



# FOCUS



## ECONOMY:

- Service life
- Absorption level
- Service hours



## ENVIRONMENT:

- Co<sub>2</sub> emission
- Process



## CSR:

- Service-friendliness
- Automation

**PRE-TREATMENT**

PROCESS

SLUDGE TREATMENT

OUTSIDE THE FENCE

SERVICE

# COOPERATION WITH **value**

At Stjernholm A/S, we want to make sure that our shared competencies are fully utilised, ensuring that we always deliver sustainable solutions with regards to economy, environment and CSR.

## COOPERATION

That is why we base our cooperation with our customers on **mutual respect, and open and honest dialogues.**

In order to ensure optimal coherence between the customer's strategies, KPIs and goals, along with the options offered by the industry and the advisers, we suggest a larger scale tender divided into six phases:

Through the dialogue, we evaluate whether or not other factors influence the decision, e.g.

- Will absorption of screen material of down to 1/8 inch minimise the costs of disposal in other areas of the plant?
- Are there any problems with non-absorbed screen material in other processes within the plant, e.g. deposits in process tanks etc.?
- Will reduction of inspection/man-hour costs allow staff to carry out other tasks?
- Do special KPIs or goals make up the basis for the final decision?

In this way, we ensure that the final solution is selected based on sustainable and long-term optimisation of supply operations – to the delight of the consumers and the supply staff.



# **value**

When you cooperate with us, you know that we are focusing on delivering a solution to you that adds value to your facility.



### **ECONOMY**

#### **STJERNHOLM MECHANICAL FINE SCREEN**

- Service life of 15-20 years with a calculated payback time of 3-7 years.
- The absorption level within the process can lead to savings of up to 30% and other potential financial benefits.
- Reduced number of service hours. According to experience, the self-purifying, automatic operation reduces time needed for inspection and maintenance with up to 2 hours per week.



### **ENVIRONMENT**

- Engines that fulfil EU requirements related to energy saving engines by law as of January 2017 contribute to reducing the total CO<sub>2</sub> emission from the facility.
- A higher degree of absorption of screen materials ensures better utilisation of fat and sludge in the next facility processes. That means less storage and transport and therefore less CO<sub>2</sub> emission from the facility.



### **CSR**

- Service-friendliness and operational reliability contribute to minimising the need for operational staff to touch the waste water, creating better working conditions and reducing absenteeism due to illness.

Remove screen material from the medium in the inlet in cooperation with Stjernholm A/S to achieve a sustainable solution!

## **TENDER SUGGESTION**

Machine equipment tenders must always be drawn up as procurements based on operational needs. The providers must be allowed to visit the plant and discuss the installation prior to final compilation of the procurement materials.

In addition, the providers must be allowed to present and explain their offer to the developer and the adviser prior to the order being placed.

The offers must be evaluated with a focus on the areas included in the section "The facts".

