENAV OG FORLÆNGER		Type : PV 01-1	VINDFANE
Tegn.nr : 52-601 + 52-606	Vingenav : 4-7014	Fabrikat : ELECTROMATIC	Type : OD 04-1
Forlænger : 4-3207, 4-3747, 4-0802	HOVEDKABLER		Leveran. : CONTROL SYSTEMS
KROJEKRANS		Type : 3 stk. 4x50 mm2	MOLLETÅRN
Fabrikat : ROTHE ERDE	Tegn.nr : 062.30.1158.000.34.1403	Tegn.nr : 51-047	
Fab.nr : 63432829-3	Los nr. :	Tårn nr : 195-94	
SPÆNDEELEMENTER		HOVEDAKSEL	
Hovedleje : RINGFEDER	Fabrikat : RFN 4073 o 235	Tegn.nr : 52-609	Serie nr : 5-416
Gearkasse : STÜWE	Type nr : HSD 280-22	FRIKTIONS BREMSER	
FRIKTIONS BREMSER BIKON		Fabrikat : MICON	Fab.nr : 1503-1504
Type nr : 1006 - o 60 x 90	IMPULSGIVERE		Krojning : Induktiv foler
BREMSESKIVE		Generator : Induktiv foler	STYRING
Fabrikat : MICON	Tegn.nr : 52-323	Fab.nr : 87052-570	
GEARFUNDAMENT		OPSTART	
Fab.nr : 421	DATO : 23/3 - 1995		
VINGER			
Type : LM 13.3 H	Fab.nr : 399 - 373 - 393		
DATO:	UNDERSKRIFT:	KONTROL DATO/INIT: 22-12-94 BD	



CERTIFICATE OF QUALITY

LM-ROTOR BLADE CERTIFICATE

Conforming to the requirements of DIN 50049 - 3.1 B

Type: LM 13.4

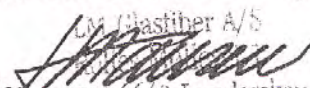
P/O Acknowledgment No.: C001904

Warranty Certificate No.: G-23325

Gelcoat colour	: 8091
Weight of tip	: 37,3 kg
Weight	: 727,8 kg
Momentum of rootbase	: 3144 kgm
α -measurement ref. drawing No. 013527/022227	: 8,5° (\pm 0,5°)
α measured (1st bolt hole clockwise seen from tip)	: 8,6°
Serial No. of brake	: A
Tip plane deviation from "0-blade"	: -10 mm
Hydraulic test pressure	: 120 bar
ROTOR BLADE No.	: 373
	: 393
Matched with blades No.	: 399

The figures are certified by LM Glasfiber A/S and comply with the current rotor blade specifications.

Date: 9. december 1994

LM Glasfiber A/S

 Sign.: DK-6640 Lunderskov
 QA-Dept.

LM GLASFIBER A/S - ROLLES MØLLEVEJ 1 - DK-6640 LUNDERSKOV



CERTIFICATE OF QUALITY

LM-ROTOR BLADE CERTIFICATE

Conforming to the requirements of DIN 50049 - 3.1 B

Type: LM 13.4

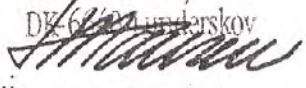
P/O Acknowledgment No.: C001904

Warranty Certificate No.: G-23325

Gelcoat colour	: 8091
Weight of tip	: 35,8 kg
Weight	: 727,8 kg
Momentum of rootbase	: 3144 kgm
α -measurement ref. drawing No. 013527/022227	: 8,5° ($\pm 0,5^\circ$)
α measured (1st bolt hole clockwise seen from tip)	: 8,6°
Serial No. of brake	: A
Tip plane deviation from "0-blade"	: -10 mm
Hydraulic test pressure	: 120 bar
ROTOR BLADE No.	: 393
	: 373
Matched with blades No.	: 399

The figures are certified by LM Glasfiber A/S and comply with the current rotor blade specifications.

Date: 9. december 1994

Sign.: 
QA-Dept.

LM GLASFIBER A/S - ROLLES MØLLEVEJ 1 - DK-6640 LUNDERSKOV



CERTIFICATE OF QUALITY

LM-ROTOR BLADE CERTIFICATE

Conforming to the requirements of DIN 50049 - 3.1 B

Type: LM 13.4

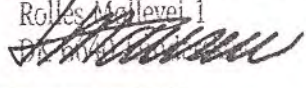
P/O Acknowledgment No.: C001904

Warranty Certificate No.: G-23325

Gelcoat colour	: 8091
Weight of tip	: 34,8 kg
Weight	: 727,8 kg
Momentum of rootbase	: 3144 kgm
α -measurement ref. drawing No. 013527/022227	: 8,5° (\pm 0,5°)
α measured (1st bolt hole clockwise seen from tip)	: 8,5°
Serial No. of brake	: A
Tip plane deviation from "0-blade"	: 0 mm
Hydraulic test pressure	: 120 bar
ROTOR BLADE No.	: 399
	: 373
Matched with blades No.	: 393

The figures are certified by LM Glasfiber A/S and comply with the current rotor blade specifications.

Date: 9. december 1994

Sign.: 
QA-Dept.