

ON YOUR SIDE

Sidel Life Cycle Management Bulletin



EDITORIAL BY...

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Sidel's strategic orientations in terms of services include the carry on of key continuous improvement programs. One objective: delivering a more and more efficient offer to you.

In this way, in addition to development of new products and optimization of the current service portfolio, we attempt to develop our knowledge of your equipment, in real operating conditions, in order to respond better to your specific needs with a tailor-made proposal.

The diagnostic visit presented in this issue of On Your Side is an integral part of this philosophy. Performed by Sidel's experts, the diagnostic visit enables to have a full and clear view of your equipment condition in your production environment. Thus, the improvement proposals we are offering you in terms of preventive maintenance are fully customized.

Energy consumptions reductions as well as output increases are among the most popular optimization solutions. Two major innovations are presented to you in this magazine: the "Quick-fit ARK*" and the "speed up kit" for SBO Series2 blow molders.

Finally, do not hesitate to share with us your opinion regarding the On Your Side magazine, by filling out the detachable reply form at the back of this issue.



With Quick-fit ARK Recycle up to 45% air

Quick-fit ARK, the new version of the air recovery system of the blow molder enables you to reuse a larger part of the exhaust air when manufacturing your bottles.

Reinjecting a larger part of this air in the machine's low-pressure blowing circuits and in the plant's utilities network, contribute to energy savings. The Quick-fit ARK, which is available for SBO Series2 machines equipped with seated blow valves, now has fewer components.

Benefits:

- Simplified assembly:
 - Shorter installation times: the fourth solenoid valve is attached directly to the nozzle cylinder.
 - It is no longer necessary to remove the blow seats.
- Yield and operating procedure are identical to those for the standard solution.
- Lower sales price.

The Quick-fit ARK was installed with success in the United States, on April 2010.

Example of calculation for a **SBO16 Series2** (a 5,000-hour production / year):

- **Bottle capacity:** 1,5 l
- **Preblow pressure:** 8b / **Blowing pressure:** 34b
- **Cost of 1 kWh:** € 0.09

Air consumptions	Before, with original configuration (Nm³h)	After, with Quick-fit ARK (Nm³h)	Savings
HP air pre-blowing/blowing	1 648	1 428	13 %
Wheel service: air stretching + nozzles	266	0	100 %
Total air consumption	1 914	1 428	25 %
Extra air reinjected into plant network		223	

Total recovered air:

- (total air consumption without air recovery - total air consumption with recovery + wheel service air + extra air) / total air consumption without air recovery.
- 709 Nm³h / 1 648 Nm³h = 43%.

*ARK : Air Recovery Kit



MAINTENANCE

IMPROVE YOUR EQUIPMENT AVAILABILITY WITH THE NEW CLEANING KIT FOR ELECTRICAL ROTARY UNIONS

Application:
Retrofitted SBO Series2 and SBO Universal

Cleaning frequency: every 12,000 hours of production or every two years.
This cleaning kit is essential for solving the unpleasant problem that is mainly found on the electrical rotary union rings and that is often responsible for malfunctions or mini-outages.

With this cleaning kit, you can avoid unplanned downtime for your machine!
It is recommended to have at least one type available in stock.

Item code: 00000141868



INNOVATION

Inspired by the SBO Universal and the SBO Series2 technology, the new stretching cylinders ensure:



- **Better sealing**

Of the rod and the piston with the use of new designed seals.

- **Longer life**

Improved with the use of food-grade grease, combined with the new seals: 27 million cycles in six months instead of the traditional 20 million.

The new tube made from molded aluminum and benefitting from improved design, also enables to:

- Reduce piston wear
- Ensure a better stiffness
- Facilitate and optimize maintenance
- Make easier the adjustment with the new rod profile

The new stretching cylinder can be easily installed in the old one's place without any modifications.

PRODUCTIVITY

Produce more!

With the new «speed up» kit at 1.800 b/h/m

Developed for SBO Series2 and SBO Series2+ blow molders

Inspired by the SBO Universal technology, this kit lets you reach an output rate of 1,800 bottles/hour/mold as a result of mechanical and electrical modifications of your machine.

For more information, visit:
www.options-upgrades.sidel.com / Ref : 965

Main changes

(inspired by the SBO Universal technology) :

- Mold open / close cam,
- Stretching cam,
- Mold base,
- Transfer arm (all options),
- Air rotary union,
- Snap-head spindle chain (retrofitted SBO Series2 version)

Kit composition varies depending on machine generation and type as well as on current production rate. A diagnostic visit and a reading of process parameters must be conducted prior to each installation.



An effective preventive maintenance

at Nestle Water Supply Est*, France



VOSGES

Mid-2009, the Nestle Water Supply Est site had diagnostic visits conducted on all its blow molders: two SBO20 Series2, one SBO12 Series2 and two SBO24/26 Series1.

Jean-François Codet, Maintenance Supervisor at Nestle Water Supply Est (NWSE), tells us his thoughts.

On Your Side : How did you integrate the diagnostic visits into your production schedule?

Jean-François Codet : We must have full production in the plant from January to September. The diagnostic visits were therefore conducted end of September 2009.

OYS : How did these visits go?

JFC : The experts were able to observe the machines in operation and idle, and they met with key staff in each area. They answered questions from our crews about the equipment. The Sidel's experts are highly qualified and know NWSE staff, machines and sites quite well.

OYS : Did you follow the recommendations of the diagnostic reports?

JFC : We received the reports from the Sidel experts less than two weeks after the diagnostic visits. They revealed that our machines were well maintained, but were showing their age. Certain machines had exceeded 60,000 hours of production, with some even hitting 80,000 hours.

