

**BRAKES, CLUTCHES, TOOTH COUPLINGS,
INDUSTRIAL CALIPER BRAKES, TORQUE LIMITING COUPLING
ELECTROMAGNETIC – HYDRAULIC – PNEUMATIC AND MECHANICAL OPERATED**

M.W.M. FRENI FRIZIONI is an Italian Company operates in the power transmission, through the design and manufacture of its products for over 50 years.

M.W.M. includes two sites situated in Milan one of them produces and the other one is focused on projects, assembly and commercializes its products.

The main feature that distinguishes us is the development, customization, and the continuous expansion of our product range together with a joint reliability and performance guarantee; in fact, near the standard item series our Company is also dedicated to the design of special solutions in order to meet every need of the customer.

Many years of experience in this field allowed to our Technical team to reach considerable results and technologically solid as concerning standard items as customized series.

The plus we offer our customers is the perfect combination of quality and reliability of a large group and flexibility, dynamism and the containment of business cost of a family.

M.W.M. business is mainly located in the European trade: United Kingdom, Germany, Swiss, France, Spain, Finland, Poland and since many years cooperate with several European and also extra -European Agent (South Africa, Swiss, UK...).

We include a wide clientele operate in several industrial section:

- Manufacturing industry (textile, mechanical, metallurgical, amusement, packaging, etc.)
- Mining
- energy industry in particular renewable energies

Everywhere brakes, couplings and clutches is needed M.W.M. FRENI FRIZIONI is able to be a valuable technical support and find out the right product for every demand.

M.W.M. range production includes more than 2.000 items partly on them shown in our three catalogues.

CALIPER BRAKE SERIES

- HAND OPERATED CALIPER BRAKE

The modular breaking is manually implemented by the operator with the rotation of an handwheel mechanism or by a remote control.



- CALIPER BRAKE PNEUMATICALLY APPLIED / SPRING RELEASED

Breaking is implemented by the adduction of air.

- CALIPER BRAKE SPRING APPLIED / PNEUMATICALLY RELEASED

Breaking is implemented by springs and released by adduction of air.



- “DUO” CALIPER BRAKES PNEUMATICALLY APPLIED

The advantages of both brake calipers pneumatically applied spring released and brake calipers spring applied pneumatically released in one single pneumatic thruster saving space and costs.

- CALIPER BRAKES HYDRAULICALLY APPLIED / SPRING RELEASED

Breaking is implemented by the adduction of oil



- CALIPER BRAKES SPRING APPLIED / HYDRAULICALLY RELEASED

Breaking is implemented by springs and released by the adduction of oil



- CALIPER BRAKES PNEUMATICALLY RELEASED – REDUCED PRESSURE

- BRAKE DISC

In caliper brakes series M.W.M. marks for the following PATENTS

- **SELF-ALIGNING SYSTEM WITH ORTHOGONAL SLIDING** (Patent n. MI2004A001339)

With this innovation the two lever arms are hinged on two steel pads that allow the caliper brake to move perpendicularly to the disk

PLUS

- perfectly Self-aligning to the disc ensuring a constant and well balanced breaking
- the weight of the thruster doesn't burden on the friction pads
- easy brake installation

- **CENTRAL SUPPORT MODULA SYSTEM** (patent n. MI2004A001339)

The M.W.M. modular caliper brake system allow the possibility to simply reconfigure each caliper brake. it's sufficient to replace the central body to vary the thickness of the brake disc or replace the actuator if some change take place in the employment conditions.

PLUS

- More than 25 different configurations with only one caliper brake

- **COMPACT THRUSTER** (patent n. MI2003U000542)

The new patented system allows to plug the pneumatic thruster between the two levers with an important size reduction. In all thrusters of MWM'S new caliper brakes the old diaphragm seal has been replaced by a more modern and compact rubber seal for reciprocating motions.

