

VOL. 1 - AUG 21

THE
DARC
JOURNAL

VOLUME ONE

IVECO
DAILY 4X4
CUSTOM
PARTS

~
RELEASE DATES, SPECS & MORE

FROM SKETCH TO REALITY

~
CARBON
FIBER
MONO
COQUE



THE ULTIMATE EXPEDITION VEHICLE



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LET'S BE HONEST

...nobody likes e-mail newsletters. Usually the only thing you're looking for is the unsubscribe button at the very end. But also we are being asked for updates on a daily basis, so we tried to figure out a fun way to keep you posted on what's going on at DARC.

This JOURNAL is what we came up with: a brief, irregular publishing on all the things that evolve around the company and more importantly, the expedition vehicles we build. We believe this kind of content brings more value than the weekly Instagram post (which you should still follow!) and gives you a better perspective on how we operate.

In this first issue you will find exclusive behind the scenes material on how the progress on our DARC MONO prototype is coming along. Ever wondered how a carbon fiber monocoque the size of a tiny house is built? - You're in luck! And in case you have a stock Iveco Daily 4x4 sitting in your driveway, we might have the perfect custom parts available for it. Lastly, DARC has come up with a few exciting events until the end of the year to make up for being stuck at home for the better part of the last 18 months.

So sit back, enjoy the read and if you still don't like it: the unsubscribe button is at the very end. :-)

BUON VIAGGIO!



HOLD MY BEER

Group CEO Dr. Jens Buchert taking matters into his own hands and test-fitting the polystyrene mock-up panel on the DARC MONO prototype.



2. DESIGN

Now it gets interesting! We take inspiration from Rallye Dakar trucks and mix in a bit of Batman's Tumbler to come up with a highly functional yet unprecedented design. Respecting the laws of aerodynamics, matching Iveco's stock body lines and following perfect proportions results in a never before seen vehicle. For the first time, an expedition truck can match a sports car

3. CONSTRUCT

Time to transfer our ideas from 2D to 3D. Through modelling we place the design concept on our previously scanned Iveco model. Now comes the tricky part, in which the engineering team at DARC takes all parts and pieces it together to construct a produceable end product. Crucial details such as wall thickness and surface radius need to be taken into account to guarantee build feasibility.

HOW TO MONOCOQUE IN SEVEN SIMPLE STEPS

1. SCAN



We start off by setting up our GOM Scanner to fully digitalize the Daily 4x4. Our partners from TEBIS AG use photogrammetry to capture even the smallest detail, which gets us a highly reliable starting point to rest our upcoming work on. The same procedure is used to design and build the gas and Ad-Blue tanks as well as outside storage compartments. Through this process DARC can create components, which have a significantly better fit compared to conventional products.

The same process follows for all remaining components included in the cabin, such as windows, hatches, light panels and roof rails. With this data properly set up, we can now check digitally for potential construction threats - such as clearance issues - way before building the first real prototype. Welcome to the 21st century, cowboys!





4. MOCK-UP

As much as you can do digitally these days, seeing real shapes, proportions and reflections cannot be replaced by any software. Therefore we CNC-mill a 1:1 scale mock-up panel from polystyrene to test fit onto our donor chassis. Admittedly this milestone is a very time and resource consuming process, but it's better to spot flaws now than later.

Lastly, the foam panel is used to gather information on clearances during a chassis torsion test.



