



User's Manual for Alsident® System Extraction arms

With Alsident® System we focus on producing extraction arms of high quality with long duration.

Alsident® System Extraction arms require a minimum of maintenance and are easy to clean.

The design makes the extractopm arm self-supporting and provides a unique user friendly extraction arm which is easy to clean.

Read this manual and follow the advice and guidance given on the operation and the capture efficiency and your extraction arm will be of great use in many years to come. Further information is available on www.alsident.com or by contacting your supplier.

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1. System Overview

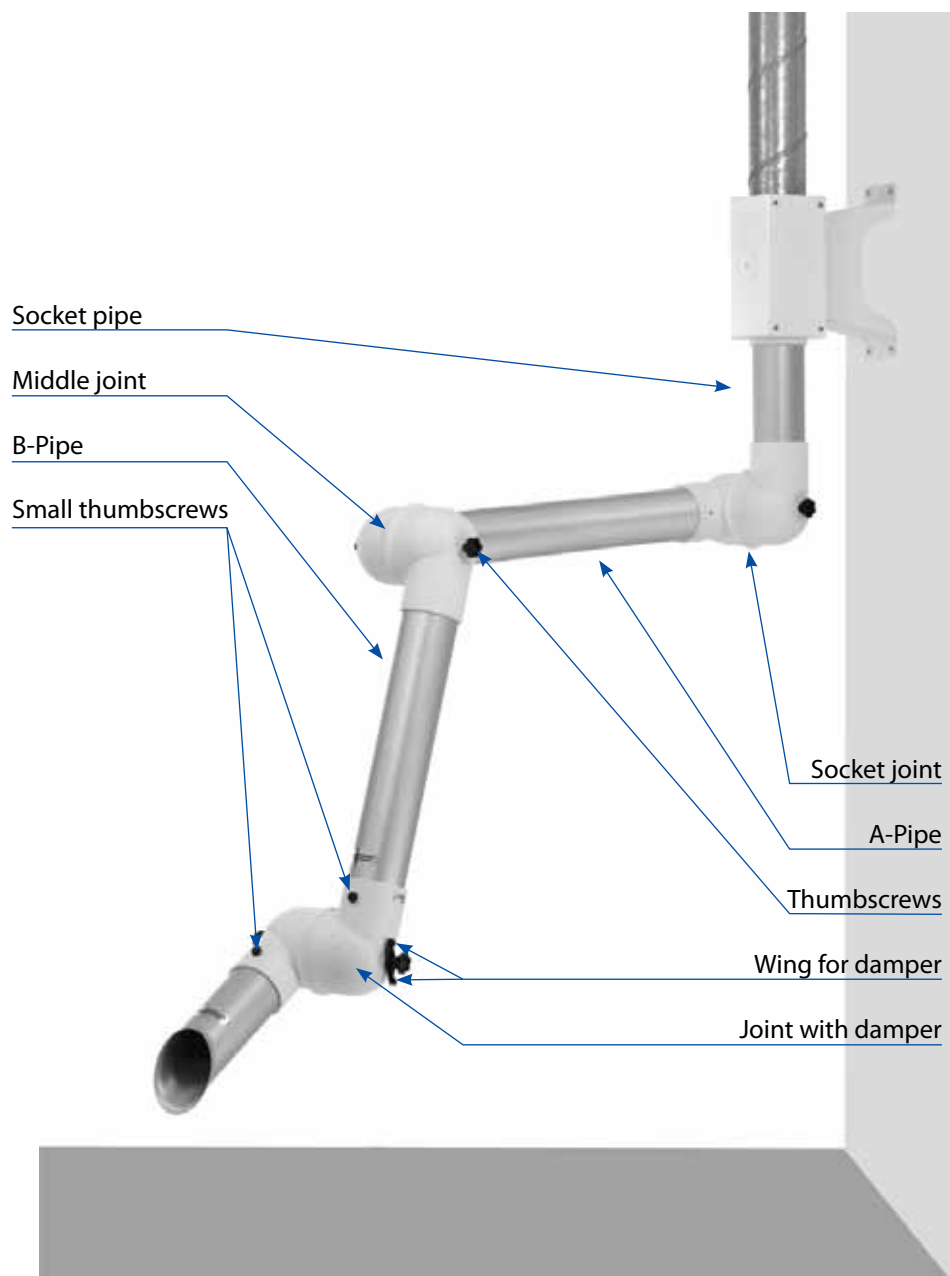
System	Diameter of pipes	Type		
		Aluminium (AL)	Antistatic (AS)	Chemical Resistant (CR)
System 50	Ø50 mm	•	•	
System 50 Flex	Ø50 mm	•	•	
System 63	Ø63 mm			•
System 75	Ø75 mm	•	•	•
System 75 Telescopic	Ø75/Ø100 mm	•		
System 100	Ø100 mm	•	•	•

