



CATV5

powerful. individual. safe.

waagner
STAGE
SYSTEMS **biro**



CONTROL
IS MORE THAN
ONE DIMENSION.



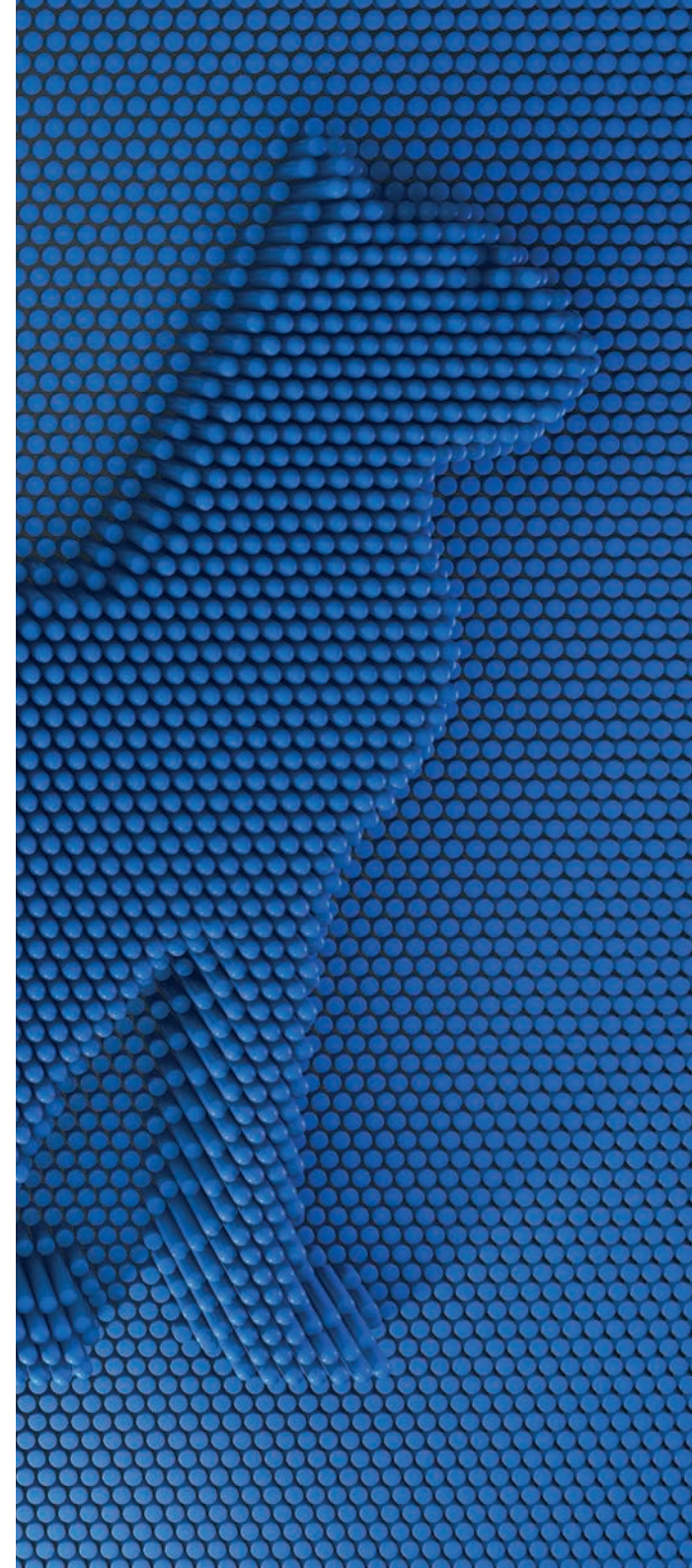
CAT V5

powerful. individual. safe.

The success in automating any stage production arises from mastering four key dimensions: unrestricted safety, high availability, powerful features and an exciting user experience.

Our mission is to provide pure excellence in all dimensions when translating your visions for a spectacular performance into a beautifully choreographed ballet of machine movements.

C·A·T V5. Powerful. Individual. Safe.





CAT

POWERFUL.

Our goal is easily defined: to integrate the best control ideas found in theatre, show and performance automation into a single powerful concept, pushing the existing boundaries.

- C·A·T V5 is designed to realise almost any creative vision by providing a full set of editing and live control features for any kind of machinery driven motion. It offers a full range of control possibilities from directly controlled motion of a single machine for set-up to synchronised group motion with trigger conditions and dynamic effects. Multi-axis 3D motion and communication to external systems are available through modular software upgrades.
- C·A·T V5 is designed to enable fully synchronised concurrent moves of more than 200 axes with guaranteed shortest reaction times, even for high-speed performer flying hoists. Its internal equipment modelling engine translates the highly complex mechanical systems into simple and natural operating commands.
- C·A·T V5 is designed to perform your daily work with minimum effort and to produce astonishing effects within a moment. It allows to control and monitor any detail of a motion and is always quick to respond. Our software solutions do not only focus on live operation of the machinery, but also offer assistance and tools for the entire system life-cycle from installation to operation, trouble-shooting and routine maintenance.

INDIVIDUAL.

Any production model in the entertainment industry has its own specific requirements. So too does any individual venue and production, and any individual user role and user.

- C-A-T V5 is designed with respect to many different ideas and operating concepts. Starting from a widely scalable system design based on cost-effective standard hardware, it offers highly flexible configuration options for both console hardware and control software features. You may find a C-A-T V5 system as a safety control solution for a single hoist or lift, or as the master automation control system in a large-scale acrobatic show.
- C-A-T V5 is designed with respect to the needs of all the individuals that will find our system in their daily work place. Ergonomics, safety and operation effectiveness – even under stress – are the basis for all our system design decisions. The user interface is designed with focus on optimised workflow, clear visual feedback and smart support of complex operation tasks.

SAFE.

A consistent and transparent safety concept is our basis for realising integrated machinery control solutions that operate with actors, technicians and audience being in the hazard zone of the machine.

- C-A-T V5 is developed and certified under EN/IEC 61508:2010 to guarantee a quality level up to SIL 3 / PLe for any implemented safety function. The safety functions are implemented based on the usage scenarios and risk analysis described in the most referenced machinery standards for the entertainment industry EN 17206, DIN 56950-1, CWA 15902-1 and DGUV regulation 17 (former BGV-C1).
- C-A-T V5 is designed to minimise the risk introduced by operator errors. All editing functions are designed to prevent input of illegal values. Consistency checks will detect conflicts caused by changed system configuration at runtime. Maintenance and failure operating modes are accessible directly in the main operator consoles rather than using a different control device with a different control interface. And finally, the safety functions can be muted selectively to maintain the highest possible safety integrity even when parts of the machinery are defect.
- C-A-T V5 is designed to provide the highest availability combined with quick and easy to use backup and recovery strategies to minimize the risk for any flying artist or performer.



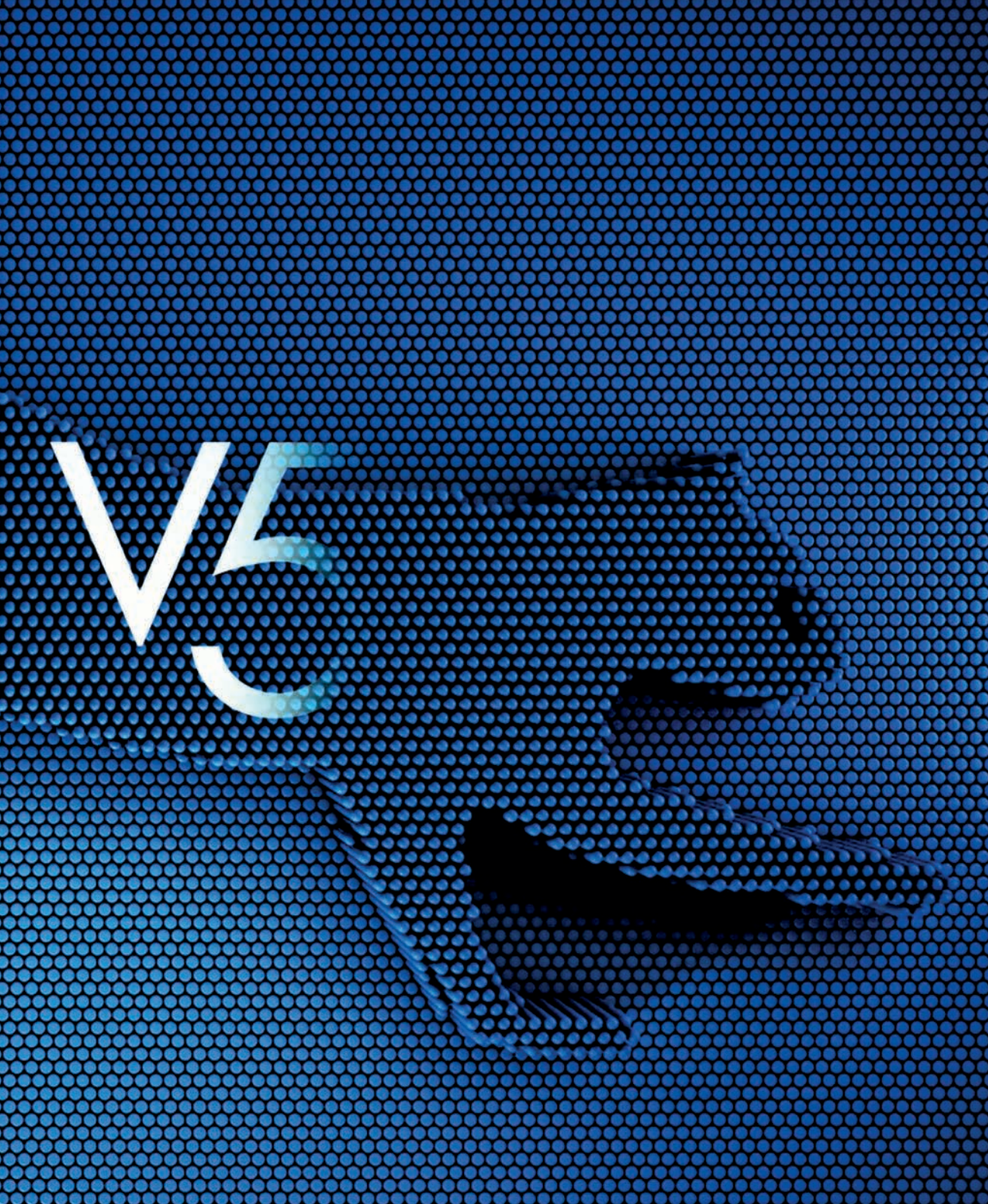
powerful.



individual.



