

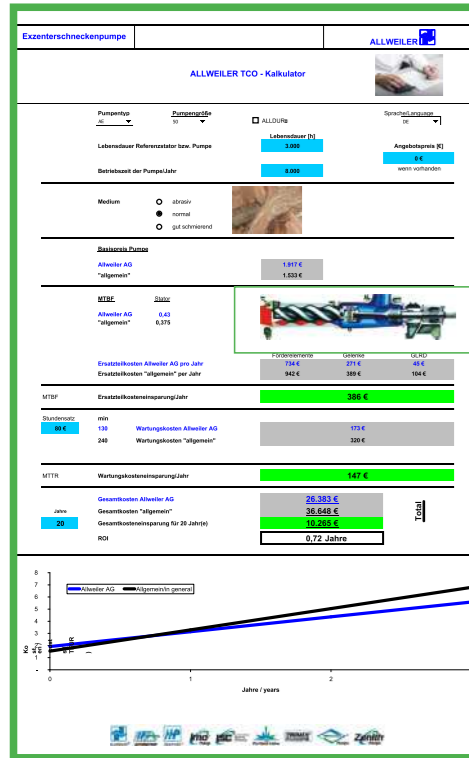
ALLWEILER TCO Calculator Significantly lower total costs

- ALLWEILER TCO Calculator:**
- >> Analyze and optimize the pumps in your system
 - >> Significantly lower energy and operating costs
 - >> Increase operational reliability
 - >> Extend maintenance cycles

Additional information is available at:
www.allweiler.com



Electronic optimization of lifecycle costs („TCO“)



Using the TCO Calculator, ALLWEILER technicians can determine exactly how much money you can save by using ALLWEILER pumps in your existing system. They start by recording your operating conditions, liquid properties, and pumping task for every pump.

The optimization program then calculates the service life (MTBF) of wearing parts. Viewed together with costs for spare parts and maintenance, you get an overview of how much money you could save over the entire service life of each pump and how fast an investment in a modern ALLWEILER pump will pay for itself.

Call 00800-77 88 10 10
(fax +49(0)77 88 20 20)
(toll-free throughout Europe)
or send an e-mail to service@allweiler.de
to arrange a TCO calculation for your system.

From one source

ALLWEILER AG is one of the few manufacturers that produces all rotors and stators for its progressing cavity pumps at its own plant.

As a result, customers benefit from comprehensive quality control, a selection of more than 20 materials, and rapid deliveries.



Our experienced technicians are there when you need them - anytime day or night. You can count on service and support within 24 hours no matter where your ALLWEILER-equipped installation is located.

The addresses of ALLWEILER global representatives are available here:
<http://www.allweiler.de>



- Colfax/ALLWEILER manufacturing centers
- Colfax/ALLWEILER sales and service locations

ALLWEILER products and services

- >> Centrifugal pumps
- >> Propeller pumps
- >> Screw pumps
- >> Progressing cavity pumps
- >> Peristaltic pumps
- >> Macerators
- >> Plant engineering
- >> Systems
- >> Monitoring and control

ALLWEILER application categories

- >> Marine and Offshore
- >> Power Generation
- >> Oil and Gas
- >> Process Technology
- >> Chemistry
- >> Bioenergy
- >> Heat Transfer
- >> Building Industry
- >> Machine Tools
- >> Pulp and Paper
- >> Water and Wastewater
- >> Food and Pharmaceutical