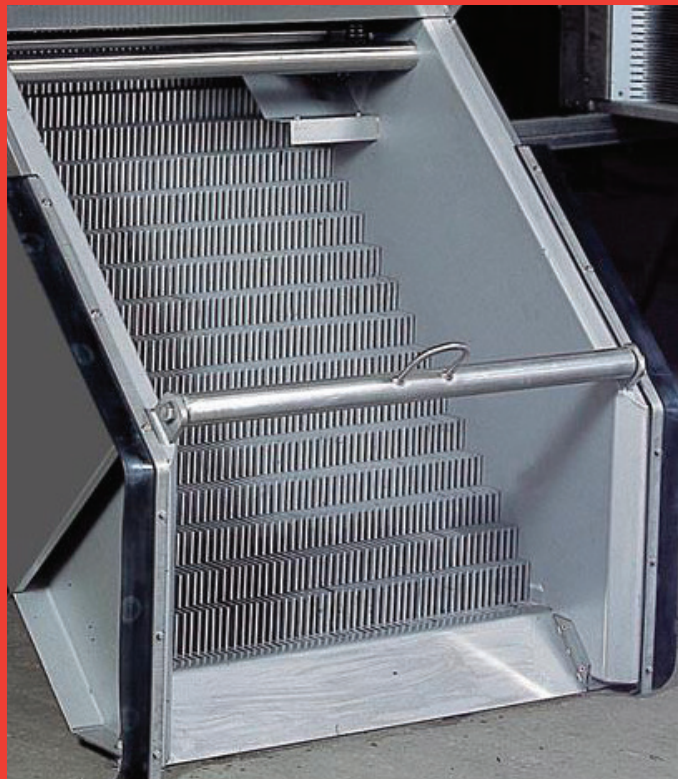


# Mechanical Fine Screen

During the past 25 years, the Mechanical Fine Screen from Stjernholm has been installed in numerous places in order to separate screen materials under various circumstances, and it can easily be adjusted to fit existing piping and buildings.

## "THE FACTS"

The screen absorbs up to 40% of the screen material and this performance is secured through minimal crack openings by the screen bars and highly reliable operations.

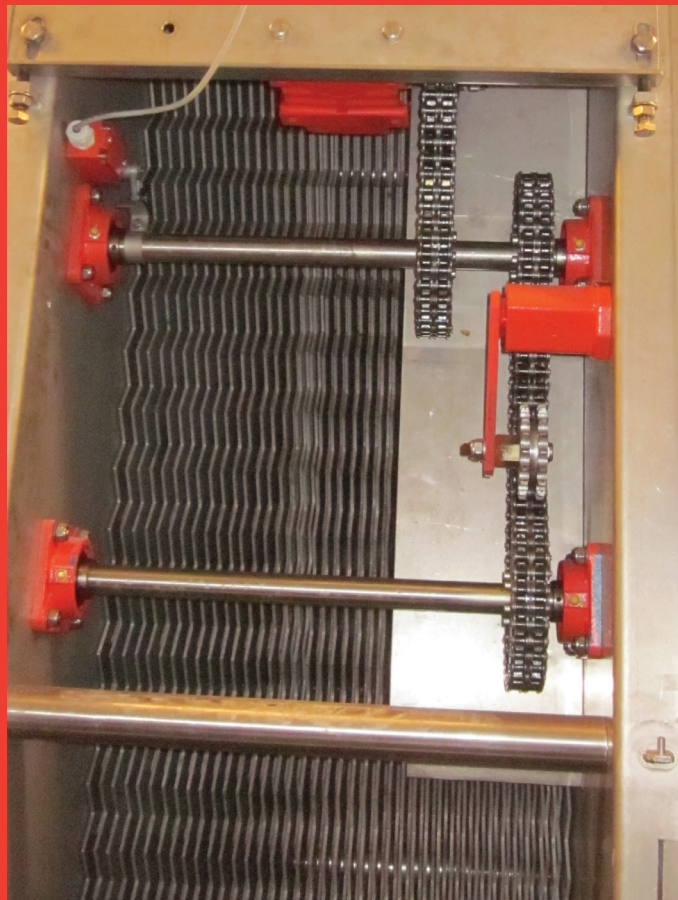


*The screen has a very low front edge by the bottom that eliminates the risk of stagnant water and thus sedimentation before the screen.*

### TABLE FOR COMPARISON WITH OWN REQUIREMENTS OR OTHER SCREENS.

| FACTS               | MECHANICAL FINE SCREEN  |
|---------------------|---|
| Service life        | 15-20 years   |
| Screen bars - Std.  | 1/8 or 5/32 inch  |
| Material standard   | AISI 304  |
| Gear type           | SEW worm gear motor   |
| Engine              | 230/460V. – 60 Hz   |
| Retention level     | Up to 40% screen material   |
| Handling strategy   | Level measurement before and after the screen; the screen is activated depending on the predefined level. |
| Handling            | Local control panel / SRO   |
| Hygiene             | Closed system with inspection window  |
| HC code:            | 84212100  |
| Producer / country: | Stjernholm A/S - Denmark  |

