

# IMPROVED PRODUCTIVITY SCT SMART CONVEYING TECHNOLOGY





#### SCT CONSTRUCTION PRINCIPLE

## IN A FLASH.

Smart Conveying Technology (SCT) means faster maintenance, shorter downtime and significantly reduced life cycle costs. This unique SEEPEX product has already won several awards and is internationally patented. The design principle of this smart technology: The Smart Stator is divided into two parts, so that maintenance can easily be done by one person without the need to remove either the suction or discharge pipe work. Additionally, the two piece Smart Rotor allows for quick and easy removal and replacement without the need to dismantle the joint or use special tools, saving time and money. The result: Maintenance in the shortest possible time resulting in less downtime and increased productivity.

Another design feature is the integrated retensioning device, which allows the clamping between the rotor and stator to be adjusted for optimum flow and readjusted when the flow rate reduces due to wear. Readjustment is done in a matter of minutes, returning pump performance to the required level without replacing any components. As such, the service life of both the rotor and stator is significantly extended, removing the need for replacement parts and reducing the life cycle costs of the SEEPEX pump.

### SMART STATOR -

Two, comparatively light, stator halves.

### **SMART ROTOR**

With detachable rotor head connection for fast assembly/disassembly, while leaving the universal joint intact.



For positioning and axially sealing the stator halves, adjusting the stator clamping and retensioning the stator halves.

#### **SEGMENT RETAINER RINGS**

For positioning and radially sealing the stator halves and locating the adjusting segments.

2



# **REDUCED LIFE CYCLE** COSTS.

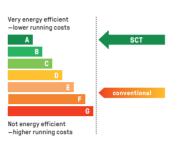
Progressive cavity pumps have a long service life, generally expected to be in the region of 15 years. The largest contributors to the total life cycle cost of these pumps are downtime (loss of production), energy and maintenance.

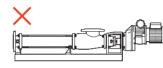
> With SCT, you not only extend the life of the pump but also increase efficiency and save on costs. Reduced downtime and the subsequent increase in production are crucial for all industries, and low maintenance costs are important for all pump users. SEEPEX SCT pumps provide a compelling economic solution for all industries.

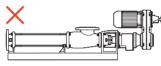
## **HOW DO SEEPEX CUSTOMERS BENEFIT FROM SCT?**

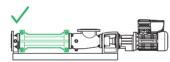
- Increased productivity, reduced downtime
- Reduction in maintenance time by up to 85 %
- Integrated retensioning device resulting in up to 200% increase of rotor and stator life
- Significantly reduced life cycle costs
- Lighter components allowing faster maintenance and assembly/ disassembly with minimal manpower
- High efficiency due to lower energy requirements
- Simple maintenance without the need for special tools
- Less space required for installation and essential maintenance as suction and discharge pipework remain in place
- Environmentally friendly as components can easily be recycled

#### ENERGY EFFICIENCY RATING









### THE MOST COMMON METHODS FOR SAVING ENERGY:

- Reduction of power requirement
- and most efficient technology

## **HIGH ENERGY EFFICIENCY**

## The reduction of energy consumption is a priority for most customers in all industries, but how can savings be implemented?

- · Replacement of old inefficient equipment with the latest
- Utilize the most efficient drive technology

Compared to conventional pumps, SCT triumphs with very low energy costs. In a highly competitive market this provides commercial advantages for SCT users. Our SEEPEX experts are knowledgeable about many proven energy efficiency solutions and will survey your site to suggest improvements.

# AT HOME IN ALL INDUSTRIES.

SEEPEX SCT pumps have been supplied into most industries for a wide variety of applications and products.

#### SCT IN RENEWABLE ENERGY

In numerous biogas plants, Smart Conveying Technology has shown a clear advantage over conventional progressive cavity pumps and other types of pumping technologies, on a wide range of applications.

SCT has a proven track record and performs efficiently and effectively, providing longer component life and quick and easy maintenance. Subsequently profitability is increased due to higher production levels.

