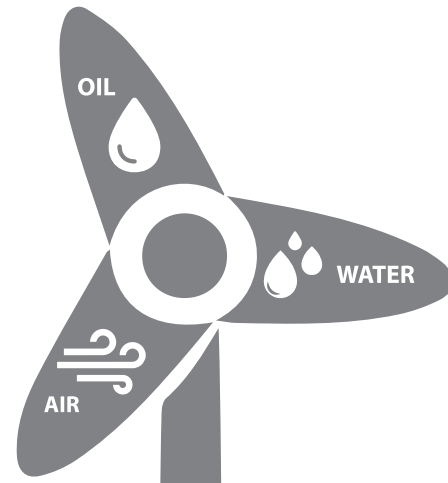


# FIND YOUR SOLUTION

## 100% THERMAL MANAGEMENT

COMBINED SOLUTIONS FOR ALL WIND TURBINES

<b>TURBINE TYPE</b>	DRIVETRAIN DIRECT DRIVE
<b>FLUID</b>	HIGH AND LOW VISCOSITY OIL WATER/GLYCOL DEIONIZED WATER AIR
<b>INSTALLATION ENVIRONMENT</b>	ONSHORE OFFSHORE COLD CLIMATE HOT CLIMATE

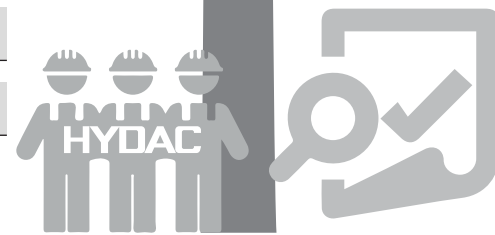


## TEST AND VALIDATION LAB

TEST RIGS FOR WIND APPLICATIONS

- WATER GLYCOL
- HIGH VISCOSITY OIL
- HEAT DISSIPATION AND PRESSURE DROP
- WIND TUNNEL
- FATIGUE
- PASSIVE COOLER
- COLD CLIMATE CHAMBER

LAB Services on demand for customer specific applications



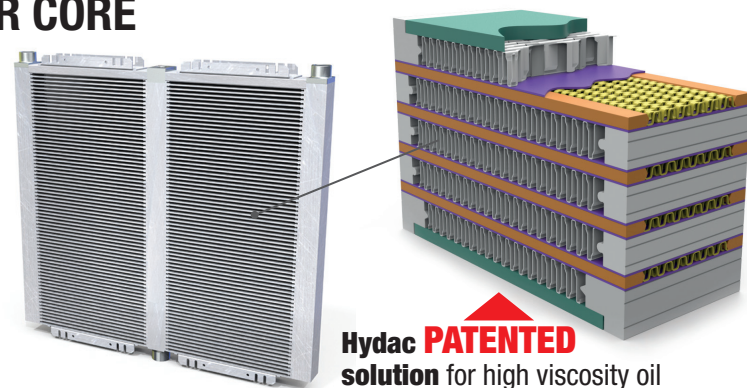
## HIGH EFFICIENCY PLATE&BAR CORE



HYDAC COOLING GROUP



EN 15085-2  
EN ISO 3834-3



Hydac **PATENTED**  
solution for high viscosity oil

# HYDAC INTERNATIONAL

LOCAL PRESENCE  
WITH 50 BRANCH OFFICES  
WORLDWIDE

- ACCESSORIES  
ACCUMULATORS  
CYLINDERS  
COOLING
- ELECTRONIC  
FILTERTECHNIK  
FILTER SYSTEMS  
FLUIDTECHNIK
- SERVICE  
SYSTEM  
PROCESS  
TECHNOLOGY

