



Highly Efficient Water, Glycol & Oil  
**Optimize your process  
temperature management**

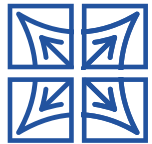
[omi-italy.it](http://omi-italy.it)





# Product Group Overview & Key benefits

Our water & oil chillers come in a wide range of sizes, offering **cooling capacities from 0,8 kW up to 465 kW** with power consumption starting as low as 0,88 kW. All our products are **ISO9001 & PED certified** and are **Industry 4.0-ready**, making them a perfect long term investment to improve your operational capability. All of chillers can be configured to match your specific requirements. Browse the catalog to learn more and discover the world of truly efficient chilling equipment.



## Flexible solution

Broad range of models and options available to satisfy your unique process needs.



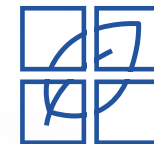
## Easy use & maintenance

Ergonomic design along with advanced controls allow for simple & trouble free operation.



## Reliable & Efficient

Unique design features and high-quality materials allow for high durability and maximum performance while maintaining low energy consumption.



## Ecological

Ecological Refrigerant Gas R513A standard in the smaller models (up to CHW 67 - CHO67) and optional on larger models.



# Industries

In the ever-evolving landscape of industrial refrigeration, the demand for reliable and efficient cooling solutions has never been more critical. OMI water, glycol and oil chillers stand at the forefront of this industry, offering a product range that is not only diverse but also tailored to meet the specific needs of various demanding industrial applications such as laser cutting or food & beverage production and storage.

OMI's water, glycol and oil chillers are built to provide reliable and optimum performance to companies that utilize cooling systems in a variety of industries and applications. Our customer-centric approach enables us to develop products that answer common industrial production pain-points and help ensure uninterrupted operation and efficiency of your business. Hundreds of OMI chillers are already in operation with industry-leading businesses in applications including (but not limited to):



Gas generation



Laser cutting



PET and plastic



Rollers for paper



Direct process



Food & Beverage production & storage



Laboratories

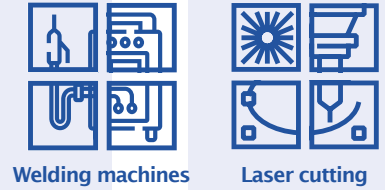


CNC machines



Welding machines





# CHWL series

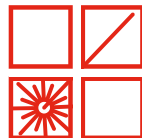
Made by an exclusive technology, OMI Laser Chillers are designed to meet the needs of the industrial laser cutting machines, which require a dedicated cooling control to cope with power fluctuations related to load variations. There are 4 configurations of chillers available, all configurations with temperature accuracy and hydraulic bypass. CHWL Laser chillers with an integrated and optional water/water cooler: the double cooling circuit allows to **independently control the temperature of the laser resonator and the optics with extraordinary accuracy of  $\pm 0,5$  K on the chiller circuit and  $\pm 1$  K on the cooler one.**



New series



Unique design



Developed from the ground up specifically to match requirements of laser cutting and welding machines