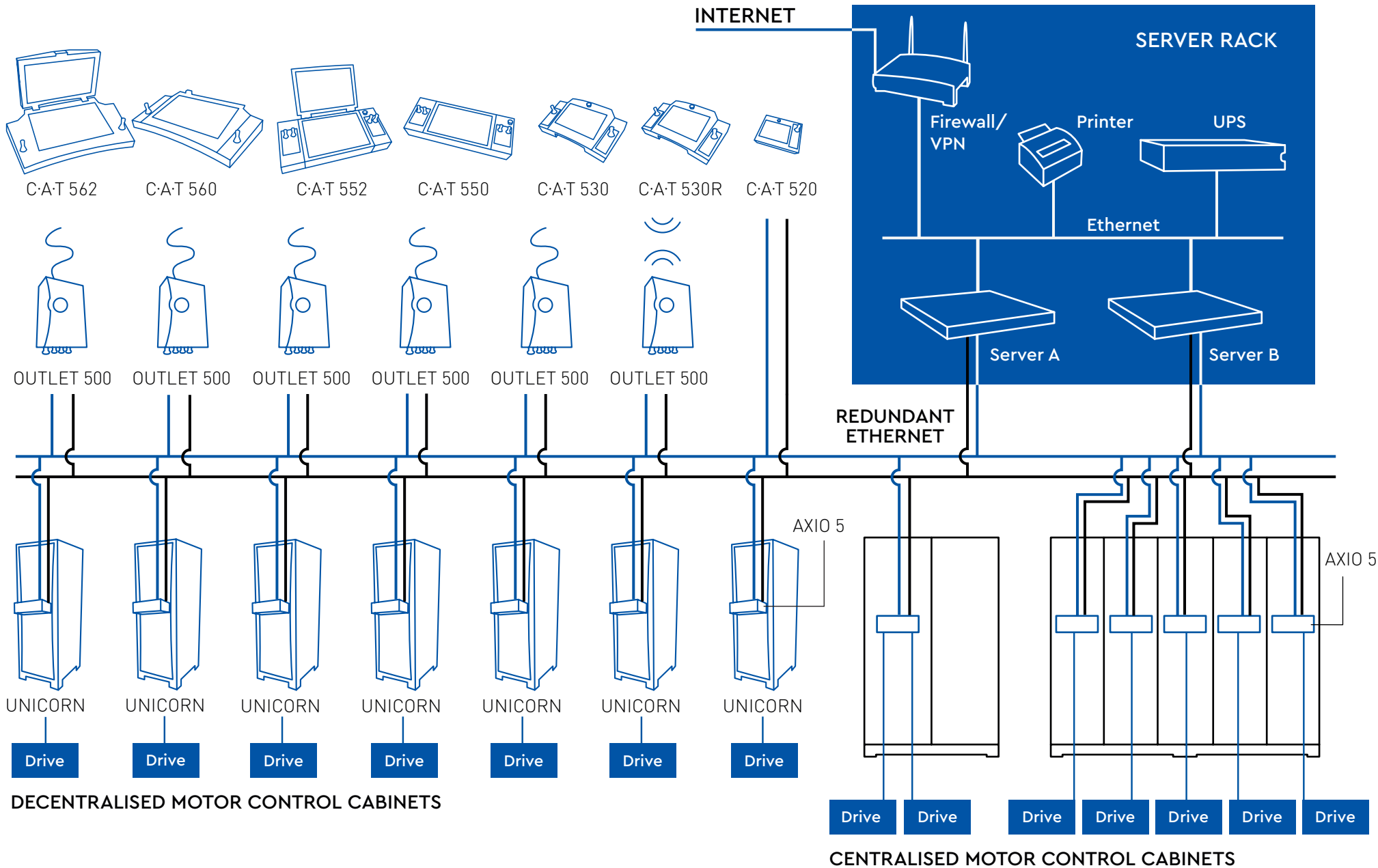
safe.



SYSTEM ARCHITECTURE

KEY FEATURES

- The redundant high-speed safety control network can integrate more than 2000 axes into a single control system without loss of timing or precision. It is based on Ethernet technology and uses standard IT network equipment.
- The AXIO 5 safety motion controller is installed inside centralised or decentralised motor control cabinets. It provides a flexible interface to all kinds and brands of switch gear, variable frequency drives and even hydraulic and pneumatic systems.
- Install UNICORN motor control cabinets next to the machines to realise the shortest commissioning time and benefit from a permanently available plug & play backup solution.
- Integrate up to 30 cable bound or wireless consoles for best possible comfort and safety. Add network-connected local control panels and displays where needed.
- Redundant powerful rack server systems integrate data storage and processing for fast user interface response and shortest machine reaction times. The 19" rack server cabinet features a UPS system for control system power protection as well as a third Ethernet network for connecting auxiliary devices.
- A VPN / firewall connection establishes an online link to the C·A·T remote service and remote backup network through an existing internet connection.





FUNCTIONAL SAFETY

TRANSPARENT SAFETY

C·A·T V5 is developed and certified under EN/IEC 61508:2010 to guarantee a quality level up to SIL 3 / PLe for any implemented safety function. The safety functions are implemented based on the usage scenarios and risk analysis described in the most referenced machinery standards for the entertainment industry EN 17206, DIN 56950-1, CWA 15902-1 and DGUV regulation 17 (former BGV-C1).

For any safety function, an individual documentation and safety rating is available.

KEY FEATURES

- Certification according to EN/IEC 61508:2010 p1-7 (2nd edition).
- Type approval according to Machinery Directive 2006/42/EC.
- The AXIO 5 hardware and software is certified as a safety motion i/o controller.
- A certified programming language allows implementation of additional safety functions without recertification.
- The configuration and selection of safety functions is certified.

Generic safety of machinery	STO	Safe Torque Off
	SS1	Safe Stop 1
	SS2	Safe Stop 2
	SOS	Safe Operating Stop
	SLA	Safely Limited Acceleration
	SLS	Safely Limited Speed
	SLT	Safely Limited Torque
	STR	Safe Torque Range
	SLP	Safely Limited Position
	SLI	Safely Limited Increment
	SDI	Safe Direction
	SMT	Safe motor temperature
	SBC	Safe Brake Control
	SCM	Safe CAM
	SSM	Safe speed monitor
Application specific safety functions – lifting and load bearing equipment for the entertainment industry	E-SAB	Safe Approval Button
	E-SCM	Safe CAM Monitoring
	E-SCP	Safe Collision Prevention
	E-SDA	Safe Door Access
	E-SGS	Safe Group Synchronisation
	E-SJP	Safe Crushing Protection
	E-SL	Safe Load
	E-SLM1	Safe Load Monitoring (Machine)
	E-SLM2	Safe Load Monitoring (Decoration)
	E-SLM3	Safe Load Monitoring (Structural)
	E-SSM	Safe Slack Monitoring
	E-SWM	Safe Winding Monitoring
Muting	SMS	Safe Muting of Safety Function