PLUS

- Saving space
- Increased reliability
- Lower cost
- Spare parts easily available on the trade

BRAKES, CLUTCHES AND TOOTH-TYPE COUPLING HYDRAULICALLY AND PNEUMATICALLY CONTROLLED

- **TORQUE-LIMITING COUPLING**

**GS/SC •GS/SC-BF •GS/SM •GS/SM-BF •GS/CD •GS/GE
•GDF •GDF/GE •GDFR •GDFM •GDPR •GDPG**



- **CLUTCHES HYDRAULICALLY AND PNEUMATICALLY CONTROLLED**

**IS •PNS/BF •LPR •LPG •LP•MPR •MPG •MP •MPR-N
•MPG-N •MP-N**



- **TOOTH - TYPE COUPLING PNEUMATICALLY CONTROLLED**

DPR •DPG •DPF •DP •DPR-N •DPG-N•DP-N



- **BRAKES HYDRAULICALLY AND PNEUMATICALLY CONTROLLED**

**IBL/SC •PBL/SC-BF •IBL •PBL/BF •FOL/BF •FPL/BF •FOL-
N/B-BF •FPL-N/B-BF •FOL-N/C-BF •FPL-N/C-BF**



ELECTROMAGNETIC BRAKES CLUTCHES TOOTH-TYPE COUPLING

- ELECTROMAGNETIC CLUTCHES APPLIED (POSITIVE)
EC ECF EC/C ESB ESB/S EMS ESAL EMSL EMSG EMSR

- ELECTROMAGNETIC CLUTCHES RELEASED /SPRING APPLIED (NEGATIVE)
EMC-N/L EMC-N

- ELECTROMAGNETIC BRAKES APPLIED (POSITIVE)
EC/F EBLF EMF EMF/MD EFAL EMFL

- ELECTROMAGNETIC BRAKES RELEASED/SPRING APPLIED (NEGATIVE)
EMF-N/L EC-N/Z-F EMF-N EMF-N/P EMF-N/B/C/CL FN/FC-FA FN-CL/FC-FA

- ELECTROMAGNETIC TOOTHED-CLUTCHES APPLIED (POSITIVE)
EC/Z EC/ZD ECF/Z ECF/ZD ESB/Z ESB/ZD ESR/Z ESBG/Z

- ELECTROMAGNETIC TOOTHED-CLUTCHES RELEASED /SPRING APPLIED (NEGATIVE)
EC-N/Z ESB-N/Z ESR-N/Z ESBG-N/Z

- ELECTROMAGNETIC BRAKES APPLIED (POSITIVE)
EC/Z-F EC/ZD-F EBLF/Z EBLF/ZD

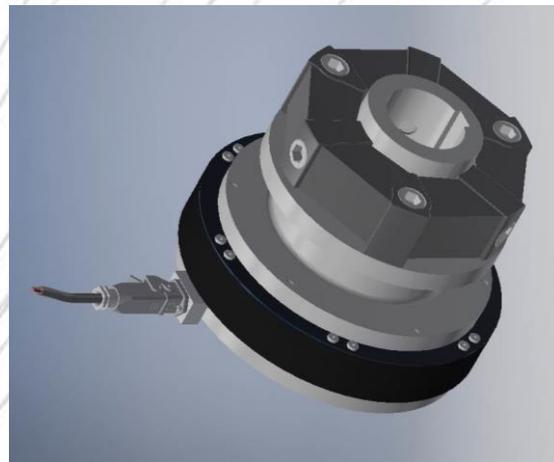
- CLUTCH-BRAKE UNITS
GFF: A-A/P FA-A A-FA FA-FA FC-FA FC-A FA-FC A-FC FC-FC



NEWS

M.W.M. is an ever-evolving company with Made in Italy quality ready to meet the technological challenges developing new products:

- **ELECTROMAGNETIC SINGLE-DISK CLUTCHES DOUBLE MAGNETIC FLUX:**
Compact design: High performance at small envelope dimensions



SPECIAL PRODUCTS & CUSTOMIZE SOLUTIONS

Year of experience in this field enabled our engineering department to reach considerable results on special product expressly planned to satisfy every customer's requirement.

