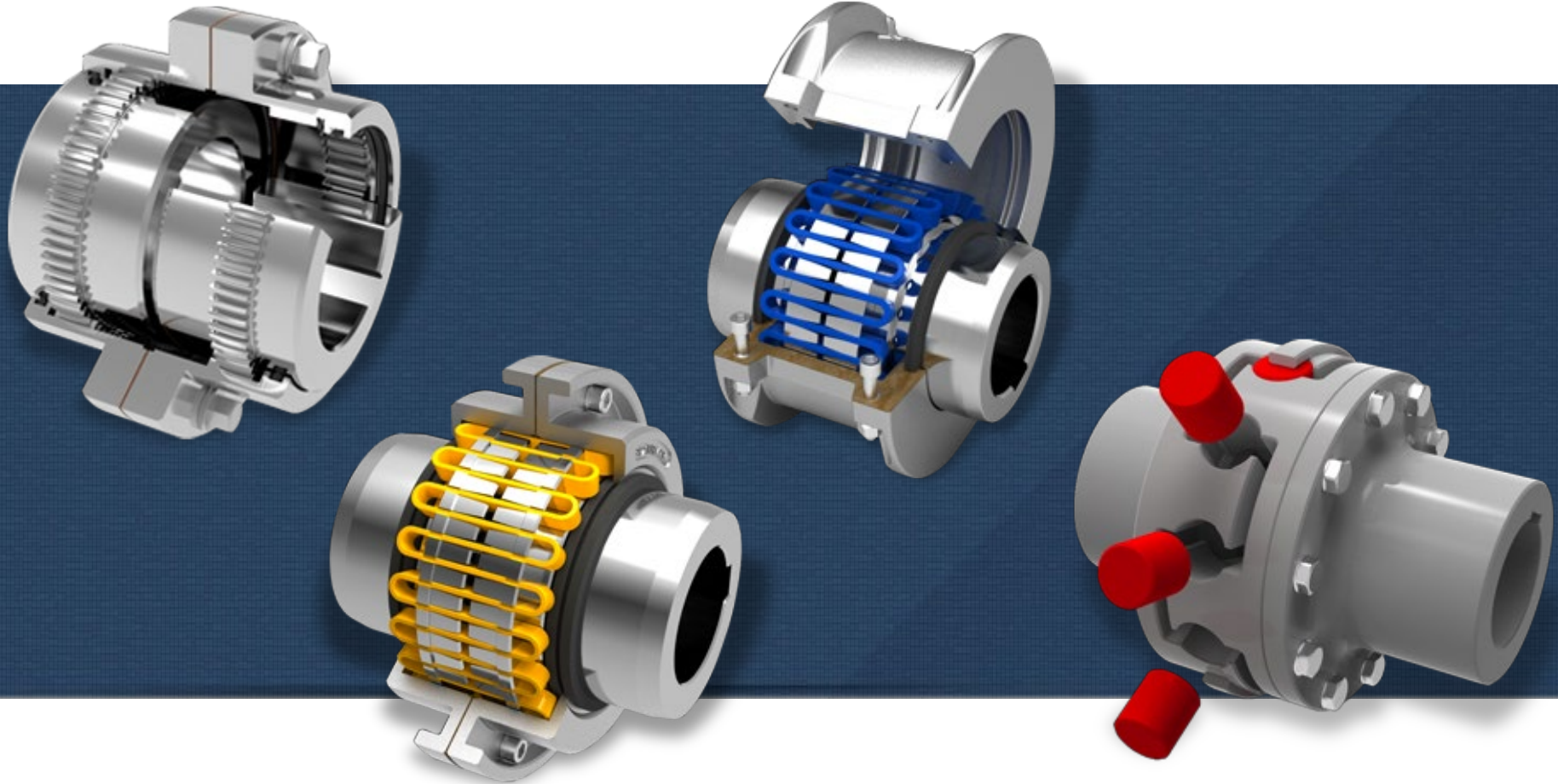


Acoplamentos METALFLEX®



CERTIFIED NATIONAL MANUFACTURER SGQ ISO 9001:2008



The Company

- Founded:** 1989 in São Paulo, Brazil
- Location:** São Paulo - SP
- Area:** 10,760 ft²
- Sector:** Design, manufacture and marketing of couplings





