

中 国 民 用 航 空 总 局
GENERAL ADMINISTRATION OF CIVIL AVIATION OF CHINA

型号认可证数据单
Validation Type Certificate Data Sheet

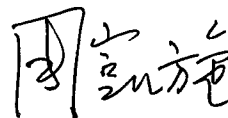
编号/No: VTC0211P

版次/Revision:0

型号/Type:

MTV-25

批准人/Approved By:



日期/Date:2008-05-16

本数据单是型号认可证(编号: VTC 0211P)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 0211P), 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
Flugplatz Straubing-Wallmühle
94348 Atting

有效页清单/List of effective pages :

Pages	1	2	3	4	5	6	7	8	9	10	11								
Revision	0	0	0	0	0	0	0	0	0	0	0								

第1部分 概述（所有型号）
SECTION 1 GENERAL (ALL MODELS)

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
当前 Current	VTC 0211P, Rev. 0, 2008-05-16	TCDS.No.32.130/97, Issue 3, 20 June, 2001
历史 History		

2. 认可当局/Validation Authority: 中国民用航空总局/CAAC

审定当局/Certifying Authority: 德国民航局/LBA

3. 型号合格证持有人/Type Certificate Holder: MT-Propeller Entwicklung GmbH
Flugplatz Straubing-Wallmühle
94348 Atting

第2部分 SECTION 2

MTV-25-1

I. 概况:

I. General:

- | | | | |
|-----------------------------|-----------|-------------------------------|-----------------------|
| 1. 数据单号: | 32.130/97 | Issue: 3 | Date: 20 June 2001 |
| 1. TCDS No.: | | 发布: 3 | 生效日期: 2001 年 6 月 20 日 |
| 2. 型号 / 衍生型 | | | |
| 2. Type / Variant: | | MTV-25 / MTV-25-1 | |
| 3. 型号合格证持有人: | | MT-Propeller Entwicklung GmbH | |
| 3. Type Certificate Holder: | | Flugplatz Straubing-Wallmühle | |
| | | 94348 Atting | |
| 4. 制造人: | | see 3. | |
| 4. Manufacturer: | | 见 3 | |
| 5. LBA Application Date: | | 20 March 1996 | |
| 5. 向德国民航局申请日期: | | 1996 年 3 月 20 日 | |
| 6. LBA Certification Date: | | 19 February 1997 | |
| 6. 德国民航局颁发合格证日期 | | 1997 年 2 月 19 日 | |

II. 审定基础:

II. Certification basis:

- | | |
|--------------------------------------|--|
| 1. LBA 适航标准: | JAR-P, Change 7 of 22. October 1987 |
| 1. LBA Airworthiness Standards: | JAR-P, Change 7 of 22. October 1987 |
| 2. 专用条件: | 无 |
| 2. Special Conditions (SC): | none |
| 3. 豁免: | 无 |
| 3. Exemption: | none |
| 4. 等效安全: | 对 CCAR35.21 条款的等效安全: 限制 MTV -25 螺旋桨只能安装在飞艇上 |
| 4. Equivalent Safety Findings (ESF): | Equivalent level of safety finding for CCAR 35.21 for Model MTV-25 which restricts the model to airship installation |
| 5. CAAC 认可审定基础 | JAR-P, Change 7 of 22. October 1987, 中国附加技术条件: 对 CCAR35.21 条款的等效安全: 限制 MTV -25 螺旋桨只能安装在飞艇上 |
| 5. CAAC validation basis: | JAR-P, Change 7 of 22. October 1987, China Additional Technical conditions: Equivalent level of safety finding for CCAR 35.21 for Model MTV-25 which restricts the model to airship installation |

III. 技术参数:

III. Technical Characteristics:

- | | |
|-----------|------------------|
| 1. 型号设计定义 | Variant MTV-25-1 |
|-----------|------------------|

设计构型如下:

