

Increase farm productivity with SKF Agri Hub for independent tillage discs

Relubrication-free, integrated, cost-effective



An integrated solution for manufacturers of agriculture attachments

SKF presents its easy-fit hub solution for agriculture (SKF Agri Hub), with integrated flange and reliable sealing solution for agricultural implements.

Today's market demands increased productivity and respect for the environment. You want to reply to these needs while lowering your management costs and improving your company's ecological profile. Today SKF Agri Hub enables you to do so.

With this SKF product, downtime for attachment maintenance is significantly reduced, since the hub is relubrication-free.

Environmental care is cost effective

SKF Agri Hub helps to reduce the lubricant consumption (→ **diagram 1**). Less lubricant is good for the environment and helps reduce operational costs. Its unique sealing solution reduces the risk of grease leaking into the soil.

What is more, the service life of SKF Agri Hub is up to three times longer than a traditional bearing. This means that the environmental impact of manufacturing and disposal can be reduced by up to two-thirds.

Benefits

OEMs

- A cost-effective solution
- Higher product quality and reliability
- Stronger market image
- Supports sustainability efforts

End users

- Increased farm productivity
- Relubrication-free
- Reduced environmental impact
- Easy to install/replace





Value added benefits

SKF Agri Hub offers manufacturers better sales claims and reduces farmers' costs, while protecting the environment: both reach their objectives, whether short, medium or long-term.

Farm productivity increased by up to 150%*

Extensive testing by SKF has shown that early bearing failure due to insufficient sealing performance can be prevented. The SKF sealing solution withstood one of the most severe tests: the "low temperature" tillage trial.

The easy-fit SKF Agri Hub solution seals the unit against string, stones, straw, mud, dust and any kind of fertilizer. During the SKF testing, the reduced bearing failures enabled the farmer to increase productivity by up to 150% (→ **diagram 2**).

Ownership costs reduced by up to 30%*

SKF's long-term experience and thorough knowledge of the agricultural industry has led to the development of this reliable, compact solution.

With no more regreasing the sealing solution protects SKF Agri Hub from contamination and reduces the number of breakdowns. Feedback from the SKF testing showed that as much as half an hour of maintenance time could be saved every day (→ **diagram 3**).

Management costs reduced by up to 90%*

Instead of using several single components the SKF Agri Hub enables you to lower your hub management costs up to 90%! This is due to the fact that the SKF solution is delivered as a complete integrated unit (→ **diagram 4**).

By purchasing the complete hub from SKF profitability rises – no more multiple suppliers for bearings, flanges and seals – no additional warranty, testing, engineering and assembly costs.

Diagram 1 – Lubricant consumption (10 years life-time/machine)

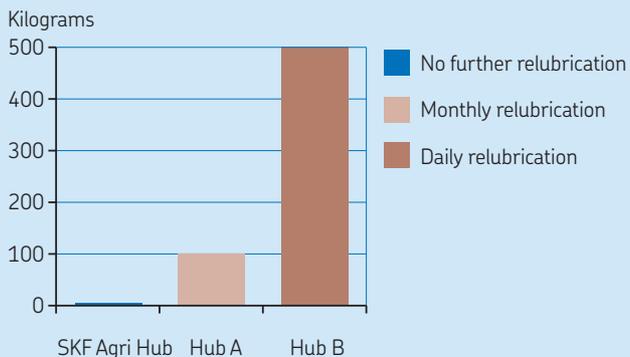


Diagram 3 – Ownership costs (10 years life cost/machine)

