Civil Aviation Authority United Kingdom



TYPE-CERTIFICATE DATA SHEET

UK.TC.A.00032

for

JS-MD Single

Type Certificate Holder M&D Flugzeugbau GmbH & Co. KG Streeker Straße 5 b 26446 Friedeburg Germany

Model(s):	JS-MD 1C
	JS-MD 3
	JS-MD 3 RES
Issue:	3
Date of issue:	10 January 2024

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		OFFICIAL - Public. This into	
Sectio	n 1	JS-MD 1C	
I.	Ge	eneral	
	1	Type / Variant or Model	
	т. т.		IS MD Single
	Mc	bdel	JS-MD 1C
	2.	Airworthiness Category	
			Sailplane and powered Sailplane (self-sustaining)
			CS-22 - Utility
	3.	Type Certificate Holder	
			M&D Flugzeugbau GmbH & Co. KG
			Streeker Straße 5 b
			26446 Friedeburg
			Germany
	4.	Manufacturer	
			M&D Flugzeugbau GmbH & Co. KG
			Streeker Straße 5 b
			26446 Friedeburg
			Germany
	5.	EASA Type Certification Application	tion Date
			7 May 2014
	6.	EASA Type Certification Date	
			1 June 2017
II.	Ce	rtification Basis	
	7.	Reference Date for determining t	he applicable requirements
			7 May 2014
	8.	Airworthiness Requirements	
			Certification Specifications for Sailplanes and Powered Sailplanes (CS 22), Amendment 2 issued 5th of March 2009
	9.	Special Conditions	
			None
	10	. Exemptions	
		·	None
		Deviations	
	11	. Deviations	
			None
	12	. Equivalent Safety Findings	

None

13. Requirements elected to comply

Standards for Structural Substantiation of Sailplane and Powered Sailplane Components consisting of Glass or Carbon Fibre Reinforced Plastics, issued July 1991

Guidelines concerning proof of compliance for the electrical system of powered sailplanes, issued September 1992

14. Environmental Standards

1. Type Design Definition

ICAO Annex 16 (see TCDSN UK.TC.A.00032 for details) CS-34.1 Fuel Venting

III. Technical Characteristic and Operating Limitations

-				
		According to M	1D01-DWL-00-00	01_R15 or later approved revisions
2.	Description			
		The JS-MD 10 conventional T	c is an all compo -tail.	site, single-seat sailplane with
		Or, with jet-eng sustaining, sin mounted behir tail.	gine installed, an gle-seat sailplan nd the cockpit in	all composite, powered, self- e with retractable jet-engine the fuselage and conventional T-
		For both config or 21m span o with flaperons airbrakes on th	gurations the win uter wing includi over nearly all w ne upper wing su	g is split in center and either 18m ng winglets. The wing is equipped ing span and Schempp-Hirth type rface.
		The main land	ing gear is retrac	table, the tail wheel is fixed.
3.	Equipment			
		Min. Equipmer	nt:	
		Airspeed indic	ator, 50 to 350 k	m/h (26 to 189 kts)
		Altimeter		
		4-point symme	etrical seat harne	SS
		Operating plac	ards	
		Control surface	e gap seals (Myl	ar seals) on all control surfaces
		Outside air ten	nperature (when	flying with water ballast)
		Magnetic com	pass (when Jet S	Sustainer installed)
		Turn and bank	indicator or artif	icial horizon (when flying in clouds)
		Variometer to i	indicate vertical s	speed (when flying in clouds)
4.	Dimensions			
		Span:	18.00 m	21.00 m
		Wing Area:	11.83 m ²	13.16 m ²
		Length:	7.10 m	7.10 m
		Height:	1.50 m	1.50 m

5. Engine (optional)

Model

TCDS No.: UK.TC.A.00032 Date: 10 January 2024 AW-DAW-TP-004 Copies of this document are not controlled. MD-TJ42

Type Certificate	EASA.E.099
Limitations	max power 97,000 RPM
Max Continuous Power	205 N at 80,000 RPM

