M50
E-BROCHURE

Fall 2944
A RACE IS ONLY A RACE...
... WHEN THE COMPETITION CAN KEEP UP
BLOW THE COMPETITION AWAY
THE DEFINITION OF PERFORMANCE
WHERE ART & INNOVATION MEET

The product of inspired design and rigorous attention to detail, constructed from the most advanced materials and production techniques, fastidiously engineered and obsessively honed to deliver levels of performance, agility, and speed previously believed to be impossible: the next-generation M series captures the spirit of the original while launching firmly into the future.

• **2920.** Origin Jumpworks debuts the prototype M50 at the Imperial Engineering Expo to mixed reviews. The public seem hesitant to accept another high-performance racing ship.

• **2923.** Three years after the initial release, the M50 wins its first Murray Cup in the hands of former Origin test pilot Caleb Arlo. The victory establishes the M50 as a dynamic and versatile speed machine.

• **Now.** Featuring over six hundred modifications, the 2945 M50 is back to continue its legacy of turning heads and blazing trails.
THE QUEST FOR TRUE SPEED

The engineers on Origin’s multi-award winning Racing Team know that true speed can only be reached when you find the perfect balance between power and maneuverability.

• Every 2945 M50 has twelve Scalpel Precision B thrusters. Each high-performance vernier thruster is individually tuned by onsite technicians in order to consistently achieve surgical precision without sacrificing plant-efficiency.

• Utilizing a forward-swept wing pattern, the M50’s primary wing system are constructed with Origin’s proprietary Z-Core composite technology to offer flexibility and resilience while keeping weight down.

• The M50’s rear airfoil is instrumental in reducing drag and increasing stability during atmospheric flight.
At Origin we honor our centuries of racing heritage, not by reflecting on our laurels, but by using the lessons of the past to continually push ourselves forward. Everything we do is governed by the belief that the ‘best can always get better.’ The race to perfection is one that will never be over, but it’s a race in which we continue to make great leaps. Innovating to win and redefining standards is in our DNA and is in the very heart of the groundbreaking new 2945 M50.
In generations past, unified body construction has meant finding one light-weight material that could withstand all the demands and rigors of high speed sport flying. While this technique provided superior strength and weight management, compromises had to be made. No longer.

• Thanks to an innovative molecular bonding construction process, the engineers at Origin have constructed a chassis that comprises over 70 specialized alloys acting together as one. Each bend and curve of the M50 is uniquely formulated to have the perfect combination of rigidity, flex and strength.

• The M50’s molded diamond laminate canopy offers maximum visibility while being rated to protect the pilot from a variety of environmental conditions as well light impacts.

• Knowing that building a ship is only half the battle, we put the M50 through rigorous stress testing in multiple Origin facilities to make sure it could endure the harshest conditions.
A racing craft like no other deserves an engine and powerplant like no other. That's why the M50 features two ACOM Starheart II powerplants that, when combined with massive twin Hammer Propulsion HM 4.2 engines, herald a new era in performance, efficiency, response and tractability.

- Developed in a joint collaboration between Hammer Propulsion and the Origin Jumpworks Racing Team, the twin HM 4.2 were built for one purpose: speed. Now these high-performance engines come standard with every M50.
- ACOM’s Starheart line of powerplants utilize cutting edge anti-tritium technology to deliver all the power you need with no compromise.
- Calibrated to minimize energy transfer delays and maximize output efficiency, the result is unrivaled speed and power when you want it, and more importantly, when you need it.
SHOOT FIRST

Building with an eye towards Murray Cup’s Blitz race, our designers looked for a way to incorporate a comprehensive weapons and defensive package without sacrificing speed and efficiency. Both of its weapons are ideal for rapid deployment and fast-on-the-fly targeting, while their hardpoints are precisely positioned to minimize counter-force while firing. Chances are, they’ll never see what hit them.

