Miele

The perfect fit.
Our SlimLine laboratory glassware washers

Miele Professional. Immer Besser.

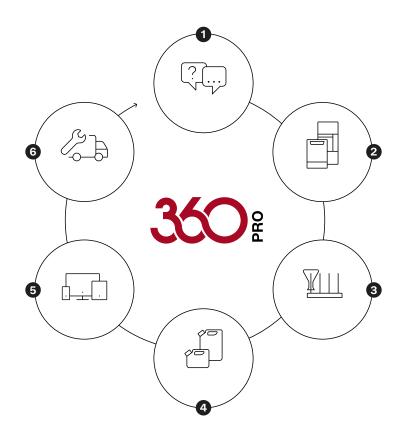


Miele 360PRO

360 e

The holistic system solution for laboratories of all types

Precision is a responsibility – and this sense of responsibility inspires us. We have developed 360PRO to help your laboratory team deliver reliable results time after time.



1. Consulting

Are you ready to start? Based on your needs, we provide advice, defining requirements and selecting the most suitable machines, holistic planning and process optimization. For maximum transparency, we invite you to bring your own glassware for a test wash in our showroom before purchasing a machine.

2. Machines

We find the right laboratory washers to meet your specific needs, as well as washing machines and dishwashers for associated tasks. Our laboratory washers ensure excellent cleaning results combined with the gentlest of treatment. Automated program cycles reduce the amount of work involved and save time. High capacities together with special-purpose cycles ensure the efficient use of resources and excellent cost-efficiency.

3. Accessories

SimpleLoad is our innovative basket system for fast, flexible and efficient loading. Besides this, we offer accessories such as those for optimizing water treatment.

4. Detergents

With ProCare Lab, we offer process chemicals which perfectly match your laboratory washers to ensure top-class results combined with maximum protection of materials and economical dispensing.

5. Digital solutions

Connected machines, optimized processes and service support — Miele ensures transparency and efficiency in your workflow.

6. Service

Whether you need advice on application technology, repairs or annual maintenance, our service team ensures that your machines are always ready when you are!

Our SlimLine laboratory glasswashers

The new generation of SlimLine laboratory glassware washers allows the use of up to three baskets on telescopic runners which can be positioned and connected to the water circuit at four different levels - providing maximum flexibility through multiple chamber configurations depending on the height of loaded items.

The SimpleLoad system is now also available on SlimLine models, simplifying loading and supporting users in correctly positioning their items of laboratory glassware. It facilitates thorough internal cleaning of glassware of all shapes and sizes and provides secure positioning and, of course, maximum protection of materials during washing.

With a variable-speed pump, circulation pressure and water consumption is optimized to individual loads. The Miele PLW 7111 laboratory glasswashers offer versatility, safety, high performance, and process traceability with low total life costs.





PLW 7111 Benefits at a Glance



Slim on the outside, big on the inside. The PLW 7111's small footprint with a width of just 25 9/16" | 650 cm comes with a large capacity that can clean up to 192 bottles (100mL), 108 bottles (250mL), or up to a 50L carboy.



Maximum flexibility is combined with intuitive use. The SmartLoad Plus system allows more flexibility with the availability of up to three loading racks simultaneously. Loading is made fast and easy with a wide range of standard and configurable loading options.



The variable speed pump adjusts circulation pressure (maximum performance when needed) and water consumption (water conservation when possible). A saving up to 15% in water consumption (10L) can be achieved between Standard and Standard Plus programs.



Thanks to the optional preheated tank, it is possible to save time and to have reprocessed items available sooner without diminishing process quality. The tank does not take chemical storage space, but can reduce the cycle time twice as much compared to a boiler.



The PLW 7111 is ready for connection to Miele Cloud Service (Miele MOVE*) and allows direct access to machine and performance data, allowing increased uptime through remote diagnostics.

* USA Only



Thanks to the SimpleLoad injection nozzles, plastic supports, injection modules and support frame, easy loading and unloading of glassware is achieved in an efficient and safe manner.