1.1 Type of Material

- Aluminium (AL):** Extraction arms of aluminium are suitable in specified areas with no requirement to chemical resistance or conductivity.
- Antistatic (AS):** The antistatic extraction arms are suitable in ESD areas and ATEX areas (Systems 75 and 100) where conductivity is required. Find more information on the approvals in Test reports and Mounting on our website under [Technical support](#).
- Chemical Resistant (CR):** These extraction arms are suitable in aggressive working areas with special demands to chemical resistance in relation to work with aggressive chemicals.



2. Technical Terms





3. Correct position of the extraction arm

We recommend before use to check that the extraction arm is mounted correctly. Incorrect mounting may affect the flexibility of the extraction arm. See illustration on page 3 of the correct mounting.

- Check on the joint with damper that the small thumbscrews are facing forward and the wing for damper is to the right side.
- Check that the Alsident® label is facing forward (on the pipe above the joint with damper).

One of the consequences of an incorrect mounting is that the spring will not come into function and the extraction arm will therefore sink from the intended working position. Through time this will cause the spring to lose its strength irretrievably. To re-establish the correct function of the spring, it will need replacement.

3.1 Models

3.1.1. Table mounted

This type is easy to correct by turning the two pipes over the socket pipe.

If the extraction arm cannot keep the working position, a strengthening of the spring might help before replacement of the spring ([See section 7](#)).

When the extraction arm operates two work stations, it is important that it is rotated on the socket pipe between the work stations – DO NOT turn the extraction arm up and behind the socket pipe.

3.1.2 Wall/Ceiling mounted

Changing an incorrect mounting of wall- og ceiling mounted extraction arms requires a demounting of the extraction arm.

Caution:

The internal spring will be damaged by turning the extraction arm down backwards below the bracket and socket pipe. The extraction arm has to be demounted from the bracket and reversed UP above the socket joint.

If the extraction arm cannot keep the working position, a strengthening of the spring might help before replacement with a new spring ([See section 7](#)).

When the extraction arm operates two workstations, it is important that the extraction arm is rotated in the bracket – DO NOT turn the extraction arm down and behind the socket joint.



4. Operating the extraction arm

The extraction arms are easy to position at the pollution source and can just as easily be repositioned to a new work situation or rest position when not in use.

The socket joint rotates freely from side to side (only limited by the surroundings) and up/down. The middle joint rotates upwards and downwards and the joint with damper at the hood also rotates around the pipe in a limited angle. The joint with damper also rotates upwards and downwards and the hood rotates in a limited angle. This gives a very high mobility and flexibility.

The thumbscrews on the sides of the joint may be loosened or tightened depending on how much friction is needed to keep the extraction arm in position.

The finger screws are to be tightened according to requirement if they get loose because of frequent movement and positioning of the extraction arm.

The more the thumbscrews are tightened, the more force is needed to reposition the extraction arm. Where large friction is necessary we recommend loosening the thumbscrews slightly before the extraction arm is repositioned.



5. Capture efficiency

To ensure that the planned/necessary air volume is extracted we recommend you to get a test report from your installer in order to document the actual air volume. Where more extraction arms are used simultaneously, you must ensure that there is sufficient air volume available on the number of extraction arms in concurrent use as planned with the installer.

By following three simple rules you can achieve the best possible efficiency:

1. Position the hood correctly in relation to the pollution source
2. Choose the right hood for the specific type of pollution
3. Position the hood as close to the pollution source as possible

Find more on this subject under [Technical support](#) and download the document Capture efficiency under [Maintenance](#).



6. Troubleshooting

6.1. The extraction arm cannot hold its position

If the extraction arm is in a stationary rim position it can happen, that the extraction arm will rise or sink from its working position. Several things can cause this. Below you can see a short description:

6.1.1. The extraction arm sinks from its position

If the extraction arm is extended far from its mounting point, it is very likely that more friction in the joint is needed to prevent the extraction arm from sinking. Therefore the thumbscrews must be tightened.