6. Fuel Capacities (when Jet Sustainer installed)/Battery

Tank in the Fuselage	42 L
Tank in right wing	None
Tank in keft wing	None
Non-usable fuel	0.4 L

7. Launching Hooks

CG Hook Tost G88 TCDS 60.230/2 Nose Hook Tost E22 NTS 11.402/9

8. Weak Links

	For winch launch	Max. 825 da	N
	For aerotow	Max. 935 da	N
9. Load Factors			
Max positive up to	203 km/h IA	S (110 KIAS)	+5.3g
Max negative up to	203 km/h IA	S (110 KIAS)	-2.65g
Max positive up to	270 km/h IA	S (124 KIAS)	+4.0g
Max negative up to	270 km/h IA	S (124 KIAS)	-1.5g

Max with airbrake extended positive up to 270 km/h IAS (124 KIAS)

10. Air Speeds

Never Exceed Speed V _{NE}	270 km/h (146 kts)
Manoeuvring Speed V _A	203 km/h (110 kts)

Maximum Permitted Speeds:	
With flaps set at 1, 2 VFE 1, 2	270 km/h (146 kts)
With flaps set at 3 V _{FE 3} $$	230 km/h (124 kts)
With flaps set at 4, 5 VFE 4, 5	165 km/h (89 kts)
With flaps set at L VFE ${\tt L}$	160 km/h (86 kts)
In rough air V _{RA}	203 km/h (110 kts)
For winch launching (18m) V _w	150 km/h (81 kts)
For winch launching (21m) V _w	140 km/h (76 kts)
For aerotowing V_T	180 km/h (97 kts)
For gear operation V_{LO}	180 km/h (97 kts)
For engine operation VPO	140 km/h (76 kts)
For engine extended V_{PE}	250 km/h (135kts)

11. Approved Operations Capability

VFR-Day Utility Category

+3.5g

Cloud flying (with 18 m wing span configuration and without water ballast only)

Aerobatic manoeuvres according to Flight Manual (with 18 m wing span configuration and without water ballast only)

12. Launch Methods

Aerotow Winch launch

13. Maximum Masses

	Wing span	18 m	21 m
	Max. Mass:	600 kg	720 kg
	Max. T/O Mass Aero-tow:	600 kg	720 kg
	Max. T/O Mass Winch launch:	600 kg	600 kg
	Cloud flying (no water ballast):	482 kg	Not approved
	Non-lifting parts:	350 kg	325 kg
14. Centre of Gravity Range			
	Wing span	18 m	21 m
	Forward limit	244 mm	269 mm
	Aft limit	375 mm	375 mm
15. Datum			
	The datum is defined as the wir rib.	ng leading edge	at the wing root
16. Levelling Means			
	Attitude for weighing is defined of the fin positioned at gradient	with the aft fuse of 1000:25	lage boom forward
17. Control Surface Deflections			
	See JS-MD 1C Aircraft Mainter	ance Manual	
18. Minimum Flight Crew			
	1		
19. Lifetime Limitations			
	See JS-MD 1C Aircraft Mainten	ance Manual an	ıd
	JS-MD 1C Jet Sustainer Mainte	enance Manual S	Supplement

IV. Operating and Service Instructions

1. Flight Manual

JS-MD 1C AIRCRAFT FLIGHT MANUAL, dated 15.05.2017 or later EASA approved revision

JS-MD 1C Jet Sustainer Flight Manual Supplement, dated 16.05.2017 or later EASA approved revision (when Jet Sustainer installed)

2. Maintenance Manual

JS-MD 1C Aircraft Maintenance Manual, dated 17.05.2017 or later EASA approved revision

JS-MD 1C Jet Sustainer Maintenance Manual Supplement, dated 17.05.2017 or later EASA accepted revision (when Jet Sustainer installed)

3. Structural Repair Manual

JS-MD Aircraft Repair Manual, dated 10.02.2017 or later revision

4. Operating Manual and Maintenance Manual for Engine

MD-TJ42 Operating and Maintenance Manual, 18.05.2016 or later EASA approved revision

5. Operating Manual for the Launching Hooks

Manual for the TOST Release latest revision

V. Notes

- **1.** Manufacturing is confined to industrial production.
- 2. All parts exposed to sun radiation –except the areas for markings and registration –must have a white colour surface.

