




# MILO MOTION CONTROL: MOTION BEYOND REALITY





CONTEMPORARY FILM  
IS POSSIBLE IN MANY  
WAYS THANKS TO  
MILO MOTION CONTROL



Harry Potter, Spider-Man 3, The Aviator, The Da Vinci Code, Yes Man and many others would have never been as spectacular without the MILO Motion Control system.

MILO MC — is a mechanized crane that allows for free control of the camera in three dimensions and is capable of precise reproduction of particular commands including change in focus distance.

This way MILO MC allows combining any moving object with a chosen background by employing panorama creation with camera movement.

# MILO MOTION CONTROL POSSIBILITIES

DCU  
DIGITAL CINEMA UKRAINE



## CLONING OF HUMANS IN A DYNAMIC SCENE

The same actors can perform different tasks in the same scene for practically an infinite number of times. For example, in the Kylie Minogue video "Come Into My World" the singer walks across the same set four times, leaving a copy of herself every time she does so.



## INSTANT ACCELERATION, SHARP STOPS AND DIFFICULT CAMERA TRAJECTORY

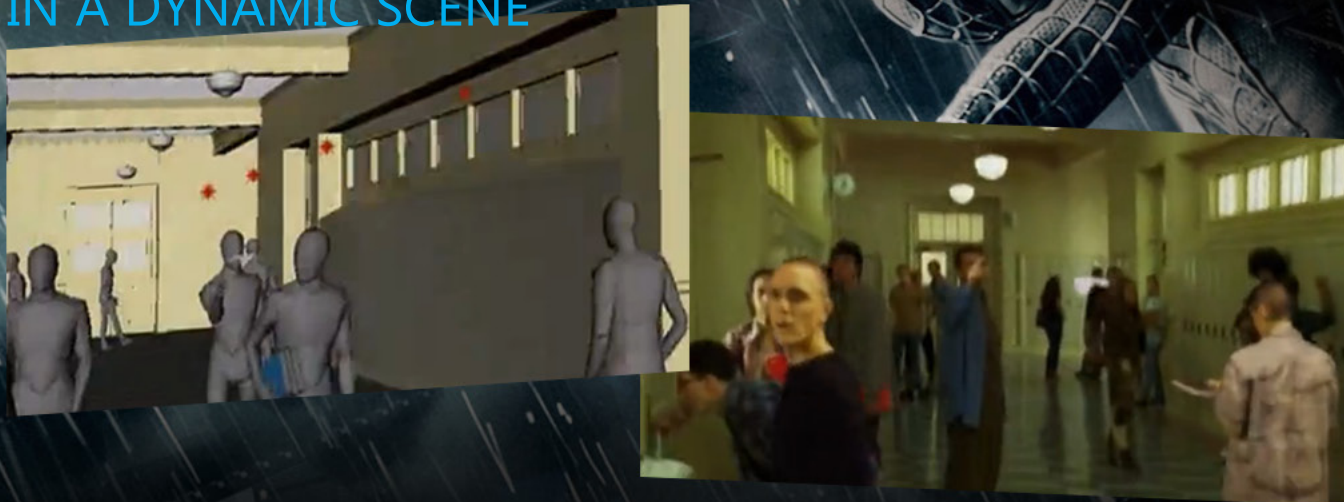
The MILO MC system can accelerate on its rails up to 2 m/c and then make a quick stop; spin with the speed 38 degrees per second and create panorama at 120 degrees per second.

## MERGING SEVERAL OBJECTS IN A DYNAMIC SCENE

The merging of several objects in a single dynamic scene in cases when, for example, a flash from an explosion or engine exhaust needs to be added to the object, such as in the film Star Wars.

# MILO MOTION CONTROL POSSIBILITIES

## THE CONTROL OF A REAL CAMERA THROUGH A CGI EDITOR AND THE MERGING OF ACTUAL MOVEMENT WITH COMPUTER ANIMATION IN A DYNAMIC SCENE



The DCU Company offers more than just maintenance services on the set, but also carries out the entire range of preparation work for shooting. During the preparation of the set that will employ the Motion Control system we realize virtual modeling, trajectory measurement for camera movement, lighting scripts and many others. As a result of this the director, the DoP and the actors all know their placement and further action. This way we save your time on the set and as a result — help in optimization of the budget.



