When we design drums, our intention is to continuously improve the acoustic quality in any given situation. We do not stop at wood selection or shell configuration. Many factors influence the acoustic performance: shell material and construction, drum head selection, tuning, mounting, room acoustics, individual perception and much more.

For SQ1 we worked closely with Chris Coleman and other Sonor artists in the development of this new drum series. The input from a professional players point of view provided many important insights.

As a first step we looked for a shell material that would meet the request for a very balanced sound. Our choice was birch because of its characteristic high end frequencies and clearly defined low-end. In blindfold tests we tried many different types of shell construction, from pure birch to hybrid versions. The pure birch shell came out as a clear winner in all test situations. Then we went out to look for a birch variety that would meet our CLTF and OSM shell making standards and found a unique European birch that stood up to these demands.

Drum shells need to act as solid acoustic unities as the foundation for a great drum sound. We use cross-laminated plies of birch to form a perfectly round shell with great stability. Each ply is laminated at a 90° angle to allow for a shell that is tension-free. Sonor’s tension-free shells would keep their round shape even if they were cut in half from the batter to resonant side.

Our OSM shell construction (Optimum Shell Measurement) utilizes slightly undersized shell diameters to give the drum head the space to float freely, allowing unrestricted contact between the bearing edge and the drum head.
Sonor artist Chris Coleman and Master Drum Builder Horst Treude in the Sonor factory Germany
HEAR THE DIFFERENCE.

As a next step we wanted to find a drum mounting solution that would affect the resonance and sustain of a drum as little as possible while having a small footprint and great stability. Inspiration came from the automotive industry where vibration-control technology is used for engine mounting systems among others. What we developed was a unique concept of mounting toms and floor toms that integrates rubber insulation within the mount to avoid any shell-to-mount contact. Scientific research shows the considerable improvement in extended sustain compared to traditional mounting methods.

ANATOMY OF A SOUND SUSTAINER

Sound Sustainers offer an integrated insulation/mounting solution. Made of heavy duty composite rubber that originated in the automotive industry the insulation layer has a unique hexagon structure. It is combined with a metal prism clamp for extra firm grip. Sound Sustainers were prototyped using advanced Selective Laser Sintering (SLS) technology. It is a highend 3D printing process that allows to integrate complex geometries within the construction components straight away. Due to its integrated design, Sound Sustainers need minimal footprint for maximum sound enhancement.

The SLS 3D Printing Process
01: CAD data from Sonor’s R&D department is used.
02: The SLS system uses a layering process on high-melt polymers at temperatures of up to 385 °C.
03: The prototype is cleaned with air to remove remaining powder.
04: The finished prototype consists of layers of powder material.
When designing a product, we put a lot of “Gehirnschmalz”* into each step. We carefully think about what every part does to sound, usability and function. And while our intentions are always to produce the best performing instruments possible, sometimes you want the word from a different horse’s mouth. So, for SQ1 we’ve teamed up with renowned German microphone manufacturer Beyerdynamic. We’ve sent two of our best people to their sound lab in Heilbronn, Germany, with an array of SQ1 drums, outfitted with different types of tom mounts – including the Sound Sustainers. The test results indicate that we’ve nailed our initial idea: Designing a mount that considerably enhances sustain of both tom toms and floor toms so you get more “uuhhhhm” out of your drums. Much more. But see, or rather hear for yourself.

*Gehirnschmalz – German for “grey matter” or “savvy"
TRUST YOUR EARS.
INSPIRED BY CLASSICS.

From the classic racing tracks of Europe to the Malecón in Havana, our inspiration for the look and feel of our new SQ1 drum series came from many sources. Inspired by vintage car designs we put together a palette of four unique lacquer finishes. Each of these colors is precision hand lacquered at the Sonor factory and finished with a special matte coating that gives each drum its exclusive touch.
THE ART AND SCIENCE OF

Drum tuning techniques can be as individual and unique as each artist. Your selection of shell material, drum sizes, heads and mounts all are important components of a drum sound. How you tune your drums, how you use muffling techniques and where you play your set further influence the sound experience. We have asked some of our artists to provide some insight into their approach to tuning and their individual sound preferences. If you are interested in the science of drum acoustics check out Moritz Albes book “Die Stimmung der Trommel” (The Tuning of a Drum). It describes the way a drum sound is created physically and how precision tuning combined with that knowledge can lead to better tuned instruments and hence better sounding drums.

“I use Remo coated Emperors on my toms, CS dot on my snares, and PST4 coated on my bass drum. As birch kits are more focused with less sustain I like to tune with little, if any, dampening. Making the overall sound of the drums ideal for studio work.”

