

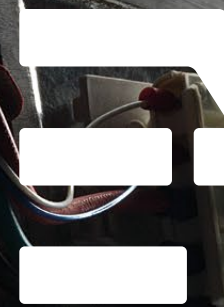
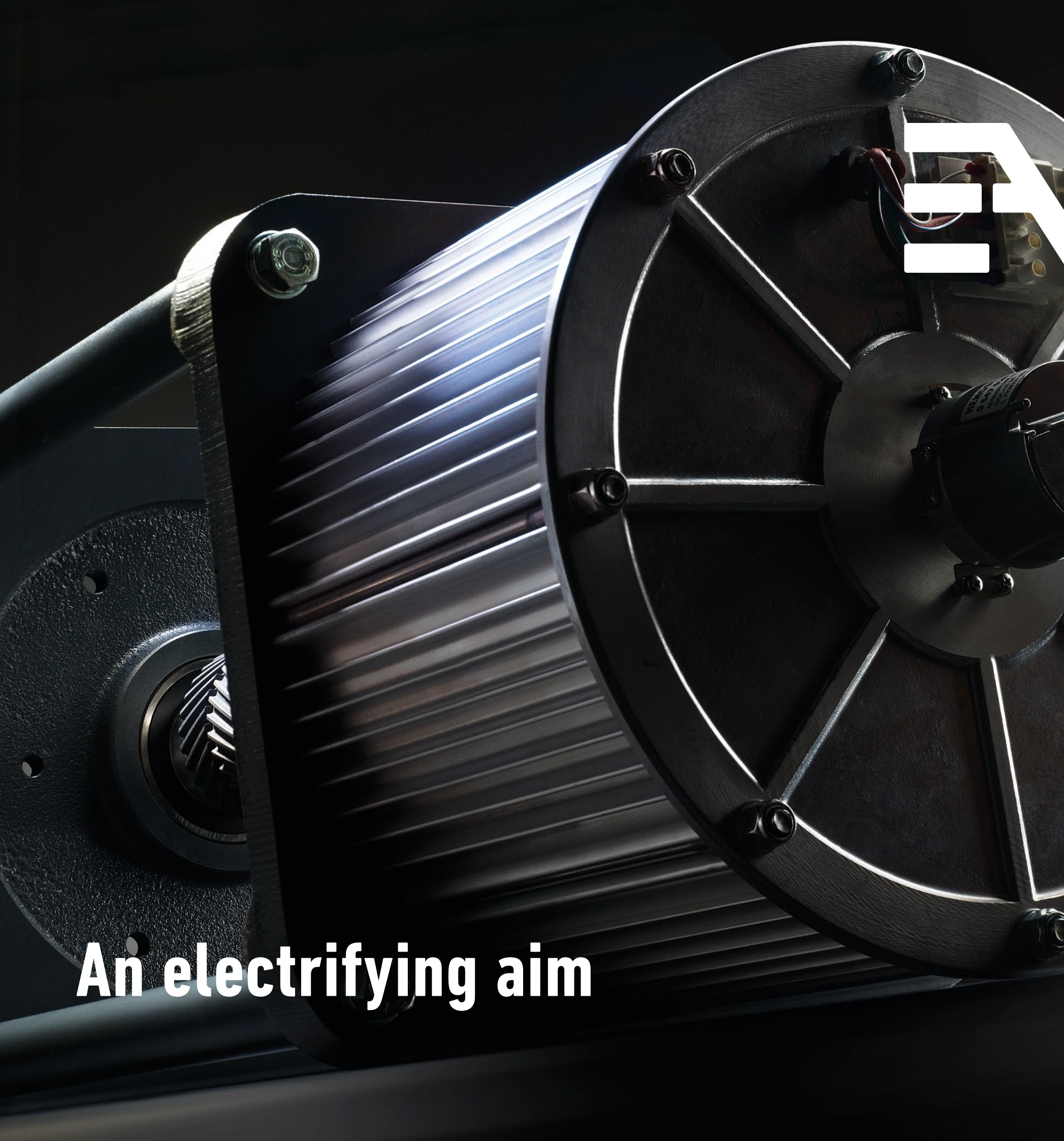
# ***GREAT MOVE***