EN/IEC 61508
EN/IEC 62061

DIN 56950-1
CWA 15902-1
DGUV REGULATION 17
BGV-C1

EN ISO 13849

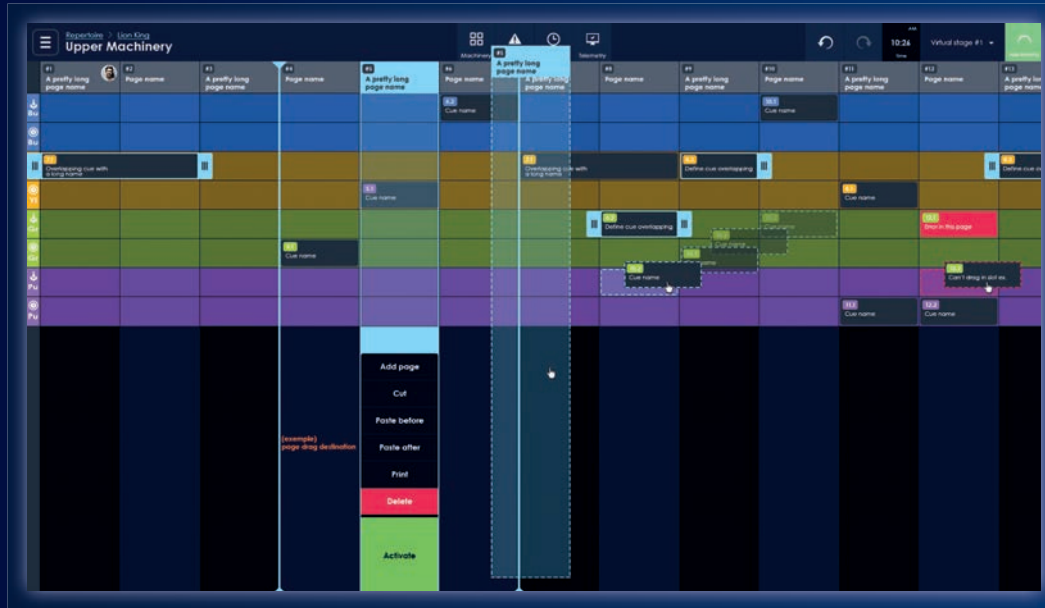


USER EXPERIENCE

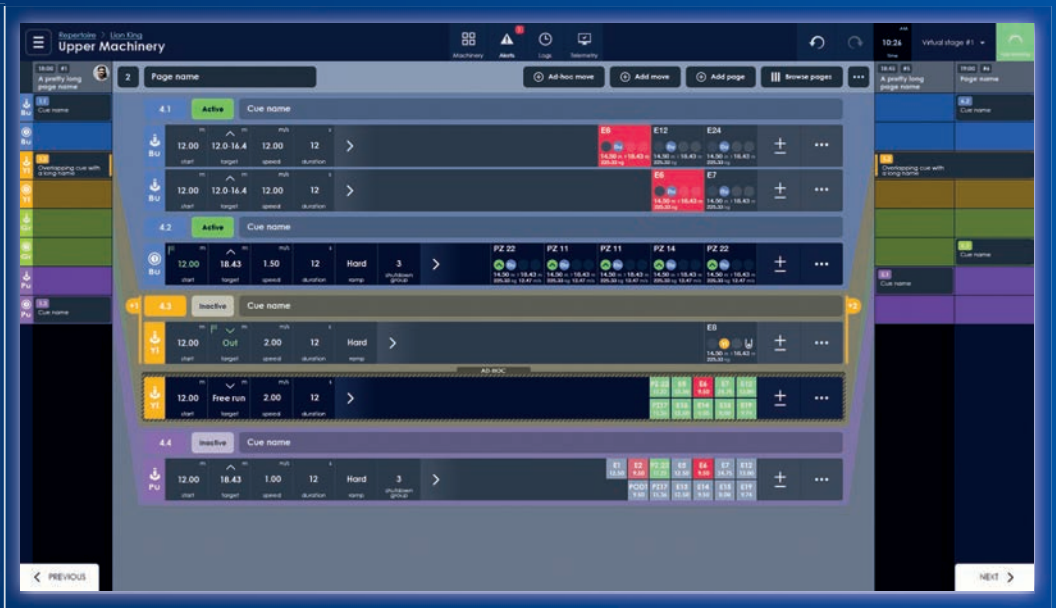
SMART GUIDING DESIGN

Best in class user experience composed of

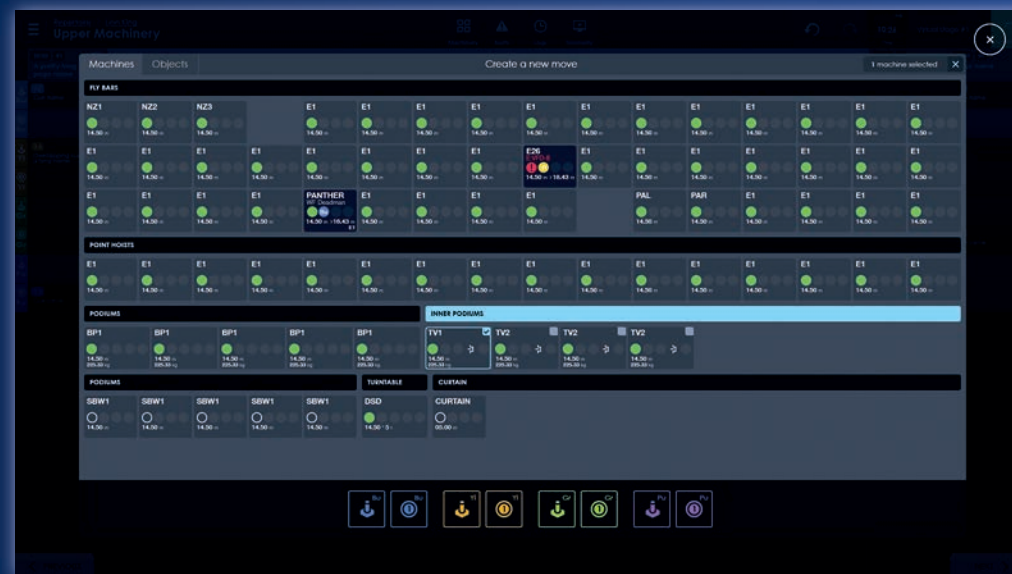
- a well-thought-out visual concept with appealing graphics
- controls design that fully supports the workflow
- a screen layout adapting to the changing working context
- a set of smart assistants that guide you through all challenges in your daily work and
- an integrated collaborative team working environment was set as target for the C·A·T V5 user interface. Participate in the C·A·T V5 user group for further raising the bar