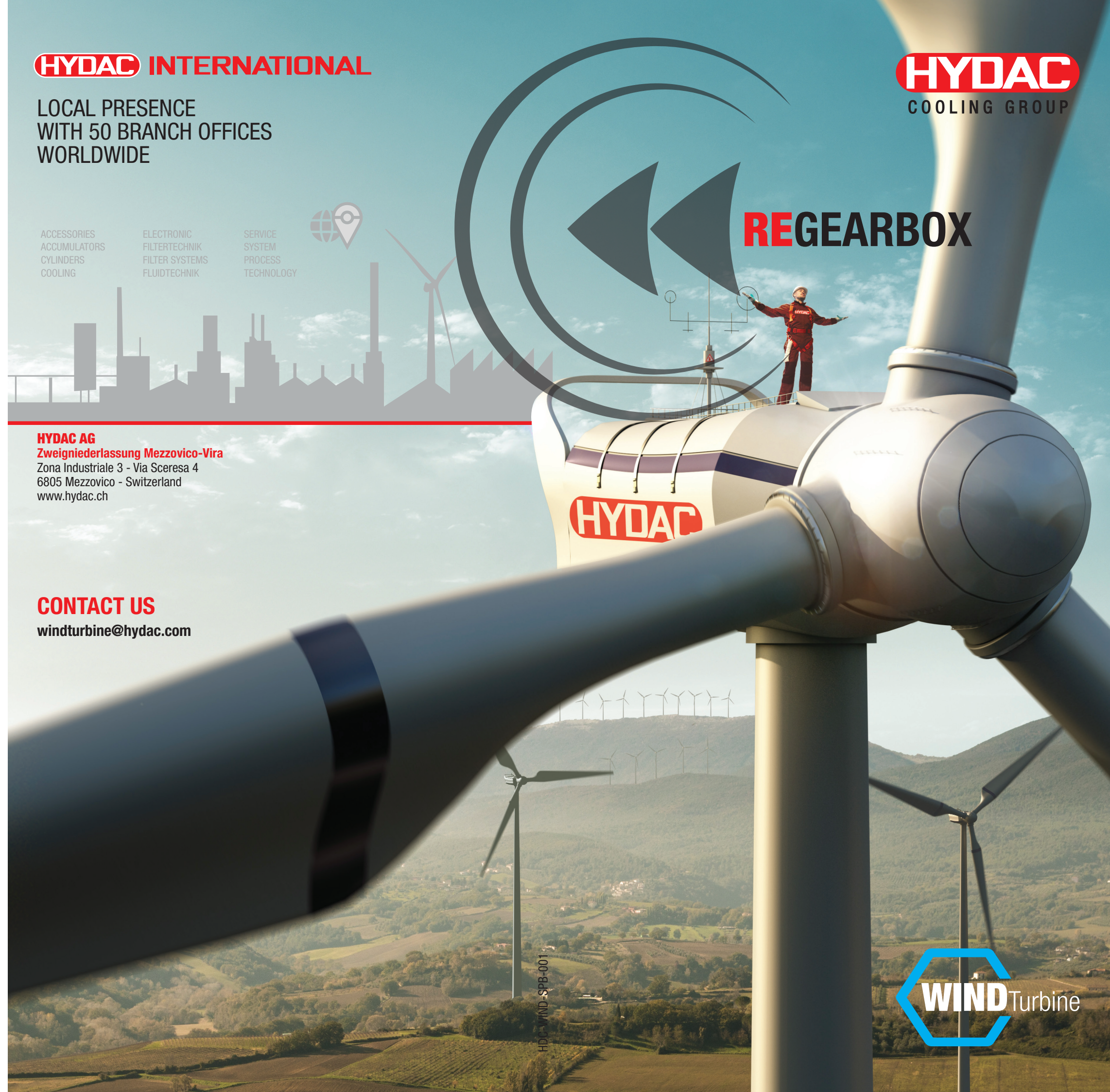


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[www.hydac.ch](http://www.hydac.ch)

**CONTACT US**  
[windturbine@hydac.com](mailto:windturbine@hydac.com)



# REGEARBOX



HYDAC WIND-SPB-001

# WHY REWIND

## Why change

HYDAC competences guarantee the best solution to the customer needs, in terms of performance, quality and reliability.

HYDAC has more than 250'000 cooling systems installed all over the world and is able to replace every type of cooling system (also for primary and secondary water glycol circuit) installed in any Wind Turbine platform.

