

CLEAN DUTY



www.mak.nl

P.O. box 462
8200 AL Lelystad
The Netherlands

T +31 (0)320 - 266966



MOTOVARIO®

HEART OF MOTION

a TECO Group company

APPLICATIONS

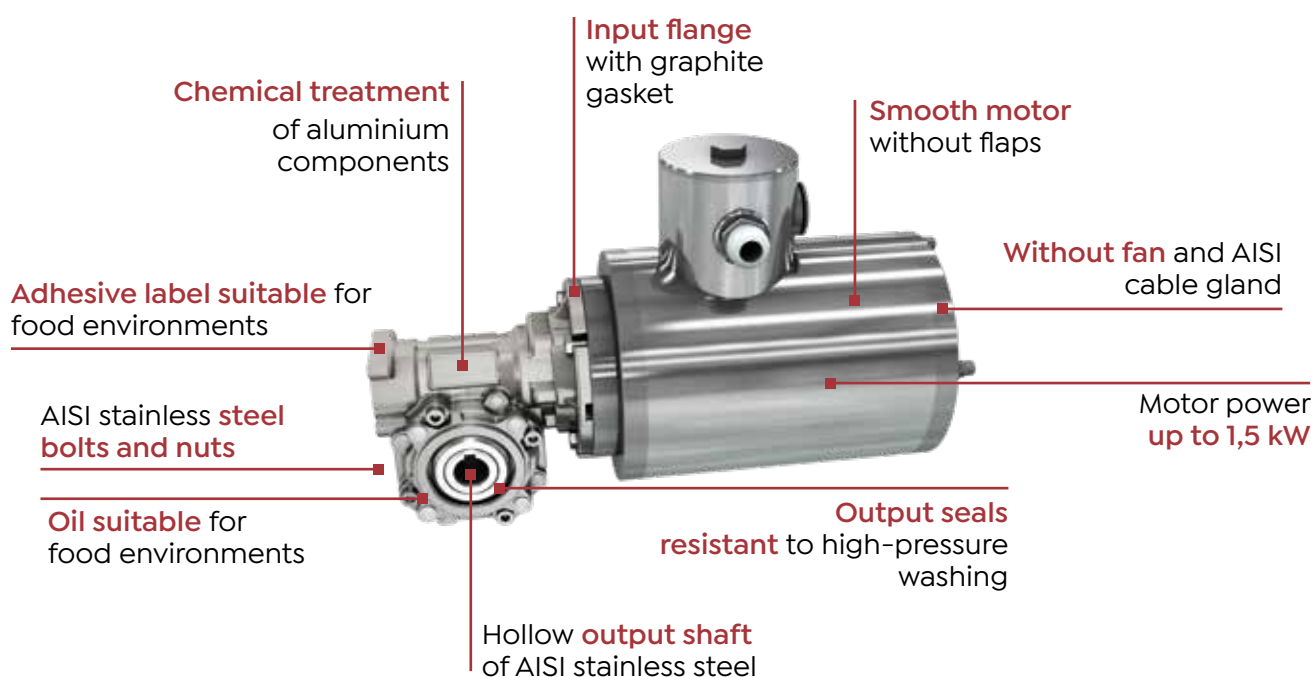
Motovario offers a wide range of gearmotors suitable to operate in humid and corrosive environments, such as food industry (meat, fish, fruit and vegetables), pharmaceutical industry and marine applications.

Motor and gear reducer are designed and manufactured with treatments able to increase their resistance and reliability characteristics and ensure resistance to wear using specific products for environment sanitisation.

The chemical treatment applied to the gear reducer casing, and the use of **AISI stainless steel components** make CLEAN DUTY a product suitable for various application requirements.

The chemical treatment and the use of the round casing effectively prevent water and dirt from stagnating and depositing.

