

Outlook

2021

Magazine #5

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AN UPDATED RANGE & NEW ADDINGS

INTERFLEX EPSO X brand has originally been created in 2018 3 years after, what's new?

Much continuous progress has been done so that most of our SEMI OPEN CELL EPDM range is made by extrusion process and in continuous rolls. No Junctions every 2 meters - No Problems!
EPSO X range quickly found its audience and our various solutions now offered makes INTERFLEX one of the top companies in this particular sector.

Many trips - visits - meetings with clients to convince them of the high quality of our grades for their TIERs and OEMs and switch to EPSO X. Many lab tests to measure the high performance level of our foams and of course also many meetings with our engineers and production staff to get a very stable continuous production wishing to meet zero defect .
A new production line for extrusion was also added in Korea in order to get additions to our existing range. This latter one not to jeopardize the actual success of our « traditional » EPSO XS and EPSO XH (from our China plant) meeting a huge success in Europe, but complementary.
The new offered grades fall under the banner of EPSO XL Grades.

As a consequence, it was decided to reduce the number of available grades in bloc form so to only keep two commercial grades, EPSO 11 BL & EPSO 12 BL.
We continue to supply our clients for their needs for blocs - higher thicknesses - sheets etc reminding that the 2 above grades are widely approved by many OEM for HVAC usage and financially very advantageous.

INTERFLEX Standard Offer is now made of
EPSO XS and EPSO XH :
90 kg/m³ and 130 kg/m³ semi closed cell EPDMs.
EPSO XS and EPSO XH hold excellent physical properties and are very good for all applications requiring complex sealing against: AIR - WATER - DUST. All this under compression.
Resistance to Humidity - UV and Temperatures' differences.
These grades can also be supplied with self-adhesive backing .



FOAMS THAT HAVE COME IN THE RANGE IN 2021

EPSO XL 75
EPSO XL 90
EPSO XL FR

Here under is a short table which makes a recap of main physical properties & performances :

EPSO XL 75	Economic	75kg/m ³	2mm to 30mm
EPSO XL 90	Very Low Fog & VOC	90kg/m ³	3mm to 30mm
EPSO XL FR	Excellent fire resistance	90kg/m ³	3mm to 30mm

QUALITIES IN BLOCKS THAT REMAIN IN THE RANGE

EPSO 12 BL : Still the same ! We do not want to change a material that works perfectly !
EPSO 11 BL : Some changes have been made on the EPSO 11 BL :
An increased thickness (57 to 60 mm skin/skin)
A new packaging to increase loadable volume.
A Thinner cell structure thanks to an even more controlled crushing process.
We hold a TECHNICAL GUIDELINE which records all the tests we made on the EPSO X series which can be sent upon request !
Finally other grades are available on special production. Super High Density Grades, EPSO in white colour ... do not hesitate to check with our experts to develop something for your special need !



Skiving tool for EPSO XL Series



3 new items are joining our range complementary to our existing EPSO range

NEW GRADES IN OUR EPSO X RANGE

EPSO XS&XH Series Production Line

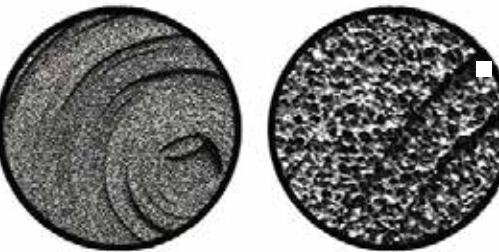


Crushing Process for EPSO XL Series



AVAILABLE IN BLOCKS (or sheets)
EPSO 11 BL + EPSO 12 BL

Ideal for HVAC, very easy to compress, excellence in Acoustic Performances.
Very Fast Recovery.
Seal again Air - Water - Dust under compression



AVAILABLE IN ROLLS

**EPSO XL 75
EPSO XL 90
EPSO XL FR
EPSO XS
EPSO XH
EPSO XC**

+ more to come

NEW VIDEO FORMAT

Due to Covid, these last months have been quite intense and we did not have so much time to make new videos. But from 2022, will be put online 3 to 4 new videos per year. On the INTERFLEX FOAMS YouTube Channel, you can also find latest video of testing made

Our Deputy General Manager Cyril Bisbrouck will have the pleasure to meet you soon again for the next FOAM'S UP! episode. You can also meet him at FOAM EXPO EUROPE 2021 at Stuttgart, Germany.