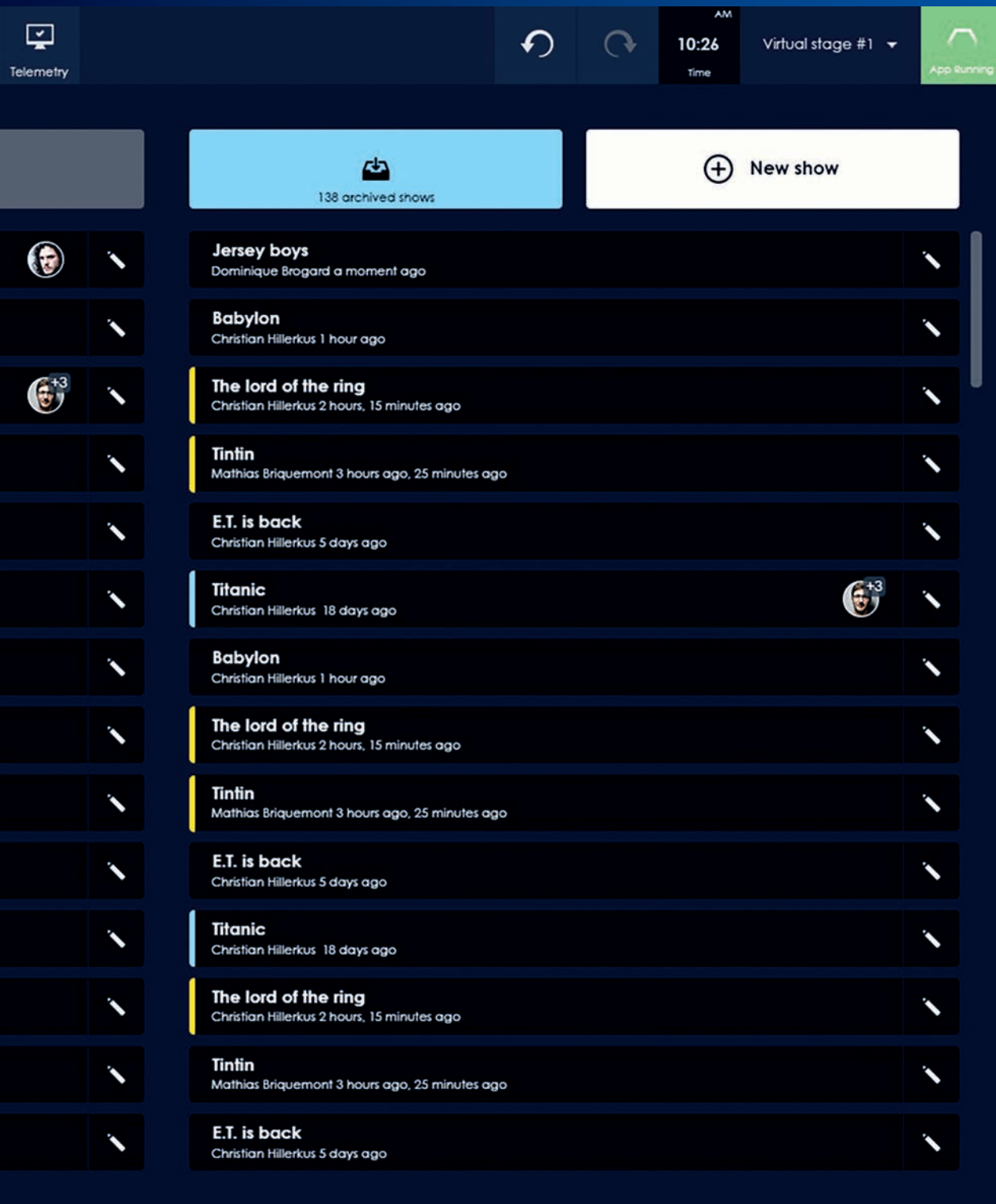
Cue arrangement on time track



Move programming

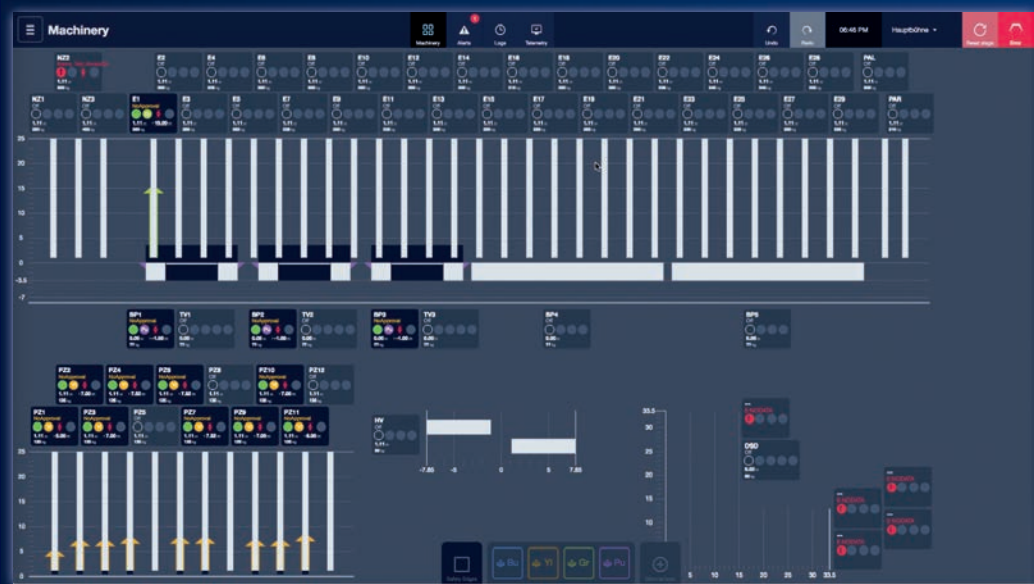


Machine selection



HIGHLIGHTS

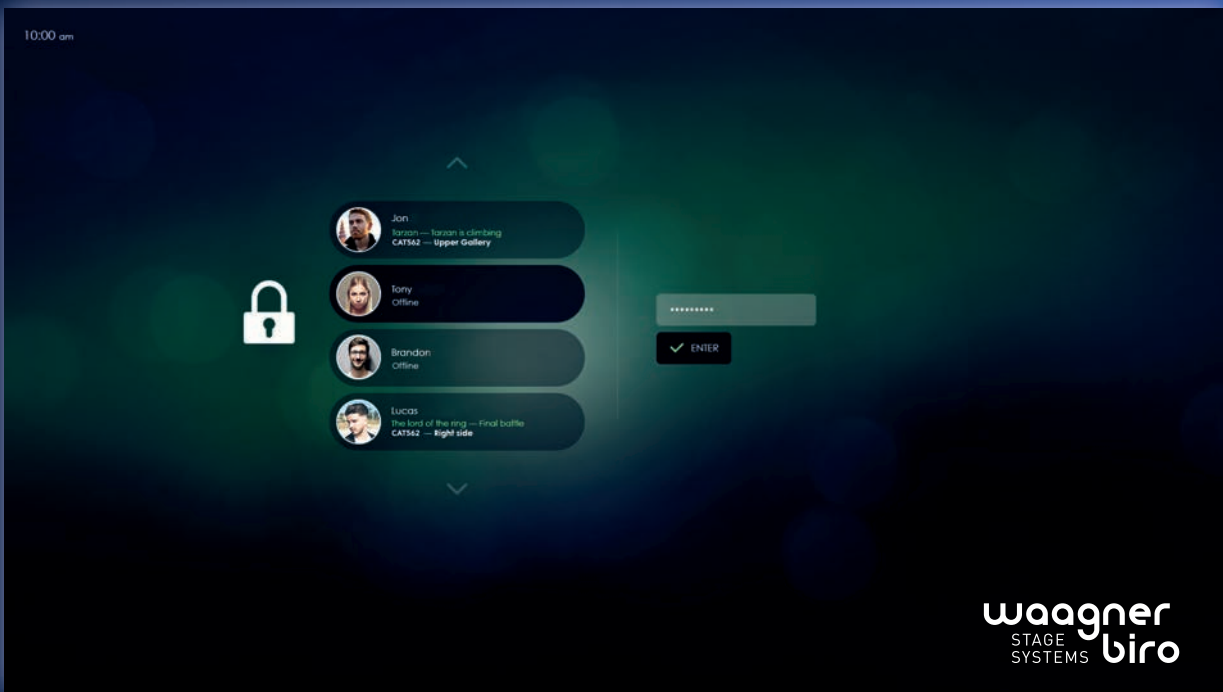
- The modern UI design is inspired by the look & feel of today's smart mobile devices. Based on the latest web technologies, the UI remains flexible and adaptable to the fast-changing demands of a superior user experience.
- Support for multi-touch gestures and drag & drop allow for quick navigation and graphical editing on touchscreen consoles. The context sensitive dialogue design enables the intuitive and straightforward operation. And if haptic feedback is essential for you, the C·A·T GEAR control devices extend the human machine interface from software to integrated hardware options.
- "Upstage lighting bar down please! We need to refocus." C·A·T expects the unexpected. Start any unplanned move within seconds, and without affecting your current programming task.
- Using the repertoire dashboard, you will never again lose track of your show files and archives. Highlight your current favourites for quick access or restore yesterday's show version from the integrated revision control system.
- Edit and run your shows from the adaptive track-based view while monitoring the system status on the machinery screen. Master even complex shows by mixing down the cues along multiple console tracks. And if a sudden event catches you off guard, simply forward your next cue for execution to another active console.
- Whether you are flying objects from your decoration warehouse or creating a new bare batten ballet: our smart targeting assistant will always suggest the most likely target selections.
- If you need a safe zone for developing the perfect motion profile, choose one of multiple virtual stages for safe move simulation without any risk for the machinery and scenery. Clone your cur-



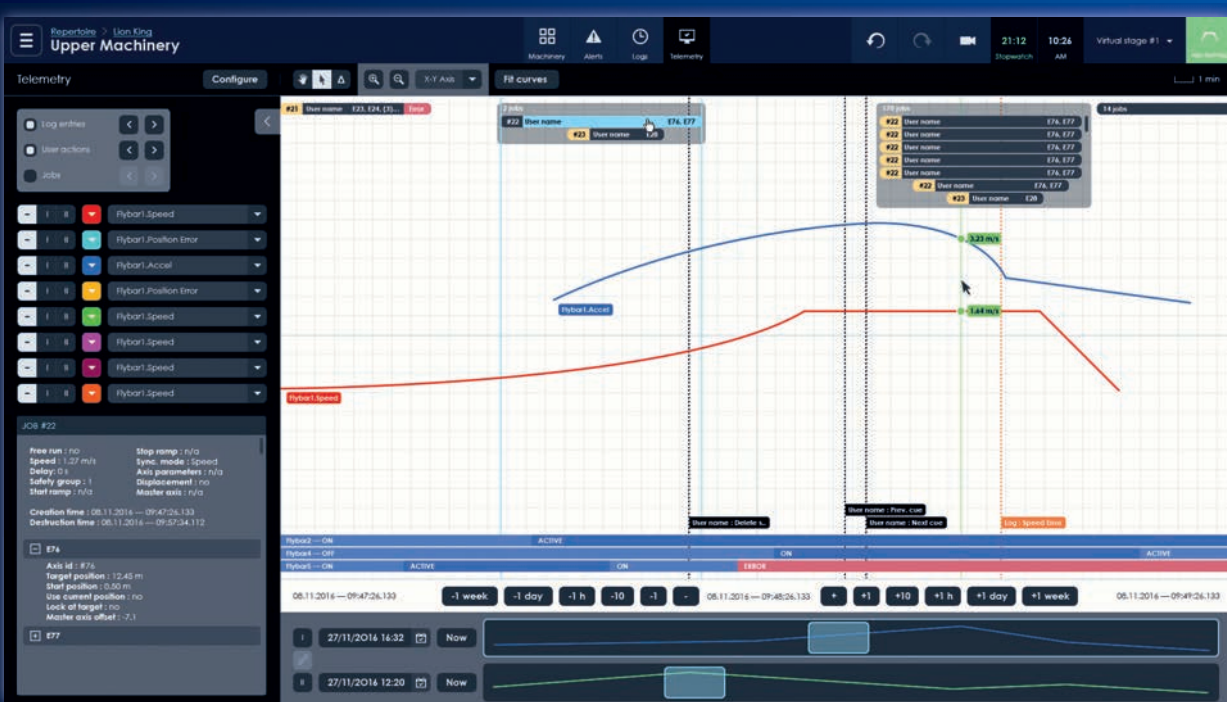
Machinery view



Smart targeting



User list

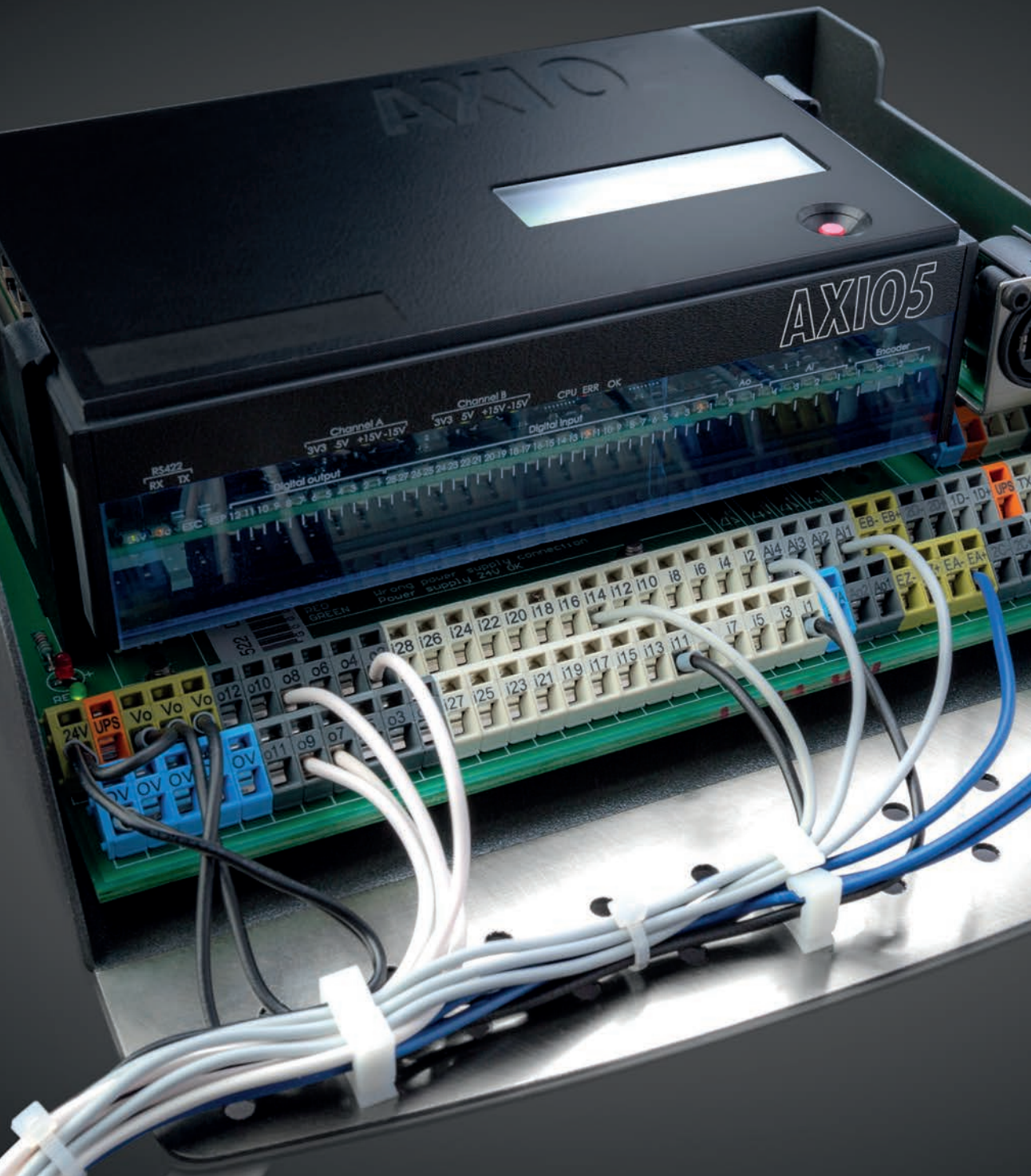


Graphical telemetry viewer

rent stage setting to a virtual stage within seconds and run your cues over and over again. You can share your virtual stage with other operators and practise the most challenging cue sequences from multiple consoles. 3D visualisation of your stage machinery, your decorations or the whole venue will be available at different levels of detail.