Intuitive and safe operation

- Intelligent controls with 7" colour touch display, optimized programs and 20 vacant program slots
- Simple and effective cleaning
- USB interface integrated in machine front
- Ready for connection to process documentation software









Visual monitoring of chamber

- Process control thanks to full glass door
- Machine status easily identifiable thanks to 3-color chamber lighting
- Automatic door lock

Thorough and efficient cleaning processes

- Chamber, spray arms and tank filters made from high-grade, electro-polished stainless steel (DIN 1.4404/AISI 316L)
- Conductivity monitoring for high-level process quality¹
- HEPA H14 fine filter for germ-free drying air
- Integrated water softener
- Heated tank for shorter cycle times¹
- Oil version¹
- Industrial voltage 480V1



Comparison PLW 6111 vs. PLW 7111

	PLW 6111	PLW 7111
Optional Variants and accessories		
Electric/Steam	No	Yes
Industrial 480V	No	Yes
Loading racks	Telescopic + wheels	Telescopic
Oil Seals	No	Yes
Interchangeable basket levels	No — Many baskets	Yes — Less baskets Magnetic sensor
Injectors	No SimpleLoad — Injectors limited to model only	SimpleLoad — Injectors interchangeable with other lab models
Program design	Unique for all loads	Regular + Plus programs
Machine Dimensions		
Chamber volume, L	210	241 (+15%)
Roller plinth	No	Yes -Integrated
Capacity		
Bottles, 1000mL	32	32
Bottles, 250mL	84	108 (+29%)
Bottles, 100mL	126	192 (+52%)
Carboy, 50L	1	1
Specs & Features		
Circulation pump	Fixed	Variable Water savings (15%) Standard vs Standard Plus
Pre-heating	Boiler 18L capacity, 4.5KW Energy savings (5 min)	Tank 16L capacity, 4.0KW Better technology Energy savings (9 min) With vs without tank Standard vs Standard Plus
Chemical storage	Outside machine	Built-in
Touch Display	3.5" key pads	7" full touch
Water Softener	No	Yes — Built in
Chamber Lights	1-color	3-color
Status indicator light	No	Yes
DOS pumps	Peristaltic	Membrane
Process Documentation		
USB	No	Yes
Printer	Yes	Yes
Wifi	No	Yes
Ethernet	No	Yes
Move Connect (USA only)	No	Yes — Integrated

SimpleLoad — Fast loading and highly efficient use of chamber space



Support frame

The holder frame offers additional load stability. As and when required, it is placed on top of the injector module, providing a secure hold even to particularly large items of laboratory glassware in a vertical and protected position.

Thorough cleaning thanks to injector nozzles

Even if a nozzle tip rests against the base of a glass, the injector nozzles still guarantee thorough cleaning. The support surrounds the injector rail in the module or basket, preventing lateral movement of the load items without wasting valuable height.

SimpleLoad equates to efficiency and convenience

- An injector system for all common injector modules and many other load carriers enables the simple and flexible loading of a laboratory glassware washer
- Optimum use of available chamber height
- Particularly fast and simple arrangement of load items
- Thorough internal cleaning of glassware of all shapes and sizes
- Secure hold and exceptional protection of materials during a wash cycle
- Injector nozzles available in 3 diameters,
 6 lengths
- Matching plastic holders and supports
- Injector modules with 8, 18 or 32 injectors
- Holder racks for 8, 18 or 32 injector positions

Holder rack





The supports of the holder rack ensure the stable positioning and thorough cleaning during the wash process.



The positioning of the glassware is easy, quick, and self centering.

Injector nozzles





Low support base for nozzles maximize the load height and increases the chamber space.