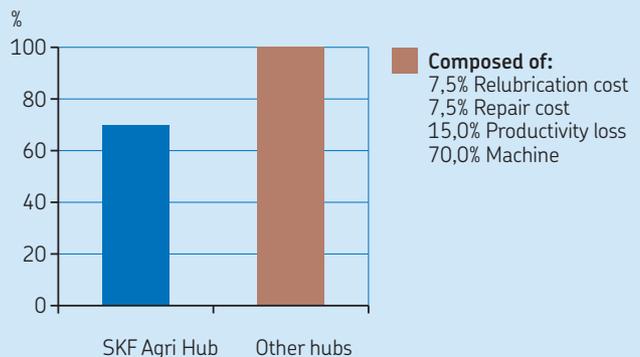


Diagram 2 – Farm productivity

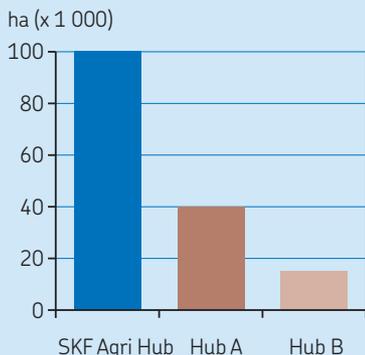
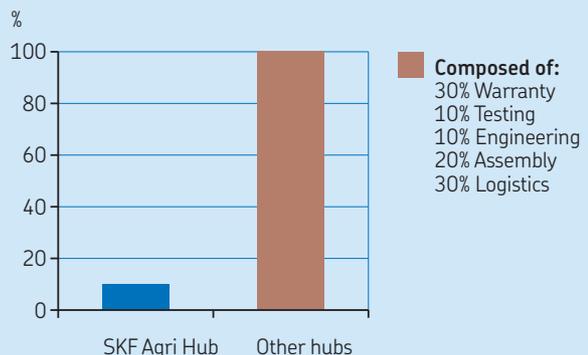


Diagram 4 – Management costs



* All figures and graphs are rounded off and based on SKF testing estimates. Particular savings and results may vary



Application description

The SKF Agri Hub is a fully integrated hub bearing system, greased and sealed for the life of the unit. These hub units have a flanged outer ring that is pre-drilled and tapped to accommodate a disc. The stationary inner ring is fitted with a threaded stub shaft for easy mounting onto virtually any implement arm.

Main features

- Anti string system flange shape
- Anti straw, Arizona dust and stones labyrinth
- High performance sealing to prevent water, snow, mud, dust ingress
- High capacity bearing with rigid design to withstand shock loads
- Plating corrosion (CR VI-free) resistant to jet cleaning and fertilizers
- Anti contamination cap for disc replacement

Typical application conditions

- Tractor speed: 5–20 km/h
- Disc speed: 90–350 rpm
- Disc diameter: 300 to 800 mm
- Loading: maximum 3 kN (applied on top of the disc)
- Temperature: –20 to +50 °C (static –50 °C)
- Harsh working conditions: straw, strings, stones, fertilizers, mud, dust, water, snow and jet cleaning

Mounting instructions

- Screws mounting torque: 100 Nm
- Nut torque: 300 Nm
- Self locking nut

For more information about SKF Agri Solutions for the agriculture industry – contact your SKF representative, or visit us at www.skf.com/agrisolutions

SKF Agri Hub testing¹⁾

	Passed	Result
Tillage disc field test	✓	+ Productivity
Mud tillage test	✓	+ Productivity
Low temperature test and start up at –20 °C	✓	+ Productivity
Friction test	✓	+ Reduced environmental impact
Corrosion protection test	✓	+ Quality
Water proof test	✓	+ Reduced environmental impact
Air pressure test	✓	+ Reduced environmental impact

¹⁾ Based on the SKF tests, the expected performance may be as much 100 000 hectares



A farmer's testimony

"My farm requires 40 days tillage a year – 30 in spring to prepare for the maize and 10 in autumn to prepare for the wheat.

