

Weight & Balance

Innovative Information Technology
Takes a Load off Your Mind



Safety and productivity are top priorities for any cargo carrier. CHAMP Cargosystems' industry leading Weight & Balance solution makes aircraft loading more efficient, cuts costs and maximizes space utilisation. It also makes flying safer. The customer driven development sets industry standards. It ensures compliance with all IATA operational and safety requirements and individual operators' business rules. It can be seamlessly integrated into existing IT systems.

Benefits

- Most advanced, intuitive and user friendly application
- Message processing vastly reduces data entry
- Optimized autoloading positions full load in seconds
- Loadmaster retains full control of the loadplan
- Significant fuel savings by consistent achievement of target MAC
- Reduced loadsheet preparation time
- Increased efficiency and productivity
- Fewer load planning errors and delays
- Intelligent multi-sector flight loading facilitates efficient unloading
- Comprehensive security and audit trail

Next generation load planning

CHAMP Cargosystems' Weight & Balance solution is a powerful, yet intuitive and easy to use tool for load planning. The state-of-the-art application automates and speeds up load planning processes and loadsheet preparation for full freighters. Loads are positioned graphically using drag and drop. The industry leading optimized autoloading module can even plan a full aircraft to the optimal MAC in seconds while the loadmaster retains full control, especially over positioning complex loads. Autoloading will also intelligently plan multi-sector flights to maximize efficient unloading and cuts time on the ground.

Drive for cost savings

CHAMP's Weight & Balance produces the legally required documents for each flight, complying with EU-OPS 1.625 loading instructions, report forms and loadsheets. It is fed and populated by IATA standard and CargoIMP messaging which reduces input errors and saves up to 70 % of processing time. The intelligent load planner provides far more accurate results than previously used manual and excel based solutions. Significant fuel savings can be realized by consistent achievement of the target MAC. Higher operational efficiency and lower costs make a positive contribution to a carrier's financial performance. Weight & Balance is a well-proven tool and at the same time the most advanced on the market, and one of the fastest.

Features

- Web application - runs on standard browsers
- Rich graphical load display
- Drag-and-drop planning facility
- Dynamic checking of load limitations
- Enhanced accuracy using formulae instead of tables
- Clear alerting of incompatibilities
- Optimized autoloading including intelligent planning of multi-leg flights
- Full management and control of complex loads
- Supports industry standard messaging
- Complies with EU-OPS 1.625
- Stand-alone mode gives full functionality without an internet connection
- Comprehensive security and audit trail including access to all loadsheets

Designed by loadmasters for loadmasters

Industry leading optimized autoloading

CHAMP's Weight & Balance is a web-based solution that works with all standard internet browsers. Drag-and-drop functionality and rich graphical displays make load planning easy. Use of formulae instead of tables for aircraft configurations allows safe and accurate load planning while fully utilizing the available capacity. Linear interpolation enables calculations to be made to the nearest balance arm cm or inch. Compatibility and load limitation checks are made dynamically as the ULD is positioned. Clear alerts instantly highlight any discrepancies. The application accurately and safely manages all the necessary computations to produce loading instructions (LIRF) and loadsheets (graphical and IATA formats). All relevant messages (UWS, FUM, CPM, PLI, etc.) are fully supported.

All these features cut average load planning time already significantly but the industry leading, rules based autoloading capability takes the benefits to a new level. With a single click of the mouse, a full ULD load can be positioned in seconds, consistently achieving the optimal MAC defined for the aircraft.

CHAMP's Weight & Balance supports a standalone mode giving full functionality without an internet connection. Flight and aircraft data are downloaded from the central servers and completed load plans are uploaded when internet access is available.