“恒速”螺旋桨

- 图纸 No. P-159, 1992 年 2 月 19 日
- 零部件清单 No. S-045, 1992 年 2 月 12 日

“恒速、顺桨”螺旋桨

- 图纸 No. P-546, 1997 年 6 月 19 日
- 零部件清单 No. S-076, 1997 年 8 月 19 日

“恒速、反桨(M)”螺旋桨

- 图纸 No. P-483-A, 1997 年 4 月 18 日
- 零部件清单 No. S-070, 1997 年 7 月 31 日

“恒速、反桨(A)”螺旋桨

- 图纸 No. P-553 dated, 1997 年 8 月 19 日
- 零部件清单 No. S-077, 1997 年 8 月 19 日

“恒速、顺桨、反桨(A)”螺旋桨

- 图纸 No. P-634-A, 1999 年 9 月 8 日
- 零部件清单 No. S-108-A, 2000 年 12 月 12 日

注: 改版时, 在图纸号和零部件清单号后会增加当前的版本字母, 例如从 P-643 到 P-643-A

1. Type Design Definition:

Variant MTV-25-1

Design Configuration as follows

"Constant Speed", respectively "Constant Speed" - Propeller

- Drawing No. P-159 dated 19 February 1992
- Parts List No. S-045 dated 12 February 1992

"Constant Speed, Feather" - Propeller

- Drawing No. P-546 dated 19 June 1997
- Parts List No. S-076 dated 19 August 1997

"Constant Speed, Reverse (M)"-Propeller

- Drawing No. P-483-A dated 18 April 1997
- Parts List No. S-070 dated 31 July 1997

"Constant Speed, Reverse (A)"-Propeller

- Drawing No. P-553 dated 19 August 1997
- Parts List No. S-077 dated 19 August 1997

"Constant Speed, Feather, Reverse (A)"-Propeller

- Drawing No. P-634-A dated 08 September 1999
- Parts List No. S-108-A dated 12 December 2000

Note: At a revision, the Drawing No. or the Part List No. will be completed with the current revision letter, e.g. from P-634 to P-634-A

2. 描述:

桨叶变距机构使用液压操作的 5 叶变距螺旋桨。桨毂为铝合金整体铣制。桨叶为复合层压木质, 外覆环氧复合加强层。桨叶前缘具有腐蚀防护装置。

2. Description:

5-blade variable pitch propeller with a hydraulically operated blade pitch change mechanism. The hub is milled out of aluminum alloy. The blade material is laminated wood composite structure coated in composite reinforced epoxy. The leading edge of the blades are equipped with an erosion protection device.

3. 设备:

整流罩: 按照 MT-Propeller 服务通告 No. 13

3. Equipment: 防冰: 按照 MT-Propeller 服务通告 No. 15
Spinner: according to MT-Propeller Service Bulletin No. 13
Ice Protection: according to MT-Propeller Service Bulletin No. 15
4. 尺寸: 螺旋桨直径: 最大 170 cm
4. Dimensions: Propeller-Durchmesser: max. 170 cm
5. 重量: 螺旋桨设计构型
“恒速”: 约 22 kg
“恒速、顺桨”: 约 22.5 kg
“恒速、反桨 (M)”: 约 30 kg
“恒速、顺桨、反桨 (M)”: 约 31 kg
“恒速、顺桨、反桨 (A)”: 约 28.5 kg
5. Weight: Propeller-Design Configuration
“Constant Speed”: approx. 22 kg
“Constant Speed, Feather”: approx. 22.5 kg
“Constant Speed, Reverse (M)”: approx. 30 kg
“Constant Speed, Feather, Reverse (M)”: approx. 31 kg
“Constant Speed, Feather, Reverse (A)”: approx. 28.5 kg

6. 桨毂/桨叶组合:

桨毂	桨叶—型号
MTV-25-1	-03, -04, -05, -06, -07, -08, -12, -16, -23, -28, -31, -49, -51, -106, -112, -122, -125, -312

6. Hub/Blade-Combinations:

Hub	Blade-Type
MTV-25-1	-03, -04, -05, -06, -07, -08, -12, -16, -23, -28, -31, -49, -51, -106, -112, -122, -125, -312