Corporate

- Since 1990, **Acoplamentos Metalflex** has been supplying high performance couplings to the Brazilian and Mercosul markets. Bolstered by a technical staff with over forty years of experience in the power transmission and industrial drive sectors, we are a highly specialized manufacturer of flexible couplings.
- Our General Director, Mr. José Correia, was the production and planning manager of Falk of Brazil for almost 30 years. He was responsible for the technical internships in the American parent company, he deployed the main operational processes and equipment in the Brazilian subsidiary, absorbing the full scope of manufacturing technology.
- Our ISO 9001: 2008 Quality Management System and our accumulated experience, in addition to our professional and business ethics, give the company the ability to be one of the Brazil's leading manufacturers of flexible couplings.
- Relying on our own original designs, international standards, the perfect selection of raw materials, and high-tech manufacturing combined with our technical expertise, we guarantee the quality of our products with emphasis on protecting the equipment using our couplers.
- Located in a 10,765 ft² headquarters in São Paulo, we consist of a broad network of distributors, representatives and resellers throughout Brazil. Besides special commercial terms for manufacturers of machinery and equipment we also have a strong record in serving larger corporate contracts.
- We focus on excellence in manufacturing and marketing of flexible couplings, supplying the various demands of industry and producing quality equipment of proven reliability. All fully covered by factory warranty and certified by our ISO 9001: 2008 Quality Management System.
- At **Acoplamentos Metalflex**, transmitting power and motion, with the certainty that our industrial drives work smoothly and accurately while minimizing maintenance and optimizing production is the essence our business philosophy.



Time line



Our founder begins manufacturing gearboxes and couplings.

Technician internships FALK USA

Foundation of L J Correia Equipamentos / Acoplamentos METALFLEX®

Began manufacturing a line of elastic grid couplings, **Metalflex M**

Began manufacturing a line of gear couplings, **Metalflex GM**

1961

1972

1975

1982

1989

1998



Time line





Quality

Since our founding in 1989, Metalflex Couplings's philosophy has been the quest for total quality and the continuous improvement of both industrial and commercial processes.

Aiming to strengthen our brand and while serving the ever demanding and competitive Brazilian and Mercosul markets, **we are currently one of the only domestic manufacturers of flexible couplings certified according to ISO 9001:2008 standards.**

Our Quality Management System is validated by ISO 9001:2008 certification and audited by BSI (The British Standards Institution), a multinational body established in 1901 and a pioneering, world leader in certification and audit standards.

Quality Policy

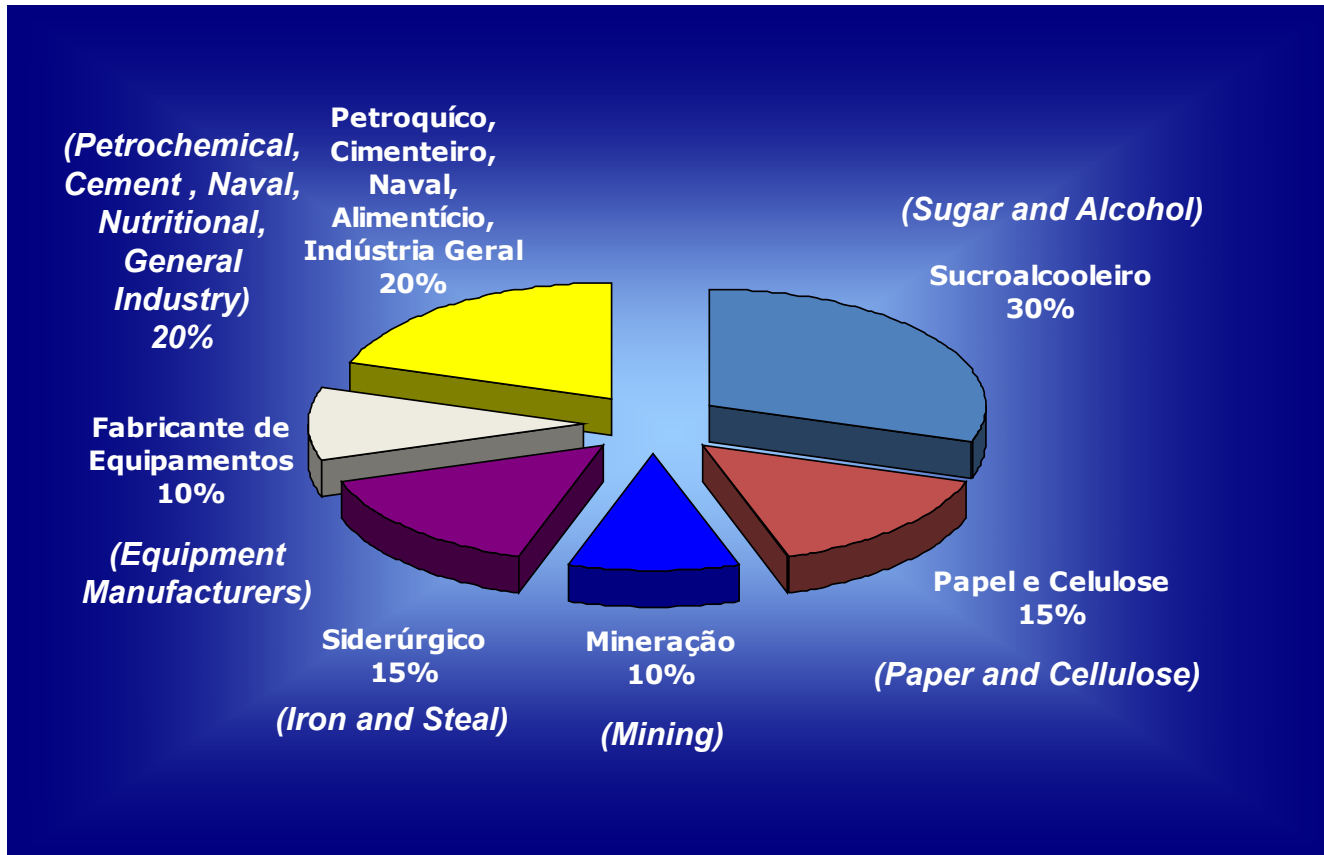
Acoplamentos METALFLEX has established the following objectives as its Quality Policy:

- Provide quality products and services while seeking to fulfill the customer's expectations and needs.
- Continuously improve the quality management system and its processes.
- Acoplamentos METALFLEX recognizes that the human factor is a key part of the process and that it should be given full support in order to achieve our goals.





Key business areas



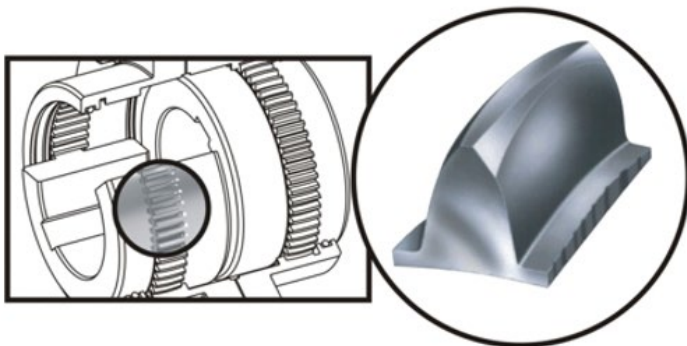


Gear Couplings – METALFLEX GM

The best cost-benefit ratio for medium and high demands. METALFLEX® GM gear couplings have the following main characteristics: large capacity torque transmission and torsional rigidity, having a high transmitted torque to weight ratio.

Adhering to international standard ANSI/AGMA 9008-B00 (revision of standard AGMA 516.01) and totally interchangeable with Falk standards. Flanges interchangeable with other domestic and imported couplings on the market.

Manufactured entirely of SAE 1045 steel and connected with high strength bolts, these couplings transmit torque through their internal/external teeth.



Triple crowned teeth

The top, root and flank camber of the teeth allows precise and smooth meshing while accommodating angular, axial and parallel misalignments of the connected shafts.



Available Models



GM10 / GM20
(double meshing)



GMV20 / GMV10
(vertical installation)



GML20 / GML52
(sliding hubs)



GM72 / GM70
(desengatável)



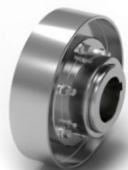
GM32 / GM31
(spacer)



GM52 / GM51
(single meshing)



GM52
(floating shaft)



GM62 / GM63 / GM66
(brake drive/pulley)



GM82 / GM81
(rigid)



GMC2
(compact)



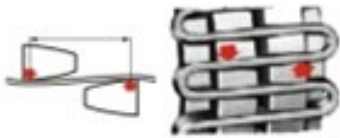
GM20
(large scale)



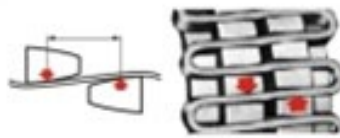
Elastic Grid Couplings - Characteristics

Torsional Flexibility

This model has the ability to absorb the torsion of overloads and vibrations, providing a flexible capacity when subjected to load variations. METALFLEX® elastic grid couplings are able to adjust the system, absorbing impact energy and transmitting power smoothly and accurately while reducing overloads and vibrations. Acts as a buffer for rotary motion thanks to the resilience of elastic grid of this METALFLEX® coupling.



Light Load: The grid surface is supported by the ends of the teeth, leaving free space so that the blades can flex under load variations.