**DIRECT DRIVE  
BRUSHLESS MOTORS**



**ELETTROMECCANICA  
ADIGE**





**Our aim: to design and produce the best electric motors. Since 1986.**

Electric motors represent a constantly evolving market: we therefore employ a team of highly motivated and dedicated specialists who cover every aspect, from design to every phase of operation. In other words: **know-how and passion.**

Each motor is built using the finest technologies, with the materials checked individually to guarantee that our factory only manufactures products of the highest quality. We are committed to ensuring that every customer receives an immediate answer and the right solution to every production requirement.

**All of this makes us proud of the name ELETTRMECCANICA ADIGE: the industriousness of Trentino at the service of major international companies.**

**An electrifying aim**





## We specialise in manufacturing small-series Direct Drive brushless motors, with the following major advantages:

1 **High flow density** in the air gap thanks to the use of high energy magnets

2 High power-to-weight ratio meaning **very compact mechanics** yet with the same power as equivalent asynchronous motors

3 Large torque-to-inertia ratio to guarantee **rapid acceleration** suitable for **high-dynamic** uses



4 Low torque fluctuations even at very low speeds to permit **high positioning accuracy**.

5 Wide range of **speed variations** thanks to the possibility of control in field-weakening mode.

6 **High-torque** operation is possible, permitting rapid acceleration and deceleration.

7 High performance and **high power factor** thanks to the presence of an intrinsic magnetic field in the rotor structure due to the permanent magnets.

8 **Compact structure** to give a high torque-to-volume ratio.





**We check  
every detail**

## **Direct Drive: the right application for every need.**



Automatic accesses



Industrial ventilation for large areas  
or zootechnics (destratifiers)



Gearless-type winches for lift  
applications



Energy generated from renewable  
sources (micro-mini wind power,  
mini-hydro)



