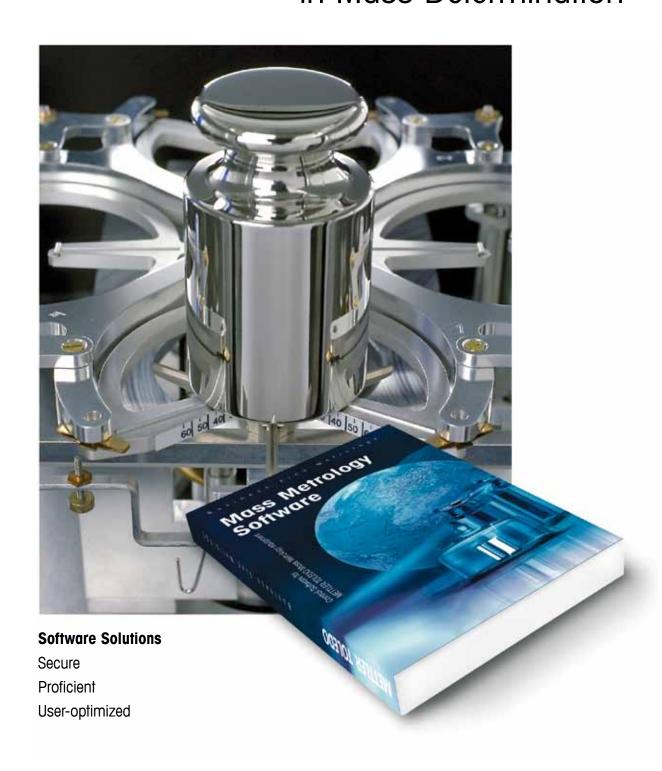
## **Efficiency**

## in Mass Determination





# **Software Solutions** at a Glance

For a flawless traceability of weights to the International Prototype Kilogram it takes the most accurate Mass Comparator and a highly efficient software solution to exclude any error caused by human factor.

When comparing weights with references, you can best rely on METTLER TOLEDO's unique expertise in the world of mass determination: Tailored software solutions for Mass Comparators guarantee efficient workflows and accurate and secure results, assuring full traceability at all times.

# Efficiency Pack Air Buoyancy Post Processor **Efficiency in Nature** Task Manager It is estimated that one third of the human food supply depends on insect pollination, MCLink most of which is accomplished by bees. a\_ControlPro WeighCom AX\_Control XP Efficiency WeighCom a\_Control AX Manual Solutions

#### **Product Overview**



#### WeighCom and MCLink

The software solutions for Manual Mass Comparators. WeighCom and MCLink enable a guided mass comparison of weights including fully detailed reports. MCLink also calculates the uncertainty budget and STD for statistical process control.



#### AX, a\_Control and a\_ContolPro

The software solutions for Automated and Robotic Comparators.

The latest generation of mass comparator control software AX\_Control and a\_ControlPro enable complete automated workflows, including weight comparisons, air data acquisition and measurement reports.



#### **Efficiency Pack**

Boosts the efficiency of Automated and Robotic Mass Comparators. The Task Manager and the Air Buoyancy Post Processor (ABPP) increase efficiency by additional automation of weight comparisons and data processing.

#### **Non-stop Comparisons**

The Task Manager module in the Efficiency Pack enables Robotic Comparator Systems to auto-run multiple weighing processes without human intervention and time effort.

#### Intelligent Processing

The Air Buoyancy Post Processor (ABPP) applies air buoyancy corrections automatically for true and conventional mass. In addition, it offers the possibility to process data any time later on.