CLEAN DUTY GEARMOTOR

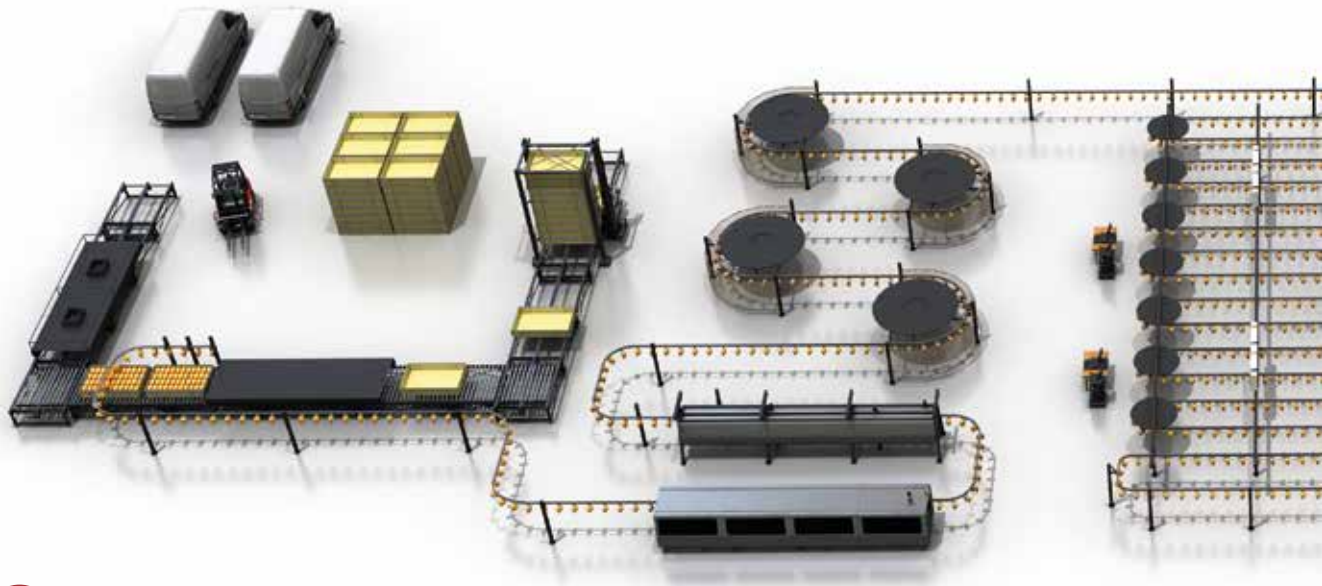


RANGE

SIZE	M2 min	M2 max	RATIO MIN	RATIO MAX
030	13	22	5	80
040	29	48		
050	55	88		
063	118	160	7.5	100
075	180	230		
090	270	432		
Motor power up to 1,5 kW				