- Behring’s M3A has been the standard of light energy weapon for years. Featuring a low power consumption, the M3A is exactly the weapon you want in your corner.
- Capable of locking and tracking targets with a combination of high-performance cameras and IP software, Talon’s Stalker missiles will quickly establish your presence in any situation.
- The latest from Gorgon Defender, the AllStop FR projects a perfect sphere in order to optimize shield performance and shrug off the shots that happen to catch up.
PILOTING PRECISION

With all the technology and engineering that goes into each and every one of our vehicles, the most important component is the one we can’t make ourselves. To create the perfect racing spacecraft you need to design it around the pilot. This inside-out approach is central to the M50 concept, for it informed all the critical packaging decisions we made to create a spacious interior within a compact exterior.
EVERY MOMENT COUNTS

A wasted action, an overcomplicated control, a single split second delay can cost you everything. We knew that we needed to streamline the inside of the M50 as much as we streamlined the outside. Analyzing over 30,000 collected points of metric data, a dedicated team worked for months to ensure that the console layout was as intuitive as it was elegant. A prime example: the angle of the throttle was realigned 2 degrees to better match the kinematics of the arm’s natural motion. The end result? Pilots can make speed adjustments up to 15% faster — the difference between the winner and second place.
CONTROL IS EVERYTHING

This ergonomic and hyper-responsive control system will melt seamlessly into your grip thanks to its proprietary Durasoft leather lining. Genetically crafted to have the suppleness of fine leather with the strength and durability of modern nanomesh fibers, this high performance yoke yields to your will, translating the finest adjustments directly into precise and immediate thruster control. With fully adjustable tension mounts and customizable sensitivity curves, the M50 adapts itself to fly the way you want to fly.
ACCELERATE BEYOND THE EXPECTED
### Basics

<table>
<thead>
<tr>
<th>Focus</th>
<th>Racing / Interception</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length / Beam / Height</td>
<td>11 / 10 / 3 m</td>
</tr>
<tr>
<td>Crew (max)</td>
<td>1</td>
</tr>
<tr>
<td>Mass (empty)</td>
<td>12,000 kg</td>
</tr>
<tr>
<td>Cargo Capacity*</td>
<td>(freight units) 0</td>
</tr>
</tbody>
</table>

### Structure Stats

<table>
<thead>
<tr>
<th>Power Plant (factory)</th>
<th>2x ACOM Starheart II (S1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Power Plant</td>
<td>Size 2</td>
</tr>
<tr>
<td>Engine (TR2; factory)</td>
<td>2x Hammer Propulsion HM 4.2</td>
</tr>
<tr>
<td>Maneuvering Thrusters (TR1; factory)</td>
<td>12x Origin Scalpel Precision B</td>
</tr>
<tr>
<td>Shield (factory)</td>
<td>Gorgon Defender AllStop FR (S1)</td>
</tr>
<tr>
<td>Max Shield</td>
<td>Size 3</td>
</tr>
<tr>
<td>Cooling System</td>
<td>2x Wen/Cassel ST-Arc A</td>
</tr>
</tbody>
</table>

### Hardpoints

<table>
<thead>
<tr>
<th>2x Class 2 (wings; size 1)</th>
<th>2x Behring M3A Laser Cannon</th>
</tr>
</thead>
<tbody>
<tr>
<td>1x Class 3 (recessed; size 1; 4 missiles)</td>
<td>4x Talon ASIM-20/c Stalker I</td>
</tr>
</tbody>
</table>

* Commercial capacity; does not include personal storage space
“The only vehicle I ever counted on to get me across the finish line was an M50. When you climb into a cockpit, you have to completely trust your machine. You have to know for sure that it’s going to do what you need it to, and no matter how hard I pushed the M50, it was a ship I could count on to push right back. Racers get it when you say that your ship is more than a ship. It’s your partner, your friend. So you can imagine that I was a bit worried when Origin asked me to put the 2945 through its paces, but all that worry was for nothing. Within the first lap I knew. The handling, the speed, it was all there, but better than I could have ever imagined. This was the soul of my old friend in a brand new body. This was a ship born to race, and for my money, destined to win.”