SlimLine laboratory glasswasher PLW 7111

General

SlimLine laboratory glasswasher	PLW 7111				
External dimensions [Width x Height x Depth mm]	650, 1965, 702				
External dimensions [Width x Height x Depth in]	25 9/16, 77 3/8, 27 5/8				
Chamber dimensions [Width x Height x Depth mm]	570, 717, 590				
Chamber dimensions [Width x Height x Depth in]	22 7/16, 28 1/4, 23 1/4				
Usable capacity [I, cu.ft]	241, 8.51				
Load concept	Rack system with max. 3 baskets	in 4 different positions			
Programs	20 vacant program slots				
Program selection	7" color touch display				
		Features (model-dependent)			
Features		Electric heating			
Single-door model	•	Electric/steam heating			
All-glass bottom-hinged door	•	Optional electrical 480V for industrial use			
3-color chamber lighting as status indicator	•				
Chamber material	1.4404/316L	Pre-heating tank			
Dispenser pumps [qty]	2	Drain pump			
Variable-speed pump	•	Drying incl. HEPA H14 filter			
Water connections	HW, CW, demineralized water	Steam condenser			
Electrical connection 3 AC 208 V, 60 Hz, 35 A	•	Water softener			
Total rated load [kW]	10.1	Conductivity meter Specifications for oil-based			
WiFi	•				
USB port	•	applications			
Process chemical capacity	3 x 5 l	Demineralized water pump			
Ethernet interface	•				
Leakage sensor	•	Optional modules			
		Potential-free contacts			
Load capacity		Additional dispenser pumps			
100 ml laboratory bottles	192	Sampling tap			
250 ml laboratory bottles	108	, ,			
1000 ml laboratory bottles	32				
Pipettes	98				

Model overview

		Hea	ting			F	eature	S			Ordering information		
Model	Connection	Electric	Electric/Steam	Drying	Steam condenser	Drain pump	Water softener	Pre-heating tank	Conductivity meter	Oil version	Mat. no.	Art. no.	
PLW 7111 [S-1012]	3 AC 208V/60 Hz	•	_	•	•	•	•	-	-	_	11879780	62711101USA	
PLW 7111 [S-1020]	3 AC 208V/60 Hz	-	•	•	•	•	•	-	-	_	11879820	62711104USA	
PLW 7111 [S-1021]	3 AC 208V/60 Hz	•	_	•	•	•	•	•	•	_	11879800	62711103USA	
PLW 7111 [S-1022]	3 AC 208V/60 Hz	-	•	•	•	•	•	•	•	_	11879840	62711106USA	
PLW 7111 [S-1023]	3 AC 208V/60 Hz	•	-	•	•	•	•	-	-	•	11879790	62711102USA	
PLW 7111 [S-1024]	3 AC 208V/60 Hz	_	•	•	•	•	•	_	_	•	11879830	62711105USA	
PLW 7111 [S-1021]	3 AC 440-480V/60 Hz	•	_	•	•	•	•	•	•	_	12025720	62711131USA	
PLW 7111 [S-1022]	3 AC 440-480V/60 Hz	_	•	•	•	•	•	•	•	-	12025730	62711132USA	

Baskets for injector modules and inserts



APLW 106

Basket, for injector modules or inserts.

- For use on Levels 1 to 4
- Basket with two docking connections
- For loading up to 2 injector modules or inserts
- Connection automatically sealed when not in use
- Loading dimensions: Width 507 mm, depth with holding rail 439 mm, without holding rail 525 mm, height dependent on position on which basket is used and on other baskets in use
- H 151.3, W 559.3, D 621.2 mm

Mat. no. 11854610



APLW 107

Basket, height adjustable, for optimum loading of inserts.

- For use on Levels 2 to 4
- Open front
- For optimum loading of inserts
- With integrated spray arm
- Loading dimensions: Width 507 mm, depth 545 mm, height-adjustable +/- 30 mm, height dependent on position on which basket is used and on other baskets in use
- H 150.5, W 559.3, D 594.4 mm

Mat. no. 11854290



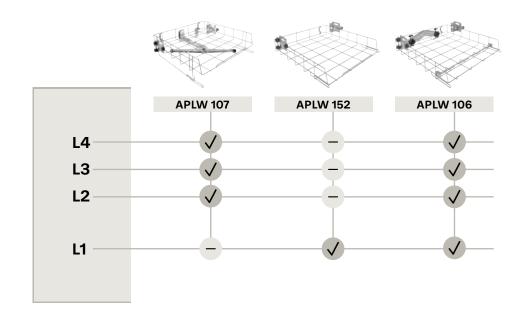
APLW 152

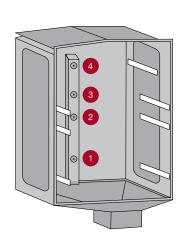
Baskets, for various inserts.

