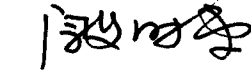


型号认可证数据单
THE VALIDATION DATA SHEET

编号/No: VTC 0228P
版次/Revision: 0
型号/Type:

MTV-21- ()

批准人/Approved By:



日期/Date: 2009.7.27

本数据单是型号认可证（编号：VTC 0228P）的组成部分，它规定了符合中国民用航空总局的适航要求所颁发此型号认可证的产品状态和限制。

This data sheet, which is part of **Validation of Type Certificate (No: VTC 0228P)**, prescribes condition and limitation under which the product for which the type certificate was issued meets the airworthiness requirements of the Chinese Civil Aviation Regulation.

型号认可证持有人/**Validation of Type Certificate Holder:**

MT-Propeller Entwicklung GmbH
Flugplatzstrasse 94348 Atting
Germany

有效页清单/List of effective pages :

页数/ Pages	1	2	3	4	5	6	7
版次/Revision	0	0	0	0	0	0	0

1. CAAC 认可数据单和型号合格证数据单 / CAAC Validation Data Sheet and Type Certificate Data Sheet

	中国民用航空总局认可数据单号、版次和颁发日期 CAAC Validation Data Sheet Number, Revision and issuance date	型号合格证数据单号、版次和颁发日期 Type Certificate Data Sheet Number, Revision and issuance date
历史 History		
当前 Current	VTC0228P, Revision 0, 2009 年 7 月 27 日	LBA No.32.130/86, Issue5 (June 17, 2004)

2. 类别/Category: 螺旋桨/Propeller

3. 认可当局/Validation Authority: 中国民用航空局/CAAC

审定当局/Certifying Authority: 德国民航局/LBA

4. 型号合格证持有人/Type Certificate Holder::

MT-Propeller Entwicklung GmbH

Flugplatzstrasse 94348 Atting

Germany。

型号/Type	MTV-21
制造人/Manufacturer	MT-Propeller Entwicklung GmbH Flugplatzstrasse 94348 Atting Germany
A.型别/A.Model	MTV-21-A 1993年6月10日, 获得型号合格审定批准, 型号合格证数据单编号 32.110/86 MTV-21-A Certified on June 10, 1993 with TCDS Nr. 32.110/86 for application of the manufacturer
构造/Construction	两桨叶液压恒速螺旋桨, 带顺桨和反桨功能。桨毂材料为铝合金, 桨叶 为层压木复合材料结构, 覆盖纤维涂层, 带防腐护套。 注: MTV-21-A 可安装机械变矩机构, 详见型别说明。 Two blade hydraulic constant speed propeller with feathering and reversing feature. The hub material is aluminum alloy. Blades material is a laminated wood composite structure with composite fiber cover and with an erosion sheath. Remark: Model MTV-21-A can be equipped with a mechanical pitch change mechanism. See model designation.
适航条/Airworthiness Regulations	FAR35部, 修正案35-1至35-7 FAR Part 35 with Amendments 35-1 to 35-7
手册/Manuals	液压控制变桨矩螺旋桨使用和安装手册E-124, 1993年3月版(或后续批准的版本)。 液压控制变桨矩螺旋桨大修手册和部件清单E-128, 1998年6月1日由1993年3月版(或 后续批准的版本)替代。 反桨液压控制变桨矩螺旋桨使用和安装手册E-504, 2002年6月版(或后续批准的版 本)。 反桨液压控制变桨矩螺旋桨大修手册和部件清单E-519, 2003年9月版(或后续批准 的版本) Operation- and Installation Manual No. E-124 for Hydraulically Controlled Variable Pitch Propellers, Issue March, 1993 (*). Overhaul Manual and Parts List No. E-128 for Hydraulically Controlled Variable Pitch Propellers. on June 01,1998 replaced by: Overhaul Manual and Parts List No. E-220 for Hydraulically Controlled Variable Pitch Propellers, Issue April, 1993 (*). Operation- and Installation Manual No. E-504 for Reversible Hydraulically Controlled Variable Pitch Propellers, Issue June 2002 (*). Overhaul Manual and Parts List No. E-519 for Reversible Hydraulically Controlled Variable Pitch Propellers,

