# Flughafen Düsseldorf Ground Handling GmbH

# Aircraft De-/Anti-icing Procedure

# DAP



Edition 3
Rev. 0
2026

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## 1.) General

This document describes the operational procedures of aircraft de-/anti-icing during the annual de-icing period from 01.10. till 30.04. These procedures are intended to provide safe, orderly and efficient deicing of all aircrafts. The aircraft de-/anti-icing is to improve traffic management carried out at the allocated remote positions by Düsseldorf Airport GmbH (FDG) and Düsseldorf Airport Ground Handling GmbH (FDGHG)

- Düsseldorf Airport Ground Handling provides equipment and full-scale aircraft De-/Anti-icing service for all airlines.
- De-/Anti-icing operations are carried out according to IATA SAE AS 6285 Aircraft Ground De-/Anti-icing Processes, SAE AS 6286 Training and Qualification Program and SAE AS 6332 Aircraft Ground De-/Anti-icing Quality Management in their latest published versions.
- Aircraft De-/Anti-icing are carried out only by trained and qualified personnel.
- De-/Anti-icing operations are performed in „one-man operation" with running engines.
- We operate in „one and / or two-step" procedure as requested and in accordance with the actual local weather conditions.
- De-/Anti-icing equipment is available from 05:30h am local time, to guarantee a fluent and on time operation.
- De-/Anti-icing procedures will be completed according to local Winter Operation Plan, as agreed between FDG, FDGHG, AOC and local ATC.

## 2.) De-/Anti-icing equipment

- Number of De-/Anti-icing vehicles: 12
- Manufacturer: Vestergaard
- Type: Elephant Beta 12 (quantity 8)
- Type: Elephant Beta 15 (quantity 4)
- Capacity De-/Anti-icing Fluid: 8.000 ltr. per truck

## 3.) De-/Anti-icing fluid

- Type I: Kilfrost DF Plus
- Type IV: Kilfrost ABC-S Plus

**4.) Registration for aircraft de-icing**

De-/Anti-icing planner: Airport internal: **Tel: 52222**
Airport external: **Tel: +49 (0) 211-421-52222**

For De-/Anti-icing requests please contact us via telephone number 52222 – at least 30 minutes prior STD. ATC Apron control will be notified of De-/Anti-icing requests.
According to the A-CDM procedures we even recommend to request de-icing before the TSAT is issued (TOBT – 40min.) and before start up approval, due to the influence of de-icing on sequencing.
This can also easily be done by setting the de-icing request in the A-CDM tool (Web-DUPLO).
Cancellations must also be made via calling Tel: 52222 or Web DUPLO (by Ground Handler for example) as soon as possible.

We work under the assumption that the ordering location has all information upon hold over times and all other criteria relating to aircraft De-/Anti-icing. In order to provide the De-/Anti-icing services, the following information must be provided to the de-icing planner.

- Airline
- Flight number
- Aircraft Registration
- Customers name

This is not required for registration via Web-DUPLO.

**5.) Taxiing in / out**

Taxi instructions to the de-icing pads will be issued by ATC.
FDG is responsible for the remote de-icing pads. The marshaller will guide the aircraft onto the de-icing pads, by means of traffic lights on the vehicle (FOLLOW ME or STOP). Alternatively, the marshaller signs can be executed by hand.
Propeller planes must bring their propellers to a standstill. De-/Anti-icing of jet powered aircraft will be carried out on the stated positions with engines running. During the process, engines must be running in "idle". The same rule applies for ATR 42/72 with parking propeller brake. Propeller aircraft without propeller brake system can be de-iced with APU running, or following a cross-start procedure, in arrangement with the Teamleader of the respective de-icing pad.
General aviation aircraft will be De-/Anti-iced by the same procedure, as described above on remote positions.
If a Ground Power-Unit (GPU) is needed, please contact us or your Ground Handling Partner, at least 30 minutes prior STD. A condition for this procedure is that aircraft owners or responsible pilots have agreed to accept responsibility and guarantee that all aircraft manufacturers regulations are complied with.
After the aircraft is parked on the de-icing pad the pilot reports his registration and type of aircraft for the commencement of De-/Anti-icing on one of the frequencies, callsign “Düsseldorf De-icing”.

After De-/Anti-icing contact ATC for taxi instructions via VHF.

- De-icing Area West at 121.680MHz
- De-icing Area East at 121.605MHz

For taxiing out of the de-icing pad, only use minimum engine power to avoid any incidents with the de-icing equipment. Leave the de-icing pad as soon as possible to expedite further de-icing operations

**6.) De-/Anti-icing area**

The De-/Anti-icing operation will be performed on remote positions.
For the charts of these locations see page 9.