- For use on Level 1
- · Vertical clearance dependent on other baskets used
- Clearances: width 507 mm, depth 545 mm
- H 151, W 560, D 596 mm

Mat. no. 11854310

Load dimensions and sample configurations*





Injector module for bulky laboratory glassware

For use in APLW 106 basket



Injector module, ideal for large-volume laboratory glassware and carboys up to 50 I

- For use on Level 1Equipped with a special injector nozzle
- Equipped with a holding frame
- Max. bottle diameter: 380 mm
- Bottle height: 560 mm to 620 mm
- Bottle neck diameter: min. 30 mm internal, max. 80 mm external
- H 532, W 505, D 526 mm



Injector modules for laboratory glassware



For use in APLW 106 basket

Select from a range of freely configurable or pre-configured injector modules.



A 300/2

Injector module for optimum loading of laboratory glassware – can be equipped with 8 nozzles.

- Suitable for laboratory glassware incl. Erlenmeyer and round flasks
- Module without injector nozzles Configuration based on individual needs
- For up to 8 injector nozzles
- Particularly suitable for Ø 6 mm injectors, e.g. A 840 or A 841,
- other diameters possible depending on application
- Nozzle spacing 118 mm across width, 118 mm across depth
- H 72, W 133, D 479 mm

Mat. no. 11056800



A 301/4

Injector module for optimum loading of laboratory glassware – can be equipped with 18 nozzles.

- Suitable for laboratory glassware incl. Erlenmeyer and round flasks
- Module without injector nozzles Configuration based on individual needs
- For up to 18 injector nozzles
- Particularly suitable for Ø 4 mm injectors, e.g. A 842 or A 843,
 - other diameters possible depending on application
- Nozzle spacing 78 mm across width, 78 mm across depth
- H 72, W 173, D 479 mm

Mat. no. 11056810



A 302/2

Injector module for optimum loading of laboratory glassware – can be equipped with 32 nozzles.

- Suitable for laboratory glassware incl. Erlenmeyer and round flasks
- Module without injector nozzles Configuration based on individual needs
- · For up to 32 injector nozzles
- Particularly suitable for Ø 2.5 mm injectors, e.g. A 844 or A 845, other diameters possible depending on application
- Nozzle spacing 60 mm across width, 57 mm across depth
- H 72, W 195, D 479 mm

Mat. no. 11056820



A 300/3

Injector module for optimum loading of laboratory glassware – equipped with 8 nozzles.

- Suitable for laboratory glassware, incl. Erlenmeyer and round flasks (250 - 1,000 ml).
- Equipped with four A 840 nozzles and four A 841 nozzles
- Nozzle spacing 118 mm across width, 118 mm across depth
- H 228, W 208, D 479 mm

Mat. no. 11116900



A 301/5

Injector module for optimum loading of laboratory glassware – equipped with 18 nozzles.

- Suitable for laboratory glassware, incl. Erlenmeyer and round flasks (50 - 250 ml).
- Equipped with nine A 842 nozzles and nine A 843 nozzles
- Nozzle spacing 78 mm across width, 78 mm across depth
- H 203, W 232, D 493 mm

Mat. no. 11116950



A 302/3

Injector module for optimum loading of laboratory glassware – equipped with 32 nozzles.

- Suitable for laboratory glassware, incl. Erlenmeyer and round flasks (25 - 100 ml).
- Equipped with 16 A 844 nozzles and 16 A 845 nozzles
- Nozzle spacing 60 mm across width, 57 mm across depth
- H 143, W 238, D 479 mm

Injector nozzles for laboratory glassware



For use with SimpleLoad injector modules

For additional protection, stability and centring of load items, there is a matching holder rack for each injector module.





Holder rack for A 300/2 and A 300/3 injector modules

• Arrangement: 2 x 4 compartments

Mat. no. 11056800

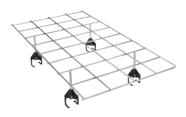


A 861

Holder rack for A 301/4 and A 301/5 injector modules

• Arrangement: 3 x 6 compartments

Mat. no. 11056810



A 862

Holder rack for A 302/2 and A 302/3 injector modules

- Arrangement: 4 x 8 compartments
- Plastic-coated

Mat. no. 11056820

Select nozzles to configure injector modules.