The recommendations mainly dealt with replacing parts, particularly some that have reached the end of their service life, and these were supported with photos. We have followed 95% of Sidel's recommendations.

OYS : What are the main benefits of a diagnostic visit for you?

JFC : It is a way of doing preventive maintenance on highly stressed parts, so that we can anticipate any breakdowns. The diagnostic visit also enables us to optimize our maintenance method. Finally, it is a constructive dialogue between our teams and the Sidel's experts about the issues that occurred throughout the year.

OYS : What are your expectations from Sidel in terms of services?

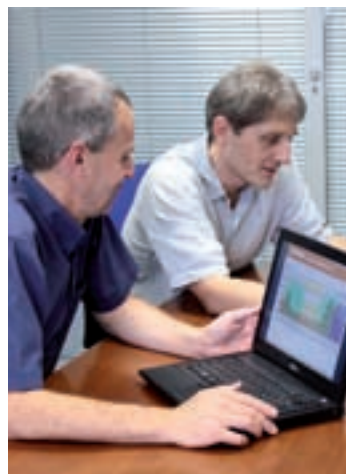
JFC : Our relationship with Sidel is based on a partnership. We therefore expect customized solutions to the issues we face, and we are highly attentive to the upgrades Sidel proposes on existing machines. Our "Nestle Continuous Excellence" approach, for example, has made us interested in Sidel's offer for format changeovers. As such, we are also interested in Kohlox™ grease-free molds.

*Nestle Water Supply Est (Vittel / Contrex / Hepar)

Eco-audit: 2m³ of water / hour saved

at SABMiller, South Africa

The Sidel Engineering & Conveying team conducted the first Eco-audit at SABMiller to reduce energy consumptions and improve production costs.



This Eco-audit on a glass bottling line at the Brewery SABMiller in South Africa last March 2010 gave a clear and understandable picture of the complex relations between the line effectiveness and its utility consumption (electricity, heat and water).

«In support of our goal to reduce water usage by 25% and to reduce fossil fuel emissions per million litre of beer produced, we are actively investigating ways to reduce water and energy consumption. Through this Eco-audit, we were able to quantify the exact water and energy requirements for each part of the packaging process and to compare these to new technology benchmarks», comments Stedrick Saayman, Group Packaging Consultant for SABMiller.

The Sidel Eco-audit allows customers to zero in on immediate savings or performance improvement with concrete recommendations, and elaborates also a broader image of the mid and long term leverages needed to reach a world class manufacturing level. Its objective is to help reduce energy costs and decrease water consumption, by analyzing consumption levels (electricity, air, steam, water, CO₂, etc.) in relation with equipment performance (line efficiency, machine reliability, changes, cleaning, stoppages).

Following the analysis by Sidel Engineering & Conveying experts on SABMiller's returnable 75-cl glass bottling line that runs at 60,000 beer bottles per hour, this packaging line has already seen its water use drop by more than 2 m³/hour.

In the medium term, there is further potential to reduce water and energy requirements. «*The audit also showed how packaging efficiency improvements result in a disproportionate decrease in water usage and Sidel made a number of recommendations in this regard to improve the line efficiency beyond the current 83%. Overall, this audit met all our expectations and we appreciated Sidel's technical expertise and involvement*», adds Stedrick Saayman.



QUALITY



TEST THE QUALITY OF YOUR BOTTLES AND PREFORMS WITH EFFICIENT LABORATORY EQUIPMENT

Sidel is updating its laboratory equipment catalog with the launch of three new products:

- **5-X multi-test compression meter:**
Function: Tests the resistance of a bottle to vertical compression.
Benefit: Determines the force that can be exerted on bottles.
- **USB temperature and humidity recorder:**
Function: Measures temperature and enables monitoring of ambient parameters.
Benefit: Ultra-compact, customizable and easy to use.
- **Digital torque meter:**
Function: Measures low ranges of torque with a good quality/price ratio.
Benefit: Improves the functionality of products, guarantees better manufacturing quality.

Come see the range of products in our updated catalog, available at www.options-upgrades.sidel.com

OPTIONS & UPGRADES

Oil free new roller for the lifting system

**Do you want to improve the maintenance of your can fillers?
Sidel proposes its new roller for the lifting system**

Application: STARCANS HS fillers.

Principle: use of a new material, polyether ether ketone (PEEK*), filled with carbon fiber.

Benefits:

- Reduction of maintenance times and extension of the roller life up to 5,000 / 6,000 hours.
- Hygiene improvement allowed by an oil free system.

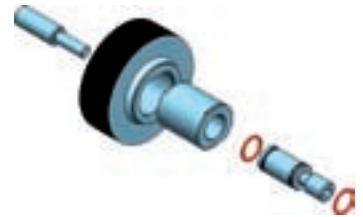
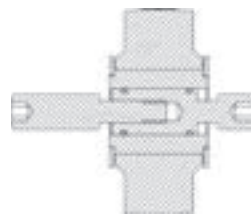
** Peek = polyether ether ketone. This is a high-performance thermoplastic material with very high wear resistance.*

Comparison of rollers:

> Old roller



> New roller



For more information, visit www.options-upgrades.sidel.com / Ref: HS046

FOR FURTHER INFORMATION, PLEASE CONTACT YOUR CUSTOMER SERVICE MANAGER



For more information on services, contact: lcm@sidel.com

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YOUR POINT OF VIEW MATTERS



Are you discovering the magazine
On Your Side for the first time?

Yes No

Do you like the format?

Yes No

Does the content meet your expectations?

Yes No

Do you appreciate the frequency
(3 issues per year)?

Yes No

What other themes would you like to be covered
in the magazine?

Do you have any suggestions for improvement
(content, form...)?

Would you agree to provide a testimonial
in a coming issue?

Yes No

Which topic? _____

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