#### **SCT IN ALL INDUSTRIES**

SEEPEX's Smart Conveying Technology is the perfect solution. SCT allows for simple retensioning of the stator within minutes, meaning the pump can continue to give acceptable flows for longer periods. When essential maintenance is required even if no more adjustment is possible, both the suction and discharge pipework remain in place resulting in a reduction of maintenance time of approximately 85%.



From environmental to biogas to the pulp and paper industry: SCT reduces downtime, provides easier maintenance, extends the life of the rotor and stator, as well as reduces life cycle costs. In short, SCT provides greater productivity and efficiency. 8

Smart Conveying Technology is the result of consistent refinement of the original design called Smart Stator Technology (SST) from 2008. SST was the design and development of a two-piece stator without the usual metallic tube, positioned and sealed together by four individual adjusting segments. This internationally patented innovation has already been successfully installed several thousand times since its invention and launch into the marketplace.

There are two ways to take advantage of the many benefits of SCT-either through purchasing a SEEPEX progressive cavity pump with SCT or by upgrading an existing pump with the latest Smart Conveying Technology.

## THE SCT RETROFIT KIT INCLUDES:

- Rotor and stator in SCT design
- Universal joint parts
- All relevant castings



# INTERNATIONALLY **PATENTED.**

But we didn't stop there: In 2010 SEEPEX further improved the design and developed and incorporated a two-piece rotor that can be replaced easily and quickly while leaving the universal joint intact. The rapid rotor change saves even more time on essential maintenance. Thanks to SCT, maintenance on the rotor and stator is the quickest and most efficient of any supplier.

# SCT RETROFIT KIT.

- All necessary fasteners to convert your existing pump to SCT

The retrofit kit works with all SCT suitable pumps. Our SEEPEX experts will gladly advise you if your pump can be upgraded.

10

## SCT: CONSTANT **INNOVATION.**

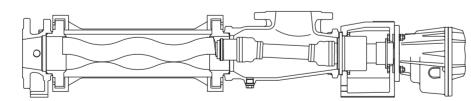
## PRESSURE, 1-STAGE **UP TO 4 BAR** (60 PSI)

SCT has been successfully installed in thousands of pump installations. Customers' satisfaction with SCT has spurred us to develop further solutions for global markets which are efficient, economical and ecologically friendly.

#### FEATURES AND BENEFITS

- Two individual rubber stator halves
- Smart Rotor with quick release geometry
- Rotor and stator sealing line can be adjusted to suit the application
- Lower power requirement
- Higher efficiency
- Readjustable when wear occurs
- Increased component life due to readjustability
- No special tools are required
- Reduced maintenance time
- Double plug and play power train
- Reduced risk of ragging
- Internationally patented

#### **1-STAGE DESIGN**



PRESSURE, 2-STAGE UP TO 8 BAR (120 PSI)

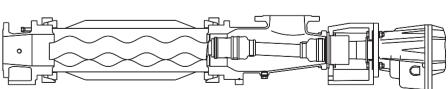
# **BEST.**

Our customers know SEEPEX represents constant innovation and customer focus. With SCT, we continue to innovate based on our customers' needs. In addition to the well-established single stage design for pressures up to 4 bar, SCT is now also available in a two stage design for pressure up to 8 bar. Both pump types offer a wide range of features and benefits.

#### **FEATURES AND BENEFITS**

- Lower power requirement
- Higher efficiency
- Readjustable when wear occurs
- No special tools are required
- Built-in lifting aids
- Reduced maintenance time
- Double plug and play power train
- Reduced risk of ragging
- Patent pending

#### **2-STAGE DESIGN**



# **MORE OF THE**

- Two individual rubber stator halves
- Smart Rotor with quick release geometry
- Rotor and stator compression can be adjusted to suit the application
- Increased component life due to readjustability



SEEPEX GmbH www.seepex.com