MORE STOCK in EUROPE

Everybody knows that there is an exceptional strong tension in the market right now and one key to success is to have stock thus we decided a few months ago to increase the quantity level of material we put on stock for each quality !
We were used to work directly from production center to customer location for each delivery we were making, but in the last 5 years, we decided to gradually and daily put more and more material on stock.
Did you know that today, 25 % of our turnover is made from material on stock in our warehouse in Belgium ?



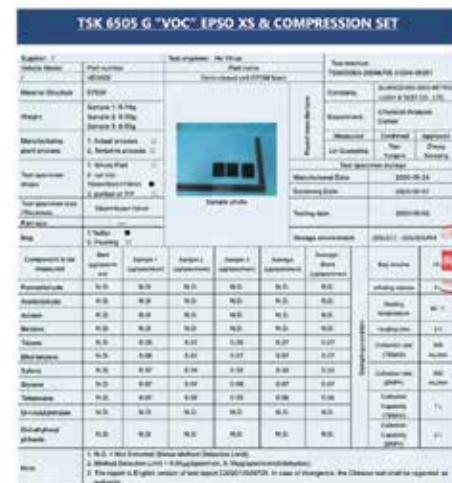
TECHNICAL GUIDELINES

Complementary to our Technical Data Sheets, we are now providing to our customers "Technical Guidelines" for different categories of material we are manufacturing: Sulfur Free EPDMs, EPSO's ... , and soon for Closed cell Sulfur cured.

This allows you to go further in the understanding of our sponges and get them approved more easily!

Just ask for your own TECHNICAL GUIDELINE document to our team !

Here you can find an example of one of the test we realized on the EPSO X. This one shows that our EPSO XS is fulfilling 100% the Toyota TSK 6505G. specifications which is not the easiest one to achieve especially for the VOC test and water tightness. Our day to day job is also to certify our various grades at OEM's and TIERS level. We would like to thanks all our teams at Quality level which are doing an amazing job to provide the best quality material.



Product Review : SFK 20

SFK 20 has a « medium » density between 100 to 130 kg/m³ and a block thickness of 50 mm. INTERFLEX now holds the largest sulphur free range on the market. Why don't you try it?



Chloé Bisbrouck
Administration & Quality Manager

Production Focus & Technical Issue : How to obtain FLAT BLOCS ?

"Our SFK 20 has the HL3 raking
on the EN45545 for Toxicity"

"Our curing method let us control the final shape of our blocs"

Keunyoung Lee - Factory Director

All the closed cell and semi open cell sponge rubber blocks have to be sliced...
From 1,2 mm thick (our minimum on our side for certain grades) to very important thicknesses.
If you are using a simple sheet skiving equipment up to a complex rolls splitting unit you well know that having flat and regular blocks is a very important thing.
Having a thickness which is varying all along is not optimal as this is the minimum point of the bloc inside the loop which is becoming the norm, so you can therefore find yourself wasting a lot of material with blocks which are not flat.

We will not talk about tension problems which can dome blocs and can generate problems with gluing of the buns when making a loop (closed or opened..) !