## **Efficiency Pack**

the Future of Mass Comparison

Automated Solutions Robotic Solutions

System

 $2 \mid$  3

#### **Software Solutions for Mass Determination**

#### WeighCom For Manual Comparators

### 

#### **Benefits**

- · Simple configuration
- One touch calibration
- Acoustic and on-screen user guidance
- Comprehensive report

#### **Main Features**

- User guided weight determination
- Operates in multiple languages
- Database for 32 reference weights
- 8 definable processes
- · Air buoyancy correction
- Automatic report print out
- Protection of sensitive data
- Data transfer with RS232

#### MCLink For Manual Comparators



- Straightforward configuration
- User-friendly process guidance
- Simultaneous mass comparison up to 4 Comparators
- · Flexible process definition
- Secure data setting

- Air buoyancy correction
- Uncertainty budget calculation
- Unlimited standards database
- · Customized weighing schemes
- · Measurement reports in .txt or .xls
- Compatible with all Manual Mass Comparators (AT, AX, UMT, UMX, PR, KA, XP, etc)

#### **AX Control and a Control** For Automated and Robotic Comparators



- Fully automated process
- Utmost performance with minimize human intervention
- · Automatic data reporting
- · Optimized process start time
- Direct data export via serial port
- Serial interface Comparator control
- Automatic climate data acquisition
- Full freedom in magazine places selection
- Weighing process monitoring
- Detailed report in .xls or .txt

#### a ControlPro For Robotic Comparators

- Full dissemination capabilities
- Automatic upward / downward calibrations with groups of up to three weights

#### Efficiency Pack For Automated and Robotic Comparators

	Data calculated with program AirSuoyancyPostProcessor v0.991									
Sroup	Series	Pos B VS.	Pos A	Non.value A	Mass Error A	Dens.B	Dens.A	Diff.Average	Std.D	
				[g]	[mg1	(kg/n^31	1kg/m^31	(ng)		
01	01	9:91	9:91	100.000	-0.0301	8009.150	8009.150	0.0001	0.0	
01	0.2	9:91	9:P1	100.000	-0.0301	8009.150	8009.150	-0.0001	0.0	
01	0.3	S:P1	8:91	100.000	-0.0301	8009.150	8009.150	0.0001	0.0	
01	Avg.	9:91	8:91	100.000	-0.0301	8009.150	8009.150			
02	01	8:92	8:72	100.000	0.1578	7959.240	7959.240		0.0	
0.2	0.2	9:72	8:72	100.000	0.1578	7959.240	7959.240	0.0001	0.1	
12	0.3	8:92	8:72	100.000	0.1578	7959.240	7959.240	0.0002	0.1	
12	Avg.	8:92	8:72	100.000	0.1578	7959.240	7959.240			
13	01	8:23	8:23	100.000	0.2158	7959.190	7959.190		0.1	
13	0.2	8:23	8:23	100.000	0.2158	7959.190	7959.190	-0.0001	0.1	
13	0.3	8:23	8:23	100.000	0.2158	7959.190	7959.190	0.0006	0.1	
13	Avg.	8:23	8:23	100.000	0.2158	7959.190	7958.190	0.0002		
14	01	8:92	8:91	100.000	-0.0301	7959.240	8009.150		0.1	
14	0.2	8:92	8:91	100.000	-0.0301	7959.240	8009.150	0.0938	0.1	
14	0.3	8:92	8:91	100.000	-0.0301	7959.240	8009.150	0.0945	0.1	
14	Avg.	8:92	8:91	100.000	-0.0301	7959.240	8009.150	0.0954		
25	01	8:23	8:91	100.000	-0.0301	7959.190	8009.150	0.1589	0.1	
25	0.2	8:23	8:91	100.000	-0.0301	7959.190	8009.150	0.1587	0.1	
25	0.3	8:23	8:91	100.000	-0.0301	7959.190	8009.150	0.1591	0.1	
25	Avg.	8:23	8:91	100.000	-0.0301	7959.190	8009.150	0.1589		
36	01	8:23	8:72	100.000	0.1578	7959.190	7959.240	0.0620	0.1	
36	0.2	8:23	8:72	100.000	0.1578	7959.190	7959.240		0.1	
36	0.3	8:23	8:72	100.000	0.1578	7959.190	7959.240	0.0639	0.1	
90	Avg.	8:23	8:72	100.000	0.1578	7959.190	7959.240	0.0630		

- Task Manager for multiple jobs
- Air density calculation according CIPM 2007
- Air buoyancy correction calculation
- Enhance productivity by running all loaded weights at once
- · Older reports compilation at any time
- ABPP Air Buoyancy Post Processor
- Individual measurements report
- Conventional and true mass calculation
- Reporting in .xls or .doc



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For more information