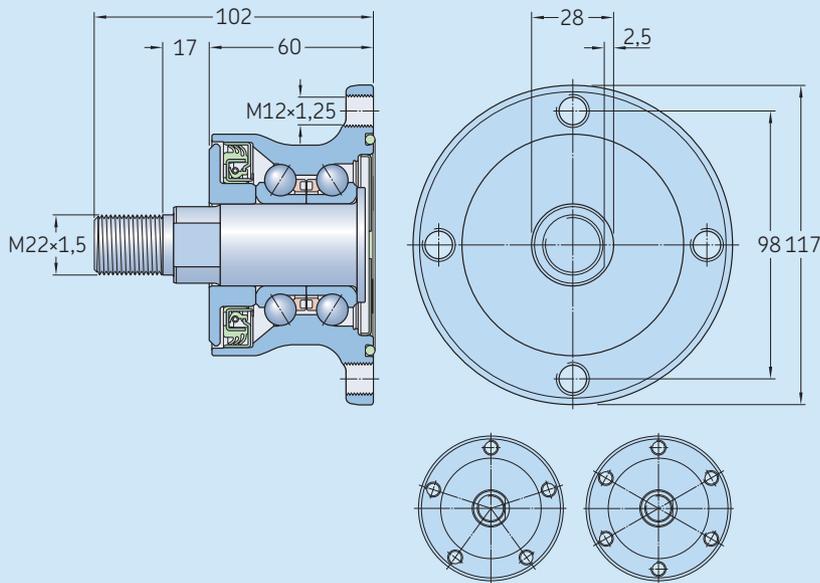
With the new solution there is no need to wash and lubricate the discs and I save half an hour a day.

The work is done more quickly and easily. We drive at more than 20 km an hour and I have seen an improvement in the way the land is worked: with the old harrow the top speed was 7 or 8 km an hour.

The old 2,5 metre harrow worked one hectare an hour, the new machine, which is still 2,5 metre covers two and half hectares an hour. The old 20 disc harrow required a 20 kilo can of grease each year, with this new solution I've eliminated greasing and washing.

In my job I'm in contact with nature every day and I'm pleased that with the new SKF solution I'm not polluting the land with grease anymore."

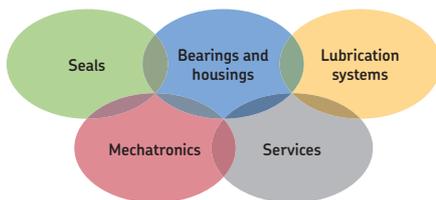
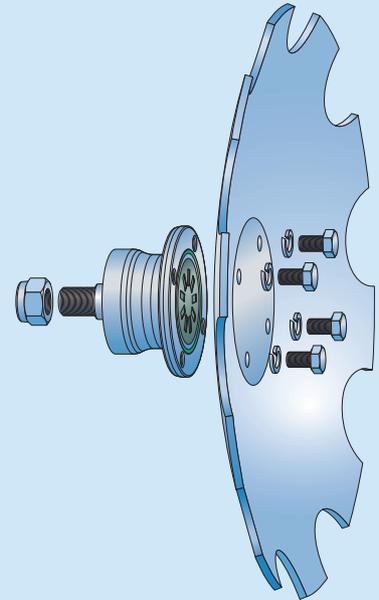
Technical data



Designation	Attachment holes in outer ring	Basic load ratings		Shaft
		dynamic	static	
–	–	C	C ₀	–
–	–	kN		–
BAA-0004	4×M12×1,25	47,5	37,5	Included
BAA-0012	5×M12×1,25	47,5	37,5	Included
BAA-0006	6×M12×1,25	47,5	37,5	Included
BAA-0003	4×M12×1,25	47,5	37,5	Not included

Plating is free from hexavalent chrome

Simple to assemble



The Power of Knowledge Engineering

Combining products, people, and application-specific knowledge, SKF delivers innovative solutions to equipment manufacturers and production facilities in every major industry worldwide. Having expertise in multiple competence areas supports SKF Life Cycle Management, a proven approach to improving equipment reliability, optimizing operational and energy efficiency and reducing total cost of ownership.

These competence areas include bearings and units, seals, lubrication systems, mechatronics, and a wide range of services, from 3-D computer modelling to cloud-based condition monitoring and asset management services.

SKF's global footprint provides SKF customers with uniform quality standards and worldwide product availability. Our local presence provides direct access to the experience, knowledge and ingenuity of SKF people.

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