# CHWL series - Performance Range

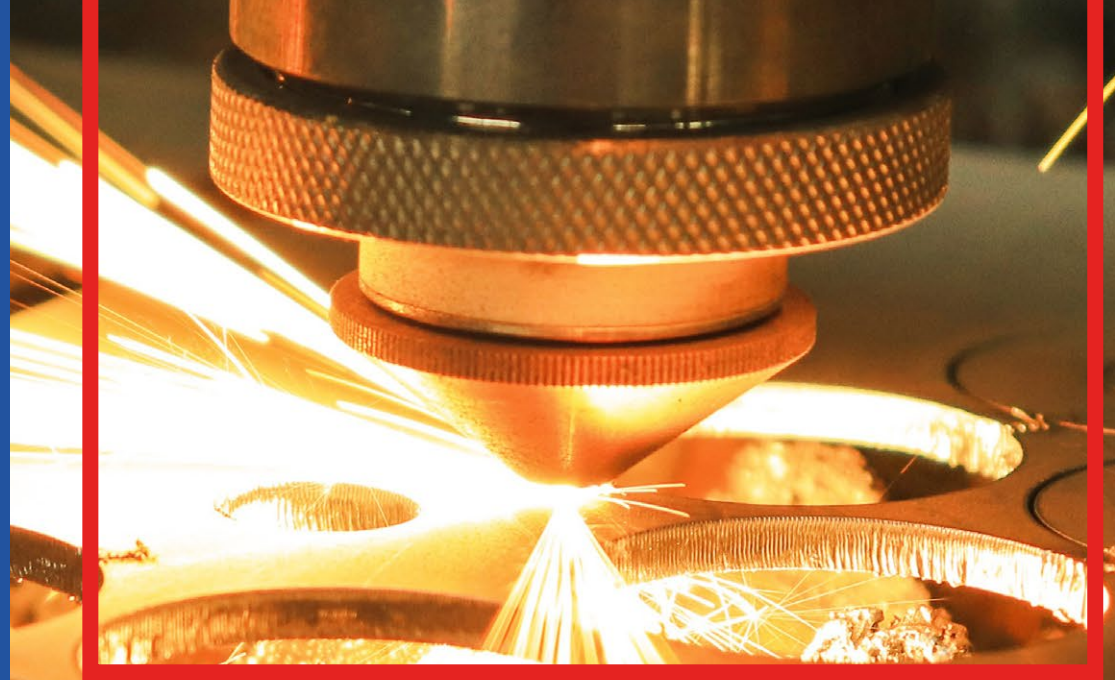
Model	Connections		Cooling capacity						Tank		* Laser power kW	Power supply V/ph/Hz	Power consumption		Fluid temperature				Ambient temperature				Available fluid pressure				Refrigerant gas	Noise level dB(A)	Dimensions			Weight Kg
			Resonator			Optical			Resonator	Optical			kW	A	Min		Max		Min		Max		Std		Max				mm			
	BSP	BSP	kW	Kcal/h	Btu/h	kW	Kcal/h	Btu/h	Resonator	Optical	°C	°F			°C	°F	°C	°F	°C	°F	°C	°F	bar	psi	bar	psi	W	D	H			
CHWL 60	3/4"	-	6,9	5960	23580	-	-	-	30	-	1	400/3/50	1,9	4,7	10	50	25	77	2	36	40	104	2	29	8	116	R513A	<70	760	760	1335	135
CHWL 100			11,3	9760	38620	-	-	-	60	-	2	400/3/50	2,8	7,1	10	50	25	77	2	36	40	104	2	29	8	116	R407C	<80	760	760	1335	140
CHWL 140			15,2	13130	51960	-	-	-	60	-	3	400/3/50	3,4	8	10	50	25	77	2	36	40	104	2	29	8	116	R407C	<80	760	760	1335	150
CHWL 170	1"	-	17,6	15200	60160	-	-	-	100	-	4	400/3/50	4,9	9,4	10	50	25	77	2	36	40	104	2	29	8	116	R407C	<80	760	1325	1570	220
CHWL 200			22,1	19090	75540	-	-	-	100	-	5	400/3/50	5,6	10,4	10	50	25	77	2	36	40	104	2	29	8	116	R407C	<80	760	1325	1570	230
CHWL 250			27,1	23400	92630	-	-	-	100	-	6	400/3/50	6,3	12,3	10	50	25	77	2	36	40	104	2	29	8	116	R407C	<80	760	1325	1570	240
CHWL 320			35,8	30920	122370	-	-	-	100	-	8	400/3/50	8,5	16,4	10	50	25	77	2	36	40	104	2	29	8	116	R407C	<80	760	1325	1570	280
CHWL 390			43,4	37480	148350	-	-	-	100	-	10	400/3/50	10,8	20,6	10	50	25	77	2	36	40	104	2	29	8	116	R407C	<80	760	1325	1570	290
CHWL 550			1" 1/2	62	53540	211930	-	-	-	200	-	15	400/3/50	13,9	26,3	10	50	25	77	2	36	40	104	2	29	8	116	R407C	<80	1520	1325	1570
With integrated cooler																																
CHWL 60	3/4"	1/2"	6,9	5960	23580	1,3	1120	4440	30	10	1	400/3/50	2,8	7,9	10	50	25	77	2	36	40	104	2	29	8	116	R513A	<70	760	760	1335	154
CHWL 100			11,3	9760	38620	4	3450	13670	60	10	2	400/3/50	3,7	10,3	10	50	25	77	2	36	40	104	2	29	8	116	R407C	<80	760	760	1335	162
CHWL 140			15,2	13130	51960	4	3450	13670	60	10	3	400/3/50	4,3	11,2	10	50	25	77	2	36	40	104	2	29	8	116	R407C	<80	760	760	1335	172
CHWL 170	1"	1"	17,6	15200	60160	4	3450	13670	100	10	4	400/3/50	5,8	12,6	10	50	25	77	2	36	40	104	2	29	8	116	R407C	<80	760	1325	1570	242
CHWL 200			22,1	19090	75540	4	3450	13670	100	10	5	400/3/50	6,5	13,6	10	50	25	77	2	36	40	104	2	29	8	116	R407C	<80	760	1325	1570	252
CHWL 250			27,1	23400	92630	4	3450	13670	100	10	6	400/3/50	7,2	15,5	10	50	25	77	2	36	40	104	2	29	8	116	R407C	<80	760	1325	1570	262
CHWL 320			35,8	30920	122370	4	3450	13670	100	10	8	400/3/50	9,4	19,6	10	50	25	77	2	36	40	104	2	29	8	116	R407C	<80	760	1325	1570	302
CHWL 390			43,4	37480	148350	4	3450	13670	100	10	10	400/3/50	11,7	23,8	10	50	25	77	2	36	40	104	2	29	8	116	R407C	<80	760	1325	1570	312
CHWL 550			1" 1/2	62	53540	211930	4	3450	13670	200	10	15	400/3/50	14,8	29,5	10	50	25	77	2	36	40	104	2	29	8	116	R407C	<80	1520	1325	1570