Section 2 JS-MD 3

I. General

II.

1.	Type / Variant or Model	
Ty Mc Sa	pe odel les Name	JS-MD Single JS-MD 3 JS-3
•	Airwarthinggo Cotonom	
Ζ.	Airworthiness Category	Sailalana and nowarad Sailalana (salf sustaining)
		CS-22 - Utility
		00-22 - Otinty
3.	Type Certificate Holder	
		M&D Flugzeugbau GmbH & Co. KG
		Streeker Straße 5 b
		Germany
4.	Manufacturer	
		M&D Flugzeugbau GmbH & Co. KG
		Streeker Straße 5 b
		26446 Friedeburg
		Germany
5.	Certification Application Date	
		28 October 2016
~	Turne Contification Date	
6.	Type Certification Date	10 July 2010
		18 July 2019
Ce	rtification Basis	
1.	Reference Date for determining	the applicable requirements
		28 October 2016
2	Airworthinges Boquiromonts	
۷.	An worthiness Requirements	Cartification Specifications for Sailplanes and Powered Sailplanes
		(CS 22), Amendment 2 issued 5th of March 2009
2	Spacial Conditions	
5.	opecial contaitions	None
		NOTE
4.	Exemptions	
		None
5.	Deviations	
		None
6	Faujyalant Safaty Eindinga	
0.	Equivalent Salety Findings	Nono
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νο.: ι 0 Jar	nuary 2024	Issue: . Page 8 of 15
	1. Ty Mc Sa 2. 3. 4. 5. 6. Ce 1. 2. 3. 4. 5. 6. 5. 6. 0 Jar	 Type / Variant or Model Type Model Sales Name Airworthiness Category Type Certificate Holder Type Certificate Holder Manufacturer Certification Application Date Type Certification Date Type Certification Date Type Certification Date Type Certification Date Airworthiness Requirements Special Conditions Exemptions Deviations Equivalent Safety Findings

7. Requirements elected to comply

Standards for Structural Substantiation of Sailplane and

Powered Sailplane Components consisting of Glass or Carbon Fibre Reinforced Plastics, issued July 1991

Guidelines for the Analysis of the Electrical System for Powered Sailplanes, issued September 1992

8. Environmental Standards

ICAO Annex 16 (see TCDSN UK.TC.A.00032 for details) CS-34.1 Fuel Venting

III. Technical Characteristic and Operating Limitations

1. Type Design Definition

		According to MD10-DWL-00-001-R02 or later approved revisions.
2.	Description	
		The JS-MD 3 is an all composite, single-seat sailplane with conventional T-tail.
		Or, with jet-engine installed, an all composite, powered, self- sustaining, single-seat sailplane with retractable jet-engine mounted behind the cockpit in the fuselage and conventional T- tail.
		For both configurations the wing is split in center and either 15m or 18m span outer wing including winglets. The wing is equipped with flaperons over nearly all wing span and Schempp-Hirth type airbrakes on the upper wing surface.
		The main landing gear is retractable, the tail wheel is fixed.
3.	Equipment	
		Min. Equipment:
		Airspeed indicator, 50 to 300 km/h (26 to 162 kts)
		Altimeter
		4-point symmetrical seat harness
		Operating placards
		Control surface gap seals (Mylar seals) on all control surfaces
		Outside air temperature (when flying with water ballast)
		Magnetic compass (when Jet Sustainer installed)
		Jet Display Unit (when Jet Sustainer installed)
		Turn and bank indicator or artificial horizon (when flying in clouds)
		Variometer to indicate vertical speed (when flying in clouds
4.	Dimensions	

