

Our
Accu-Lube micro-lubrication

Benefits in the following companies and industries among many others:

Machine construction:

- Depo
- Fill
- Prowin
- EMAG
- Matec
- Viessmann

Car industry:

- Daimler Chrysler
- Porsche
- Audi

Aircraft construction:

- EADS
- Airbus
- MAN Technologie

Suppliers to the car industry:

- Behr
- Otto Fuchs
- Thyssen
- GKN Driveline
- Honsel

Aluminium working industry:

- Trimet Aluminium
- Alcoa
- Corus
- Ankra
- Hydro Aluminium
- Hörmann

Due to the three manufacturing plants and a worldwide distribution network we are able to provide our customers a global support structure:



Germany

Accu-Lube

USA

ITW ROCOL North America

Japan

FUJI BC ENGINEERING

Distribution in:

Italy
France
Spain
Sweden
Finland
Benelux
Czech Republic
Poland
United Kingdom
Norway
Greece
Switzerland

Canada
Mexico
Brasil
Australia
New Zealand

China
India
Hong Kong
Taiwan
Korea
Thailand
Singapore
Malaysia
Philippines

Please contact us and allow us to show you the way to a better environment in connection with low production costs through the use of the **Accu-Lube MiniBooster** in your production.

Accu-Lube
Manufacturing GmbH

Glaitstr. 29 · D-75433 Maulbronn-Schmie
Postfach 80 · D-75430 Maulbronn
Tel. 07043/5612 · Fax 07043/907098
www.accu-lube.com · mail: accu-lube@accu-lube.com

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Accu-Lube
Micro-Lubricating-System
MiniBooster

Economical and ecological



MiniBooster II HD SR

Transport of the lubricant through the machine tool spindle and through the tool adapter to the cutting edge of the tool.

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The principle of the *Accu-Lube* micro-lubrication. The transport of the lubricant through the machine-tool-spindle

Micro-lubrication is provided when an air and lubricant mixture is transported through the machine-tool-spindle ensuring the *Accu-Lube* lubricant is delivered precisely to the cutting edge.

The *Accu-Lube MiniBooster* consists of the following essential parts:

- *Accu-Lube* precision controlled volume pumps
- *Accu-Lube* frequency generator
- *Accu-Lube MiniBooster* chamber = the essential part of the system
- electronic control system for automatic adjustment to different tool diameters (only MBII HDSR, on page 3)

The *Accu-Lube* precision controlled volume pumps are controlled with the help of the frequency generator. The piston is moved forward and the adjusted quantity of lubricant is transported through the oil tube to the **MiniBooster chamber**. In the MiniBooster chamber the lubricant drop is split with the help of 6-bar air pressure. The oil-air-mixture (the oil droplets have a micro size) is transported into the reservoir and then through the hose and through the spindle to the cutting edge of the tool.

Advantages of the micro-lubrication

Cost saving:

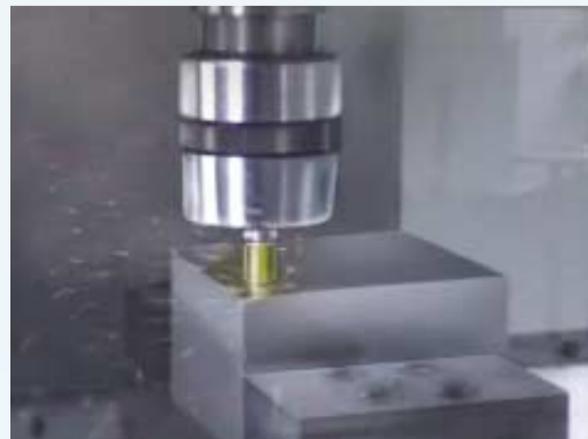
- Increase of tool life
- no waste disposal
- dry chips
- minimum cleaning costs: no residue on tools, machine part and machine
- no facility for flood coolant needed

Environmentally safe:

- *Accu-Lube* lubricants are manufactured out of plant oils
- *Accu-Lube* lubricants have no EP-additives
- minimal, optimal adjustable consumption when *Accu-Lube dosage system* is applied



conventional lubrication



micro lubrication

You can decide

Accu-Lube MiniBooster MB II HD SR

Accu-Lube MiniBooster II HD SR for coolant fed tools with a diameter 1 - ≤ 25 mm



The new developed **micro-lubrication-system** is appropriate for coolant fed tools in CNC-machining centres and CNC-turning lathes.

The *Accu-Lube MiniBooster MB II HD SR* allows a safe production process.