Hypatia Darring,  
M50 Pilot & 2934 Murray Cup Winner
Cockpit

Cooling Surface (underside)

Missiles (4)

Shield Generator

2x Hammer Propulsion HM 4.2 Engines

Behring 3A Laser Cannon

Paired ACOM Starheart II Powerplant

Landing Gear Bay

Top

Side

Underbody

Brake

12 Origin Scalpel Precision B Maneuvering Thrusters = (6 on each side)

Behring 3A Laser Cannon

Top

Underbody

Cooling Surface (underside)
The story of the M50 is the story of adversity. The first of the M Series Model 50 ships were unveiled at the Imperial Engineering Expo in 2920, in Prime, to a hesitant public. Constructed as a spiritual successor to Origin’s legendary X Sport, the first M50 was an attempt to reclaim Origin’s dominance on the racetrack. The times, as the saying goes, had changed. Technical innovations and motivated manufacturing competitors made the competitive racing circuit an unforgiving place.

The engineers at Origin refused to capitulate. They took every defeat and setback as a challenge to iterate and evolve. While they were able to create some of the most innovative design choices the astroengineering community had ever seen, the public’s interest in their ship flagged, causing a slow and steady decline.

As the M50’s 25th anniversary approached, Origin Jumpworks felt that Humanity had finally caught up with their ship. They did not want to simply release ‘another’ version of the same old ship. They wanted to challenge and excite. To capture the thrill and exhilaration that only a high-performance ship can bring. To show their commitment, they pursued daring and visionary engineers scattered across the industry and gave them one of the most inspiring and terrifying starting points: a blank canvas.

We were only given one rule: look to our past. Study Origin pioneers like Estella Holiday, the Lang Brothers, and Javo Croy. See what inspired them, both creatively and personally, to find what drove them to make the choices that they made. This was to be our guide to build the future.

The 2945 M50 is the future. Of that, we have no doubt. From the engine housing to the contours of the hull, this ship is the culmination of tireless discussion and iteration. Our designers looked at every detail, every bolt, and ask ‘why.’ The result wasn’t the M50 that we imagined it would be; it became the ship it had to be.

Nassir Kossin
Lead Ship Engineer
Origin M50 Team
Based on Terra in the heart of Human civilization, ORIGIN Jumpworks GmbH has been designing and manufacturing high performance spacecraft and components for over two centuries. From the unparalleled velocity of the M50 to the spacious luxury accommodations of the 890 JUMP, ORIGIN has engineered a solution for every lifestyle.

From high-tensile multimetal structural components rated for 150% survivability in the deadliest spatial environments to stylish interiors refined by Johann Hexlairre and the finest team of designers in the galaxy, ORIGIN spacecraft are more than the sum of their parts. All ORIGIN craft feature standard-defining upgrade mounts and technology access points. Only the highest quality component options are standard or made available as options at ORIGIN showrooms across known space.

All ORIGIN models are manufactured in a closed-cycle; everything from starship wing spars to cup holders are designed and constructed by ORIGIN engineers at ORIGIN-owned factories. You fly the spacecraft we imagined, with absolutely no compromises. Add to the equation unparalleled safety ratings and flight effectiveness scores and you know that choosing to pilot an ORIGIN spacecraft is putting your life in the best possible hands.

The models featured in this publication are approved for use in the UEE. Some items of equipment are available as extra-cost options only. Availability may vary from market to market due to local restrictions and regulations. For information on standard and optional equipment, please consult your local Origin Dealer.

All information in respect of construction, features, design, armaments, dimensions, weight, power output and running costs is correct at the time of going to print (2944-09-03). Origin reserves the right to alter specifications without prior notice.

Colors may differ from those illustrated.

Errors and omissions excepted.

© ORIGIN JUMPWORKS GmbH, 2944