ALL-OPTIFLOW®: Low Total Cost of Ownership (TCO) is guaranteed

Maximum efficiency, low energy requirement

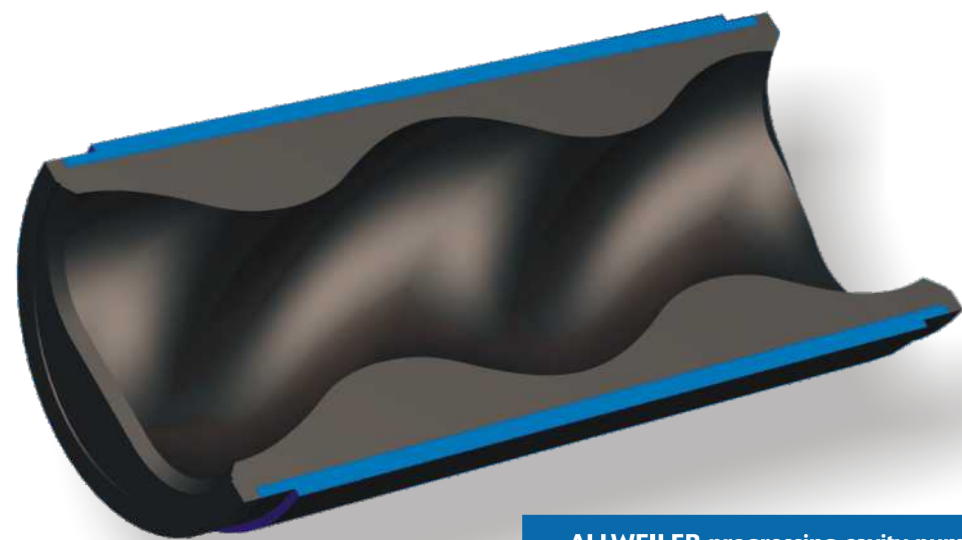
- >> Greater power density with innovative 1/2-screw pumping elements
- >> Rotors with specially contoured, smoothed surfaces and lower adhesion and sliding friction
- >> Shaft seal with very small diameter and up to 50% lower friction loss
- >> Stators with uniform clamping and special scaled, facet-like surface

Low costs for maintenance and spare parts

- >> Patented, zero-play stub shaft connection
- >> Internal bearing, removable bearing bracket
- >> High-quality joint design
- >> Joint protected against overpressure and solids
- >> Joints are lifetime-lubricated with oil



ALLDUR® Stators Extreme durability with abrasive liquids



ALLDUR®: Here's what you can expect:

- >> Extremely high wear resistance
- >> Up to 300% longer service life (MTBF)
- >> Longer maintenance intervals
- >> Less downtime (MTTR)
- >> Lower maintenance costs
- >> Extended pump service life
- >> May be retrofitted at any time

ALLWEILER progressing cavity pumps with ALLDUR® stators Specially designed for ALLWEILER progressing cavity pumps

- >> Ready for dynamic loads
- >> High impact resilience
- >> Low compression set
- >> High tear-growth resistance
- >> High aging resistance
- >> Extreme durability



ALLWEILER is a business unit of Colfax Corporation

ALLWEILER GmbH
Kirchhellener Ring 77-79
46244 Bottrop
Germany

Tel.: +49 (0)2045 966 - 60
Fax: +49 (0)2045 966 - 679
service@allweiler.de

www.allweiler.com

ALL-OPTIFLOW®

New 1/2-screw pumping elements for all liquids, even those with fibrous and solid components, with pressure up to 6 bar.

- >> Rotors with special surfaces for high efficiency
- >> Stators from internal production in a variety of materials, optimized for every liquid.

>> ALL-OPTIFLOW®: THE PRODUCT OF DECADES OF OPTIMIZATION

Universal progressing cavity pump with the lowest total costs (TCO)



ENERGY COSTS REDUCED
up to 15%

MAINTENANCE COSTS REDUCED
up to 15%

ALL-OPTIFLOW®

Fully-optimized pump with very low operating and maintenance costs. For all industrial processes. With optimized distribution of forces.

Proven over decades of use:
The foundation for optimization and standardization. ALL-OPTIFLOW® optimizes the flow of pumped liquid, the distribution of forces, and the flow of lubricant for extraordinary efficiency and an extended service life.

Minimal wear and rapid, straightforward maintenance:

- >> The shaft seals on ALL-OPTIFLOW® are accessible without disassembling the pipelines.
- >> ALL-OPTIFLOW® stators made of ALLDUR extend service life by up to three times when pumping abrasive liquids.
- >> The patented zero-play stub shaft connection of ALL-OPTIFLOW® is permanently self-sealing, stainless, and can be quickly separated from the drive shaft.