A 840

Injector nozzle Ø 6 x 130 mm

- For items with neck diameters of between 12 and 85 mm
- Diameter of cap at top: 11 mm

Mat. no. 11056100



Δ 841

Injector nozzle Ø 6 x 210 mm

- For items with neck diameters of between 12 and 85 mm
- Diameter of cap at top: 11 mm

Mat. no. 11056190



Δ 842

Injector nozzle Ø 4 x 90 mm

- For items with neck diameters of between 10 and 70 mm
- Diameter of cap at top: 9 mm

Mat. no. 11056330



A 843

Injector nozzle Ø 4 x 185 mm

- For items with neck diameters of between 10 and 70 mm
- Diameter of cap at top: 9 mm

Mat. no. 11056440



A 844

Injector nozzle Ø 2.5 x 80 mm

- For items with neck diameters of between 6 and 55 mm
- Diameter of cap at top: 5 mm

Mat. no. 11056600



A 845

Injector nozzle Ø 2.5 x 125 mm

- For items with neck diameters of between 6 and 55 mm
- Diameter of cap at top: 5 mm

Injector modules for pipettes, vials, measuring cylinders, viscosimeters and sedimentation cones



For use in APLW 106 basket



Δ 303

Injector module, for optimum loading of up to 98 pipettes.

- Suitable for 98 measuring and full pipettes, for example
- Height of holder rack: 150 mm
- H 185, W 225, D 471 mm

Mat. no. 9862560



A 312

$\label{localization} \textbf{Injector module for reprocessing viscometers.}$

- Suitable for up to 8 viscometers
- Equipped with 8 x A 867 special nozzles
- Nozzle spacing 118 mm across width, 118 mm across depth
- H 395, W 164, D 475 mm

Mat. no. 11054470



A 846

Injector nozzle, with support, for laboratory bottles and round flasks.

- For laboratory bottles, max. 10 I, and round flasks, max. 6 I
- Nozzle length: 127 mm, Nozzle length with holder:
 158 mm
- Nozzle diameter: 10 mm



A 304

Injector module, for optimum loading of up to 98 pipettes.

- Suitable for 98 centrifuge tubes, vials, test tubes, for example
- H 130, W 222, D 471 mm

Mat. no. 9862570



APLW 870

Set of injector nozzles, with supports, for cleaning sedimentation cones (Imhoff).

- Set consists of 4 special nozzles with holders
- Max. diameter 120 mm, max. height 470 mm
- For use with separately available A 300/2 injector module
- For use with separately available A 300/3 injector module
- H 290, W 125, D 125 mm

Mat. no. 12151110



A 847

Injector nozzle, with support, for Erlenmeyer flasks.

- For Erlenmeyer flasks, max. 5 l
- Nozzle length: 127 mm
- Nozzle Ø: 10 mm, Support Ø: 142 mm

Mat. no. 11025600



A 306/

Injector module, ideal for large-volume laboratory glassware.

- Suitable for $4 \times 1 2$ I measuring cylinders, tall form
- Suitable for 2 x 1 2 I measuring cylinders, short and 2 tall
- · Plastic-coated contact surfaces
- Measuring cylinders even removable when module is in machine
- H 418, W 235, D 471 mm

Mat. no. 11035210



A 313

Injector module for reprocessing large-volume laboratory glassware.

- Adapts to various types of laboratory glassware using A 846, A 847 and A 848 injector nozzles:
- Laboratory bottles, 2 I 10 I
- Round flasks, 21-61
- Erlenmeyer flasks, 2 I 5 I
- Measuring cylinders, 2 I 5 I
- Depending on the diameter, for 2 or 3 load items
- H 361, W 255, D 614 mm

Mat. no. 11055970



A 848

Injector nozzle, with support, for measuring cylinders.