Industrial automation



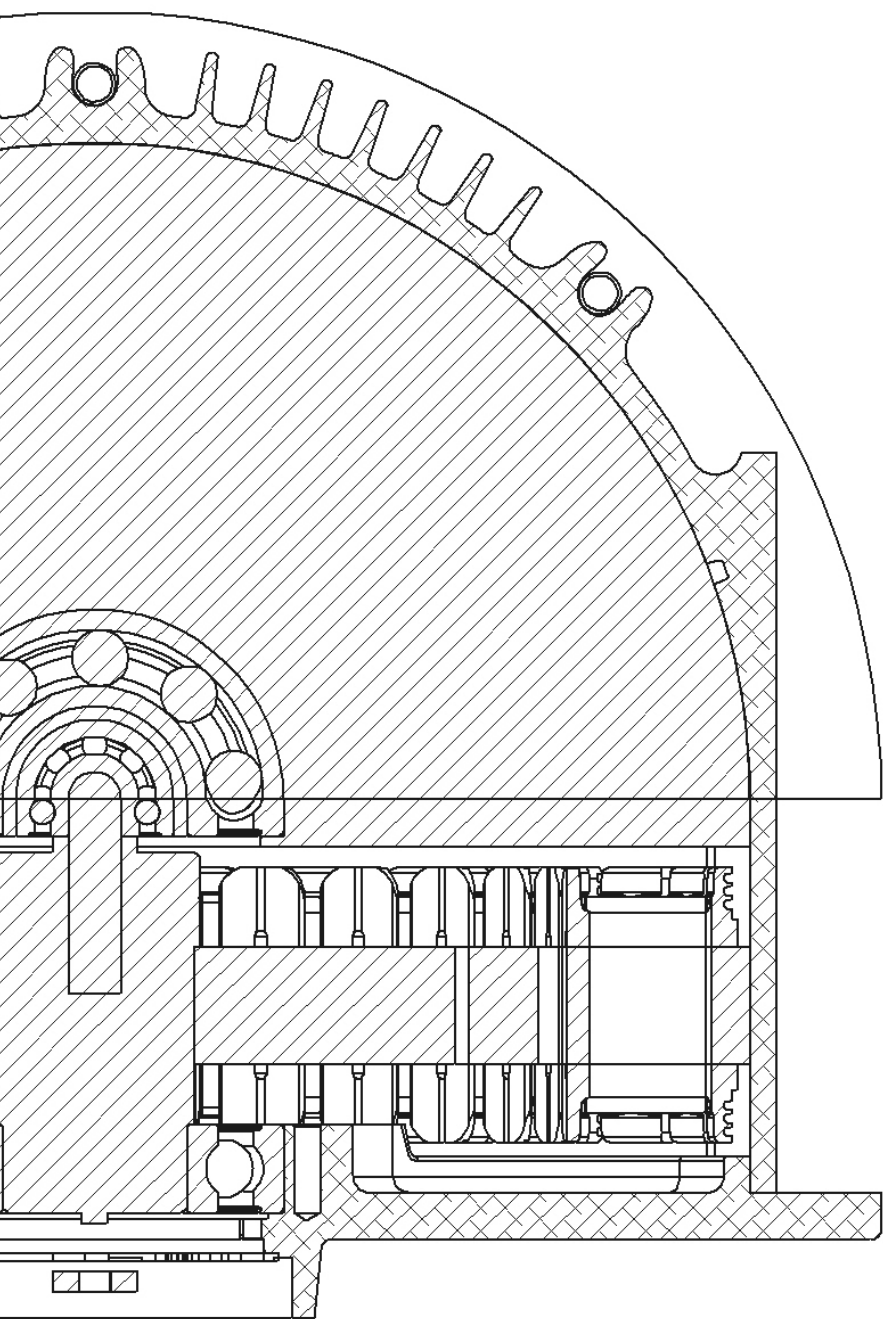
Aerators and mixers for wastewater,  
industrial tanks and biogas plants



**We produce everything in-house,**

from the design to the final realisation  
of the item, thus guaranteeing the  
highest possible quality on our  
materials.