7. 控制系统: 液压操纵调速器, 控制参数见 MT-Propeller 服务通告 No. 14
7. Control System: Hydraulically operating governors corresponding to the data of MT-Propeller Service Bulletin No. 14
8. 与发动机的匹配: 桨毂法兰盘与螺旋桨牌号中特定的字母相对应
8. Adaption to Engine: Hub flanges corresponding to the particular letter in the propeller designation
9. 旋转方向: 旋转方向 (顺飞行方向观察) 与螺旋桨牌号中特定的字母相对应
9. Sense of Rotation: Sense of rotation (viewed in flight direction) corresponding to the particular letter in the propeller designation

IV. 使用限制:IV. Operational Limits:

1. 批准的组合

发动机/飞机: 见注: - VI. 2. and 3.

1. Approved combinations

Engine / Airplane: See Notes- chapter VI. 2. and 3.

2. 螺旋桨转速: Max. 2850 RPM

2. Propeller speed: Max. 2850 RPM

3. 驱动功率: 最大起飞和连续功率在 2850 RPM 达到 138 kW
最大起飞和连续功率在 2700 RPM 达到 261 kW
3. Driving Power: Max. Takeoff and Continuous Power of 138 kW at 2850 RPM
Max. Takeoff and Continuous Power of 261 kW at 2700 RPM
4. 螺旋桨桨距角: max. 100°
4. Propeller Pitch Angle: max. 100°

V. 使用和维护说明

V. Operating and Service Instructions

1. 使用 and 安装手册: 液压操纵变距螺旋桨的使用和安装手册 No. E-124, 1997 年 7 月 1 日发布
液压操纵的可反桨变距螺旋桨系统-R(M)的使用和安装手册 No. E-504, 1997 年 5 月 21 日发布
液压操纵的可反桨变距螺旋桨系统-R(A)的使用和安装手册 No. E-610, 2000 年 3 月 29 日发布
2. 维护说明: 液压操纵变距螺旋桨的大修手册和零部件清单 No. E-220, 2000 年 11 月 29 日发布, 替代 No. E-128, 1997 年 5 月 15 日发布
液压操纵可反桨变距螺旋桨系统-R(M)大修手册和零部件清单 No. E-519, 1997 年 4 月 4 日发布
液压操纵可反桨变距螺旋桨系统-R(M)大修手册和零部件清单 No. E-520, 2000 年 4 月 12 日发布
液压操纵可反桨变距螺旋桨系统-R(A)大修手册和零部件清单 No. E-680, 2001 年 1 月 7 日发布
3. 服务通告: 适用的 MT-Propeller 服务通告(SB) 见当前 MT-Propeller 服务通告列表.

1. Operation and Installation Manuals:

Operation and Installation Manual No. E-124 for hydraulically controlled variable propeller, Issue 01 July 1997
Operation and Installation Manual No. E-504 for reversible hydraulically controlled variable propeller System -R(M), Issue 21 May 1997
Operation and Installation Manual No. E-610 for reversible hydraulically controlled variable propeller System -R(A), Issue 29 March 2000

2. Service Instructions:

Overhaul Manual and Parts List No. E-128 for hydraulically controlled variable propeller, Issue 15 May 1997 replaced by Overhaul Manual and Parts List No. E-220 for hydraulically controlled variable propeller, Issue 29 November 2000

Overhaul Manual and Parts List No. E-519 for reversible hydraulically controlled variable propeller System -R(M), Issue 04 April 1997

Overhaul Manual and Parts List No. E-520 for reversible hydraulically controlled variable propeller System -R(M), Issue 12 April 2000

Overhaul Manual and Parts List No. E-680 for reversible hydraulically controlled variable propeller System -R(A), Issue 07 January 2001

3. Service Bulletins:

Applicable MT-Propeller Service Bulletins (SB) are published in the current list of Service Bulletins of MT-Propeller.