- For measuring flasks, max. 5 l
- Nozzle length: 350 mm
- Nozzle Ø: 10 mm, Support Ø: 142 mm

Inserts and other components

For use in APLW 107 and APLW 152 baskets







A 321

E 103/1, E 104/1, E 105/1, E 139/1

E 106

Article	Description	Mat. no.			
Inserts for test tubes, funnels, beakers, wide-necked glassware, measuring cylinders					
A 13	Lid to secure sensitive load items, replacement for use on E 103, E 104, E 105 and E 139.	03810200			
A 14/1	Lid, for securing delicate load items for AK 12/1.	11131560			
A 321	Insert, for various utensils	11309380			
A 322	Lid, for securing delicate load items, for A 321.	11874380			
AK 12/1	Insert, for various utensils	11131690			
E 149	Insert, for max. 80 test tubes, 16 x 105 mm.	03808800			
E 103/1	Insert, for test tubes, 12 x 75 mm.	06907630			
E 104/1	Insert, for test tubes, 12 x 105 mm.	06907640			
E 105/1	Insert, for test tubes, 12 x 165 mm.	06907650			
E 139/1	Insert, for test tubes, 12 x 200 mm.	06907660			
APLW 040	Insert, for test tubes, height 100 mm.	11105000			
APLW 041	Insert, for test tubes, height 130 mm.	11105010			
APLW 042	Insert, for test tubes, height 200 mm.	11105020			
APLW 043	Lid for APLW 040 – 042 inserts.	11105030			
APLW 044	Separator net, for dividing base in APLW 040, APLW 041 and APLW 042.	11105040			
E 106	Insert, for wide-necked glassware, measuring cylinders, etc.	03808310			
E 106/1	Insert, for wide-necked glassware, measuring cylinders, etc.	03808320			
E 106/2	Insert, for wide-necked glassware, measuring cylinders, etc.	03808330			
APLW 038	Insert, for wide-necked Erlenmeyer flasks and measuring cylinders.	11104980			
E 109	Insert, for beakers, max. 250 ml.	03808360			
E 110	Insert, for beakers, max. 250 – 600 ml.	03808390			
E 111	Insert, for beakers, max. 600 – 1,000 ml.	03808420			
E 144	Insert, for max. 18 beakers, max. 250 ml.	03808710			

Article	Description					
Inserts for Petri dishes, watch glasses, microtitre plates, etc.						
E 118	Insert, for half petri dishes.	03830270				
E 402	Insert, for max. 44 watch glasses.	03830420				
E 494	Insert, for 5 microtitre plates.	06570920				
E 136	Insert, for 56 half petri dishes.	03830280				
E 403	Insert, for max. 105 watch glasses.	03830430				
E 137	Insert, for 56 half petri dishes.	03830290				
APLW 039	Insert, for half petri dishes.	11104990				
E 134	Insert, for 210 slides.	03808600				
Further components						
A 2	Cover net, for securing delicate load items.	03830460				
A 3	Cover net, for securing light-weight items in inserts.	03830470				
A 11/2	Insert, for gentle cleaning of delicate load items by softening the spray jet.	11239130				
A 320	Insert, for gentle cleaning of delicate load items by softening the spray jet.	11295510				
A 838	Tool set, for adjusting basket heights and installing/removing injector nozzles.	11054290				
E 336	Irrigation sleeve, for pipettes/MIS instruments in injector units.	03809390				
SD-B	Injector nozzle for butyrometers	03583540				
E 362	Blind stopper, for sealing connections on load carriers.	03809630				

More details on accessories available on our website:



www.mieleusa.com/p



www.mieleprofessional.ca



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Immer besser

Since 1899, Miele — a family-run company — has subscribed to a clear corporate philosophy condensed into the two words 'Immer Besser' (forever better). This overarching claim is the foundation of Miele's proverbial quality and sustainability and the power of innovation of a brand 'Made in Germany'. A brand promise which gives professional users the certainty of having chosen the right product.

Award-winning

Uncompromising product reliability and service dependability is the reason why customers have repeatedly voted Miele the best and most trustworthy brand. Coveted awards such as the MX Award, the iF and reddot Design Awards and the German Sustainability Prize confirm the distinguished position Miele enjoys with respect to design, quality management and the sparing use of resources.

Proficient

Miele Professional has been developing and manufacturing a broad range of high-quality laundry machines, dishwashers, washer-disinfectors and sterilisers for decades. Carefully selected accessories, comprehensive advisory services and a Miele service operation which guarantees fast response times ensure that machines perform to perfection and offer the ultimate in capacity and efficiency.

Miele Professional on the web

- For detailed information on technical data, features and accessories
- Brochures covering all product groups and applications available as downloads
- Detailed information, instructions and product presentations on Miele Professional's YouTube channel