ALL-OPTIFLOW® lowers spare parts costs.

Joint protected from overpressure

The joint collar is designed so that it cannot be pressed into the joint, even when subjected to excessive pressure. As a result, damage to the collar is reliably prevented.

Joint protected from solids

Abrasive liquids and solids that easily pass through the suction casing and into the pumping chambers of the rotor and stator will not collide with the face side of the collar. Instead, they contact a raised metal shroud at the universal joint shaft. As a result, solids are guided over the durable face side of the joint collar and around the joint without causing damage to the joint collar.

Lifetime oil-lubricated joint

The innovative design of mutually sliding joint pins and bushes creates a joint movement that effectively circulates joint oil. In contrast to grease-lubricated joints, any friction-induced heat is thereby continuously guided away from the contact surfaces. This exchange of lubricant makes the joints very heavy duty and gives them an extraordinarily long service life.

Twenty different elastomer materials for the perfect stator every time

A special elastomer geometry, the faceted surface, and the optimized ALLDUR® elastomer minimize starting and operational torque, boost efficiency, stabilize the pump's performance curve, minimize wear during operation, and enable trouble-free starting even after extended downtime. ALLWEILER's proprietary ALLDUR® stators extend service life by up to three times, even when pumping highly abrasive liquids.

ALL-OPTIFLOW® saves energy.

Higher power density with innovative single-screw rotor

Twice the capacity at equal speed and 20% lower average sliding speed reduce energy consumption (lower drive power) and extend the rotor's service life. A patented process eliminates scoring and produces instead a shark-skin structure on the surface. Benefits: lower adhesion and sliding friction, thereby reducing drive power and starting torque.

Special rotor surface minimizes starting and operating torque

The surfaces of ALL-OPTIFLOW® rotors are optimized with proprietary processes. In addition, ALLWEILER's patented process creates a precision-contoured, smooth surface with a structure similar to shark skin. The benefits are optimized flow and sliding properties, while the rotor exhibits much lower adhesion and sliding friction.

ALL-OPTIFLOW® lowers maintenance costs.

Patented zero-play stub shaft connection

In block design, ALL-OPTIFLOW® is a self-sealing, stainless connection between the drive and the pump that is highly insensitive to dirt. It assembles and disassembles easily and quickly. Shaft diameter is approximately 30% smaller, reducing frictional losses at the shaft seal by up to 50%.

Internal bearing

The drive shaft bearings may be relubricated and are protected against spray water.

Removable bearing bracket

The bearing bracket may be removed from the drive shaft as a complete unit. Shaft seal accessible without further disassembly of the pump. The pump casing may remain attached to the pipelines.

High-quality joint design

Both ends of the ALL-OPTIFLOW® universal joint shaft end in gas- and liquid-sealed encapsulated pin joints that are designed to be very simple and robust and absorb the rotor's eccentric movement without disturbances. Force is transferred over exchangeable, hardened bushes and pins that reliably protect the remaining joint parts from wear and enable straightforward replacement.

ALL-OPTIFLOW® will save you a significant amount of energy. Numerous design details boost efficiency and lower operating and maintenance costs:

- >> ALL-OPTIFLOW® has new 1/2-screw pumping elements that move twice as much at the same speed.
- >> ALL-OPTIFLOW® rotors have a special contoured and smooth surface with minimal adhesion and frictional losses, so less power is needed for starting and operation.
- >> ALL-OPTIFLOW® utilizes special small-diameter stub shafts. Compared to conventional stub shaft connections, frictional losses at the shaft seals are approximately 50% lower. The shaft seals are more durable and require less drive power
- >> ALL-OPTIFLOW® stators are characterized by uniform clamping and a special scaled, facet-like surface. Low drive power is adequate for starting and operation, even after a long period of downtime.