FIELDS OF APPLICATION

EXAMPLE OF PRODUCTION PLANT



1

PRIMARY PROCESS

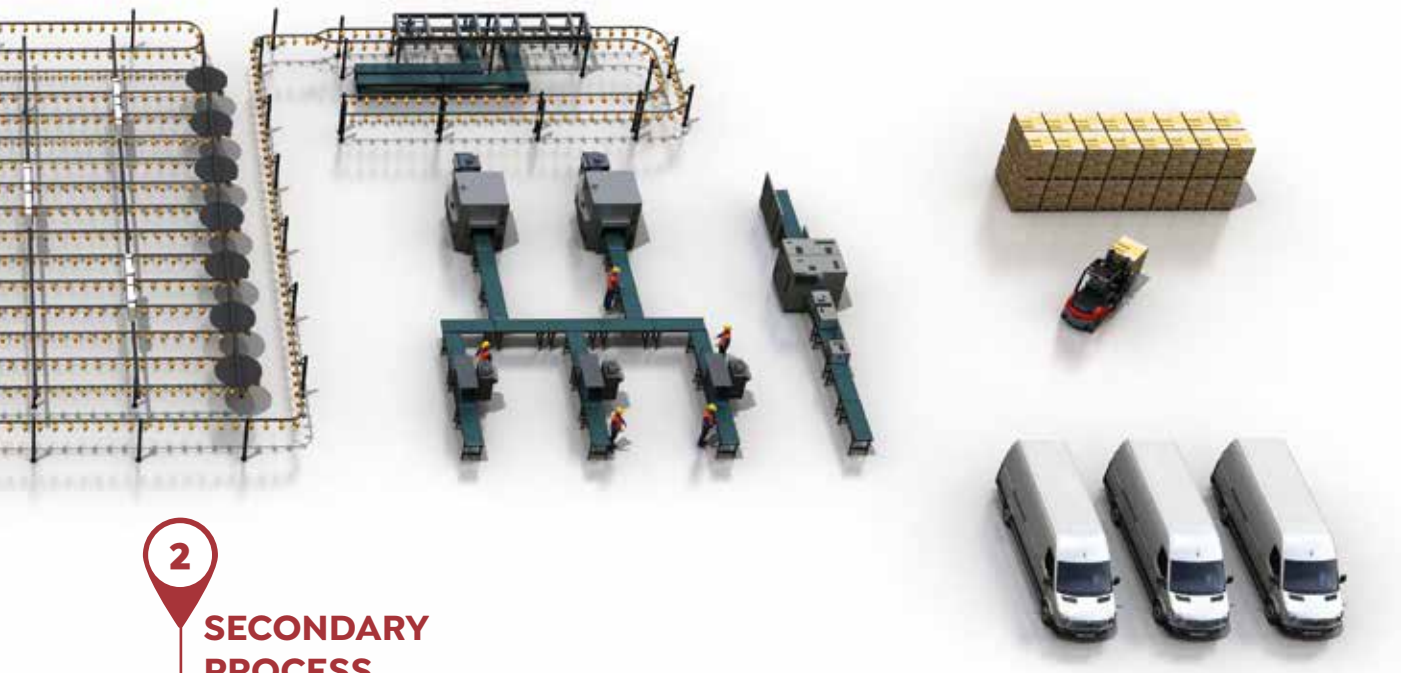
APPLICATIONS

- Power Systems
- Vaccination machines
- Conveyors



Motovario offers solutions with:

- High quality paints (STEEL-IT) that ensure suitable protection in **very harsh and corrosive environments**
- Inverters to reduce consumption and with installation inside cabinet or on-board the motor (up to IP66)
- Inverters with soft start, deceleration ramps and STO functions
- Compact size



2

SECONDARY PROCESS

APPLICATIONS

- Cutting, slicing, dosing
- Heating, cooling
- Outer packaging



Motovario offers solutions with:

- Surfaces with **chemically treated aluminium** for washing with cleaning products with pH from 2 to 12 and washing with high-pressure water
- Lubricants for food use, high and low temperatures
- **Motors with smooth surfaces** and protection grade IP66
- Several configurations with or without fan

SURFACE TREATMENT

STEEL-IT TREATMENT

STEEL-IT coating consists of AISI 316L stainless steel louvres of different grain sizes dispersed in epoxy resin.

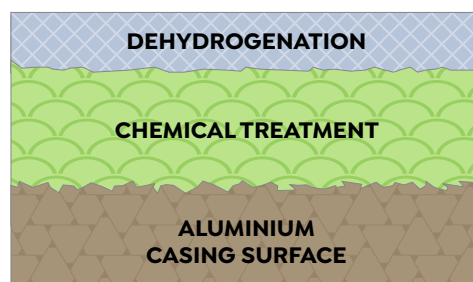
It protects against:

- corrosion under harsh environmental conditions
- sea and salty water

CHEMICAL TREATMENT

Thanks to the high chemical resistance of the coating and the complete coverage of the surface, this treatment protects against:

- the acids of food products
- washing with acids and alkalis with PH from 2 to 12
- high-pressure washing
- aggressive chemical solutions



TEST CARRIED OUT AND DETERGENTS SUPPLIED BY **ECOLAB**

Immersion corrosion tests have been carried out using the most representative detergents and sanitisers in the industrial cleaning market.

TEST PROCEDURE PERFORMED:

Immersion test

Complete immersion in the test fluid.

Duration

28 days, which simulates a product used for 7 years.

Example of washing cycle



Pre-washing
PHASE 1



High-pressure washing
PHASE 3



Washing with foam - 15 min.
PHASE 2



Disinfection
PHASE 4

Assessment

No decoration change (colour, degree and shine), no changes in protective properties according to DIN EN ISO 4628-1.

NEW PRODUCT PRE TEST



PRODUCT USED FOR 7 YEARS - POST TEST



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MOTOVARIO®

HEART OF MOTION

a **TECO Group** company

Motovario spa

Via Quattro Passi 1/3 - 41043 Formigine (MO) - Italy

Ph. +39 059 579700

marketing@motovario.it - www.motovario.com