“When playing birch drums I’ve always got on a set of Vintage Emperor double ply heads as I’ve already got enough attack from the shells. On floor toms I like to detune a lug for a bit more texture in the sound and on my bass drum I’ll detune the two left side lugs. With resonate heads I’ll tune a set of clear Ambassadors a tone higher.”

For more information visit sonor.com/sq1

For precision tuning use the ‘opposite-lug’ method for the sequence of tightening the tension rods.
“In general I tune the toms bottom heads slightly higher than the top, always make sure that when I tap the tom with my finger I can hear a clear consistent tone! When I need the vintage warm sound, I use the Evans Calftone 56 on all drums... and tune them higher and even on top and bottom heads!”

“With any recording I’ve done with birch drums, I’ve always used the combination of a single ply G1 Evans Batter Head and an Evans resonant Bottom Head. From tuning the top and bottom head the same pitch, I always get a defined, well balanced tone with beautiful sustain from every birch drum used.”

“For SQ1 I choose EVANS EC2/top and G14/bottom (both clear). They give me all the fat tone and sing, the way I desire to hear them. This head/shell combo has become a go-to lately, studio & live.”
“The SQ1 birch shells have that really big sound, with great versatility and full tone – even at lower tension... these drums roar!”

Chris Coleman

Full SQ1 performance video is available on sonor.com/sq1
LEGENDS ARE CREATED IN SELECT PLACES.

No, we didn’t go to London to test SQ1 drums in a studio setting. But we invited two Sonor artists, Alexis Nuñez from The Kooks and Joshua Blackmore from Strobes, to the Frankfurt based Abbey Road Institute, one of the 7 locations of the new education initiative from the legendary Abbey Road Studios. The brand new, state-of-the-art studio facility includes both a live recording space and professional-standard control room. Here we found the perfect conditions to let both Alexis and Joshua get their first hand experience on SQ1 drums.

Since graduating from the Royal Academy Of Music in 2008 Joshua has toured across the globe and worked collaboratively with Strobes, Squarepusher, Troyka, Django Bates, Aurora and BBC Concert Orchestras and many more. He aims to succeed in the rare feat of bringing serious technical instrumentation to diverse musical genres such as electronica and progressive jazz.

Alexis Nuñez/The Kooks | A self-described “pop” band, their music is primarily influenced by the 1960s British Invasion movement and post-punk revival of the new millennium.

With songs described as „catchy as hell“, The Kooks have experimented in several genres including rock, Britpop, pop, reggae, ska, and more recently, funk and hip-hop. (Wiki)

Learn more about Alexis, Joshua, SQ1, and the Abbey Road Institute at sonor.com/sq1
“Birch being a popular choice of wood for the studio, tracking with the SQ1 will be a dream. The new unique mounting system offers uninterrupted sustain that's controlled and full of that Sonor tone.”

Joshua Blackmore
Nir Z is a well-established studio-session drummer known not only for his incredible studio chops and dynamic live presence, but also for the amazing energy he can bring to any musical situation. His seventeen years in NYC and seven years in Nashville Tennessee led him to record and perform with major artists such as John Mayer, Genesis, Chris Cornell, Billy Squier, Alana Davis, Ray Wilson, Blake Shelton and many others. Nir is also busy in his own personal recording studio using his vast experience to produce tracks and play drums and percussion for musicians all over the world.
Birch drums have been my ‘go to’ choice when it comes to recording in the studio. I’ve recorded many Devin Townsend records and studio sessions with that rich birch sound. The boosted high frequencies, slightly reduced midrange and excellent low-end punch best describe what birch drums are all about.

In my opinion and experience, a birch shell has this naturally equalized sound that covers all the frequencies required for many styles of music, in a live or studio scenario. With the SQ1 series, you’ll get everything I described about that birch sound along with expert craftsmanship, innovation and high standard German engineering, that Sonor has been known for, for over a century. If you want a high quality, beautiful sounding and easy to tune drum kit for all scenarios and styles of music, look no further than the Sonor SQ1 drums. I highly recommend these drums, they live up to what you expect from a birch drum combined with that Sonor legacy ... That’s a combination that’s hard to beat!”

Ryan “RVP” Van Poederooyen is the drummer for the Devin Townsend Project DTP. He has performed as a studio/session drummer on many albums/singles for label acts and independent acts around the world. He has been a session drummer for producers such as Brian Howes (Nickelback, Hinder, Puddle of Mud, Daughtry), Chad Kroeger (Nickelback), Rhys Fulber (Fear Factory, The Tea Party, Josh Groban) among many others.
“A birch shell has this naturally equalized sound that covers all the frequencies required for many styles of music, in a live or studio scenario.”