The advantages of the *Accu-Lube MiniBooster MB II HD SR* are the user friendliness, the economic use of lubricant and the simple and quick installation.

- Initiated by the electronic control, the system adjusts itself automatically to the different tool diameters of coolant fed tools.
- It is not necessary after a tool change to program an M-function for each tool.
- The existing CNC-programs must not be changed for a special M-function for the **micro lubricating system**.
- Simple installation! The system requires an air supply of 6-8 bar and an electrical output of 24V on the CNC-machine tool (M-function cooling-lubricant on/off).
- The system is easy to operate and offers process safety especially during high volume batch production.
- The consumption of air is reduced by 20% because the system switches on only when more oil-air mixture is needed, as the lubricant is always present in the reservoir.
- The consumption of lubricant is approximately 8-14 ml /h. This is depending on the size of the used tools and the time of use of the tool.

Technical data: operating current: 24 V DC 1,4 - 2,5 A
operating pressure: 6-8 bar
reservoir: 500-750 ml

Accu-Lube MiniBooster MB II HDC



Accu-Lube
MiniBooster MB II HDC

Inside lubrication

- 2 booster chambers
- 3 precision controlled volume pumps
- 3 frequency generators

Appropriate for coolant fed tools with a diameter of 3 - ≤ 25 mm

Outside lubrication

- 3 precision controlled volume pumps (as an option a maximum of 4 can be installed)
- 3 frequency generators (depending on the number of precision controlled volume pumps)

With no limits as far as the tool diameter is concerned, provided that the positioning of the nozzle can be optimised and the lubricant will reach the cutting edge of the tool. This applicator consists of two systems in one box.

Outside lubrication for non coolant fed tools

Inside lubrication for coolant fed tools

Advantages:

- it is unnecessary to replace all tools which are not coolant fed
- during heavy duty cutting operations outside and inside lubrication can be used

Optionally available with electric control.

With this system all cutting operations on a CNC machining centres are covered.

Accu-Lube Double-MiniBooster II



Accu-Lube Double-MiniBooster II
for coolant fed tools
with a diameter
3 - ≤ 8 mm

Inside lubrication

- 4 booster chambers
- 4 precision controlled volume pumps
- 2 frequency generators

This **Double-MiniBooster II** consists of two separate systems, which are united in one box.

This **MiniBooster** was developed for multi spindle heads.

In case multiple coolant fed tools with the same diameter are used (4 tools with a maximum tool diameter of 8mm) the system allows the lubrication with sufficient lubricant/air-mixture.

Optionally available with electric control.

Accu-Lube MiniBooster MBI

- Turning lathes without rotating tools
- This MiniBooster was developed for grooving and parting off tools and coolant fed turning tools from the company 



MiniBooster MBI



MiniBooster MB II

Accu-Lube MiniBooster MB II

- Turning lathes with rotating tools
- CNC-machines with different tools and different tool diameters
- Tool diameter 3 - ≤ 8 mm



MiniBooster MB III

Accu-Lube MiniBooster MB III

- Turning lathes with rotating tools
- CNC-machines with a multiple number of different tools and tool diameters
- Tool diameter 3 - ≤ 12 mm

Accu-Lube lubricants

For safety reasons and in order not to invalidate the warranty for the applicators we recommend that **only Accu-Lube lubricants** are used within the **Accu-Lube MiniBooster**.

We recommend:

When processing aluminium **Accu-Lube LB 5000**:

- for medium- heavy cutting operations
- **Accu-Lube LB 5000** is developed to cut aluminium and after a post heating process there will be no residue on the work piece.
- **Your advantages:** ecologically safe, not dangerous, economical and no waste disposal



When processing ferrous material the best results are obtained with **Accu-Lube LB 2000** and **Accu-Lube LB 8000**

Accu-Lube LB 2000:

- for light- heavy duty cutting processes
- **Accu-Lube LB 2000** is manufactured out of natural refined triglycerids. This lubricant is appropriate for working ferrous material and non ferrous material provided there is no post heat treatment.
- **Your advantages:** ecologically safe, not dangerous, economical and no waste disposal



Accu-Lube LB 8000:

- for light- medium- heavy duty cutting processes
- **Accu-Lube LB 8000** is a mixture of natural ingredients. This lubricant is especially appropriate for working in ferrous material. When using **Accu-Lube LB 8000** there is no residue on the parts
- **Your advantages:** ecologically safe, not dangerous, economical, no waste disposal, no residue