**DA-West** (for departures RWY 05L/05R)

PAD 1 on V61 A
PAD 2 on V63
PAD 3 on TWY “R”
PAD 4 on V72 A

**DA-East** (for departures RWY 23L/23R)

PAD 1 till PAD 4 on V01 - V08

**7.) VHF- frequencies on remote area**

The VHF- frequencies for De-/Anti-icing will be assigned to the Pilot-in-Command by ATC as arranged with the local marshaller.

- PAD 1 on 121,635 MHz
- PAD 2 on 121,815 MHz
- PAD 3 on 121,865 MHz
- PAD 4 on 121,955 MHz

**8.) Special De-icing**

Contamination Checks: e.g. „Tactile Check”, can be performed for a fee by one of our de-icing crew members.

If you need supporting of the following De-/Anti-icing methods:

- Underwing de-icing
- De-icing of undercarriages
- De-icing of propeller blades
- Fan blade deicing (Hot Air)

Please contact the De-icing planner via telephone number Tel: 52222 as soon as possible, to find a solution how to proceed.

**Appendix**

**a.) Non-Cold-Pool-Member**

Charges for aircraft De-/Anti-icing at Düsseldorf Airport 2026/2027
- Effective October 1st, 2026 -

Charges of De-/Anti-Icing fluid (No.3) may be adjusted as of January 1st, 2027

1) Definition of aircraft categories effective de-/anti-icing season 2026/2027

| AIRCRAFT CATEGORIES | |
| --- | --- |
| Category 1 | AT42, BA31, E120, DO82, SF34, SH36, DH81, HS25, BE20 |
| Category 2 | A220, A318/319, A320/321, AT72, BA46, B727, B737, CL65/70/90, CRJX, DA50/90, DC9, DH83/84, E135/145/170/175/190/195, FK50, FK70, FK10, G2/5, SB20, MD80, MD90 |
| Category 3 | B757, B767, A300, A310, IL76/86 |
| Category 4 | IL96, DC10, MD11, A330, A340, A350, B777, B787 |
| Category 5 | A380, B747, Antonov124 |

Any type not included in this list will be inserted in the respective category by Handling Company in accordance with its size.

2) Variable charges per event

| Aircraft according to category | Non Cold Pool |
| --- | --- |
| Cat. 1 | € 1,440 |
| Cat. 2 | € 2,090 |
| Cat. 3 | € 2,970 |
| Cat. 4 | € 4,150 |
| Cat. 5 | € 5,910 |

In case of cancellation of a de-icing/anti-icing order an amount of 25% of the de-icing charges according to the aircraft category will be invoiced.

3) Variable Charges of De-/Anti-Icing fluid per litre

| De-/Anti-Icing fluid | Non Cold Pool |
| --- | --- |
| De-Icing Type 1 Premix | € 8,00 |
| Anti-Icing Type 4 100% | € 11.40 |

**b.) Cold Pool-Member**

Charges for aircraft De-/Anti-icing at Düsseldorf Airport 2026/2027
- Effective October 1st, 2026 -

Charges of De-/Anti-Icing fluid (No. 4) may be adjusted as of January 1st, 2027

1) Definition of aircraft categories effective de-/anti-icing season 2026/2027

| AIRCRAFT CATEGORIES | |
|---|---|
| Category 1 | AT42, BA31, E120, DO82, SF34, SH36, DH81, HS25, BE20 |
| Category 2 | A220, A318/319, A320/321, AT72, BA46, B727, B737, CL65/70/90, CRJX, DA50/90, DC9, DH83/84, E135/145/170/175/190/195, FK50, FK70, FK10, G2/5, SB20, MD80, MD90 |
| Category 3 | B757, B767, A300, A310, IL76/86 |
| Category 4 | IL96, DC10, MD11, A330, A340, A350, B777, B787 |
| Category 5 | A380, B747, Antonov124 |

Any type not included in this list will be inserted in the respective category by Handling Company in accordance with its size.

2) Seasonal lump sum for “Cold Pool” Member Airlines

| Aircraft according to category | Fixed Amount |
|---|---|
| Cat. 1 | € 1,475 |
| Cat. 2 | € 2,140 |
| Cat. 3 | € 2,995 |
| Cat. 4 | € 4,225 |
| Cat. 5 | € 5,920 |

Fixed charges according to departures based on the 50th calendar week 2026.

