

# Plastic chain scraper.



Plastic chain scraper for sludge removal  
from rectangular clarification tanks.



**VA Teknik** Sweden

Towards a cleaner world

[www.vateknik.se](http://www.vateknik.se)

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# Plastic chain scraper.

VA Teknik's plastic chain scraper is a proven product that has been on the market for more than 40 years.

With thousands of installations from North to South and east to west in all corners of the world VA Teknik possesses extensive expertise. We offer you reliability and consistency with our well-engineered chain scrapers. A solid performing product where continuous development work is conducted to make the plastic chain scraper even better.

## Advantages

- Light weight
- Durable
- Energy efficient
- High sludge removal rate
- Robust

## Use

- Municipal Waste Water Treatment Plants
- Industrial Waste Water Treatment Plants
- River water Treatment Plants
- Refineries
- Desalination Plants
- Food and Dairy industries
- Pulp and Paper mills.

## Function

### Drive Unit

The motored gear is assembled on a vertically adjustable motor plate for tensioning of the power transmission chain. The transmission chain is made of acetal resin and is lubricated by the tank water. All moving parts are covered and protected by a light weight easy access aluminum hood.

### Drive Shaft

The shaft is designed as a stainless steel tube with welded flanges. Plastic split sprockets are bolted to the flanges. The split sprockets enable maintenance without disassembly of the driveshaft. The drive shaft's bearings are spherical long life heavy duty plastic bearings. The bearings are lubricated by the tank water. No additional greasing is needed.

### Idler wheels

Plastic hubs with sprockets are fixed with collars on stationary solid stub end shafts. The shafts are secured in brackets that are welded to anchor bolted wall plates. Collector chain tensioning is available as an option.

### Scraper flights

Fiberglass reinforced plastic and the sigma shaped profile of the flights makes it more corrosion resistant, rigid, strong and flexible to resist high sludge loads without compromising the safe operation. Our flights are always available in stock in various configurations.

The unique sigma profile gives the scraper a natural high durability and rigidity which is incomparable with others. No additional reinforcing plates or additives are needed to establish that.

We define the suitable scraper profile based on tank dimensions and sludge load, and supply scrapers to tanks up to 10 m wide in single configuration or 20 m with twin configuration. We have a vast experience of specially designed configurations.

The scrapers are equipped with skids and filler blocks for the strongest possible fixation of the chain's attachment link. A number of scrapers are equipped with rubber strips to sweep the entire tank floor

### Bottom strips and wall rails

Plastic skid strips on the tank floor and stainless steel wall rails guide and keep the scrapers in position. Our design makes the use of additional nylon wear strips on the wall rails unnecessary, which reduces maintenance costs.



### Scraper collector chains

The plastic collector chain type NCS 720S is made of an acetal resin which is a highly suitable plastic when it comes to chemical-, corrosion- and wear resistance and yet does not compromise on the strength or durability of the chain.

The chain pitch is 6" or ~152 mm and the maximum break load is over 3100 kg. The chain is locked with simple snap-in pins.

Removal/installation is kept very simple with our special tool.

Specifications	
Power output range	0.12-1,5 kW
Motored gear	SEW, Nord or by client demand
Steel parts below water	Stainless steel configurations: AISI304, AISI316L, EN1.4547 (Super duplex)
Plastic parts	Polyethene, high density PE. Urethane Glassfiber reinforced polyester
Collector and Drive Chain	NCS720 S - Acetal resin plastic NH78 - Acetal resin with 316 pin.
Tensile force	Breaking load >3100kg Average work load ~1400 kg
Size configuration	Sigma    Width <8m Length <100m Diamond    Width <10m Length <100m
Types	VAT YB – Surface and bottom VAT SB – Standard Bottom VAT LB – Bottom below lamellas VAT SF – Sand/Grit trap scrapers VAT DAF – Surface scrapers VAT API – API scrapers
Overload protection	Electronic Torque Guard

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