AQUACULTURE

Fish Pond Water Clarity Case Study Garstedt, Germany

*Hydro*FLOW® improved pond water clarity, increasing visibility to full depth within one week and enabling algae to flocculate and be captured in the filtration system.

160cm	1 wk	↓	✓
Water Visibility To Full Depth	Clarity Improvement	Reduced Filter Cleaning Time	Algae Flocculated And Captured

⇄ BEFORE & AFTER

BEFORE

- ✗ Visibility around 80 cm (160 cm depth)
- ✗ Pond bottom not visible due to algae
- ✗ Algae and sediment dispersed in water

AFTER

- ✓ Visibility improved to full pond depth
- ✓ Pond bottom clearly visible
- ✓ Algae formed flakes captured in filters

BEFORE

Filter units clogged with algae

AFTER

Algae flocculated and captured on filter

OVERVIEW

A private koi pond in Garstedt, Germany experienced reduced water clarity due to algae growth and suspended solids, limiting visibility and affecting filtration performance. The pond, stocked with koi and supported by a multi-stage filtration system with UV treatment, required improved water quality to maintain stable conditions.

CHALLENGE

Low visibility and dispersed algae reduced filtration effectiveness and increased maintenance requirements.

- Limited visibility of around 80 cm
- Pond bottom not visible due to algae
- Filter units becoming clogged
- Sediment stirred by fish activity

SOLUTION

A *Hydro*FLOW® K40 unit was installed on the suction line before the filtration system to treat the circulating water. Performance was monitored to assess changes in water clarity

UNIT INSTALLED **1x *Hydro*FLOW® K40**	INSTALLATION POINT **Suction line before filter**
FILTER SYSTEM **8 filter units**	INSTALL DATE **July 2017**

INSTALLATION

K40 installed on suction line before filter

SITE

Visibility >160cm with pond bottom clearly visible

RESULTS

Visibility increased

Clarity improved from 80 cm to full pond depth (160 cm), bottom clearly visible

Rapid improvement

Significant clarity improvement observed within one week of installation.

Filter loading increased

Algae and suspended solids were captured in the filters, increasing filter loading.

Reduced cleaning time

All 8 filter units were cleaned in the time previously required for a single unit.

Algae flocculated

Algae formed larger particles that were more easily captured by the filtration system.

Improved filtration

Filter performance improved as solids were retained rather than dispersed in the water

KEY TAKEAWAY

Summary

*Hydro*FLOW® improved pond water clarity within one week by enabling algae flocculation and more effective filtration. Visibility increased to full depth, while captured solids improved filter performance and reduced cleaning time across all filter units.

160cm	1 wk	↓
VISIBILITY	IMPROVEMENT	REDUCED CLEANING TIME

🖼️ ADDITIONAL PHOTO EVIDENCE

BEFORE

Algae and solids suspended in water

AFTER

Clearer water after filtration

RESULTS

Flocculated algae captured on filter surface

RESULTS

Filter units loaded with flocculated algae

HYDROPATH

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