Span:	15.00 m	18.00 m
Wing Area:	8.75 m ²	9.95 m ²
Length:	6.86 m	6.86 m
Height:	1.35 m	1.35 m

5. Engine (optional)	
Model	MD-TJ42
Type Certificate	EASA.E.099
Limitations	max power 97,000 RPM
Max Continuous Power	205 N at 80,000 RPM

6. Fuel Capacities (when Jet Sustainer installed)

Tank in the Fuselage	22.2 L
Tank in right wing	None
Tank in keft wing	None
Non-usable fuel	0.33 L

7. Launching Hooks

CG Hook Tost G88 TCDS 60.230/2
Nose Hook Tost E22 NTS 11.402/9

8. Weak Links

For winch launch	Max. 750 daN
For aerotow	Max. 600 daN

9. Load Factors

Max positive up to	207 km/h IAS (112 KIAS)	+5.3g
Max negative up to	207 km/h IAS (112 KIAS)	-2.65g
Max positive up to	280 km/h IAS (151 KIAS)	+4.0g
Max negative up to	280 km/h IAS (151 KIAS)	-1.5g
Max with airbrake extended positive up to	280 km/h IAS (151 KIAS)	+3.5g

10. Air Speeds

Never Exceed Speed V_{NE}	280 km/h (151 kts)
Manoeuvring Speed V _A	207 km/h (112 kts)

Maximum Permitted Speeds:

With flaps set at 1, 2 VFE 1, 2	280 km/h (151 kts)
With flaps set at 3 $V_{FE 3}$	230 km/h (124 kts)
With flaps set at 4, 5 V _{FE 4, 5}	165 km/h (89 kts)
With flaps set at L V _{FE L}	160 km/h (86 kts)
In rough air V _{RA}	207 km/h (112 kts)
For winch launching (15m) V_W	150 km/h (81 kts)
For winch launching (18m) V _w	150 km/h (81 kts)
For aerotowing V⊤	180 km/h (97 kts)
For gear operation V_{LO}	180 km/h (97kts)
For engine operation VPO	140 km/h (76 kts)
For engine extended VPE	250 km/h (135 kts)

11. Approved Operations Capability

TCDS No.: UK.TC.A.00032 Date: 10 January 2024 AW-DAW-TP-004 Copies of this document are not controlled. VFR-Day only

Cloud flying according to Flight Manual (with 15 m and 18 m wing span configuration without water ballast only)

Aerobatic manoeuvres according to Flight Manual (with 15 m and 18 m wing span configuration without water ballast only)

12. Launch Methods

Aerotow

Winch launch

13. Maximum Masses

Wing span	15 m	18 m	
Max. Mass	525 kg	600 kg	
Max. T/O Mass Aero-tow	525 kg	600 kg	
Max. T/O Mass Winch launch	525 kg	600 kg	
Cloud flying (no water ballast)	418 kg	418 kg	
Aerobatics (no water ballast)	418 kg	418 kg	
Non-lifting parts	320 kg	313 kg	
Wing span	15 m	18 m	
Forward limit	270 mm	270 mm	
Aft limit	390 mm	398 mm	
The datum is defined as the wing leading edge at the wing root rib.			
Attitude for weighing is defined with the aft fuselage boom forward of the fin positioned at gradient of 1000:18			
See JS-MD 3 Aircraft Maintenance Manual			
1			
	 Wing span Max. Mass Max. T/O Mass Aero-tow Max. T/O Mass Winch launch Cloud flying (no water ballast) Aerobatics (no water ballast) Non-lifting parts Wing span Forward limit Aft limit The datum is defined as the wirit. Attitude for weighing is defined of the fin positioned at gradient See JS-MD 3 Aircraft Maintena 1 	Wing span15 mMax. Mass525 kgMax. T/O Mass Aero-tow525 kgMax. T/O Mass Winch launch525 kgCloud flying (no water ballast)418 kgAerobatics (no water ballast)418 kgNon-lifting parts320 kgWing span15 mForward limit270 mmAft limit390 mmThe datum is defined as the wing leading edge rib.Attitude for weighing is defined with the aft fuse of the fin positioned at gradient of 1000:18See JS-MD 3 Aircraft Maintenance Manual	