## REPLACEMENT

**1:1 version** of the original unit, realized with the latest R&D improvements

## REPOWERING

**Updated system** with dedicated innovation:

- More heat dissipation
- Best in class noise emissions
- Low electrical consumption

## RENEW

**Complete** your replacement / repowering with our plus:

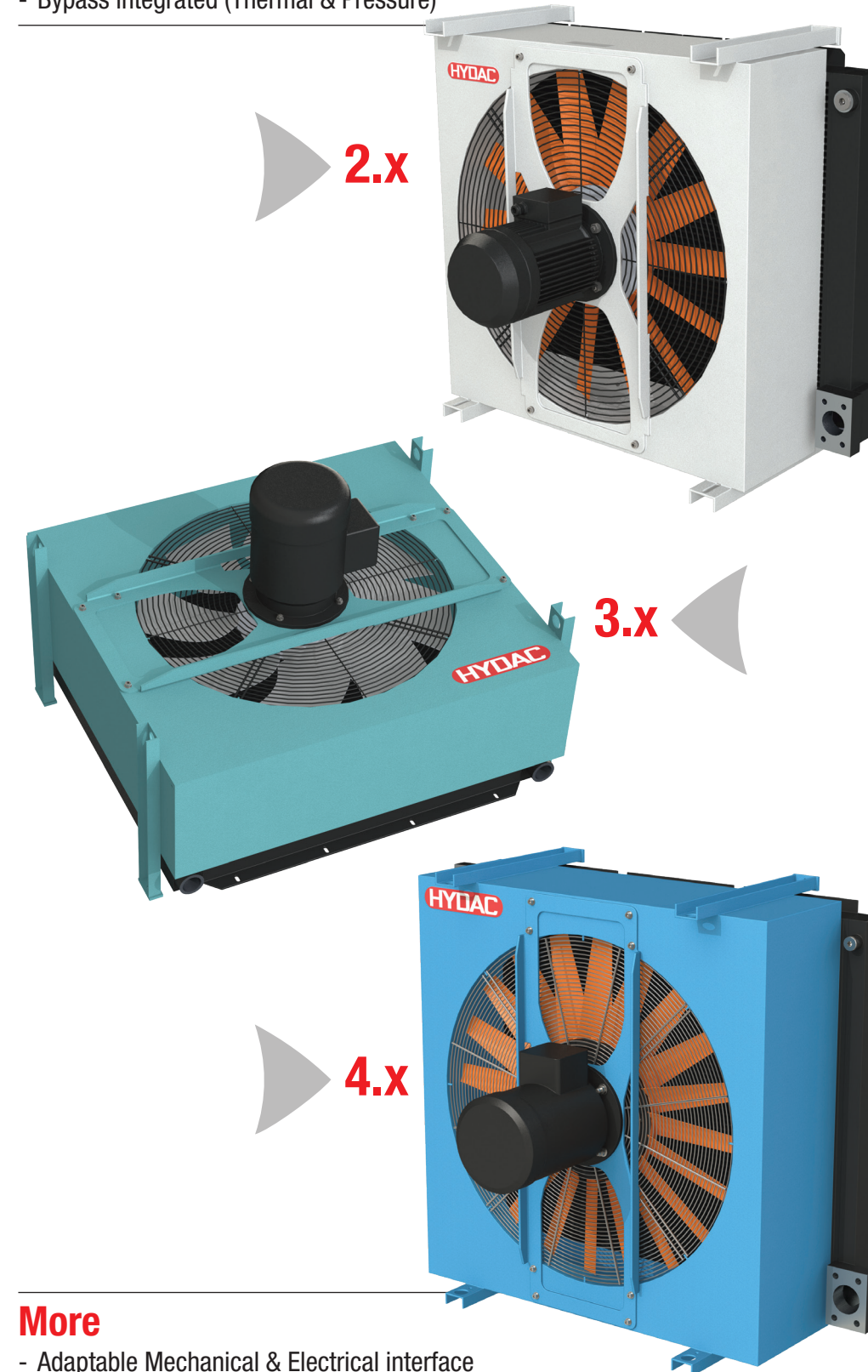
- Lube system
- Filter
- Tank
- Breather
- Sensors & Monitoring