\* These values are merely indicative, please check the actual cooling capacity requested by the laser application.

Contact our team for detailed information about correction factors, configurations and options.



## Optional features & upgrades



- **Internal by-pass with pressure gauge** - This device allows the chiller to operate properly even if the plant is disabled or closed. Recommended in case of multiple applications.
- **Special pumps (silenced, high pressure, stainless steel and more)** - Silenced pumps for indoor ambient, stainless steel pumps suitable for aggressive liquids, vane pumps for high pressure applications, etc.
- **Out of standard voltages**
- **Low ambient temperature kit** - ideal for installations in environments with temperatures down to -15°C.
- **Support heaters** - used as antifreeze, from 350W to 3000W, used like antifreeze protection or in particular applications, to warm up the liquid media at required value automatically before start the production.
- **Water condenser** - Shell and tube condenser for fresh and sea water applications.
- **Remote display** - To monitor chiller performance remotely.
- **Centrifugal fans** - Ideal option for installations with conduits to dissipate the heat from the condenser.
- **Stainless steel fittings** - For installations in slightly corrosive environments or liquids.

- **Flow switch and level** - Options that can be installed separately or combined. They monitor fluid flow and tank level. In case of no flow or level below the set point, the compressor is switched off first, then the pump. Automatic reset.
- **Control box for high temperatures** - For installations in high temperature environments up to 50°C.
- **Industry 4.0** - Controller equipped with Modbus RS-485 Connection.
- **Valve kit for level difference** - Option suitable for systems with long external pipes or where application is located in a higher position compared to the chiller. If the chiller is off, the non-return valve and solenoid valve prevent the water from entering the device and from overflowing from the tank.
- **Condenser air filter** - Air filter, removable and washable, which keeps the condenser clean and efficient to maximize the heat exchange.
- **Wheels** - The wheels allow you to make the chiller mobile: the wheels are equipped with brakes.
- **Accuracy +/- 0,5°K** - Option suitable for applications where a high precision of the process fluid temperature is required.