



KOLLITSCH GmbH
BODENBEARBEITUNG MIT TIEFGANG!

YOUR PATH TO HEALTHIER SOILS
THE KOLLITSCH REAR SOIL LOOSENER



Welcome

TO THE KOLLITSCH FAMILY

Welcome to the world of healthy soils,
We are very pleased to welcome you to our family. As a family-owned company based in Leipzig, we place great value on personal support and individual solutions for your needs.

The roots of Kollitsch GmbH go back to 2014, when Franz Kollitsch developed the soil loosener to meet specific challenges in agriculture. Since 2018, we have been marketing our rear soil loosener through Kollitsch GmbH.

As a **family business**, we are always there for you and will find solutions for your needs together. With us, there are no rigid hierarchies; no matter whom you reach out to, we will take care of your concern to the best of our ability.

We hope you enjoy discovering our products and are always happy to assist you.

Your Kollitsch Family

WHAT MAKES US UNIQUE!



FAMILY

We are both a family and a company. Each of us stands 100% behind what we do.



CUSTOMER SATISFACTION

We personally deliver every machine to ensure optimal use.



SUSTAINABILITY

Our machine is designed to allow additional components to be added at any time.

WE BREATHE NEW LIFE INTO YOUR SOIL!



ROBUST, EFFICIENT, SUSTAINABLE THE KOLLITSCH REAR SOIL LOOSENER

The Kollitsch Rear Soil Loosener is the solution to compacted soils and the increasing demands of modern agriculture. Engineered for maximum impact with minimal intervention, it stands out through its robust construction, operational efficiency, and adaptability.

► Minimal traction requirement

Thanks to leading disc coulters

► HARDOX steel at heavily stressed areas

Extremely robust yet lightweight

► Special tine shape for natural soil fractures

Preserves soil life and promotes humus formation

► Working depth up to 55 cm

Targeted loosening even in deep compactions

► Hydraulically supported frame guidance

Precise depth control via the tractor's position control

► Sustainable Effect

Improves soil structure and supports healthy plant development

CUSTOMER FEEDBACK WHAT LONG-TIME USERS SAY



ERNST TSCHIDA - AUSTRIA

"Since we started using the Kollitsch Soil Loosener, the structure of our soils has significantly improved. Less waterlogging, better plant development with minimal soil disturbance."

HEALTHY SOIL STARTS WITH THE RIGHT LOOSENING!



TINO RYLL - BRANDENBURG

"Especially when we started regenerative agriculture, the Kollitsch Soil Loosener helped us enormously. Breaking up the plow pan and targeted ferment application were key to our success."



SOIL LOOSENING

AS THE KEY TO YIELD POTENTIAL

Targeted soil loosening not only improves soil structure but also supports long-term yield potential. It enables deeper root growth, enhances water retention, and promotes active humus formation—making the soil more fertile and resilient.

Compacted soil (left side of the image): Water cannot penetrate deeper layers, nutrients are less available, and root growth is inhibited by compaction. Microbial activity is minimal, leaving the soil lifeless - with direct consequences for plant development and yield performance.