VI. 注释:

1. 本 TCDS 及其批准的改版中公布的制造商文件都是有效的。
2. 螺旋桨对于特定的飞机/发动机组合的适用性必须在飞机的型号审定中予以演示。
3. 螺旋桨/发动机/飞机组合对于 JAR-P60(b), 160(b), 190 and 220 的符合性已经在 MT-Propeller 服务通告 No. 16 予以演示。
4. 制造商推荐的大修间隔列在 MT-Propeller 服务通告 No. 1 中。
5. 螺旋桨命名系统

桨毂					桨叶			
MT	V	-	25	-	1	-	()	
----	----	----	----	----	/	----	----	----
1	2	3	4	5		6	7	8

- 1 MT-Propeller (制造商)
- 2 V = 可变距螺旋桨
- 3 螺旋桨型号编号
- 4 螺旋桨型号衍生型编号
- 5 桨毂型号字母代码
- 6 桨叶型号字母代码
- 7 螺旋桨直径 cm
- 8 根据已审定的桨毂/桨叶组合给出的桨叶型号编号 (包括设计构型和气动数据)
- 9 设计更改的字母代码
小写字母表示更改不影响桨叶副的互换性, 大写字母表示桨叶副的互换性将受到限制和失去互换性

VI. Notes:

1. The documents of the manufacture which are published in this TCDS or in approved revisions are valid.
2. The suitability of a propeller for a certain aircraft/engine-combination must be demonstrated within the scope of the type certification of the aircraft.
3. Propeller/engine/aircraft-combinations that have been demonstrated to comply with the requirements of JAR-P60(b), 160(b), 190 and 220 are published in MT-Propeller Service Bulletin No. 16.
4. The overhaul intervals recommended by the manufacturer are published in MT-Propeller Service Bulletin No. 1.
5. Propeller designation system

Hub					Blade			
MT	V	-	25	-	1	-	()	
----	----	----	----	----	/	----	----	----
1	2	3	4	5		6	7	8

- 1 MT-Propeller (manufacturer)
- 2 V = Variable Pitch Propeller
- 3 No. of propeller model
- 4 No. of variant of the propeller model
- 5 code letter for hub type
- 6 code letter for blade type
- 7 propeller diameter in cm
- 8 no. of blade type (contains design configuration and aerodynamic data) according to the certified hub/blade - combinations
- 9 code letter for design changes
small letter for changes which do not affect interchangeability of blade set capital letter for changes which restrict or exclude interchangeability of blade set

MTV-25-2

I. 概况:I. General:

- | | | | |
|-----------------------------|-----------|-------------------------------|----------------------|
| 1. 数据单号: | 32.130/97 | Issue: 1 | Date: 20 June 2001 |
| 1. TCDS No.: | | 发布: 1 | 生效日期: 2001 年 6 月 3 日 |
| 2. 型号 / 衍生型 | | | |
| 2. Type / Variant: | | MTV-25 / MTV-25-2 | |
| 3. 型号合格证持有人: | | MT-Propeller Entwicklung GmbH | |
| 3. Type Certificate Holder: | | Flugplatz Straubing-Wallmühle | |
| | | 94348 Atting | |
| 4. 制造人: | | see 3. | |
| 4. Manufacturer: | | 见 3 | |
| 5. LBA Application Date: | | 25 May 1999 | |
| 5. 向德国民航局申请日期: | | 1999 年 5 月 25 日 | |
| 6. LBA Certification Date: | | 20 June 2001 | |
| 6. 德国民航局颁发合格证日期 | | 2001 年 6 月 20 日 | |

II. 审定基础:II. Certification basis:

- | | |
|--------------------------------------|-------------------------------------|
| 1. 适航标准: | JAR-P, Change 7 of 22. October 1987 |
| 1. Airworthiness Standards: | JAR-P, Change 7 of 22. October 1987 |
| 2. 专用条件: | 无 |
| 2. Special Conditions (SC): | none |
| 3. 豁免: | 无 |
| 3. Exemption: | none |
| 4. 等效安全: | 无 |
| 4. Equivalent Safety Findings (ESF): | none |

III. 技术参数:III. Technical Characteristics:

- | | |
|-----------|------------------|
| 1. 型号设计定义 | Variant MTV-25-2 |
|-----------|------------------|

设计构型如下:

“恒速、反桨 (M)” 螺旋桨
- 图纸 No. P-731, 2000 年 12 月 12 日
- 零部件清单 No. S-128, 2000 年 12 月 12 日

“恒速、顺桨、反桨 (M)” 螺旋桨
- 图纸 No. P-732, 2000 年 12 月 12 日
- 零部件清单 No. S-129, 2000 年 12 月 12 日

注: 改版时, 在图纸号和零部件清单号后会增加当前的版本字母, 例如从 P-732 到 P-732-A

1. Type Design Definition: Variant MTV-25-2

Design Configuration as follows

"Constant Speed, Reverse (M)"-Propeller

- Drawing No. P-731 dated 12 December 2000

- Parts List No. S-128 dated 12 December 2000

"Constant Speed, Feather, Reverse (M)"-Propeller

- Drawing No. P-732 dated 12 December 2000

- Parts List No. S-129 dated 12 December 2000

Note: At a revision, the Drawing No. or the Part List No. will be completed with the current revision letter, e.g. from P-732 to P-732-A

2. 描述: 桨叶变距机构使用液压操作的 5 叶变距螺旋桨。桨毂为铝合金整体铣制。桨叶为复合层压木质, 外覆环氧复合加强层。桨叶前缘具有腐蚀防护装置。
2. Description: 5-blade variable pitch propeller with a hydraulically operated blade pitch change mechanism. The hub is milled out of aluminum alloy. The blade material is laminated wood composite structure coated in composite reinforced epoxy. The leading edge of the blades are equipped with an erosion protection device.
3. 设备: 整流罩: 按照 MT-Propeller 服务通告 No. 13
防冰: 按照 MT-Propeller 服务通告 No. 15
3. Equipment: Spinner: according to MT-Propeller Service Bulletin No. 13
Ice Protection: according to MT-Propeller Service Bulletin No. 15
4. 尺寸: 螺旋桨直径: 最大 170 cm
4. Dimensions: Propeller-Durchmesser: max. 170 cm
5. 重量: 螺旋桨设计构型
- “恒速、反桨 (M)” : 约 28 kg
- “恒速、顺桨、反桨 (M)” : 约 29 kg
5. Weight: Propeller-Design Configuration
- “Constant Speed, Reverse (M)” : approx. 28 kg
- “Constant Speed, Feather, Reverse (M)” : approx. 29 kg

6. Hub/Blade-Combinations:

Hub	Blade-Type
MTV-25-2	-03, -04, -05, -06, -07, -08, -12, -16, -23, -28, -31, -49, -51, -106, -112, -122, -125, -312

7. 控制系统: 液压操纵调速器, 控制参数见 MT-Propeller 服务通告 No. 14
7. Control System: Hydraulically operating governors corresponding to the data of MT-Propeller Service Bulletin No. 14
8. 与发动机的匹配: 桨毂法兰盘与螺旋桨牌号中特定的字母相对应
8. Adaption to Engine: Hub flanges corresponding to the particular letter in the propeller designation
9. 旋转方向: 旋转方向 (顺飞行方向观察) 与螺旋桨牌号中特定的字母相对应
9. Sense of Rotation: Sense of rotation (viewed in flight direction) corresponding to the particular letter in the propeller designation

IV. 使用限制:**IV. Operational Limits:**

1. 批准的组合

发动机/飞机:

见注: - VI. 2. and 3.

1. Approved combinations

Engine / Airplane:

See Notes- chapter VI. 2. and 3.

2. 螺旋桨转速:

Max. 2850 RPM

2. Propeller speed:

Max. 2850 RPM

3. 驱动功率:

最大起飞和连续功率在 2850 RPM 达到 138 kW

最大起飞和连续功率在 2700 RPM 达到 261 kW

3. Driving Power:

Max. Takeoff and Continuous Power of 138 kW at 2850 RPM

Max. Takeoff and Continuous Power of 261 kW at 2700 RPM

4. 螺旋桨桨距角:

max. 100°

4. Propeller Pitch Angle:

max. 100°

V. 使用和维护说明**V. Operating and Service Instructions**

1. 使用 and 安装手册:

液压操纵变距螺旋桨的使用和安装手册 No. E-124, 2000 年 11 月 29 日发布

液压操纵的可反桨变距螺旋桨系统-R(M)的使用和安装手册 No. E-504, 2000 年 4 月 12 日发布

2. 维护说明:

液压操纵变距螺旋桨的大修手册和零部件清单 No. E-220, 2000 年 11 月 29 日发布, 替代 No. E-128, 1997 年 5 月 15 日发布

液压操纵可反桨变距螺旋桨系统-R(M)大修手册和零部件清单 No. E-519, 2000 年 10 月 10 日发布

3. 服务通告:

适用的 MT-Propeller 服务通告(SB) 见当前 MT-Propeller 服务通告列表.

1. Operation and Installation Manuals:Operation and Installation Manual No. E-124 for hydraulically controlled variable propeller, Issue 29 November 2000
Operation and Installation Manual No. E-504 for reversible hydraulically controlled variable propeller System -R(M), Issue 12 April 2000**2. Service Instructions:**Overhaul Manual and Parts List No. E-128 for hydraulically controlled variable propeller, Issue 15 May 1997 replaced by Overhaul Manual and Parts List No. E-220 for hydraulically controlled variable propeller, Issue 29 November 2000
Overhaul Manual and Parts List No. E-519 for reversible hydraulically controlled variable propeller System -R(M), Issue 10 October 2000**3. Service Bulletins:**

Applicable MT-Propeller Service Bulletins (SB) are published in the current list of Service Bulletins of MT-Propeller.

VI. 注释:

5. 本 TCDS 及其批准的改版中公布的制造商文件都是有效的。
6. 螺旋桨对于特定的飞机/发动机组合的适用性必须在飞机的型号审定中予以演示。
7. 螺旋桨/发动机/飞机组合对于 JAR-P60(b), 160(b), 190 and 220 的符合性已经在 MT-Propeller 服务通告 No. 16 予以演示。
8. 制造商推荐的大修间隔列在 MT-Propeller 服务通告 No. 1 中。
5. 螺旋桨命名系统

桨毂					桨叶			
MT	V	-	25	-	1	-	()	
---	---	---	---	---	/	()	165	- 06 ()
1	2	3	4	5		6	7	8 9

- 1 MT-Propeller (制造商)
 - 2 V = 可变距螺旋桨
 - 3 螺旋桨型号编号
 - 4 螺旋桨型号衍生型编号
 - 5 桨毂型号字母代码
 - 6 桨叶型号字母代码
 - 7 螺旋桨直径 cm
 - 8 根据已审定的桨毂/桨叶组合给出的桨叶型号编号 (包括设计构型和气动数据)
 - 9 设计更改的字母代码
- 小写字母表示更改不影响桨叶副的互换性, 大写字母表示桨叶副的互换性将受到限制和失去互换性

VI. Notes:

5. The documents of the manufacture which are published in this TCDS or in approved revisions are valid.
6. The suitability of a propeller for a certain aircraft/engine-combination must be demonstrated within the scope of the type certification of the aircraft.
7. Propeller/engine/aircraft-combinations that have been demonstrated to comply with the requirements of JAR-P60(b), 160(b), 190 and 220 are published in MT-Propeller Service Bulletin No. 16.
8. The overhaul intervals recommended by the manufacturer are published in MT-Propeller Service Bulletin No. 1.
5. Propeller designation system

Hub					Blade			
MT	V	-	25	-	2	-	()	
---	---	---	---	---	/	()	165	- 06 ()
1	2	3	4	5		6	7	8 9

- 1 MT-Propeller (manufacturer)
 - 2 V = Variable Pitch Propeller
 - 3 No. of propeller model
 - 4 No. of variant of the propeller model
 - 5 code letter for hub type
 - 6 code letter for blade type
 - 7 propeller diameter in cm
 - 8 no. of blade type (contains design configuration and aerodynamic data) according to the certified hub/blade - combinations
 - 9 code letter for design changes
- small letter for changes which do not affect interchangeability of blade set capital letter for changes which restrict or exclude interchangeability of blade set

END