All freighter aircraft are supported including:
747F (all versions),
777F, 757F, 737F
MD-11F
A330-F

FLIGHT PROGRESS		
Boeing 747-400F (LXCC5)	MIA - HSV - PIK - LUX	XX2222A/04Nov MIA - HSV
Preparation	Status	Action
LoadPlanning	■	Update
Display/Update Fuel	■	Update
Display/Update Payload	■	Update
Open Load Sheet		Open Open [G]
Open Loading Instruction		Open Open [G]
Persons on board	■	Update
Messages	Status	Action
UWS In	(0 received)(0 rejected)	View
FUM In	■	View
CPM In	■	View
Estimate ZFW	■	View
ZFW	■	View
Fuel In	■	View
CPM Out	■	View
ACARS Sent	■	View
UCM Out	■	View
LDM Out	■	View

[Back](#)

A simple solution for a complex problem

PLANNING AREA

Boeing 747-400F (LXCC5) MIA - HSV - PIK - LUX XX2222A/04Nov MIA - HSV

Personnel 0 Dead Head 0

PAYLOADS Sort By: weight BY SPHC Hide OHG

A2/PMC11026XX HSV/2093kg
 Q6/PMC60746XX PIK/1930kg
 Q7/PMC9466XX LUX/1743kg
 A1/PMC8333XX HSV/1098kg

A1	A2	B1	CR	DR	ER	FR	GR	HR	JR	KR	LR	MR	PR	QR	RR	SR	T	
			Q6 4085	Q6 2150	Q7 2279	Q7 2076	Q7 5727	Q7 5423 RCM	Q7 3090	Q7 2187	Q7 3138 RFL	Q7 2787	Q7 4805		Q7 2583	Q7 2708		
			Q6 2010	Q6 2180 RMD	Q7 2505	Q7 4540	Q7 5350	Q7 2056 MAG	Q7 4554 RCM	Q7 4716 RFL	Q7 3575	Q7 3470 RNG	Q7 3012	Q5 2029	Q7 3137	Q7 4834		
			CL	DL	EL	FL	GL	HL	JL	KL	LL	ML	PL	QL	RL	SL		
			11P PLD 2318	12P PLD 3239	21P PLD 2397	22P PLD 2137	23P PLD 2875				31P PLD 2370	32P PLD 3487	41P PLD 3654	42P PLD 2634	45R 710	52 1345	53	54
															45L 1201			

	Weight (kg)	Index (IU)	CG (%MAC)	STR-LIM (kg)
OEW	159983	59.40		
PLD	119373	15.87		128048
PERS + CREW ABV BASIC	0	.00		
ZFW	279356	75.27	31.55	288031 L
BLK	30000	0.00		
RMP	309356			389696
TXY	1000			
TOW	308356	75.27	30.47	388336
TRP	22000			
LDW	286356	75.27	31.27	302092
FAD	7000	0.00		
PLD FL	0	0.00		
Underload	8675			

Dangerous Goods: Yes Live Animals: No Temp Sensitive Cargo: No

Overall Status: ZFW LMT, TOW LMT, LDW LMT, EXT ZFW, M/D LOAD, L/D LOAD, FUEL LD, CNTL LD, CUM LMT, CMB LMT, UNSY LD, LTRL LD, RMPW LMT, TIE DOWN

Itinerary: HSV, PIK, LUX

Complete load planning with a mouse click

A clear and uncluttered screen facilitates the loading process. The load, which can be created automatically from an inbound UWS message received from the cargo operational system, is displayed graphically across the top of the screen. Detailed information is displayed in a pop up box by hovering the mouse over the ULD.

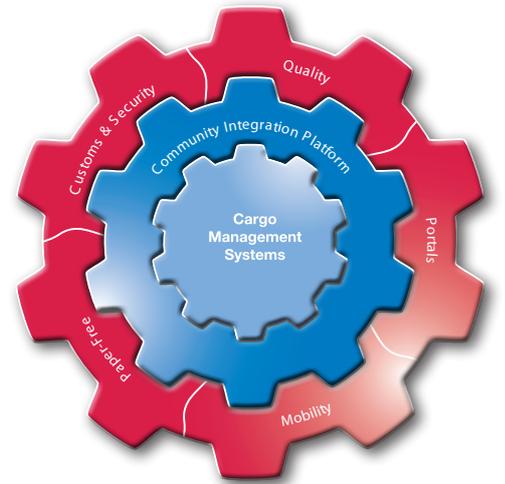
Dragging a ULD onto a position initiates all the calculations dynamically. Any discrepancies are clearly indicated.