## OUR TEAM

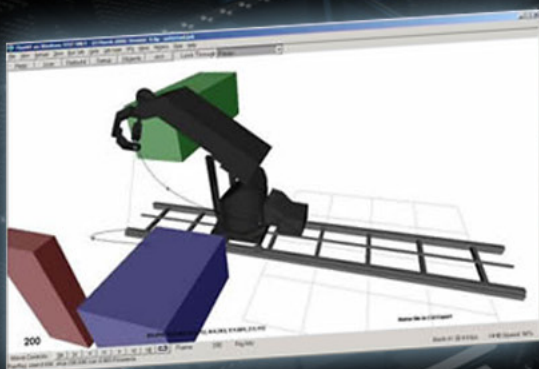
Our team is capable of setting up the MILO MC for work in a mere 35 minutes. Together with our partners we offer the full spectrum of services for the development of visual effects of any complexity. Our specialists have not only worked with the Motion control systems for many years but also partake in additional courses and certification in London.



# FLAIR MOTION CONTROL SYSTEM CONTROLLER



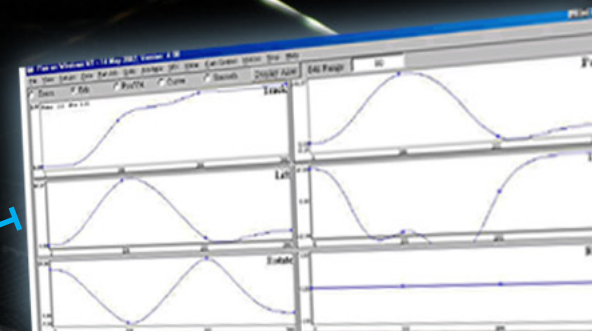
MANUAL PROGRAMMING



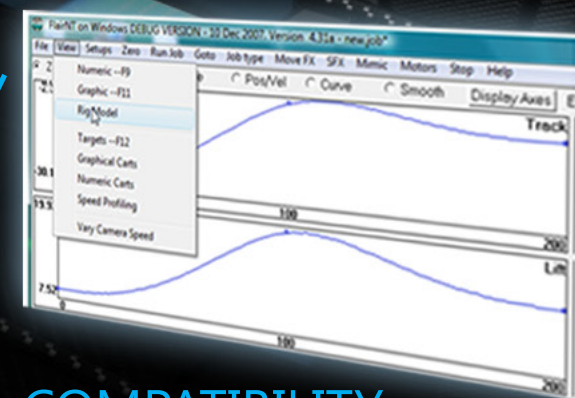
PROGRAMMING OF TRAJECTORY AND FOCUS CONTROL



FLAIR MOTION CONTROL SYSTEM CONTROLLER



FRAME BY FRAME FILMING WITH CUSTOMIZABLE PARAMETERS



COMPATIBILITY WITH CGI EDITORS

# FLAIR MOTION CONTROL SYSTEM CONTROLLER



## MANUAL CONTROL

FLAIR allows for manual control of the Motion Control system with the help of a range of manipulators.

## TRAJECTORY PROGRAMMING

Thanks to a unique PO, the FLAIR controller lets you create movement trajectories for the camera as well as control the speed and movement every step of the way.

## FLAIR MOTION CONTROL SYSTEM CONTROLLER

FLAIR Motion Control System — is a package of software and equipment solutions intended for full control of the mechanized cranes such as the MILO MC. FLAIR lets you control MILO MC as a whole as well as its individual components. The system is fitted with several processors that control different parts of the mechanized crane.

## CUSTOMIZABLE FOCUS CONTROL

FLAIR allows for the control of focus distance to the object from any part of the camera movement trajectory. All it takes is to insert the focus values and lens type. Apart from that, with the help of FLAIR it is possible to control the focus effects of the camera — Fade/Dissolve.

## FRAME BY FRAME FILMING WITH CUSTOMIZABLE SETTINGS

FLAIR lets you film in frame by frame mode with the option of changing frame rate from 0.1 to 125 FPS. Also customizable are the time of automatic freezing after each shot, determining the exact number of frames needed, toggling the camera disposition and the speed of shooting with every subsequent frame.

## COMPATIBILITY WITH CGI EDITORS

The data of the trajectory and the placing of the camera and the object from any place can be imported from FLAIR into any CGI editor for the creation of an identical virtual stage.



# ADDITIONAL EQUIPMENT AND ACCESSORIES



FLAIR IS THE MOST POWERFUL AND UNIVERSAL SOLUTION FOR FILMING VFX BUT WE STRIVE TO GIVE THE DIRECTOR AND DOP COMPLETE FREEDOM OF ACTION THANKS TO ADDITIONAL EQUIPMENT FOR MANUAL PROGRAMMING.