5. OPTIMIZE

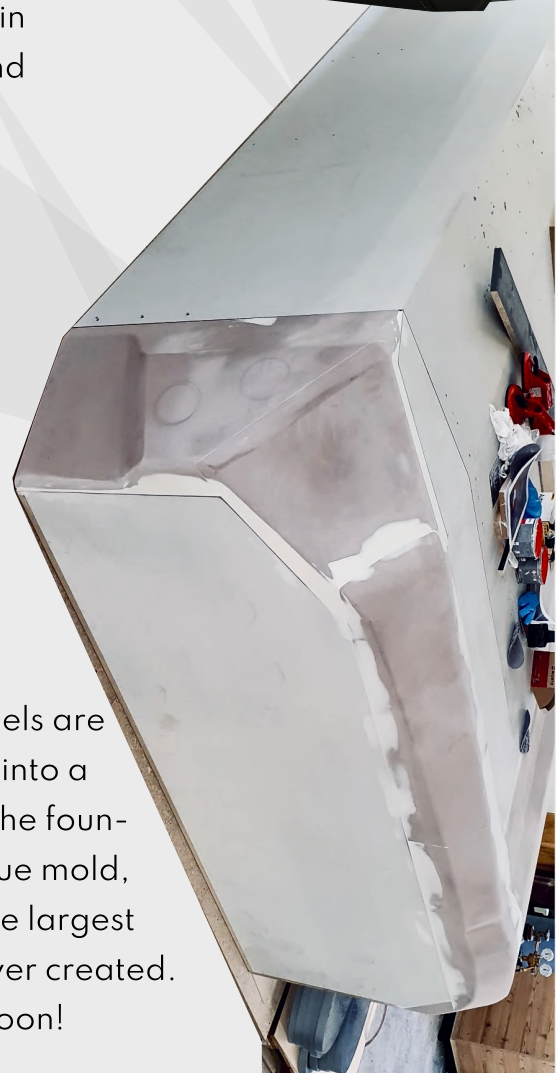
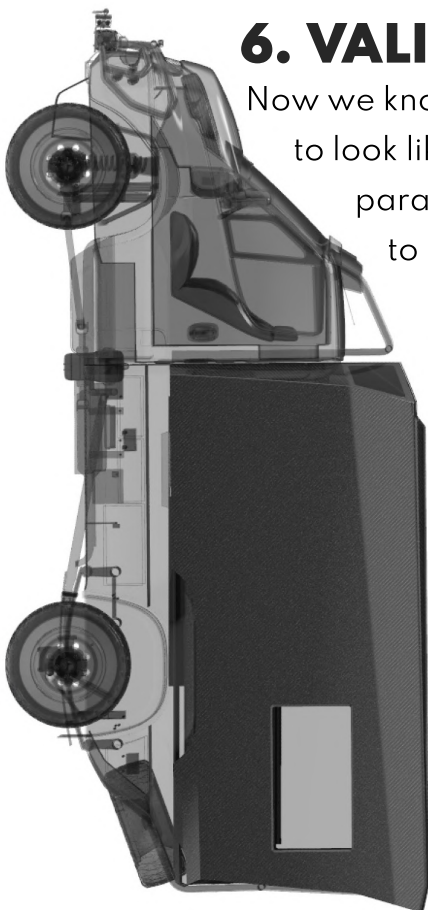
The information gathered through the foam panel is now implemented back into the dataset. The largest visual change is the updated LED light panel, which uses parts from a 2021 OEM production car. Besides a much better proportioned rear view, a series-produced unit has great advantages in terms of LED durability and global accessibility in case you back into something in the middle of nowhere and need a spare piece quickly.

6. VALIDATE

Now we know exactly what the cabin is going to look like. Our engineers run final tests on parameters such as structural strength to confirm technical feasibility. Next, the data is split into smaller parts to make the prototyping process as straightforward as possible.

7. BUILD

Using the reviewed data, the panels are CNC-milled and pieced together into a single 1:1 positive module. This is the foundation for the negative monocoque mold, which will be the birthplace for the largest carbon fiber monocoque cabin ever created. Stay tuned to see the final result soon!





KNOW WHAT TO EXPECT

Have you ever picked wall paint and once it was applied, it looked terrible? - Well, we certainly have!

That's why the DARC design team will create a photorealistic rendering with your bespoke interior options. This way you know exactly what you are getting before the actual building process begins.

TECH TALK

We teamed up with Vektor Carbon to create a series of carbon fiber components for the Daily 4x4. Among the first is a high-end designed air intake snorkel and sand filter suitable for both LHD and RHD vehicles. It comes with a complete install kit and is street legal where necessary. Its slim shape avoids interfering with opening doors.



- BAR

RELEASE: 10/2021

The DARC MONO bull bar is light, resistant and most importantly: not overdone. It's directly attached to the vehicle's main frame and holds a LED light bar, front license plate, winch and tow hooks. Unlike Iveco's stock bar, ours follows the body lines and has a snug fit. And last but not least, it is the only one on the market homologated to work with driver & passenger air bags.