See JS-MD 3 Aircraft Maintenance Manual and JS-MD 3 Jet Sustainer Maintenance Manual Supplement

IV. Operating and Service Instructions

1. Flight Manual

JS-MD 3 AIRCRAFT FLIGHT MANUAL, dated 24.04.2019 or later EASA approved revision

JS-MD 3 Jet Sustainer Flight Manual Supplement, dated 08.02.2019 or later EASA accepted revision (when Jet Sustainer installed)

2. Maintenance Manual

JS-MD 3 Aircraft Maintenance Manual, dated 31.05.2019 or later EASA accepted revision

JS-MD 3 Jet Sustainer Maintenance Manual Supplement, dated 14.03.2019 or later EASA accepted revision (when Jet Sustainer installed)

3. Structural Repair Manual

JS-MD Aircraft Repair Manual, dated 12.06.2019 or later issue

4. Operating Manual and Maintenance Manual for Engine

MD-TJ42 Operating and Maintenance Manual, 19.11.2018 or later EASA approved revision

5. Operating Manual for the Launching Hooks

TOST Operating Manual - Europa G 88 Safety Releases_Issued February 1989_ revision 4_March 2001 or latest available revision

TOST Operating Manual - Tow Release E22_Issued

October 2002_revision 1_May 2003 or Latest available revision

V. Notes

- 1. Manufacturing is confined to industrial production.
- 2. All parts exposed to sun radiation except the areas for markings and registration must have a white colour surface.

Section 3 JS-MD 3 RES

I. General

1.	Type / Variant or Model	
Typ Mo Sal	be del es Name	JS-MD Single JS-MD 3 RES JS-3 RES
2.	Airworthiness Category	
		Sailplane and powered Sailplane
		CS-22 - Utility
3.	Type Certificate Holder	
		M&D Flugzeugbau GmbH & Co. KG
		Streeker Straße 5 b
		26446 Friedeburg
		Germany
4.	Manufacturer	
		M&D Flugzeugbau GmbH & Co. KG
		Streeker Straße 5 b
		26446 Friedeburg
		Germany
5.	Certification Application Date	
		29 September 2020
6.	Type Certification Date	
•	Type contineation Date	18 August 2021
		0
<u></u>	rtification Basis	
Ce		
1.	Reference Date for determining the	ne applicable requirements
		29 September 2020
2.	Airworthiness Requirements	
		Certification Specifications for Sailplanes and Powered Sailplanes (CS 22), Amendment 2 issued 5th of March 2009 and additional requirements as per EASA CRI A-01
3.	Special Conditions	
		SC-22.2014-01 Issue 2 Special Condition applicable to Powered Sailplanes equipped with Electric Propulsion Units

4. Exemptions

II.

None

5. Deviations

None

6. Equivalent Safety Findings

CS 22.335 (f)

7. Requirements elected to comply

Standards for Structural Substantiation of Sailplane and Powered Sailplane Components consisting of Glass or Carbon Fibre Reinforced Plastics, issued July 1991

Guidelines for the Analysis of the Electrical System for Powered Sailplanes, issued September 1992

8. Environmental Standards

Noise: ICAO Annex 16, Chapter 10 (see TCDSN UK.TC.A.00032 for details)