Ryan Van Poederooyen
SQ1 FINISHES

GTB | GT BLACK
WITH NATURAL BEECH HOOPS

CRB | CRUISER BLUE
WITH WALNUT HOOPS

HRR | HOT ROD RED
WITH NATURAL BEECH HOOPS

RGR | ROADSTER GREEN
WITH WALNUT HOOPS
SQ1 REFERENCE

SQ1 SET
SQ1 320 SET NM* SHELLSET / BD 20" / TT 12" / FT 14"

SQ1 SET
SQ1 322 SET NM* SHELLSET / BD 22" / TT 12" / FT 16"

SQ1 SET
SQ1 324 SET NM* SHELLSET / BD 24" / TT 13" / FT 16"

SQ1 SNARE DRUM
SQ1 1465 SDW SNARE DRUM 14" X 6.5" / DUAL GLIDE

SQ1 BASS DRUMS
SQ1 2016 BD NM* BASS DRUM 20" X 16"
SQ1 2217 BD NM* BASS DRUM 22" X 17.5"
SQ1 2414 BD NM* BASS DRUM 24" X 14"
* = NO MOUNT

SQ1 TOM TOMS
SQ1 0807 TT TOM TOM 08" X 07" / SOUND SUSTAINER
SQ1 1007 TT TOM TOM 10" X 07" / SOUND SUSTAINER
SQ1 1208 TT TOM TOM 12" X 08" / SOUND SUSTAINER
SQ1 1309 TT TOM TOM 13" X 09" / SOUND SUSTAINER

SQ1 FLOOR TOMS
SQ1 1413 FT FLOOR TOM 14" X 13" / SOUND SUSTAINER
SQ1 1615 FT FLOOR TOM 16" X 15" / SOUND SUSTAINER
SQ1 1817 FT FLOOR TOM 18" X 17" / SOUND SUSTAINER

SQ1 FEATURES
- 100% European Birch shells
- BD shells: 10 ply, 10 mm
- SD, TT & FT shells: 7 ply, 7 mm
- TUNESAFE system - maximum tuning stability
- CLTF tension-free shell forming process
- OSM slightly narrowed outside shell measurements
- 45° bearing edges
- SOUND SUSTAINER mounting system on all tom toms and floor tom leg brackets
- DUAL GLIDE snare strainer mechanism
- 4 different matte lacquer finishes
- Bass drum hoops with different finishes (Natural Beech and Walnut)
- All bass drums without mount
- Remo USA Ambassador Coated batter heads and Ambassador Clear resonant heads (snare drum, tom toms & floor toms)
- Remo USA Powerstroke P3 Clear batter head
- Powerstroke P3 Fiberskyn resonant head with “off-set” SONOR logo (bass drums)
### Australia
- Joe Accaria > Human Nature/David Campbell
- Dave Goodman > Independent
- Joel „Kustom“ Mammone > Independent
- Mick Mills > Claymore
- Evan Yako > Recording Artist

### Austria
- Klaus Brenzsteiner > Parametrix
- Werner Grätz > Les Humphries Singers
- Christian Lettner > Basic Jazz Lounge
- David Piribauer > Independent
- Reinhard Schwarzinger > Independent
- Harald Tanschek > Independent

### Sweden
- Mikkey Dee > Motörhead / Scorpions
- Tomas Hooke > Meshuggah

### Switzerland
- Christoph Blatter > Rhythmtalk
- Christoph Fluri > Take This
- Noby Lehmann > Rhythmtalk
- Jojo Mayer > Nerve
- Philipp Schmid > Independent

### Benelux
- René Creemers > Drumbassadors
- Wim De Vries > Drumbassadors
- Hans Eijkenaar > The Voice Of Holland
- Juan van Emmerloot > Stef Burns
- John Engels > Independent
- Dave Langguth > Kim Mitchell
- Anthony Michelli > Independent
- Maxime Zampieri > Independent

### France
- Jacques Bourbounet > Independent
- Frederic Degue > Independent
- Christian Grasset > Independent
- Marc Jacquemin > Cock Robin / FLOX
- Paco Sery > SJKX
- Jack DeJohnette > Jazz Great
- Ari Dassan > Independent

### Canada
- Tyler Stewart > Barenaked Ladies
- Chris Sutherland > The Bodyguard / Tamodu
- Johnny Fay > The Tragically Hip
- Tim Timleck > Emm Gryner / Trapper
- Andreas David > Terminal Baggage Claim
- Alan Hetherington > Lenka Lichtenberg
- Brian Craig > Les Ékorchés

### Italy
- Enzo Angello > Educator
- Lele Borra > Educator
- Gianni Calabria > Session
- Francesco Corvino > Session
- Gianni Dalbon > NEK
- Claudio Mastrocici > Independent
- Fabio Nobile > Session
- Federico Pauco-Micheli > Independent
- Sergio Pescara > Groovydo
- Daniele Poma > Runetkane
- Giorgio Prato > Independent