UNDERSTANDING SOIL STRUCTURE

THE IMPACT OF SOIL LOOSENING

Root development

Roots cannot penetrate the compacted layer

Weed Pressure

Weeds grow faster than the main crop

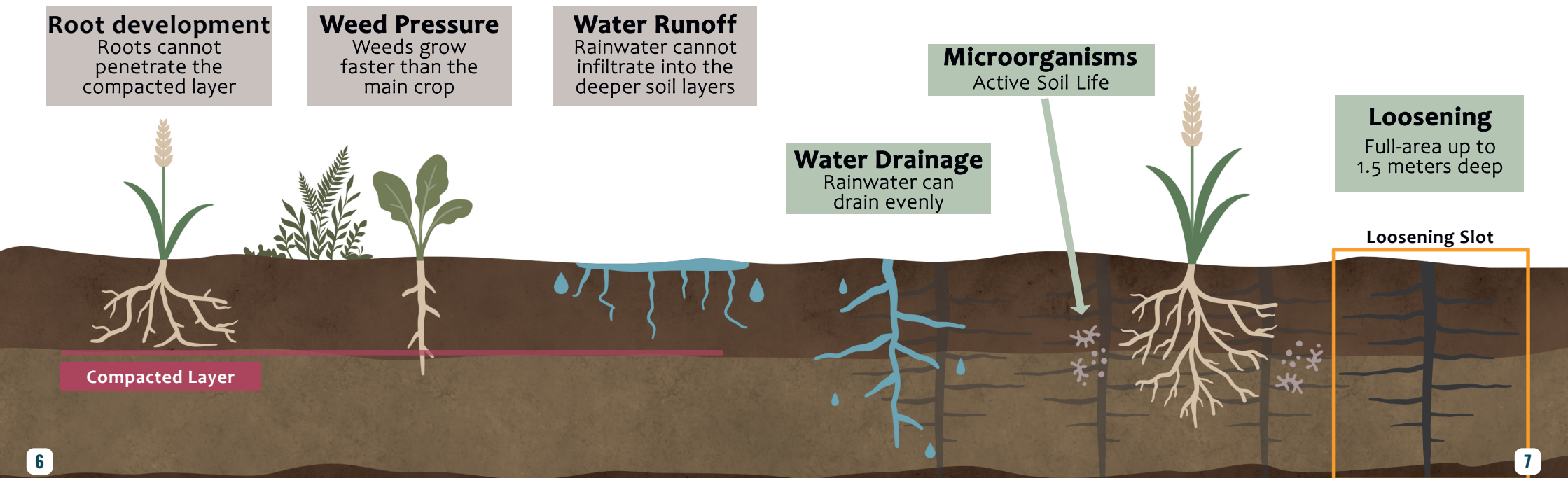
Water Runoff

Rainwater cannot infiltrate into the deeper soil layers

MICROORGANISMS AS NATURAL ALLIES IN THE SOIL

Nitrogen, phosphorus, and sulfur are among the most essential building blocks for healthy plant growth and high yields. In many soils, however, these nutrients are no longer sufficiently available and often need to be supplemented through fertilization. Healthy soils with an active structure, on the other hand, help plants to nourish themselves more efficiently: through symbiotic relationships with microorganisms, plants can access and absorb nutrients more effectively—a natural process that is sustainably enhanced by soil loosening and humus formation.

Loosened soil (right side of the image): Water infiltrates evenly, and roots grow deep and well-branched. Microorganisms break down organic matter, promote humus formation, and make nutrients available to plants. This creates fertile soil with stable nutrient exchange and high resistance to drought. Full-area loosening ensures uniform plant emergence. When the main crop is combined with a suitable cover crop, essential nutrients can be provided naturally—significantly reducing the need for soil additives. This sustainably strengthens soil structure and supports stable, site-adapted crop development.



UNDERSTANDING SOIL

PRACTICAL FUNDAMENTALS

A STRONG SOIL IS MORE THAN JUST DIRT!

Healthy soils are the foundation of every successful agricultural operation. Those who understand their structure can implement targeted measures—for higher yields, more resilient crops, and improved resistance to extreme weather conditions.

KEY SOIL FACTORS

► Soil Structure

A stable crumb structure improves water and air balance.

► Soil Life

Microorganisms decompose organic matter, release nutrients, and promote humus formation.

► pH-Level

Affects nutrient availability and microbial activity in the soil.

► Water Balance

Storage capacity and infiltration are crucial during droughts and heavy rain events.

► Nutrient Availability

Nitrogen, phosphorus & others must be accessible to plants—soil loosening supports their distribution.

Soil Type	Property	Processing Tip
Sandy Soil	Permeable, dry	Incorporate organic matter; reduce fine tillage
Clay Soil	Dense, poor drainage	Deep loosening to improve aeration and water flow
Loam Soil	Fertile but prone to compaction	Targeted deep loosening to break up compact layers; promote humus formation

Identifying compaction - before it becomes a problem!



Waterlogging

Puddles after rain indicate disturbed infiltration.



Curved Roots

Instead of growing straight down, roots grow sideways.



Smearing with Spade

Soil smears when wet, lacking crumb structure.



Reduced Soil Life

Few earthworms, little visible organic activity.

How to Counteract Compaction:

- Adjust working depth to the level of compaction (e.g., 30–40 cm)
- Combine loosening with organic fertilization or ferment applications
- Consider tramline management & machinery weight



TECHNOLOGY MEETS BIOLOGY

THE KOLLITSCH PRINCIPLE

Rethinking Soil Cultivation – With Respect for Life Below the Surface!

Traditional tillage focuses solely on mechanical effects. We think further: Our goal is to work with the biology of the soil—not against it. The Kollitsch Soil Loosener combines targeted mechanical impact with the protection and activation of biological processes.

What Sets Us Apart

Natural Fracture Lines Instead of Cutting

The special tine design lifts and breaks the soil without destroying soil life.

Building Up Instead of Turning Over

No inversion, no mixing—the soil layers remain intact.

Ferments and Microorganisms

Can be optionally combined with injection technology to specifically stimulate life in the soil.

Humus as a Goal, Not a By-product

Less disturbance means better conditions for humus formation.

QUOTE FROM THE FIELD

FARMER FROM LOWER BAVARIA

“Using the HBL has made our fields more uniform, and the crops appear noticeably more vital - it's immediately visible and confirmed year after year in the stand development.”

WHEN IS DEEP LOOSENING USEFUL?

- ▶ Yield depression in partial areas
- ▶ Spade tests reveal compacted layers (30–45 cm)
- ▶ Increased water erosion or waterlogging
- ▶ Noticeable weed displacement of the main crop

IMPORTANT TO NOTE!

- ▶ Never loosen when the soil is too wet - risk of smearing
- ▶ Always work in accordance with local conditions
- ▶ Regular soil testing supports informed decisions





KOLLITSCH GmbH

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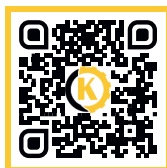


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Find more information and
technical videos on our website!



Are you interested in the Kollitsch Soil Loosener?

Call us or send us an email – we are happy to
provide personal and expert advice!

The direct line to fellow farmers!



Join our WhatsApp group to connect
with other farmers – quick, practical,
and direct!

www.kollitsch-gmbh.com