III. Technical Characteristic and Operating Limitations

1.	Type Design Definition					
		According to N	ID11-DWL-00-00	01-R02 or later approved revisions		
2.	Description					
		The JS-MD 3 F conventional T	RES is an all com -tail.	nposite, single-seat sailplane with		
		The wing is spl including wingl nearly all wings upper wing sur	it in centre and e ets. The wing is span and Schem face.	either 15m or 18m span outer wing equipped with flaperons over pp-Hirth type airbrakes on the		
		The JS-MD 3 F fuselage to ena and batteries fo	RES is based on able the fitment c or self-launch.	the JS-MD 3 with modified rear of larger doors for an electric motor		
		The horizontal tailplane and elevator area were increased to enhance stability and control surface effect compared to the JS-MD 3.				
		The main landi retractable.	ng gear is retrac	table, the tail wheel is fixed or		
3.	Equipment					
		Min. Equipmen	t:			
		Airspeed indicator, 50 to 300 km/h (26 to 162 kts)				
		Altimeter				
		Display and Co	ontrol Unit (DCU))		
		RES Master Sv	witch Guard			
		Rear View Mirror				
		Supplemental (independent) fire warning system				
		4-point symme	trical seat harne	SS		
		Operating placards or Placard booklet				
		Control surface gap seals (Mylar seals) on all control surfaces				
		Outside air temperature (when flying with water ballast)				
4.	Dimensions					
		Span:	15.00 m	18.00 m		

	Wing Area:	8.75 m ²	9.95 m ²	2	
	Length:	6.94 m	6.94 m		
	Height:	1.22 m	1.22 m		
5. Engine					
o	Solo Electric Emrax 208 H\ Power Electr	Propulsion S /, SOLO econt onics Emectric	System 8000 trol, BM384 and Power	0/400 consisting of Mot Li-Ion battery system a cables.	or ind
6. Engine Limits					
	Maxin	num Take-off F	Power	40 kW	
	Maxin	num RPM		4350 RPM	
7. Propellers					
•	Techn	oflug KS-1C-1	20-R-065-S	;	
	CAA 1	vpe Certificate	e Data Shee	et UK.TC.P.00100	
		51			
8. Launching Hooks	00.11			20/0	
	CG H		ICDS 60.23	30/2	
	Nose	Hook Tost E22	2 NTS 11.40	12/9	
9. Weak Links					
	For wi	nch launch	Max. 75	50 daN	
	For a	erotow	Max. 60	00 daN	
10. Load Factors					
Max positive up to	207 ki	m/h IAS (112 K	(IAS)	+5.3g	
Max negative up to	207 ki	m/h IAS (112 K	(IAS)	-2.65g	
Max positive up to	240 ki	m/h IAS (130 K	(IAS)	+4.0g	
Max negative up to	240 ki	m/h IAS (130 K	(IAS)	-1.5g	
Max with airbrake extended positive up to		240 km/h IAS (130 KIAS) +3.5g		+3.5g	
11. Air Speeds					
Never Exceed Speed V _{NE}	270 ki	m/h (145 kts)			
Manoeuvring Speed V _A	195 ki	m/h (105 kts)			
Maximum Permitted Speeds:					
With flaps set at 1, 2 $V_{FE 1, 2}$	270 ki	m/h (145 kts)			
With flaps set at 3 V _{FE 3}	230 ki	m/h (124.1 kts))		
With flaps set at 4, 5 $V_{FE 4, 5}$	165 ki	m/h (89 kts)			
With flaps set at L V _{FE L}	160 ki	m/h (86.3 kts)			
In rough air V _{RA}	195 ki	m/h (105 kts)			
For winch launching (15m) V_W	150 ki	m/h (80.9 kts)			
For winch launching (18m) V _w	150 ki	m/h (80.9 kts)			
For aerotowing V⊤	180 ki	m/h (97.1 kts)			
For assisted aerotowing V_T	150 ki	m/h (80.9 kts)			
For gear operation VLO	180 ki	m/h (97.1 kts)			