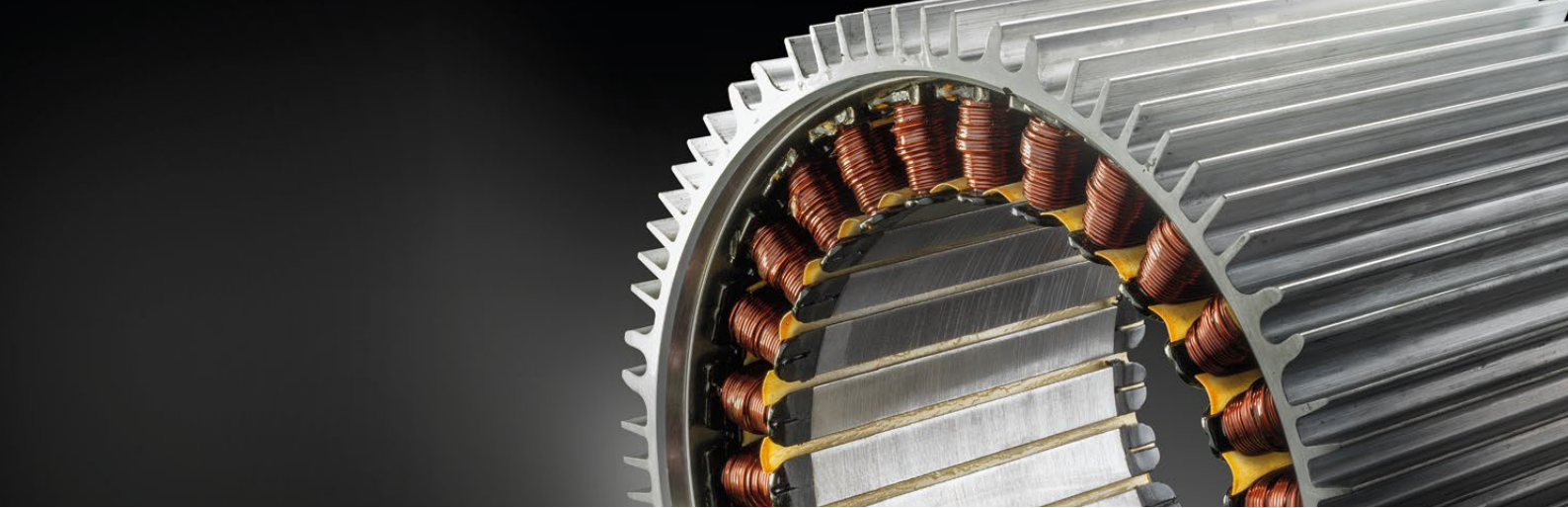
**With the best equipment.**



**We carry out  
all processes  
in-house**



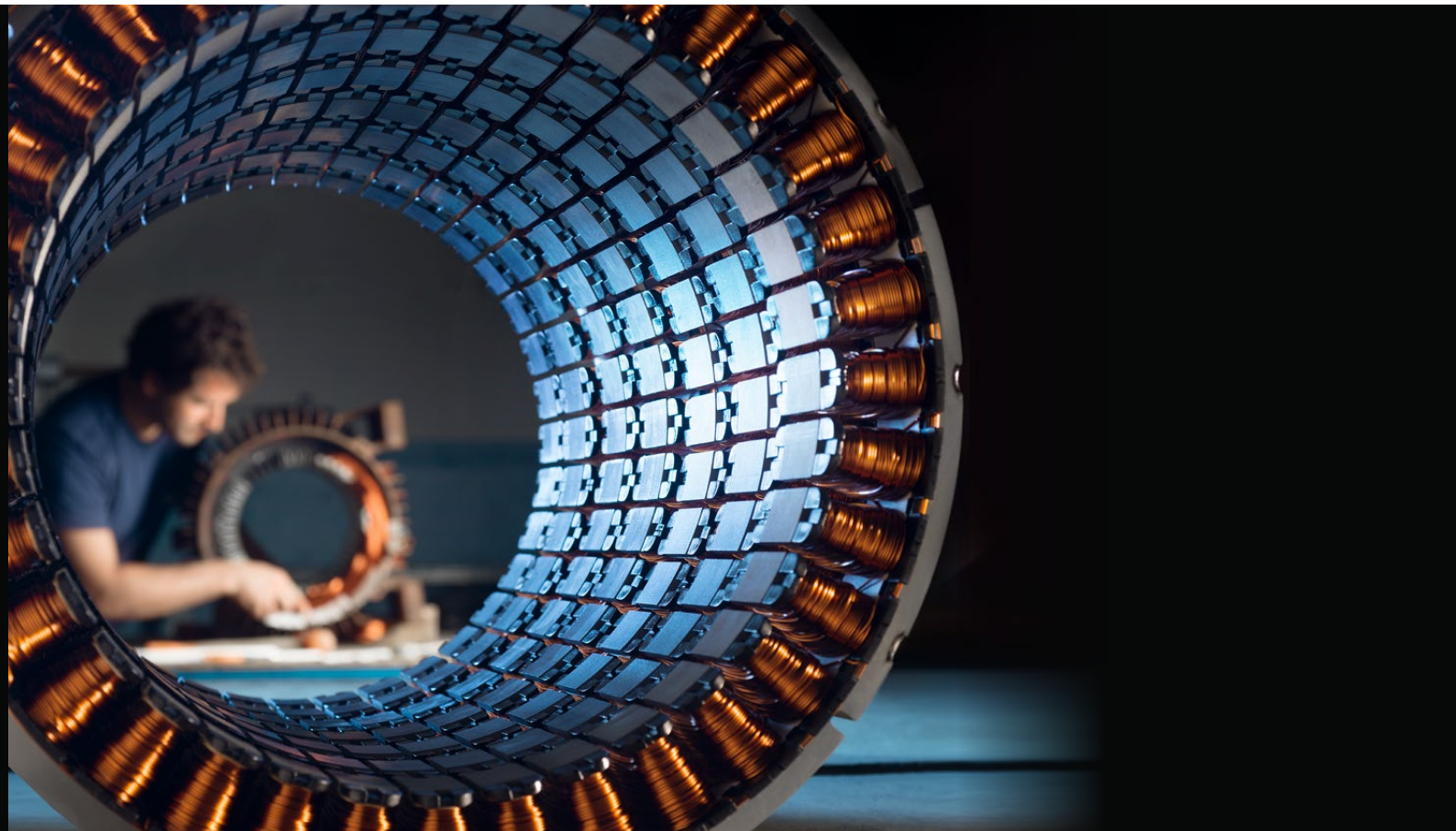




## Controlling the machines

These machines are controlled by means of **vector inverters with flow control**: with their magnetic anisotropy and the use of concentrated windings, these machines can offer **excellent controllability both in terms of torque and kinematics** (speed and position control); when combined with axis control inverters, this makes them particularly suitable for **direct motion control applications**. These machines can be controlled either in **sensored mode**, i.e. with an encoder, or in **sensorless mode**, i.e. without any feedback device. The choice of sensed or sensorless mode depends on the characteristics of the mechanical load and the degree of precision required in positioning.