# WIND Gearbox Cooling

## Features

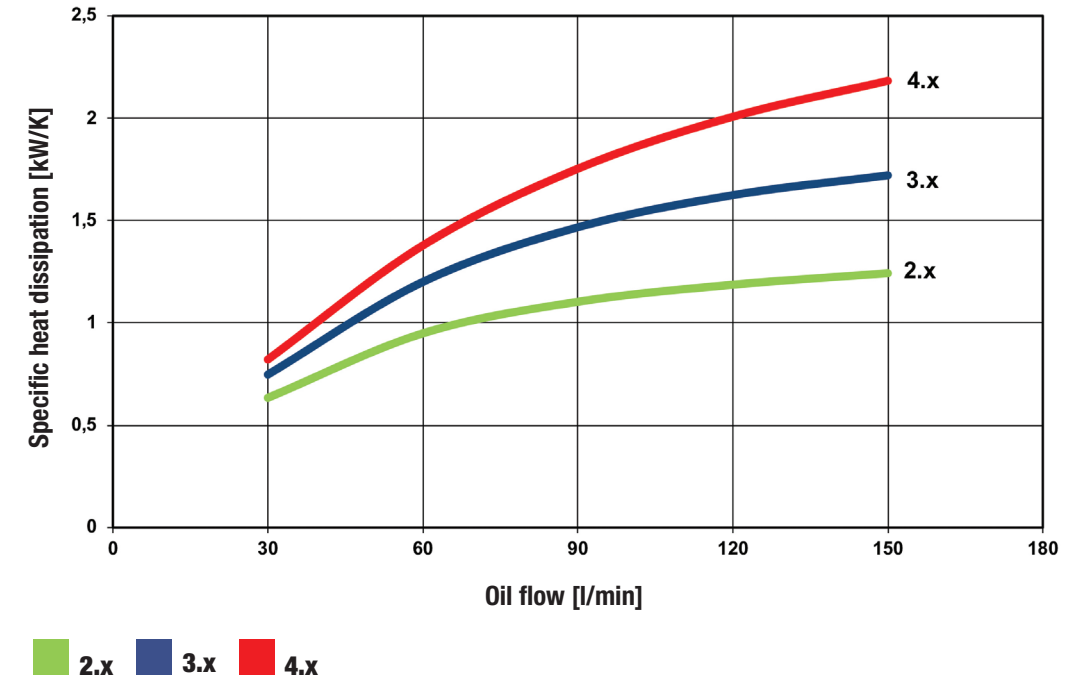
- Compact cooling design for gearbox from 1 up to 4 MW wind turbine platform
- Cooler with high efficiency Hydac Plate&Bar technology
- High viscosity oil handling
- Bypass integrated (Thermal & Pressure)



## More

- Adaptable Mechanical & Electrical interface
- Colour customizable
- Available on request Hot or Cold Climate version
- Solution for offshore application

## Cooling Performance



## WE LISTEN, WE PLAN, WE SUPPORT

WELCOME TO THE HYDAC COOLING PHILOSOPHY

<b>We listen</b>	because all customer needs are different
<b>We plan</b>	so as to turn your needs into the most suitable solution
<b>You</b>	get the best cooling technology which contains all our know-how
<b>Hydac Wind Team</b>	a dedicated sales and customer care structure, operating worldwide and committed to our valued global customers, close to their local production

## HYDAC INTERNATIONAL

### NOT ONLY COOLERS

Hydac International can provide a complete product portfolio to both turbine manufacturers and OEM producers.

Top quality components work better together. Customers can count on Hydac's worldwide sales representative network to make their lives easier.

- Hydraulic power units** for rotor or yaw brakes and rotor lock
- Cooling systems** for every wind turbine cooled component
- Pumps**
- Filters**
- Holders for cables, pipes and hoses**
- Valves**
- Sensors**
- Tanks**

## CERTIFICATIONS

All our coolers are **developed** and **engineered** in Switzerland