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With engine extended VPE	150 km/h (80.9 kts)		1	
For engine operation V _{max}	150 km/h (80.9 kts)			
12 Maximum Operating Altitude			1	
	7000m AMSI			
13. Approved Operations Capability				
	VFR-Day only			
	Cloud flying permitted according to specifications in flight manual with restricted mass, without water ballast and with engine pylon retracted			
	Aerobatic manoeuvres permitted according to specifications in manual with restricted mass and without water ballast			
14. Launch Methods				
	Aerotow (including Sustainer Assisted Aerotow)			
	Winch launch			
	Self-launch			
15. Maximum Masses				
	Wing span	15 m	18 m	
	Max. Mass	525 kg	600 kg	
	Max. T/O Mass Aero-tow	525 kg	600 kg	
	Max. T/O Mass Winch launch	525 kg	600 kg	
	Max. T/O Mass (2 HV batteries)	525 kg	575 kg	
	Cloud flying (no water ballast)	418 kg	418 kg	
	Aerobatics (no water ballast)	418 kg	418 kg	
	Non-lifting parts	340 kg	340 kg	
16 Centre of Gravity Range			I	
To: Centre of Gravity Range	Wing span	15 m	18 m	
	Forward limit	270 mm	270 mm	
	Aft limit	390 mm	398 mm	
17. Datum				
	The datum is defined as the wing leading edge at the wing root rib.			
18. Levelling Means				
	Attitude for weighing is defined with the aft fuselage boom forward of the fin positioned at gradient of 1000:18			
19. Control Surface Deflections				
	See JS-MD 3 RES Aircraft Maintenance Manual			
20. Minimum Flight Crew				
-	1			

	21.	1. Lifetime Limitations			
			See JS-MD 3 RES Aircraft Maintenance Manual		
IV.	Ор	erating and Service Instructions	Istructions		
	1.	Flight Manual			
			JS-MD 3 RES AIRCRAFT FLIGHT MANUAL, dated 14.03.2023 or later EASA approved revision		
	2.	Flight Manual Supplement			
			JS-MD 3 RES AIRCRAFT FLIGHT MANUAL SUPPLEMENT, dated 24.032023 or later approved revisions		
	3.	Maintenance Manual			
			JS-MD 3 RES Aircraft Maintenance Manual, dated 23.05.2022 or later EASA accepted revision		
	4.	Maintenance Manual Supplement			
			JS-MD 3 RES Aircraft Maintenance Manual Supplement, dated 23.05.2022 or later revisions		
	5.	Structural Repair Manual			
			JS-MD Aircraft Repair Manual, dated 10.05.2022 or later issue		
	6.	Operating Manual for the Launchi	or the Launching Hooks		
			TOST Operating Manual - Europa G 88 Safety Releases_Issued February 1989_ revision 4_March 2001 or latest available revision		
			TOST Operating Manual - Tow Release E22_Issued		
			October 2002_revision 1_May 2003 or Latest available revision		

V. Notes

- **1.** Manufacturing is confined to industrial production.
- 2. All parts exposed to sun radiation except the areas for markings and registration must have a white colour surface.

Section 4 Administration

I. Acronyms and Abbreviations

Acronym / Abbreviation	Definition
CS	Certification Specification
CAA	Civil Aviation Authority
CRI	Certification Review Item
DCU	Display and Control Unit
EASA	European Union Aviation Safety Agency
g	Load Factor
HV	High Voltage
kg	Kilogram
Km/h	Kilometres per hour
Kts	knots
kW	Kilowatt
L	Litre
LBA	Luftfahrt-Bundesamt
m	metre
mm	Millimetre
MTOW	Maximum Take Off Weight
ТС	Type Certificate
TCDS	Type Certificate Data Sheet
ТСН	Type Certificate Holder
VFR	Visual Flight Rules

II. Type Certificate Holder Record

TCH RecordPeriodM&D Flugzeugbau GmbH & Co. KGPresent. No changes.Streeker Straße 5 b26446 Friedeburg26446 FriedeburgFriedeburgGermanyFriedeburg

III. Amendment Record

TCDS Issue No.	TCDS Issue Date	Changes	TC Issue and Date
1	26 Apr 2022	This certificate supersedes EASA.A.616 in the UK. All technical data as per EASA.A.616 Issue 5.	Issue 1 26 Apr 2022
2	24 Apr 2023	Correction of JS-MD 3 Certification basis and editorial corrections.	
3	10 Jan 2023	Addition of installed RES system with batteries. Deviation DEV- B22.335-01 and engine/battery restriction removed, plus corrections.	

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