PUSHING THE BOUNDARIES

FRAMELESS WINDOWS

RELEASE: 10/2021

Our friends at BBG GmbH are the world's leading OEM window supplier for luxury yachts and exotic cars (such as the Bugatti Veyron). So when we reached out to them about developing state-of-the-art technology for the DARC MONO, they didn't hesitate. The result will be a revolution in the camping industry, offering the first ever frameless windows with unprecedented features. On the left you see the prototype mold tools milled from solid aluminum. More info will be covered in our next issue.



17" X 9" FORGED ALUMINUM RIMS
TRUE BEADLOCK DESIGN
37" X 12.5" MUD TERRAIN TIRES
6600KG TOTAL ADMISSIBLE WEIGHT
MADE IN GERMANY

Ever since February one of the hottest topics around the DARC MONO was its wheels. So let's lift the secret: DARC is currently developing, prototyping and soon in-house producing true beadlock rims from forged aluminum (such as a Porsche GT2RS). Moreover, we will exclusively offer the only 131N rated tire homologated for the European market. This set can handle a total admissible weight of 6600kg, allowing DARC MONO owners to add more than 1100kg of payload to their vehicle. And yes, these wheels will be for sale, pre-orders are accepted via email or contact form.

3D scanning the inside of the chassis wheel wells allows us to calculate the perfect rim and tire dimensions. With a laser cut wooden profile we double-check if our our design clears calipers, axes and body panels, even at maximum suspension compression. After our work is done here, the template can be reused as a true Italian pizza peel.

THESE WHEELS ARE
MADE FOR ROLLIN'
AND THAT'S JUST
WHAT THEY DO!

ONE OF THESE DAYS
THESE WHEELS ARE
GONNA ROLL ALL
OVER YOU

I LIKE WHAT I'M SEEING, HOW TO GET IN TOUCH?

CONTACT

**I'M
A FAN**

**AND WOULD
LIKE TO COME
FOR A VISIT**



WE ARE PLANNING SOME EXCITING EVENTS IN 2021 IF COVID REGULATIONS LIFT IN TIME. PLEASE FOLLOW OUR SOCIAL MEDIA CHANNELS TO BE KEPT IN THE LOOP.

**I'M
INTERESTED**

**IN PURCHASING
A DARC MONO**



GREAT NEWS! PLEASE REACH OUT AND SCHEDULE A PRIVATE VIEWING WITH US. CURRENTLY THE NEXT FREE VIEWING SLOT IS IN OCTOBER 2021.

**I'M
PRESS**

**AND WOULD
LIKE TO PUBLISH
DARC CONTENT**



THANK YOU FOR YOUR SUPPORT. PLEASE SEND A MESSAGE TO PR@DARC-MONO.COM AND WE WILL BE HAPPY TO ASSIST.

**I'M A SIGNED CLIENT,
WHAT DO I DO?**

**DON'T WORRY!
WE'VE GOT BIG PLANS
WAITING FOR YOU!**



THANKS FOR READING ISSUE 1 OF

THE
DARC
JOURNAL

**WE WANT YOU TO KNOW THAT WE
VALUE YOUR SUPPORT
IMMENSELY AND DO NOT TAKE IT
FOR GRANTED.**

**IT IS OUR GOAL TO NOT ONLY
BUILD THE BEST EXPEDITION
VEHICLES OUT THERE, BUT ALSO
TO SHAPE THE BRAND WORLD
AROUND THEM.**

**IF YOU HAVE ANY QUESTION,
COMMENTS OR IDEAS TO
IMPROVE WHAT WE DO, FEEL
FREE TO CONTACT US ANYTIME.**

**THIS DOCUMENT CAN BE FREELY
SHARED AND WE ENCOURAGE
YOU TO DO SO. IN CASE YOU'D
LIKE TO HAVE A HARD COPY OF
THIS JOURNAL, WE ARE HAPPY TO
SEND IT TO YOU.**

**STAY TUNED FOR MORE, WE HAVE
GREAT THINGS AHEAD OF US.**

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