- No matter how many operators are working on different consoles: all your actions are stored in your personal operator session. Restore your previous session upon log in, start a new session or transfer a running session to/from another console when a different location is more convenient or safe. Undo and redo all of your personal actions at any time.
- C-A-T will turn your technical crews into a collaborative ballet. Based on personalised user accounts, C-A-T helps you to easily coordinate and follow your team work with the system. Our multi-user editing strategy is designed for fully concurrent work without any lock-outs. And because talking is so much more efficient than typing, all C-A-T consoles feature an integrated high-quality video chat system.
- A built-in graphical telemetry viewer, intelligent alert notifications and human readable logs integrate all necessary tools for maintenance management and trouble-shooting in the operator consoles. The telemetry does not only visualise all relevant I/O and status signals but links this information directly to user actions and machinery motion, creating an easy to understand visual explanation for all past events.
- The embedded C-A-T STUDIO is your interface for guided machine setup and configuration management. Automated tools speed up your regular maintenance tasks like brake testing and load sensor recalibration, creating precious time for additional spot maintenance works.





AXIO 5

SAFETY MOTION I/O CONTROLLER

The AXIO 5 connects the C-A-T control system to the world outside. It combines an SIL 3 / PLe certified safety motion controller and freely assignable safety I/O ports in a hot-pluggable black box.

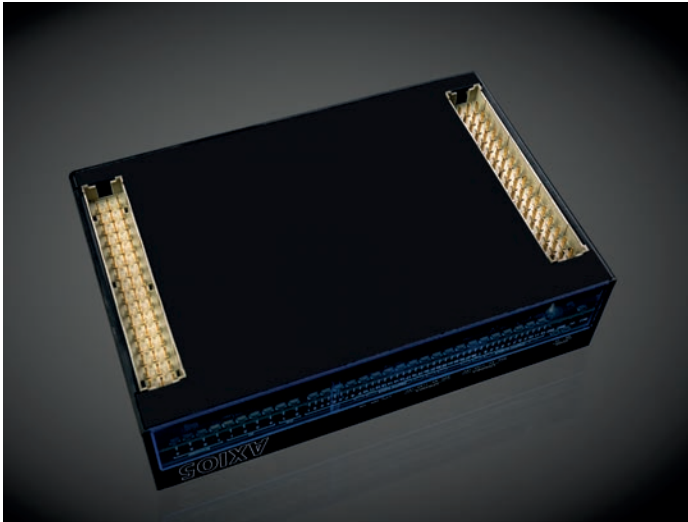
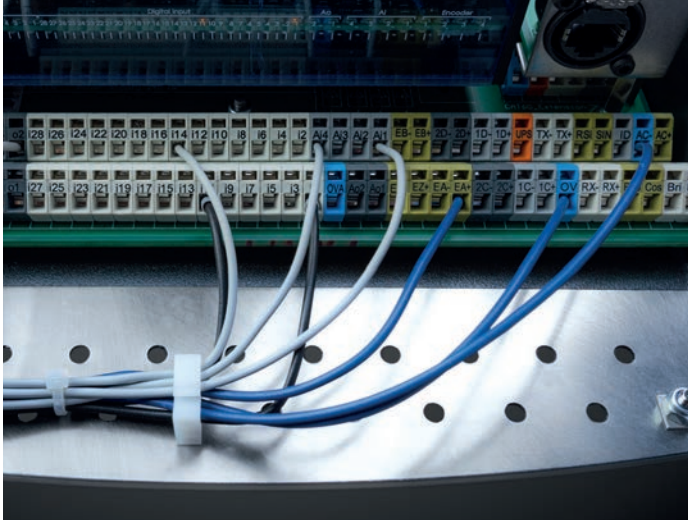
The AXIO 5 translates your console commands into the necessary electrical signals to control all kinds of machinery; including high-speed winches, chain hoists, turntables, stage wagons, stage lifts, hydraulics and many more.

KEY FEATURES

- Developed with reference to the most important machinery standards for the entertainment industry and functional safety: CWA 15902-1, DIN 56950-1, DGUV Rule 17 (formerly BGV-C1), EN 62061, EN ISO 13849-1 and EN 61508 (second edition).
- Certified as a SIL 3 / PLe safety controller by TÜV Austria. Certified for implementation of all mentioned safety functions at Safety Integration Level 3.
- 220 MHz Safety CPU
- Analogue and digital safety I/O ports. Connects with up to four encoder channels.
- Hot-pluggable with auto-configuration to the connected machine. Boots up within seconds.
- Easy upgrade for your C·A·T V4 installation: AXIO 5 is pin-compatible with the AXIO-II motion controller.

TECHNICAL CHARACTERISTICS

Dimensions	WxHxD	167 mm x 57 mm x 112 mm
I/O ports	10-bit analogue inputs 12-bit analogue inputs digital outputs, analogue outputs Encoder ports Ethernet 100 MBit/s 1-wire bus	[0 V – 10 V] [-10 V – 10 V] [-10 V – 10 V] [SSI, INC, SinCos]
Safety level	SIL 3 / PLe	
Accessories	Mounting PCB: Rack 5, MiniRack, UNICORN-Rack	





C·A·T 562 C·A·T 560

UNLIMITED CONTROL

In both stationary and mobile control applications, the C-A-T 560 series consoles offer a superior user experience. Large display(s) and multi-touch screens provide extensive space for graphical editing and visual feedback. In addition, four to twelve docking slots are available for adding your preferred selection of control devices.



KEY FEATURES

- One (C·A·T 560) or two (C·A·T 562) 24" Full-HD displays with capacitive ten-point multi-touch.
- 4 to 12 slots for C·A·T GEAR modules, default has two joystick modules.
- Built-in e-stop actuator and global dead-man switch.
- Built-in safety I/O controller and powerful PC board.
- Integrated camera, speaker and microphone for video chat.
- Access control by RFID token or chip card. Key switch is optional.
- Connectors for CABLE 100, two LED gooseneck lamps, four USB devices and an external dead-man switch.
- The intensively tested thermal design of our consoles allowed us to build our consoles with enclosed housing, passive cooling and IP54 protection.

TECHNICAL CHARACTERISTICS

Dimensions	C·A·T 560			
	4 slots:	WxHxD	930 mm x 160 mm x 550 mm	
	8 slots:	WxHxD	1060 mm x 160 mm x 560 mm	
	12 slots:	WxHxD	1190 mm x 160 mm x 570 mm	
	C·A·T 562			
	4 slots:	WxHxD	930 mm x 560 mm x 560 mm	
	8 slots:	WxHxD	1060 mm x 560 mm x 570 mm	
	12 slots:	WxHxD	1190 mm x 560 mm x 580 mm	
	Screen(s)	C·A·T 560: 1 x 24" LCD, 1920 x 1080 pixel, 10-point capacitive touch screen		
		C·A·T 562: 2 x 24" LCD, 1920 x 1080 pixel, 10-point capacitive touch screen		
Connectors	1 x CABLE100, 1 x External dead-man switch, 2 x XLR Lamp, 4 x USB type A			



C·A·T 550

GALLERY CONSOLES

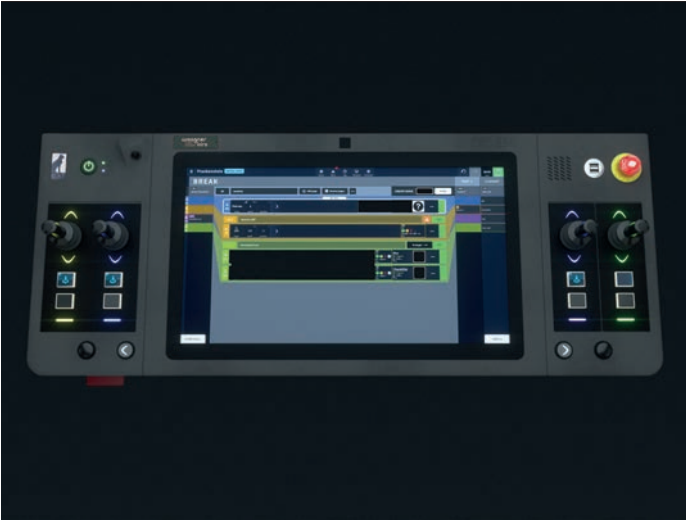
Especially designed to create an ergonomic workplace alongside a tight fly gallery, the C·A·T 550 offers all the powerful features of our C·A·T 560 series consoles in a compact body on a flexibly adjustable rail mounting solution.

KEY FEATURES

- One 20" Full-HD display with capacitive ten-point multi-touch.
- 4 slots for C·A·T GEAR modules, default has four joystick modules.
- Built-in e-stop actuator, global dead-man switches and previous/next buttons.
- Built-in safety I/O controller and PC board.
- Integrated camera, speaker and microphone for video chat.
- Access control by RFID token or chip card. Key switch is optional.
- Connectors for the CABLE 100, two LED gooseneck lamps, external dead-man switch, four USB devices.
- Connectors for external display and external network device.
- The intensively tested thermal design of our consoles allowed us to build our consoles with enclosed housing, passive cooling and IP54 protection.
- Mounted on a height and rotation adjustable sliding arm with integrated cable management.
- The mounting solution supports seated operation and standing operation in front as well as side view.