If the point of extraction exceeds the specified working area of the extraction arm, the extraction arm is either too short or the mounting point is wrong (download our [Working Areas](#) from the website). The best solution is either to choose a longer extraction arm or to move the mounting point closer to the pollution source.

The internal spring might be weakened when the extraction arm is used in a rim position for a long time causing the extraction arm to sink from its position. Here the solution will be to strengthen the spring. Read more under section 7 [Adjustment of internal spring](#).

6.1.2 The extraction arm rises from its position

If the extraction arm is bent under itself towards its mounting point, more friction in the joint is also necessary, in this case to prevent the extraction arm from rising from its position, by tightening the thumbscrews. If this position is the intended working position, a too long extraction arm might have been chosen or the mounting point is wrong. A shorter extraction arm or moving the mounting point further away from the pollution source will be the best solution. A position in the lowest working area can make some of the models rise upwards as the internal spring is a bit too strong for this position. This is adjusted by weakening the spring a bit. Hold the extraction arm in both hands and push it below the wanted position towards vertical position a couple of times - until the position is held. Make sure not to weaken the spring too much.

If the extraction arm is positioned within the specified working area, the problem might be that the O-rings in the joints have lost their friction due to soiling from oil, glue or similar. In this case the O-rings are to be cleaned as described in the document [Cleaning of the extraction arm](#) which can be downloaded from our website under Maintenance.

6.2 General

Please contact your installer if you need help solving any problem. It might be of great help to the installer if you would be able to send a couple of photos showing the problem and the entire extraction arm in working position.

6.3 Spare-parts.

Some parts of the extraction arms are wearing parts with a shorter lifetime than the extraction arm in general.

It is always possible to buy new spare-parts for the Alsident System extraction arms from your installer.



7. Adjustment of internal spring

In certain cases it might be necessary to adjust the strength of the internal spring by weakening or strengthening it.

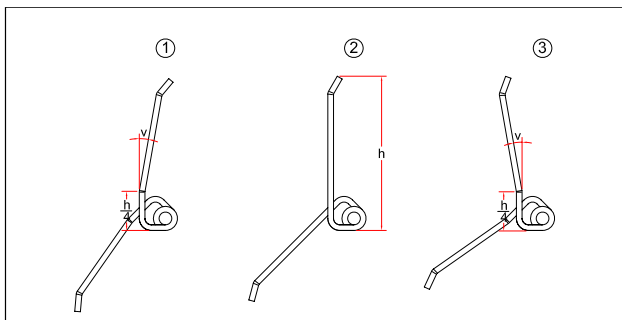
In order to tighten the spring, the extraction arm must be demounted from the bracket. The socket joint must be dismantled by removing the thumbscrew from the joint and pulling the threaded stay out. Now bend the legs of the spring **against the winding direction** making the spring effective at an earlier point. See the illustration below.

In order to weaken the spring, the extraction arm must also be demounted from the bracket and the socket joint must be dismantled. The legs of the spring must be bent **in the winding direction** to affect the spring to grip at a later point. See the illustration below.

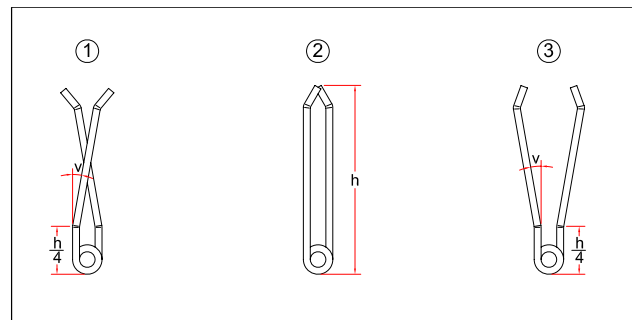
The below figures show the spring in three different positions;

1. a weakened spring
2. a spring in normal position
3. a strengthened spring

Bend the legs of the spring in a distance of app. $\frac{1}{4} \times h$ from the winding. The angle 'v' depends on the need for strengthening/weakening of the spring. It is advisable to bend stepwise (e.g. 5°) and frequently make a test of the spring.



Spring for table mounting



Spring for wall and ceiling mounting

For all three springs apply:

a spring is **weakened** by bending the legs **in** the winding direction.

a spring is **strengthened** by bending the legs **against** the winding direction.