Elettromeccanica Adige can supply machines in combination with the various models of encoders or revolvers on the market – both incremental and absolute – according to each customer's needs.



## Range of machines

The PM machines produced by Elettromeccanica Adige are based upon two standard models: **PM-D250 | PM-D390**

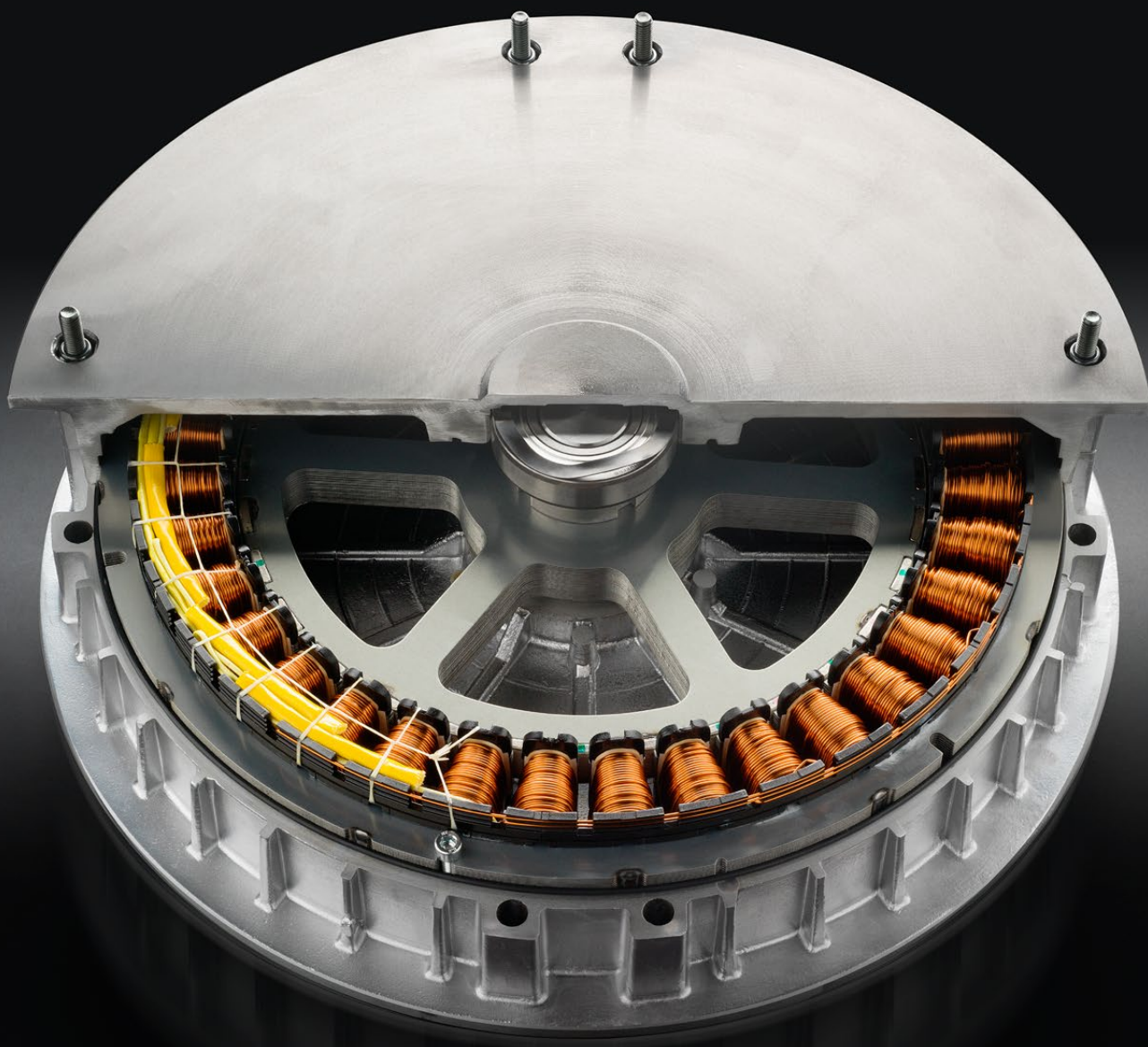
These machines are available both in a standard range, which optimises the power output of the machine for variable speed regimes of between 0 and 500 rpm, as well as in small and medium series, with customised solutions to optimise the working points of the machine, resulting in a machine with direct control of the axis integrated into the system.