"Offering flat blocs only
represents advantages..."
Jachee Lee - Quality Manager



Production Team
Korean Blocs Production Unit



CHALLENGES OF TODAY AND TOMMOROW

ELECTRIC VEHICLES

Electric vehicles are now part of our daily lives. The recent government decisions in France on stopping sales of new thermal vehicles within the next 15 years will push even more motorists to investigate the acquisition of fully electric models. Other countries have already banned the most polluting vehicles from their city center or are strengthening the bans with systems of vignettes or urban tolls. Electric vehicles arrive with new standards and norms, new challenges and new constraints. Effectively we have the addition of batteries under the hood, interiors with a more futuristic looks and a new way of approaching trips, whether personal or professional. Here we will focus mainly on the technical side and what "foam" solutions can be brought by INTERFLEX to this boom of the 100% electric car ■



COMPRESSION SET IS CRUCIAL

We also know the importance of the compression set which has to be excellent. The parts and pads being made to last over time, a very low deformation will be authorized. Since the foam has to work in a context with variations in temperature, humidity, etc., the more important thing is to be well advised and to have a foam with excellent resistance to ageing. Artificial ageing tests under stress and compression will always be carried out in order to determine whether the foams meet the specifications of the manufacturers. Furthermore, the batteries will be brought to be dismantled and reassembled. The foams must therefore remain in place and be able to re-support a new load! Do not hesitate to ask us what types of foam will match your needs ■

ABOUT BATTERIES ...

The addition of battery is here one of the main challenges in the construction of the vehicle. As far as we are concerned, the battery pack must first be well supported, well wedged and no longer moved once put in place by the operator. Therefore, the main characteristics of foams must be: A compression Deflection in accordance with specifications and force applied, a very good flame resistance and ageing under severe conditions, and excellence in compression set ■

From many years now we are fully dedicated to provide high skilled materials which can bring great added value. I am personally focused to produce a new generation of material as we always did for all the sectors in which we work.

Namsik Kim, Production Director



EPSO 150 GREY «PADS for BATTERIES» ■

FLAMMABILITY !

Fire is the enemy especially when it can come into contact with very dangerous combustibles inside the batteries. Hence materials must comply with very strict specifications. INTERFLEX engineering team took this in consideration when we developed the first grades dedicated to battery pack, and will take care of this for all the material that will be released soon. UL 94 HF1 standard is a minimum, some of our grades are VO compliant... There must be no spread of the flame because of our foams. We are working also with independent laboratories in Europe and Asia to have our foams certified with the objective to guarantee the necessary safety. ■

Challenges

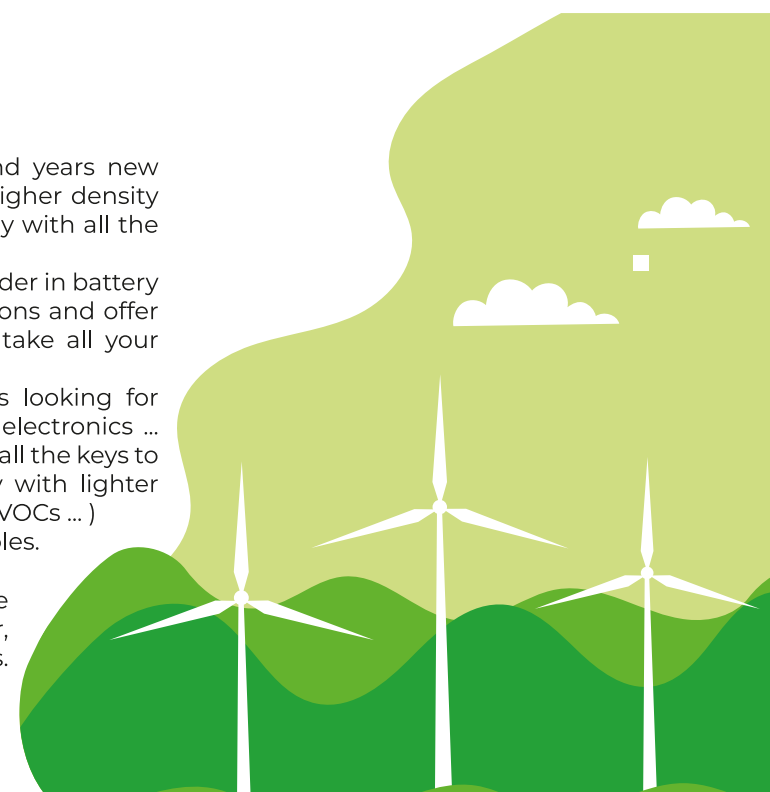
Our intention is again to develop in the coming months and years new solutions, like microcellular sponge rubber EPDM and other higher density Semi Open cell EPDM to combine different solutions to comply with all the OEMs' requests ... Because every car manufacturer aspires to become the new leader in battery production, we aspire to be one step ahead of technical solutions and offer you your security and flexibility! Our team will be happy to take all your requests into consideration. Last but not least, we are aware that the OEMs are always looking for innovative solutions for the lightings sector, vehicle interiors, electronics ... hence you will find in our previous OUTLOOK MAGAZINE (n°4) .. all the keys to bring more technological materials in order to bring novelty with lighter materials, odorless and which respects driver's health (without VOCs ...) Our sulphur free pure EPDM range is one of our famous examples.