TECHNICAL CHARACTERISTICS

Dimensions	WxHxD 860 mm x 100 mm x 340 mm
Screen(s)	1 x 20" LCD, 1920 x 1080 pixel, 10-point capacitive touch screen Support for secondary external display
Connectors	1 x CABLE 100, 1 x external dead-man switch 1 x HDMI video for display, 1 x RJ45 Ethernet 4 x USB type A, 2 x XLR LED lamp



C·A·T 530



FREEDOM OF MOVEMENT

When rigging on stage, placing your hoists on the grid or moving the set along on your stage wagon: your C·A·T 530 series console will be on your side. Cable-bound or on the C·A·T Wi-Fi network, it gives you full access to your machinery, your show data and all important set-up and maintenance functions.

And with the flexible C·A·T GEAR slot design, you can even configure it to become a two-handed performer flying controller with joystick and separate speed wheel.



KEY FEATURES

- One 12" HD-Ready display with capacitive ten-point multi-touch.
- 2 slots for C·A·T GEAR modules, default has two joystick modules.
- Built-in e-stop actuator and global dead-man switch.
- Built-in safety I/O controller and powerful PC board.
- Integrated camera, speaker and microphone for video chat.
- Access control by RFID token or chip card. Key switch is optional.
- Available as a radio version C·A·T 530 R with integrated Wi-Fi.
- Connectors for CABLE 100, two USB devices, optional battery pack.
- The intensively tested thermal design of our consoles allowed us to build our consoles with enclosed housing, passive cooling and IP54 protection.

TECHNICAL CHARACTERISTICS

Dimensions	WxHxD	570 mm x 150 mm x 355 mm
Screen(s)	1 x 12" LCD, 1366 x 768 pixel, 10-point capacitive touch screen	
Connectors	1 x CABLE 100, 2 x USB type A, Battery pack	
Radio network	Wi-Fi (optional)	
Accessories	Shoulder strap carrying bag, wall mount	

C·A·T 500



DESKTOP CONSOLES

Designed for offline simulation using a laptop. Or for hardware control in the automation control booths of large-scale acrobatic shows where two screens are not enough. The C·A·T 500 series desktop consoles link the C·A·T GEAR control modules with an external laptop or workstation computer.



KEY FEATURES

- 3 slots to 9 slots for C-A-T GEAR modules.
- Built-in e-stop actuator, global dead-man switch and previous/next buttons.
- Built-in safety I/O controller and PC board.
- HDMI connectors for up to two external displays.
- Integrated camera, speaker and microphone for video chat.
- Access control by RFID token or chip card. Key switch is optional.
- Connectors for the CABLE 100, two HDMI display ports, one LED gooseneck lamps, external dead-man switch, four USB devices.
- The intensively tested thermal design of our consoles allowed us to build our consoles with enclosed housing, passive cooling and IP54 protection.

TECHNICAL CHARACTERISTICS

Dimensions	3 slots: WxHxD 6 slots: WxHxD 9 slots: WxHxD	520 mm x 160 mm x 300 mm 750 mm x 160 mm x 300 mm 980 mm x 160 mm x 300 mm
Screen(s)	None (uses an external network connected display device)	
Connectors	1 x CABLE 100, 2 x HDMI display port, 1 x External dead-man switch, 4 x USB type A, 1 x XLR LED lamp	

C·A·T GEARS



GIVE PAW!

Whenever two joysticks are not enough, or if you prefer tactile input in addition to a touchscreen, a broad selection of C·A·T GEAR devices are available for the full customisation of your C·A·T consoles to your specific needs.

Equip any of our C·A·T 560 series, C·A·T 550 series, C·A·T 530 series and C·A·T 500 series consoles with compatible gears. Can't decide? Don't worry, C·A·T GEARS are sold separately and can be replaced whenever you need to change them.

KEY FEATURES

- Customise you console hardware. C·A·T GEARs allow flexible module configuration.
- Each module comes with internal data, power and a safety signal connector to the console.
- C·A·T 560 series consoles are available with 2 x 2 slots, 2 x 4 slots and 2 x 6 slots, based on a modular and extendible design.
- C·A·T 550 series consoles are available with 2 x 2 slots.
- C·A·T 530 series consoles are available with 2 x 1 slots.
- C·A·T 500 series consoles are available with 1 x 3 slots, 2 x 3 slots and 3 x 3 slots.
- C·A·T GEAR modules can be installed or replaced as needed, on site.
- If the existing console is too small to add more C·A·T GEARs, you can send in the console and have a larger module wing installed.

TECHNICAL CHARACTERISTICS

Available modules	Joystick playback – standard Joystick playback – interactive Wheel playback Jog wheels Macro keys Function keys 3D mouse Key switch Blind (custom built on request)
-------------------	--





JOYSTICK PLAYBACK – STANDARD

Full control of your rigging moves – from full speed to millimetre-precise positioning.

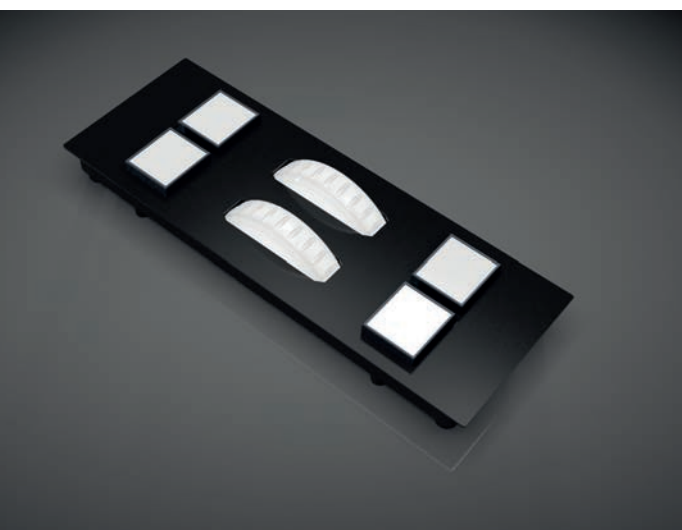
- Precisely controllable logarithmic joystick with included dead-man switch on top.
- Up/down arrow lights indicate the applied deflection direction.
- Stop & Go buttons pair for direct execution of programmed cues. Integrated monochrome action light and RGB status lights in the button rings.
- RGB identification light bar.
- IP54 enclosed.



JOYSTICK PLAYBACK – INTERACTIVE

Full control of your rigging moves – from full speed to millimetre-precise positioning.

- Precisely controllable logarithmic joystick with included dead-man switch on top.
- Up/down arrow lights indicate the applied deflection direction.
- Stop & Go buttons pair for direct execution of programmed cues. The integrated OLED micro display can show the assigned cue name, cue progress information, error status or even a fully coloured graphical representation of the controlled object.
- RGB identification light bar.



WHEEL PLAYBACK

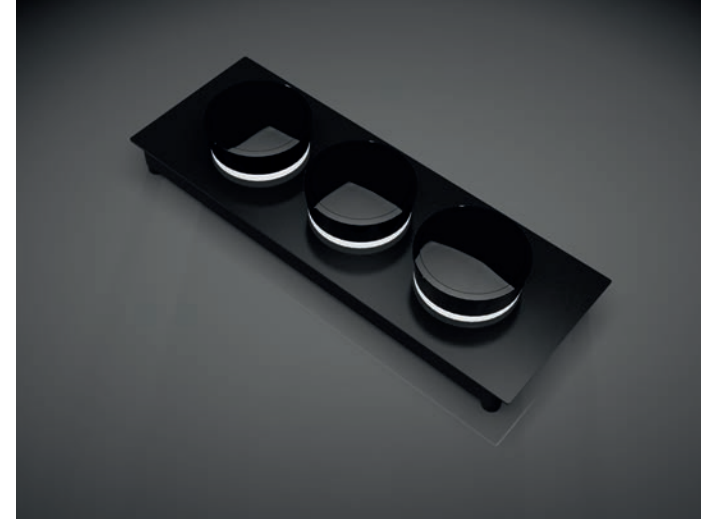
Two endless high-resolution wheels for direct cue-speed control and precise positioning. Each of the wheel channels features:

- Precisely controllable endless encoder wheels with a resolution of up to 1,600 ticks/turn, this is 10 ticks per millimetre. Depending on the application, a lower resolution will be applied automatically. The adjustable software simulation of finite range parameter control makes reset springs and motorised faders obsolete.
- A pair of OLED micro display buttons for use as a go button or a mode toggle button. The display can show the assigned cue name, cue progress information, the selected operation mode and of course a graphical and numerical representation of the currently set parameter values.

JOG WHEELS

Jog wheels are the best choice for fast value selection from a limited list and intuitive manipulation of numeric values. The three jog wheels automatically adapt their functionality to the input mask selected on the console screen. Up to three values can be manipulated without any touchscreen action.

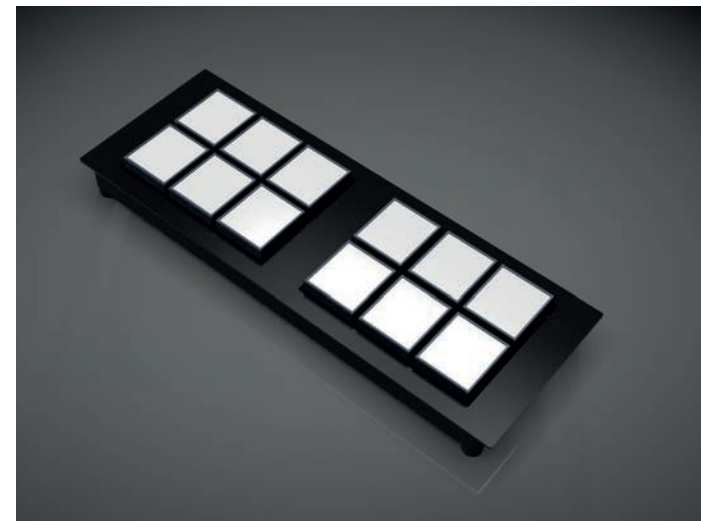
- Push-to-enter jog wheel with 50 ticks/turn
- RGB illuminated ring to indicate the currently selected function and the value intensity.