	Issue September 2003 (*) (*) = or later approved revision
B.型别/B.Model	MTV-21-D 1993年6月10日, 获得型号合格审定批准, 型号合格证数据单编号32.110/86。 除使用限制外, 所有规范与A型别所述一致 Certified on June 10, 1993 with TCDS Nr. 32.110/86 for application of the manufacturer All specification as mentioned under A. apply except the operating limitations.
C.型别/C.Model	MTV-21-F 1993年6月10日, 获得型号合格审定批准, 型号合格证数据单编号32.110/86。 除使用限制外, 所有规范与A型别所述一致。 Certified on June 10, 1993 with TCDS Nr. 32.110/86 for application of the manufacturer All specification as mentioned under A. apply except the operating limitations.
使用限制/	Operating Limitations
桨毂/叶片Hub/Blade	桨毂Hub: MTV-21-A, -D,-F 桨叶型号Blade Type -03,-04,-05,-06,-07,-08,-09,-12,-16,-23,-26,-31,-49,-51,-106,-112,-125,-129,-312
直径/Diameter	145cm-180cm
质量/Mass	恒速, 约10kg/“Constant Speed”approx.10Kg 恒速, 反桨, 约12kg/“Constant Speed, Feather” approx.12 kg 恒速, 顺桨, 约12kg/“Constant Speed, Feather” approx.12 kg 恒速, 顺桨, 反桨, 约13.5kg/“Constant Speed, Feather, Reverse” approx.13.5 kg
驱动功率/Driving Power	3400rpm, 最大起飞功率59kw或3200rpm, 起飞最大功率64kw/Take-off power max. 59 kW at 3400 rpm or 64 kW at 3200 rpm。 3000rpm, 最大连续功率68kw/ Continuous power max. 68 kW at 3000 rpm。 螺旋桨直径145cm-160cm/ Propeller Diameter: 145 cm to 160 cm。 2750rpm, 最大起飞/连续功率73.6kw/ Take-off /Continuous power max. 73.6 kW at 2750 rpm。 螺旋桨直径145cm-160cm/ Propeller Diameter: 145 cm to 175 cm。 2388rpm, 最大起飞功率85kw /Take-off power max. 85 kW at 2388 rpm。 2265rpm, 最大连续功率73.5kw/ Continuous power max. 73.5 kW at 2265 rpm。 螺旋桨直径145cm-160cm/ Propeller Diameter: 145 cm to 180 cm。
设备/Equipment	服务通告No.13 (2002年2月24版或后续批准的版本)规定的整流罩/ Spinner according to MT-Propeller SB No. 13,Issue February 24, 2002 服务通告No.14 (2003年11月27日版或后续批准的版本)规定的螺旋桨控制器/ Propeller governor according to MT-Propeller SB No. 14,Issue November 27, 2003 服务通告No.15 (1998年12月9日版或后续批准的版本)规定的除冰设备/ De-icing equipment according to MT-Propeller SB No. 15,Issue December 09, 1998
型别说明/	Model Designation

示例/Example

桨毂/Hub

MT V-21- () -D- () - () - () - ()

1 2 3 4 5 6 7 8 9 10

桨叶/Blade

/ () - () -180-05- ()

1 2 3 4 5

桨毂/Hub

- 1 MT-Propeller Entwicklung GmbH
- 2 变矩螺旋桨/Variable Pitch Propeller
- 3 基本型连续号/ Consecutive number of the basic type
- 4 设计系列连续号/ consecutive number of design series
- 5 螺旋桨法兰盘代码/ Code for propeller flange
A = Motorglider engines bolt 7/16" - 20 UNF, circle dia 80 mm
D = ARP 502
F = SAE No. 1, bolts 3/8 "-24UNF
- 6 配重字母代号说明/Letter designation counterweights
空白/blank=没有配重或安装小配重用于向低桨矩的桨矩调整/ none or small counterweights mounted for pitch change moments towards low pitch
C=安装有向高桨矩调整的配重/ counterweights mounted for pitch change moments towards high pitch
- 7 关于顺桨的信息/Information about feathering
空白/blank=无顺桨/no feathering possible
F=液压顺桨系统/feathering system(hydraulic)installed
MF=机械顺桨系统/feathering system(mechanical)installed
- 8 关于反桨的信息/information about reverse
空白/blank=无反桨/no reverse possible
R=带反桨/reverse installed
- 9 关于反桨系统的信息/information about reverse system
M=MUhlbauer 系统
- 10 小写字母/small letter=不影响互换性的改装/modification which do not affect interchangeability
大写字母/capital letter=限制或排除互换性的改装/modification which restrict or exclude interchangeability