*The table is available to download at [www.stjernholm.dk](http://www.stjernholm.dk)*



*The Mechanical Fine Screen from Stjernholm features a solid construction and is run by a low-energy engine through a worm gear and a driving gear. The parallel screen bars, which are alternately fixated and moveable, ensure minimal crack openings in all operational situations.*



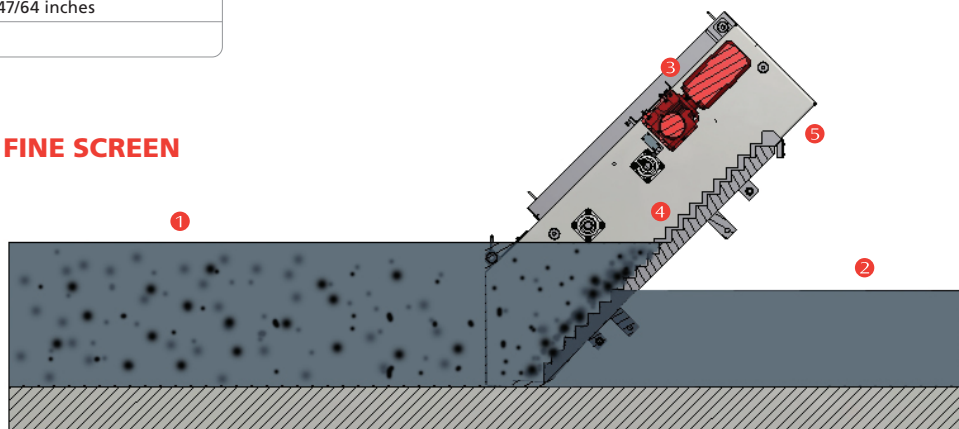
*Installed with parallel screen bars where every second bar is moveable.*

## TECHNICAL DATA:

|                          |                                   |
|--------------------------|-----------------------------------|
| Screen width             | 15 3/4 - 47 1/4 inches            |
| Installation inclination | Up to 45 degrees                  |
| Discharge height         | 39 3/8 / 55 1/8 / 78 47/64 inches |
| Engine data              | 230V/460V - 60 Hz                 |

## THIS IS HOW THE MECHANICAL FINE SCREEN FROM STJERNHOLM WORKS

1. Inlet before screen
2. Outlet after screen
3. Gear motor
4. Screen bars
5. Discharge area for screen material washer, waste compactor or container.



## STJERNHOLM A/S

Stjernholm A/S develops, manufactures and markets better technical solutions with a high degree of sustainability. Based on the concept "Value-adding cooperation", we concentrate on the areas in which we know that our knowledge and competencies make a difference: economy, environment and CSR.

We focus on delivering solutions with documented sustainability based on mutual respect, and open and honest dialogues, both externally and internally.

Stjernholm A/S was founded in 1997 and employs approximately 30 dedicated and competent staff members. Our company is financially stable and we are a well-known and well-established player on the market for water treatment. We are noted for our innovative and future-oriented approach to customer cooperation.

## STJERNHOLM SERVICE

Working with Stjernholm A/S as your service partner, all your service needs are covered by one supplier, no matter who delivered the utility machinery and equipment in the first place. We train our service technicians in keeping their eyes and ears open when visiting a plant. In this way, we have a better chance of preventing small problems from growing bigger through proper maintenance and exchange of wearing parts.

(See our product brochure "Stjernholm Service" for additional information)

## SURVEYOR'S REPORT

Based on verifiable sustainability, Stjernholm A/S offers compilation of a surveyor's report for the specific plant in question. Using our professional knowledge, competencies and innovative approach, we offer a complete evaluation of the plant, followed by a report which documents areas of potential optimisation based on sustainable solutions.

(See our product brochure "Stjernholm Surveyor's Report" for additional information)



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