MACRO BUTTONS

Want to select all your installed masking suspension hoists with a single button click? Want to recall the automatic sequence for moving the side stage wagon onto the main lift? Or, just need some extra go buttons? The macro buttons are user-programmable buttons. Any operation that can be expressed using the C·A·T V5 syntax language can be recorded and assigned with text and/or icon display.

- 2 x 6 OLED micro display buttons can show the assigned cue name and the cue progress information, macro name or fully coloured macro icon.



FUNCTION KEYS

The function keys implement the basic C·A·T V5 syntax on hardware keys. Type in the commands for loading machines, programming moves or executing shows using the dedicated function keys. An additional jog wheel gives you quick access to list item selection and parameter values editing.

- 24 syntax programming keys
- Numeric keypad
- Push-to-enter jog wheel with 50 ticks/turn





3D MOUSE

Navigate through 3D spaces intuitively using the 3D navigation mouse. Two buttons help to select and edit 3D motion paths.

- 3D mouse with three axes for translation and three axes for rotation.
- Two mouse buttons.



KEY SWITCH

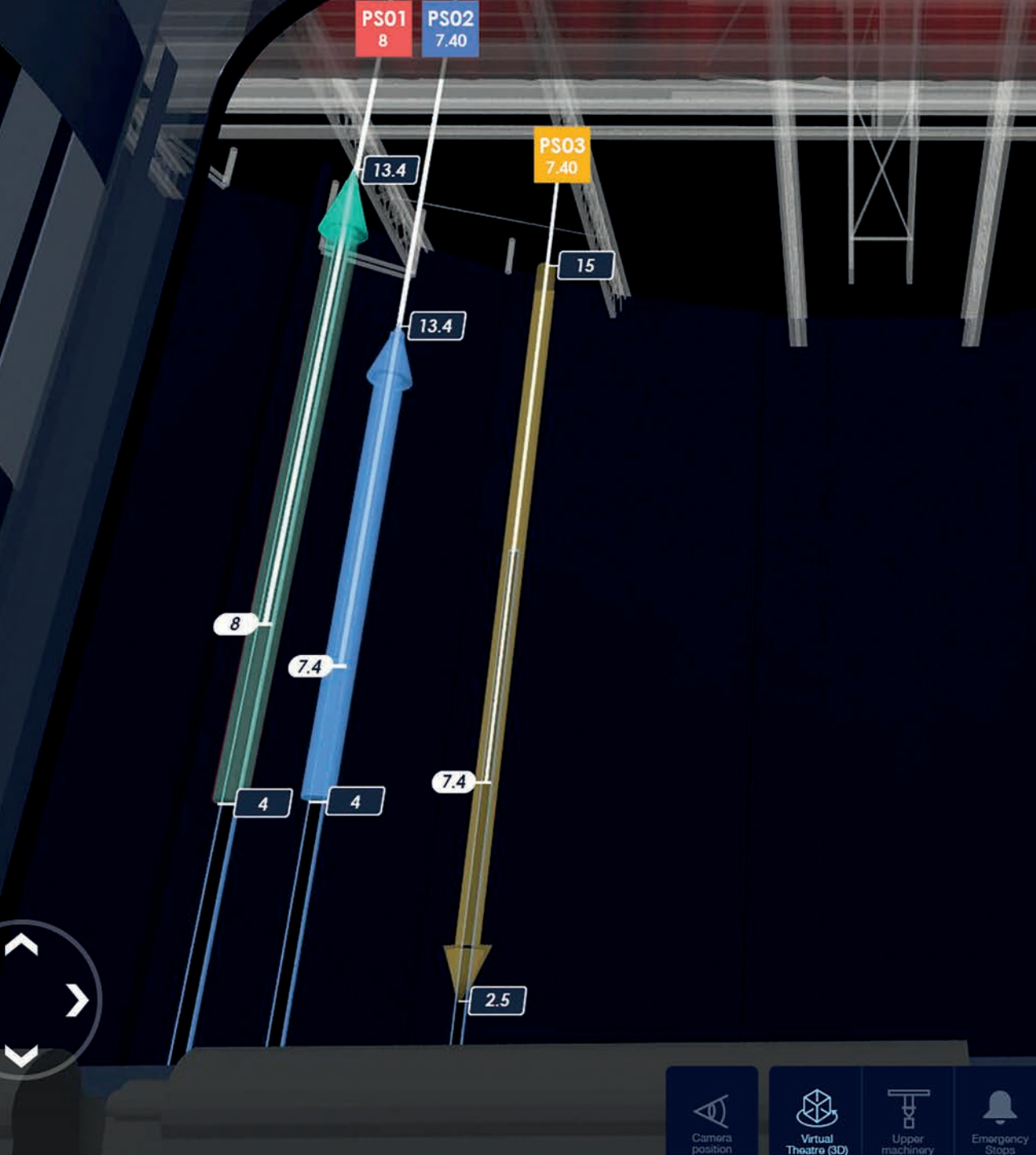
Wherever a traditional key switch is used for access control or machine-function (software) switching, the key switch module allows installation of a customer-supplied key switch.



BLIND COVER

If you don't use all module slots from the beginning, just leave them empty with blind cover installed for later installation of additional C·A·T GEAR control modules.





3D VIEW

ENHANCED IMAGINATION

Sometimes, a systematic view only does not allow for fully understanding the constraints introduced by set design, the dependencies of complex scene changes and the images created from a spectator view point.

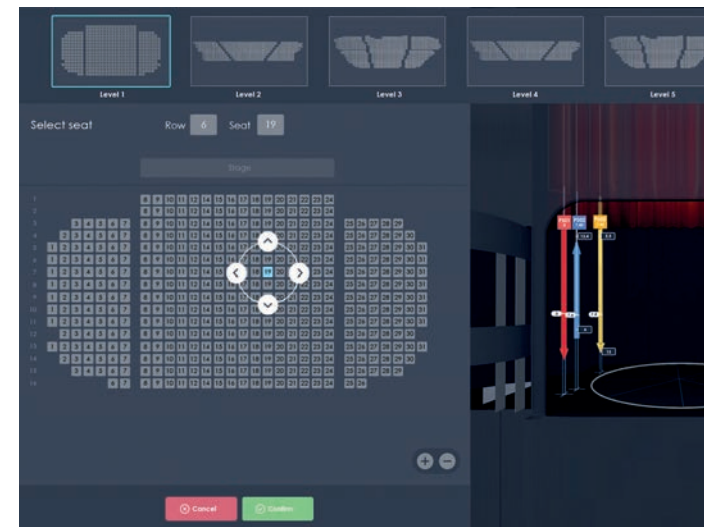
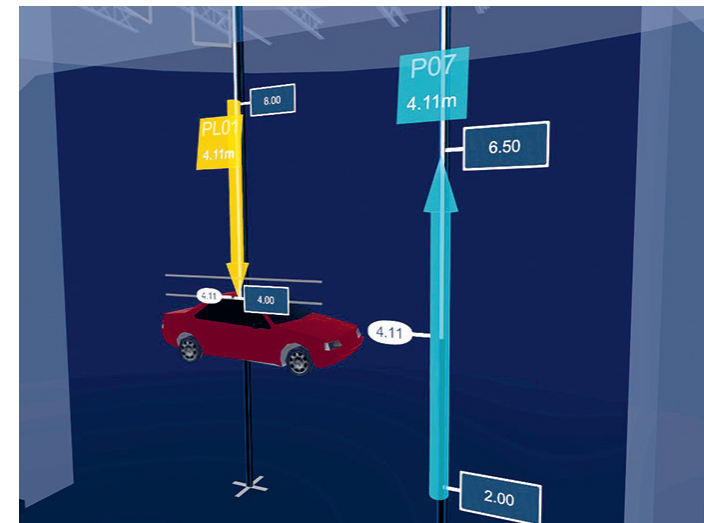
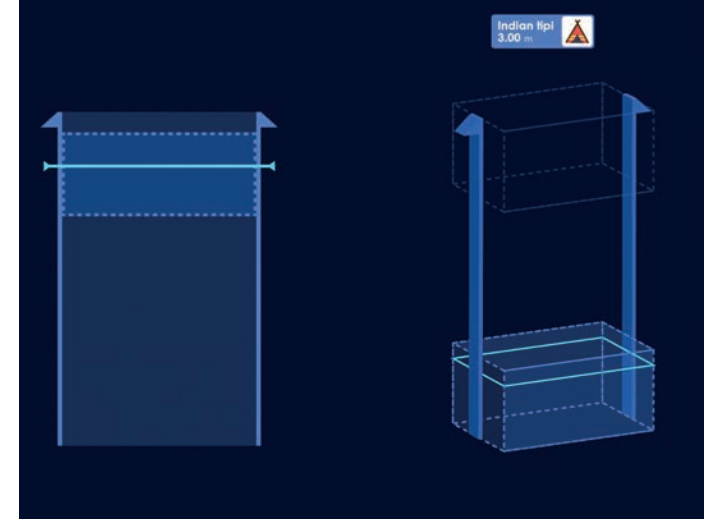
C·A·T V5 can enhance your imagination by 3D visualisation of the machinery under control, the set design and even the full stage and auditorium.