桨叶/blade

- 1 作动销位置/Position of actuation pin
空白/blank=低桨矩的桨矩调整销/Pitch change pin for pitching moments towards low pitch
C=高桨矩的桨矩调整销/ pitch change pin for pitching moments towards high pitch
CF=顺桨调整销（高桨矩）/pitch change pin for feathering (pitching moments towards high pitch)
CR=反桨调整销（高桨矩）/pitch change pin for reverse (pitching moments towards high pitch)

	CFR=反桨、顺桨调整销/pitch change pin for feathering and reverse (pitching moments towards high pitch)
2	转动方向/Sense of rotation 空白/blank=右手(牵引)/right hand (tractor) RD=右手(推进)/right hand (pusher) L=左手(牵引)/left hand(tractor) LD=左手(推进)/left hand(pushes)
3	螺旋桨尺寸(单位厘米)/Propeller diameter in cm
4	基本型连续号(包括空气动力数据)/Consecutive number of basic type (includes aerodynamic data)
5	小写字母/small letter=不影响桨叶互换性的改装/modification which do not affect interchangeability of blade sets 大写字母/capital letter=限制或排除桨叶互换性的改装/modification which restrict or exclude interchangeability of blade sets
备注/Remarks	
1	型号合格审定对下列MT文件所述螺旋桨设计有效/ The Type Certification is valid for Propeller design according to the following listed MT-Documents MTV-21-A, -F (恒速)/(Constant Speed) 图号/Drawing No. P-300-(X), Issue 07.07.1992 (*) 部件清单号/Partlist No. S-048-(X), Issue 24.02.1993 (*) MTV-21-D (恒速)/(Constant Speed) 图号/Drawing No. P-649-(X), Issue 03.09.1999 (*) 部件清单号/Partslist No. S-112-(X), Issue 13.09.1999 (*) MTV-21-A (恒速, 液压顺桨)/(Constant Speed, Feather hydraulic) 图号/Drawing No. P-439-(X), Issue 25.07.1992 (*) 部件清单号/Partslist No. S-058-(X), Issue 26.07.1994 (*) MTV-21-A (恒速, 机械顺桨)/(Constant Speed, Feather mechanical) 图号/Drawing No. P-443-(X), Issue 09.09.1994 (*) 部件清单号/Partslist No. S-062-(X), Issue 12.09.1994 (*) MTV-21-()-C-R(M) (恒速, 反桨)/(Constant Speed, Reverse-Mühlbauer) 图号/Drawing No. P-667-(X), Issue 01.12.1999 (*) 部件清单号/Partslist No. S-117-(X), Issue 03.07.2002 (*) MTV-21-()-C-F-R(M) (恒速, 顺桨, 反桨)/(Constant Speed, Feather, Reverse-Mühlbauer) 图号/Drawing No. P-701-(X), Issue 23.04.2000 (*) 部件清单号/Partslist No. S-121-(X), Issue 03.07.2002 (*) (X)= 图纸和部件清单的当前更改/current changing letter of Drawing and Parts list (*)= 或后续批准的版本/or later approved revision
2	在飞机的型号合格审定范围内, 批准螺旋桨与航空器/发动机组合的适用性

3

The suitability of the propeller for a certain aircraft/engine combination has to be proved within the scope of the Type Certification of the aircraft.

关于制造人推荐的大修时间，参考MT-Propeller 服务通告No.1

For the manufacturers recommended overhaul times refer to MT-Propeller SB No.1.

结束 (End)