In addition, color coding is used e.g. to highlight exceeded critical limitations. The load plan can only be finalized when the entire load has been positioned and all checks are green or yellow. Alternatively, autoloading will complete the planning of the flight in a few seconds on the click of a mouse, optimizing the load plan to the target MAC for the aircraft but respecting all the same compatibility and load limitation checks.



Our Portfolio

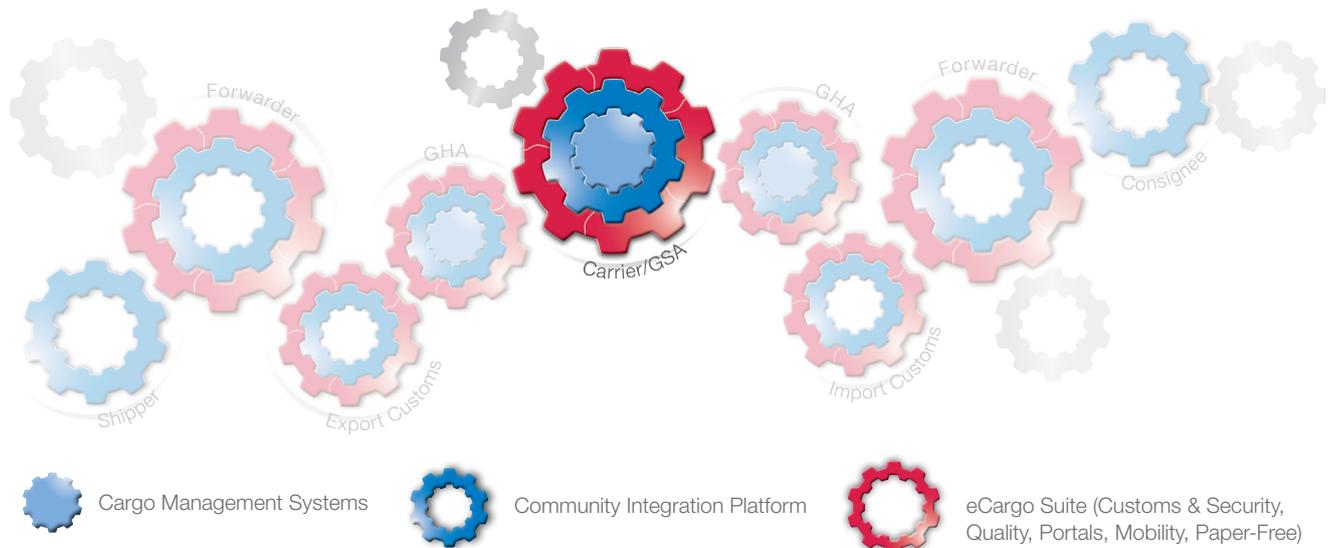
CHAMP Cargosystems provides the most comprehensive range of integrated IT solutions and distribution services for the air cargo transport chain. Our portfolio spans Cargo Management Systems, messaging and integration services through our Community Integration Platform and a comprehensive suite of eCargo solutions. These include applications to meet customs and security requirements, quality optimization, as well as e-freight and mobility needs. The products and services are well known under the Cargospot and Traxon brands.



The CHAMP Global Community

CHAMP serves over 200 airlines and GSAs and connects these with some 3,000 forwarders and GHAs. Our global community ranks among the largest in the industry. The size and combined expertise of the CHAMP global community allows us to leverage economies of scale to the benefit of all.

CHAMP's Weight & Balance is available for all freighter aircraft.



About us: CHAMP Cargosystems was founded in Luxembourg in 2003 as a 100% subsidiary of Cargolux Airlines. In January 2005, CHAMP was merged with SITA Cargo (UK) Ltd. Only three years later, we acquired Softair AG and the acclaimed Cargospot portfolio. The company expanded rapidly and in 2010 opened a development center and operational office in the Philippines. In November 2011, we took over Traxon Europe, a provider of leading edge electronic communication solutions. Some 450 people are now working for CHAMP all over the world. We provide global solutions delivered locally to you. For further information see: www.champ.aero **CONNECTED THINKING FOR THE AIR CARGO COMMUNITY**



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