HANDWHEELS MSA-20 — is a controlling system intended for manual programming of panoramic filming and camera tilt

Grip Sticks — controller for manual programming of crane movement (includes up to 16 directions)

Focus Iris Zoom Lens Control Motors — a focus, diaphragm and lens zoom programming system

PAN BARS — a controller for the manual programming of panoramic filming and camera tilt

Bloop Lights — a lighting marker that simplifies searching of materials needed during editing

Focus Controller — a controller for the manual programming lens focus distance

Motion Base Controller — controller for manual programming of the 6-DOF system

Hand Held Box — a console for manual programming of basic movements of the MILO MC

Zoom Controller — a controller for manual programming of lens zoom

# CAMERA COMPATIBILITY

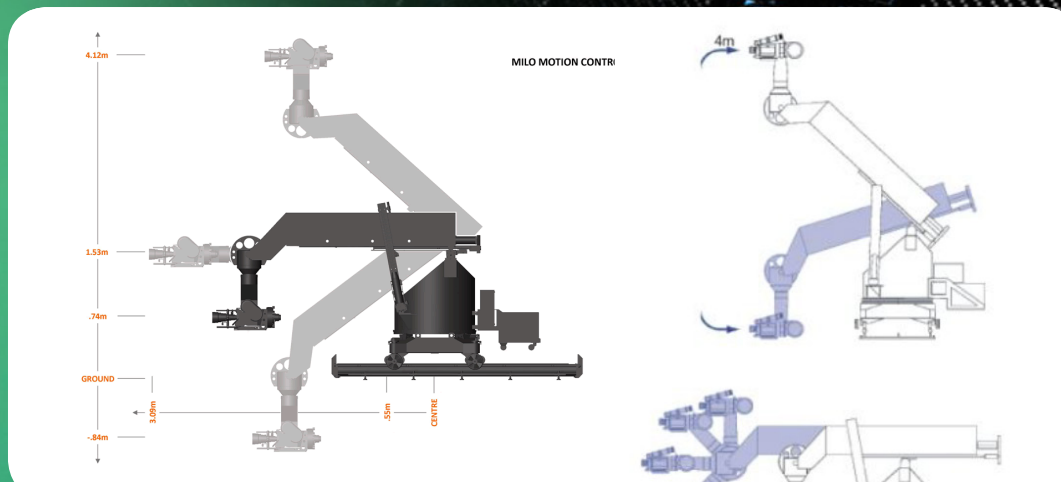
## CAMERA'S THAT SUPPORT THE FLAIR SYNCHRONIZATION SYSTEM

CAMERA	FRAME SPEED
Arri 435	continuous
Arri 435 Advanced/Extreme	any
Arri Alexa series	any
Arri Film Cameras	any
Moviemax Compact	any
Red One	24, 25, 30 FPS
	with external synchronization
Red Epic	any
Panavision Genesis	any
Panavision Film Cameras	any
DSLR Canon	not included
Phantom	up to 300 FPS
Phosonics Film Cameras	up to 300 FPS
Sony and Panasonic video cameras	continuous
Thomson/Grass Valley Viper	continuous
Weisscam and SI-2K	up to 300 FPS

MILO MC lets you create complex VFX scenes, including assimilating Motion Control and Motion Capture. DCU possesses one of the best MoCap systems provided by the Viacon Company and all the necessary infrastructure for the realization of complex tasks, including any cameras required.



# TECHICAL STATS OF THE MILO MC



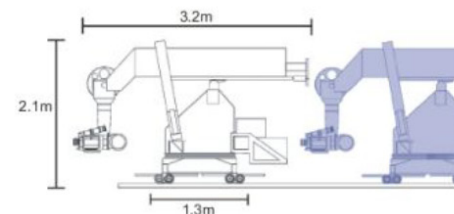
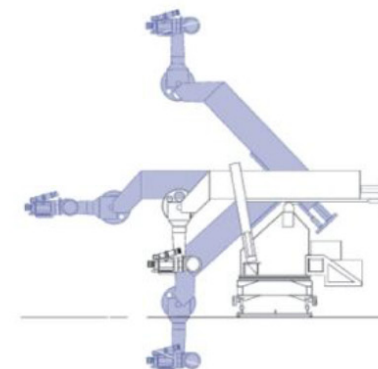
ACTION	RANGE	SPEED
Crane movement	by track's length	2 m/s
Arm rotation	unrestrained	30 deg/s
Arm ascension	+/- 45 degrees	24 deg/s
Arm extension	1 meter	38 sm/s
Camera carrier rotation	225 degrees	40 deg/s
Panorama Shot	unrestrained	120 deg/s
Camera tilt	290 degree	120 deg/s
Camera rotation	unrestrained	120 deg/s

**Electricity parameters:** 110-240 V, 50-60 Hz

**Generator capacity:** 6,5 KVA

**Arm height:** +412/-84 sm

**Total mass:** 710 kilo





## Contacts

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