3) Variable charges per event

| Aircraft according to category | Cold Pool |
|---|---|
| Cat. 1 | € 490 |
| Cat. 2 | € 715 |
| Cat. 3 | € 1,010 |
| Cat. 4 | € 1,415 |
| Cat. 5 | € 2,010 |

In case of cancellation of a de-icing/anti-icing order an amount of 25% of the de-icing charges according to the aircraft category will be invoiced

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4) Variable Charges of De-/Anti-Icing fluid per litre

| De-/Anti-Icing fluid | Cold Pool |
|---|---|
| De-Icing Type 1 Premix | € 4,30 |
| Anti-Icing Type 4 100% | € 6,15 |

**c.) VHF Cockpit communication**

For communication with the deicing teamleader on deicing pad the following phraseology shall be used

PLEASE ONLY USE THE AIRCRAFT REGISTRATION

COCKPIT: DUS-deicing this is (A/C REG) request deicing.

DUS: Good morning (good evening), (A/C REG), which parts of your aircraft require deicing?

COCKPIT: (A/C REG) - request wings and tail.
(Or additional request: fuselage, complete aircraft)

DUS: (A/C REG) - wings and tail confirmed.
Confirm brake set, Aircraft configured and ready for treatment.
(one step procedure) We will use type I
(two step procedure) We will use for the first step type I and for the second step type IV, Kilfrost ABC-S Plus 100% for anti-icing.

COCKPIT: (A/C REG) – Brake set, Aircraft is configured for spraying.

DUS: (A/C REG) – Hold position, deicing commences. You are now blocked by deicing vehicle. Monitor this frequency. I will call you back when deicing is completed.

COCKPIT: Roger. Hold position

DUS: (A/C REG) – Deicing completed. Your anti-icing-code is:

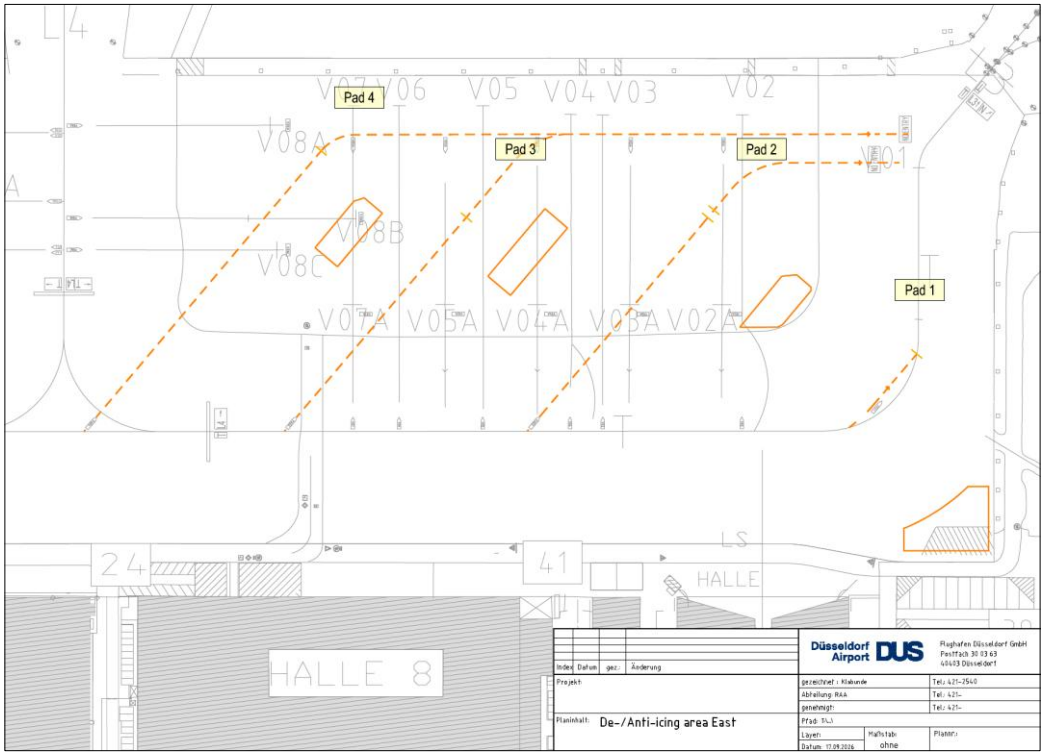
**TYPE OF FLUID - MANUFACTURER - BRANDNAME - MIXTURE %**
**ANTI-ICING BEGAN AT (local time) – DATE,**
**“POST-DEICING/ANTI-ICING CHECK COMPLETED”.**

(Where a deicing only procedure was performed, replace this element with:
“Holdover time does not apply”)