KEY FEATURES

- Several 3D visualisation licenses are available, from abstract machine grid to a fully textured venue model with stage and auditorium.
- Full integration into the C·A·T 560 series console providing 3D rendering engine and touchscreen optimized navigation interface.
- Augmented display of machine states and cue information in the 3D engine.
- Abstract 3D visualisation derived from rigging object parameters without adding any model.
- Import, manage and render 3D models of objects used in your show. Commonly available 3D file formats are supported.
- Freely moveable view point using a 3D mouse or touchscreen navigation panel.
- Edit and select your preferred camera positions.
- Choose a spectator view point from your audience seat map.

TECHNICAL CHARACTERISTICS

Available options	Standard 3D visualisation Venue models, textures Seat map selection
-------------------	---

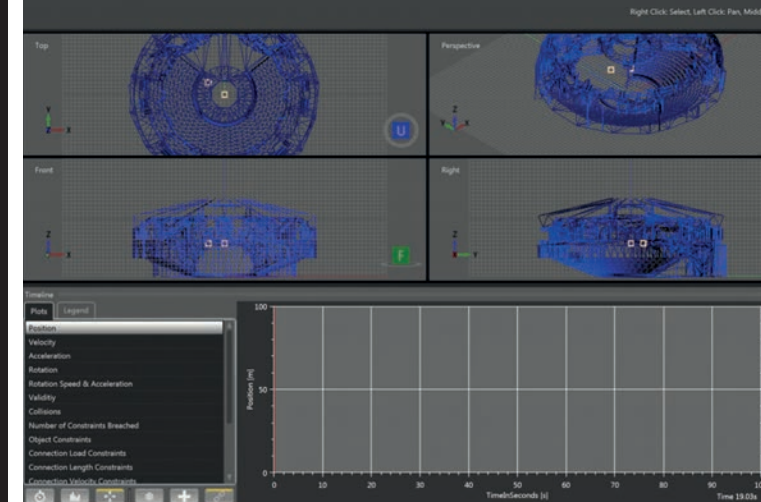
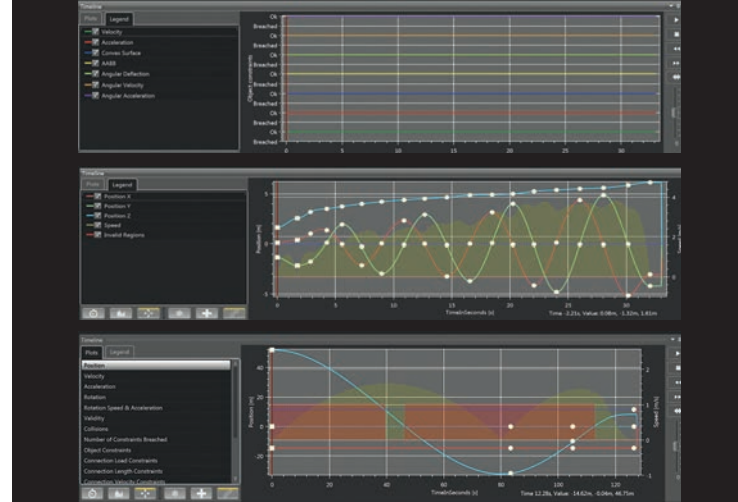


3D FLYING



DEGREES OF FREEDOM

C·A·T V5 includes all the necessary algorithms and tools for setting up a multi-axis 2D or 3D flying system from up to 8 point hoists. Depending on the setup chosen, up to 6 degrees of freedom can be addressed and controlled within the 3D motion editor.



KEY FEATURES

- Define any multi-axis 2D / 3D flying system from 2 to 8 point hoists or tracked flying systems in the 3D motion editor.
- Graphically edit your 3D flying path and object rotation or use a multi-axis controller for free manual 3D flying.
- C-A-T V5 automatically translates the 3D position information into the corresponding individual machine positions, always respecting and monitoring possible acceleration, speed and rope tension.
- Edit and simulate several simultaneous 3D motions within the 3D motion editor.

PICTURES: DAI SHOW, DRAGONE



LINK TO LIGHTING AND MEDIA

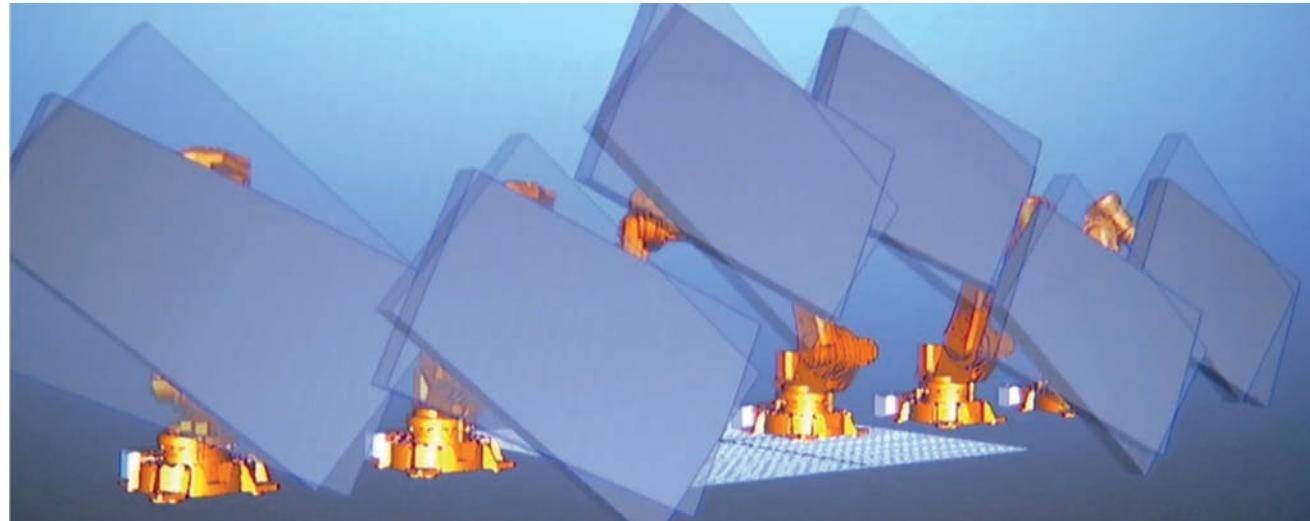
POSITION TRACKING, CUE TRIGGERS, VIRTUAL PLAYBACKS

Talking SMPT/E, DMX, ArtNet, streaming ACN, PSN or a custom protocol? The Babel Fish is C·A·T's favourite dish.

We own our protocol stacks, finding a way to connect your C·A·T automation control system to any kind of lighting, media or show control system.

PICTURES: RCL QUANTUM CLASS, TW070

CONTROL SYSTEM INTEGRATION



3RD PARTY EQUIPMENT, ROBOT CONTROL, DECORATION AUTOMATION

A C-A-T links an industrial type robot control subsystem to the entertaining world of called cues.

Generic control boxes are used to integrate show deck automation and 3rd party machines into the overall automation control system.



PICTURES: RCL QUANTUM CLASS, TW070



SERVICE & MAINTENANCE

C·A·T SERVICE

With expert knowledge, the C·A·T Service is there to help you with any control related questions, software tuning and associated spare parts. Our system maintenance service covers testing all I/O functions and safety functions of the machines, the control consoles, the servers and their subsystems, and repairs or replaces faulty components or software functions where necessary.

Do you want to get more out of your existing hardware and applications? The Waagner-Biro Stage Systems Service Centre offers software update services and system hardware upgrades for your existing C·A·T (Computer Aided Theatre) controls. It was never so easy to keep up-to-date with the latest stage control technology. Our R&D teams continuously develop new features to support the C·A·T operators all over the world. Take advantage of these developments and retrieve our updates easily via remote maintenance over a VPN connection.

Under a permanent service contract, we will check the availability of your equipment constantly, and act immediately in case of error. Live monitoring allows our customer service agents to see all important system parameters, telemetry and log data in real time.

Are you missing the right system or feature to solve your stage automation challenge? Contact us to discuss and develop the right solution with our requirements engineers. And get your own feature implemented and deployed to your C·A·T installation on special order.

We offer hotline and support services including remote access also in the evenings at show times (and beyond), on weekends and public holidays. Contact the Waagner-Biro Stage Systems service centre to arrange for a 24/7 hotline service or full service contract. Many customers already take advantage of our permanent service benefits and enjoy the guarantee that a service technician is always available for them.

WAAGNER-BIRO STAGE SYSTEMS AG

— AUSTRIA

Waagner-Biro Stage Systems GmbH
Saturn Tower
Leonard-Bernstein-Strasse 10
1220 Vienna, Austria
T: +43/1/90 28 00
stagesystems.austria@waagner-biro-stage.com

— GERMANY

Waagner-Biro Bavaria Stage Systems GmbH
Am Schönbühl 12
92729 Weiherhammer, Germany
T: +49/9605/92 22 0
F: +49/9605/92 22 50
stagesystems.bavaria@waagner-biro-stage.com

— LUXEMBOURG

Waagner-Biro Luxembourg Stage Systems S.A.
1, rue de l' école BP10
4813 Rodange, Luxembourg
T: +352/50 35 21
F: +352/50 35 24
stagesystems.luxembourg@waagner-biro-stage.com

— RUSSIA

000 Waagner-Biro Moscow Stage Systems
Leninskaja Sloboda Str. 26, Geb. 28
115280 Moscow, Russia
T: +7/495/803 36 49
F: +7/495/803 36 49
stagesystems.moscow@waagner-biro-stage.com

— SPAIN

Waagner-Biro Spain Stage Systems S.A.
c/Santisima Trinidad 30
28010 Madrid, Spain
T: +34/91/447 57 29
F: +34/91/446 18 67
stagesystems.spain@waagner-biro-stage.com

— CHINA

Waagner-Biro Stage Systems (Beijing) Co. Ltd.
Room A027, 2nd Floor, NanYin Mansion
No. 2 North Street East 3rd ring,
Chaoyang District, Beijing, PR China
100020
T: +86/10/641 36 389
stagesystems.china@waagner-biro-stage.com



Waagner-Biro Luxembourg Stage Systems S.A.
1, rue de l'école, L-4813 Rodange
stagesystems.luxembourg@waagner-biro-stage.com