### Indonesia
- Erhandy „Reky“ Gusti > Gigi
- Cerdhania „Cendi“ Lintangan > Ella’s Securio
- Jon Piliyang > Independent
- Yosaya „Echo“ Soenamtri > Independent
- Antonius „Anton“ Suryo > Kerispatih
NORWAY
Rune Arnesen > Independent
Jan Axel “Hellhammer” Blomberg > Mayhem
Anders Engen > Bjørn Eidsvåg
Bjørn Gunnar Sando > Hellbillyes
Class ‘Heiberg > Briskeby
Solo Johnsen > Dum Dum Boys / Helter Skelter
Espen Mønken > Independent
Kim Oftedal > Doudn / Midcon
Ole Petter Hansen Chytilie > Dream Police / Ingrid Bjørnør / Beart for Beart
Agne Sæter > CC Cowboys

JAPAN
Yuki Aoyama > nano.RIPE
Masao Fukunaga > Nana Mizuki
Genta > Masayoshi Yamazaki / bird
Naoya Hamada > Independent
Yuki Hatano > YELLow
Yuichi Hokazono > Spicy Kickin’ / Sphere
Osamu Jinguji > Remioromen
Taro Koyama > Independent
Yuya Maeta > Martin Friedman
Ken Ken Sato > Plastic Tree
Yutaka Watanabe > Independent
Hideo Yamaki > Independent
Yuzo Yoshioka > Monster-Tairiku
Yukky > Home Grown

KOREA
Joowon Eum > Independent
Ji-Hyun Kim > Independent
Junyong Quak > Independent

NEW ZEALAND
Patrick Kuhtze > Independent
Darren Mathiassen > Shapeshifter / Hollie Smith
Phil Rudd > AC/DC

UNITED KINGDOM
Steve Alexander > Independent
Craig Baron > Independent
Richard Bailey > Incognito
Ian Boyne > Runrig
Joshua Blackmore > Strobes
Dane Campbell > Phil Campbell
Jack Carrack > Paul Carrack
James Chapman > Independent
Joe Crabtree > Wishbone Ash
Danny Cummings > Mørk Knopfler
Blair Cunningham > Westernhagen
Guy DeRose > Moloko / Roisin Murphy
Martin Ditcham > Westernhagen / Status Quo
Dean Duke > Paul Carrack
Josh Gilmer > Sons & Lovers
Gavin Harrison > Porcupine Tree / King Crimson
Ryan Jenkinson > Reverend & the Makers
Martin “Magic” Johnson > Bewitched
Vinnie Colommi > Mel C / Spice Girls
Ed Lux > Editors
Daryld Leecia > Super Furry Animals
John Marshall > Soft Machine Legacy
Nicko McBrain > Iron Maiden
Bryan McCallan > 24 Pesos
Perry Miles > Tricky / Billy Ocean
Alexis Nuñez > The Kooks
Chris “Jungle” Polglase > Independent
Alex Reeves > Guy Garvey
Andy Robertson > Marlon Roudette
Arnaldo Rogano > Future Shock
Rocky Singh > Asian Dub Foundation
Henry Spinetti > Katie Melua / Eric Clapton
Richard Thair > Red Snapper
Alex Toff > Jack McManus
Paul Walsham > Hurts / Barclay James Harvest

GERMANY
Christian Blum > Brings
Ronny Dehn > Silly
Stephan Emig > Triosphere
Benny Greb > Moving Parts
Carola Grey > Noisy Mama
Härte Häßlig > Independent
Rennie Hatzke > Münchner Freiheit
Eike Herwig > Donats
Sebastian Krajewski > Speed / Peter Fox
Ralf Neuhaus > Independent
Jost Nickel > Jan Delay
Andreas Nevax > Silvermond
Dennis Posthawo > Guano Apes
Polu Roy > Wir sind Helden
Klaus Scharffschütt > Polyphex
Christoph Schneider > Rammstein
Joe Stopa > Konvoy / Cro / Cassandra Steen
Ralph Winter > Big Band der BW
Michael Wolpers > Running Wild

CHINA
Guan Fel > Wang Feng Band
Liu Gang > C.N.S.O
Lu Xun > China Drummer Association
Zheng Zhuhai Hao Zt > Independent

ARGENTINA
Pablo LaPorta > Independent
Gustavo Meli > Independent
Jota Moretti > Independent
Pedro Pacheco > Soledad Pastorutti
Nicolas Polo > Asspere
Andy Vilanova > Caraja

INDIA
Ranjit Barot > John McLaughlin

KOREA
Joowon Eum > Independent
Ji-Hyun Kim > Independent
Jinyang Duak > Independent