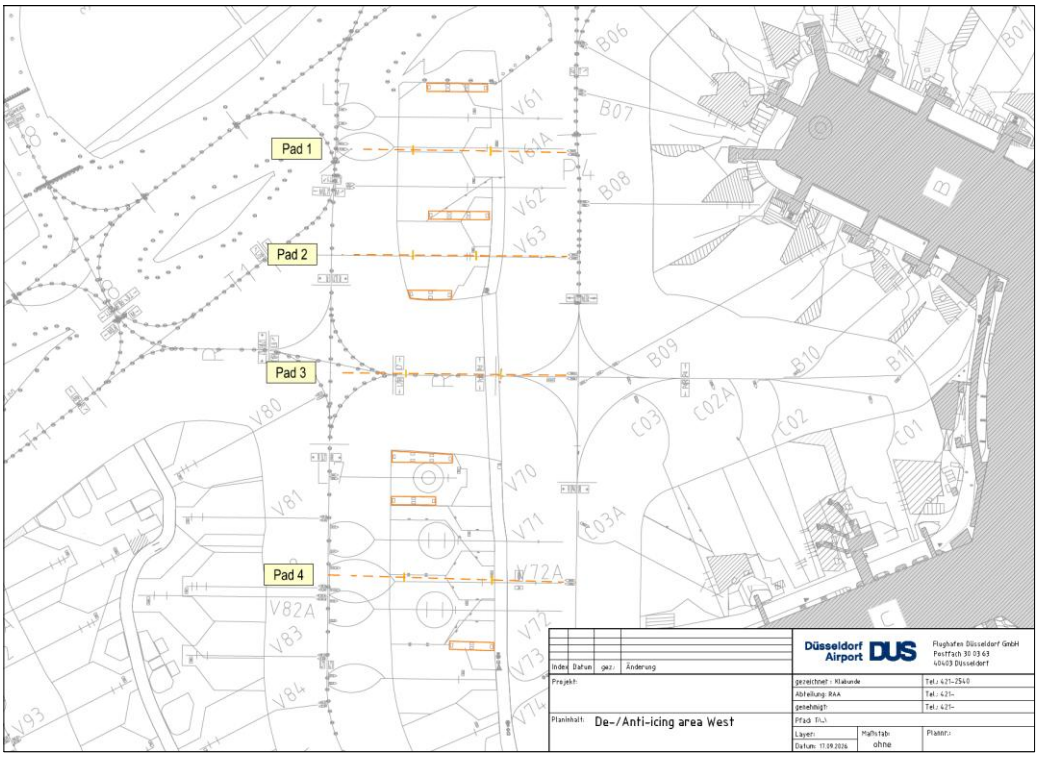
Deicing personnel and equipment are safely away, hold position and contact Düsseldorf Ground. (DA East on 121.605 MHz / DA West on 121.680 MHz)

COCKPIT: (A/C REG) – Hold position and contact ground.

### d.) De-/Anti-icing area East




### e.) De-/Anti-icing area West



### f.) De-/Anti-icing checklist for crews / ramp agents

If de-icing is needed, please inform the ramp-agent as soon as possible, at least 30 minutes before STD.
Or best: before TSAT is issued (TOBT – 40 min.)

Registration for Aircraft De-icing:

De-/Anti-icing planner: Airport internal: **Tel: 52222**
Airport external: **Tel: + 49 (0) 211- 421- 52222**

According to runway in use, remote de-icing area DA-East or DA-West will be advised by ATIS.

Request start-up only when the aircraft is fully ready and able to push-back within 5 minutes.
Contact ATC immediately if any delay is encountered after having received start-up clearance.

You will be guided to the respective de-icing area by ATC and to the de-icing pad by the marshaller.

The VHF-Frequencies for De-/Anti-icing will be assigned to the Pilot-in-Command by ATC as arranged with the local marshaller.

- PAD 1 on 121,635 MHz
- PAD 2 on 121,815 MHz
- PAD 3 on 121,865 MHz
- PAD 4 on 121,955 MHz

Please do not contact the teamleader of the de-icing crew before entering the de-icing pad.

After De-/Anti-icing is completed contact DUS-Ground on 121,680 MHz or 121,605 MHz for further taxi-clearance to the runway in use.
For taxiing out of the de-icing pad use only minimum engine power. Leave the pad as soon as possible.

**Additional Information:**

After De-/Anti-icing contact ATC for taxi instructions via VHF.

- De-icing Area West at 121.680MHz
- De-icing Area East at 121.605MHz

De-/Anti-icing fluids are:

- Type I: Kilfrost DF Plus
- Type IV: Kilfrost ABC-S Plus

In case you are already in sequence, but you do not need De-/Anti-icing anymore, please advise your ramp-agent or your company to cancel as soon as possible.

- Airport internal: Tel: 52222
- Airport external: Tel: +49 (0) 211- 421- 52222

### g.) Special De-/Anti-icing information for handling A380 at area DA- East

VHF- frequency is 121,865 MHz (from Pad 3)