### FEATURES OF OUR STANDARD PRODUCTS

MODEL	TORQUE		SPEED	POLES	AXIS POWER		CURRENT	FREQUENCY
	Nm		Rpm		kW		Amp	Hz
	RATED	PEAK			Continuous service	Intermittent service 40%		
D250H30	30	45	500	24	1,6	2,4	3	100
D250H45	45	67,5	500	24	2,4	3,5	4,5	100
D250H90	90	135	500	24	4,7	7,1	9	100
D250H135	135	202,5	500	24	7,1	10,6	13,5	100
D250H180	180	270	500	24	9,4	14,1	18	100
D250H225	225	337,5	500	24	11,8	17,7	22,5	100
D390H20	40	60	500	32	2,1	3,1	4	133
D2390H40	80	120	500	32	4,2	6,3	8	133
D390H60	120	180	500	32	6,3	9,4	12	133
D390H100	200	300	500	32	10,5	15,7	20	133
D390H160	320	480	500	32	16,7	25,1	32	133

### CUSTOMISATIONS

MODEL	TORQUE		SPEED	POLES	AXIS POWER		CURRENT	FREQUENCY
	Nm		Rpm		kW		Amp	Hz
	RATED	PEAK			Continuous service	Intermittent service 40%		
D250H135/120S	135	202,5	70	24	1,0	1,5	4	14
D250H135/106P	170	255	390	24	6,9	10,4	13	78
D250H135/78S	175	262,5	182	24	3,3	5,0	7	36,4
D250H90/120S	90	135	100	24	0,9	1,4	3	20
D250H90/81P	90	135	500	24	4,7	7,1	13	100
D250H45/96S	45	67,5	300	24	1,413	2,1195	4	60
D390H20/120S	40	60	250	32	1,0	1,6	3,9	50
D390H40/120S	90	135	150	32	1,4	2,1	3,9	30
D390H60/120S	130	195	100	32	1,4	2,0	3,9	20



**ELETTROMECCANICA  
ADIGE**

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