

Singing a brand new song

—BY JOE SAGE

It takes special skill to design a three-dimensional object in two dimensions—whether on paper or a CAD screen—especially an object as complex and glorious as an automobile. The clay model phase helps, but it really just underscores the original challenge: those had to be designed in two dimensions first, too. (Getting it all translated into machinery to produce and assemble panels and other parts is the next miracle.)

We had all this in mind as we walked around the all-new 2020 Hyundai Sonata for the first time, then again with Ha Hak Soo, director of Hyundai's interior design group, who was in from Korea for the car's recent launch drive held here in Arizona. While this is the eighth generation in a heritage that goes back to 1985 (or to gen two for 1989 in the US), Mr Ha tells us the popular midsize sedan didn't really start to get recognized, or fully appreciated, until the mid-cycle facelift of gen six, a

2012 model released in 2011. Ha quotes *Motor Trend* from that time, saying, "It's fast, good-looking and loaded... what's not to like?"

Ha points out a comprehensive challenge in creating the new Sonata: that whereas they have spent most of those first 35 years competing against other midsize sedans, in today's market they have to compete with SUVs and crossovers.

The new Sonata is a global effort, initiated in their Korean studios, then moving to the Hyundai Design Center studios in Irvine, California.

Migration to a new platform and chassis let engineers and stylists change Sonata's proportions, which they have done from its new cascading grille to a dramatic new decklid and taillight treatment. Advances in lighting technology created the opportunity for innovation beyond the obvious: for example, the chrome surrounds of the headlights extend up along the hood cutline with a machine-cut matrix that's near-invisible when parked, but creates a stylish fade when running—you'll want to check this detail out, up close.

It's a looker and a nice sculptural achievement, but lots of what you see represents breakthroughs in manufacturing itself and in the confidence of extremely high fit and finish required in the processes. Note, for example, the structural relationships among grille, headlights and hood. This ap-

proach, with sheet metal continuity between the headlamp glass and grille, and with no separate cross-fascia cutline for the leading edge of the hood, are hallmarks of premium European cars costing two to three times the price of the Sonata.

The looks are new for Sonata and also represent a new direction for the brand. Rather than a fairly uniform "family" look across models, the whole Hyundai lineup—as started last year with the new Kona small utility—is moving toward a set of vehicles they compare with "chess pieces," a distinctively Hyundai look, but with each model's personality more easily distinguished.

The same level of premium quality and style continues inside, where what they acknowledge was a "tall and bulky" prior center stack has been replaced in form, but not function, with a slim, low and wide style, which also brings the driver's focus back to a 12.3-inch all-digital binnacle cluster of primary instruments—better in all regards.

Interior touches range from owner-customizable ambient lighting to armrests of soft-touch material their entire length (with front-to-back stash compartments below them).

Another key contributing factor in the Sonata's new profile is its advanced suspension, which allows a much smaller body dimension above the front wheel arches—stylish, sleek and also broad-



casting its improved ride and handling, accompanied by improvements in NVH.

We put it all to the test on an all-day drive from Paradise Valley to Roosevelt Lake, up and back via the Beeline Highway, with a side dash on hilly, twisty two-lane Bush Highway to Saguaro Lake.)

Upon our return to Paradise Valley, Hyundai had another surprise for us—a first drive in the still-in-development, camouflaged Sonata N-Line, a light performance version of the sedan (short of a full N model) with a 290-hp 2.5-liter turbo four. (We can vouch for the fact that more people stop to stare at a car they can't see than at one they can.)

Everything presented in the new Hyundai Sonata reflects the entire evolution we've witnessed with the brand over the past two decades, one of the fastest and most legitimate applications of the Continuous Improvement philosophy we've seen in any industry. This is no surprise after a number of Hyundai launch drives—staff and engineers ride along with us, absorb every scrap of feedback they can, and get on the phone to Korea the same evening. There, the factory will come to a halt, if need be, and improvements will be promptly implemented. It's a phenomenon to watch, and the benefits go straight to product. ■

SPECIFICATIONS

SE / SEL

ENGINE2.5L 16v 4-cyl GDI
 COMPRESSION RATIO13.0:1
 HP/TORQUE191 hp / 181 lb-ft
 FINAL RATIO3.195
 BRAKESF: 12.0" (SE) / 12.8" (SEL) vented;
 R: 11.8" solid

WHEELS ...16x6.5 (SE) / 17x7.0 (SEL) alum alloy
 TIRES205/65R16 (SE) / 215/55R17 (SEL)

SEL Plus / Limited

ENGINE1.6L 16v 4-cyl turbo-GDI
 COMPRESSION RATIO10.5:1
 HP/TORQUE180 hp / 195 lb-ft
 FINAL RATIO3.367
 BRAKESF: 12.8" vented; R: 11.8" solid
 WHEELS/TIRES...18x7.5 alum alloy / 235/45R18

TRANSMISSION8-spd electronic auto
 w/OD lock-up torque converter, shift lock

STEERINGmotor-driv col-mt rack & pinion

DRIVETRAINFWD

SUSPENSIONF: MacPherson strut, stblzr
 bar, gas shocks; R: multi-link,
 stblzr bar, gas shocks

LENGTH / WHEELBASE192.9 / 111.8 in

HEADROOM (F/R)40.0 / 38.4 in

LEGROOM (F/R)46.1 / 34.8 in

TURNING CIRCLE35.9 ft

GROUND CLEARANCE5.3 in

CARGO VOLUME16.0 cu.ft

WEIGHT3120-3336 lb

FUEL / CAPACITYreg unl / 15.9 gal

MPGSE: 28/38/32 (city/hwy/comb)
 SEL: 27/37/31 (city/hwy/comb)

SEL Plus / Limited: 27/36/31 (city/hwy/comb)

BASE PRICE SE\$23,400
 SEL25,500
 SEL Plus27,450
 Limited33,300