Our sponge rubber solutions are now sold to almost all the OEMs, from Germans to various American's car manufacturer, and without forgetting Asians or Europeans most famous OEMs. We always keep ourselves up to date with latest regulations ■

BATTERIES AND GREEN CARS

THE CORRECT DEFLECTION CURVE

It should be adapted to the weight of the batteries as well as to the force exerted during installation but also during the entire life of the battery. In this specific case, it is necessary to have a fairly dense but flexible foam which supports the compression during installation and which supports the battery by preventing it from moving afterwards. Our teams and thanks to our extensive equipment, are able to define the necessary compression force as well as the resistance that the foam must offer in order to guide you towards the best material. Here we are talking about the « pad » on which the battery rests. Generally speaking, the battery relies on a complex set of different materials. Some of our foams are also used to provide support between the bodywork and the various elements on which the batteries rest. Our teams are in contact with approved laboratories of the main equipment manufacturers in order to develop the best solutions, making no compromise whatsoever on performance or on price. INTERFLEX already hold semi open cell and high density foams to meet this kind of compression need. We also develop solutions with extruded materials in order to save our customers money on foam converting costs ■





I hope that you enjoyed reading this new issue of our Outlook magazine.

All along these years, our magazine creates a link between us and enables you to follow our non stop development program.

We sincerely hope that Covid Pandemia has not too much affected your businesses. It is obvious that there is an actual reorganization of all businesses in the world and that 2021 has been often complicate in terms of conveying our materials from our Asia plants to Europe.

Interflex nevertheless continues its materials developments and as you will have seen insight this last edition , particular focus was dedicated to our EPSO Grades and Sulfur free EPDM.

Thanks to our recent new partner, Mr Park and his team with whom we now offer the new XL Series.
Thanks also to Mr. Hong and his team in China for their continuous support to our joint successful businesses. A new factory is actually in construction to soon even better serve our growing business worldwide.
And thanks of course to our original business associate, Keunyoung Lee and his team for their continuous efforts with their Sulfur free development program.

As Independent family business, INTERFLEX has the flexibility to take quick decisions which can be necessary in these difficult times caused by Covid 19. Our permanent stock of strategic references is amongst our top priorities so that to continue to best deserve our clients. 2022 will see a drastic increase of our permanent stock of all EPSO references. Interflex is now almost the N°1 Europe based company offering a so complete range of Semi closed cell grades EPDM with more than 15 different grades and soon will come NBR extruded versions In continuous rolls. Watch this space in 2022.

All the best and keep safe.

Best Regards

Yves BISBROUCK
Managing Director & Owner



Find the previous versions
of our OUTLOOK MAGAZINE here