Standard Load: As the load increases, the distance between the contact points decreases but there is sufficient space and capacity to absorb overloads.



Overload: Within its capacity, the elastic grid flexes to its limits, with blades completely seated in the teeth, transmitting the load directly.

Misalignments

Parallel, angular and axial misalignments of the connected shafts are offset by the movement of the elastic grid within the inner grooves, without affecting the ability to transmit torque.

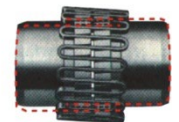
Angular



Axial



Parallel





Elastic Grid Couplings – METALFLEX M

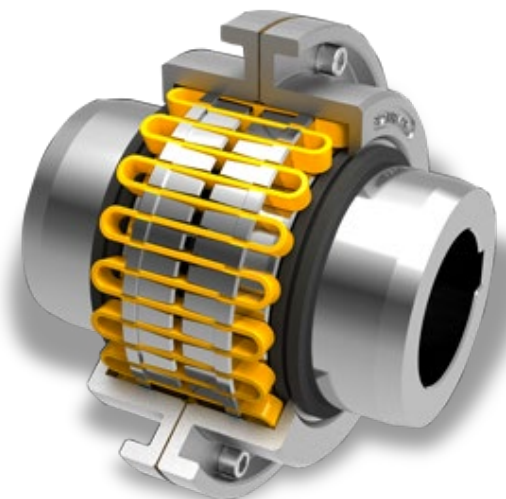
METALFLEX® M elastic grid couplings meet the vast majority of industrial applications. They are torsionally flexible and through the elastic grids they provide torque transmission and compensation of angular, axial and parallel misalignment between the connected shafts. They absorb and reduce overloads and vibration by up to 70%.

The elastic grids also act as "mechanical fuses" in the event of high overloads in the system thus protecting the connected equipment. They can be used in a vertical or a horizontal position; its exclusive seals prevents impurities from entering and loss of lubricant.

They are available in 20 sizes: shaft bore up to 12.598"- torque up to 94,113 foot lbs.

The elastic grids are made from a special high strength steel alloy which undergo heat treatment and shot peening, compressing the molecules of the surface of the steel and increasing their strength and flexibility.

São totalmente intercambiáveis com o padrão Falk e os demais acoplamentos nacionais e importados disponíveis no mercado.





Available Models



Model M
(standard)



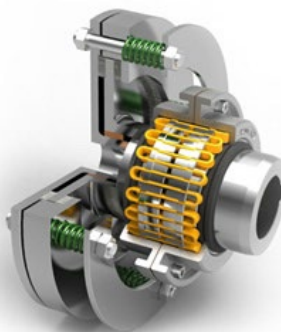
Model ML
(with spacer)



Model MP
(with/without floating shaft)



Model MBW
(with brake pulley)



Model MT
(with torque controller)



Model M
(large scale)

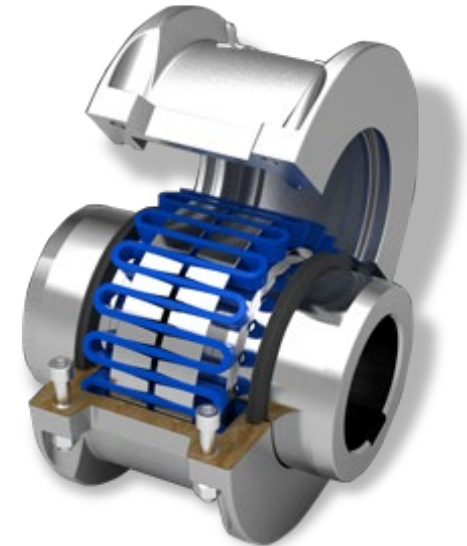


Elastic Grid Couplings – METALFLEX™

METALFLEX® M elastic grid couplings meet the vast majority of industrial applications. They are torsionally flexible and through the elastic grids they provide torque transmission and compensation of angular, axial and parallel misalignment between the connected shafts. They absorb and reduce overloads and vibration by up to 70%

The elastic grids also act as "mechanical fuses" in the event of high overloads in the system, protecting the connected equipment. Extremely simple to install and maintain with all the advantages of METALFLEX®™ elastic grid couplings, plus all the inherent qualities of elastic grid couplings.

The horizontally split enclosures allow installation and maintenance to be carried out quickly and without the need for moving equipment.



The elastic grids, produced with special steel according to international standards, are single layer for all sizes of couplings and have a trapezoidal cross section which facilitates the engagement and disengagement of the hub slots.

Fully interchangeable with the standard Falk and other domestic and imported couplings.



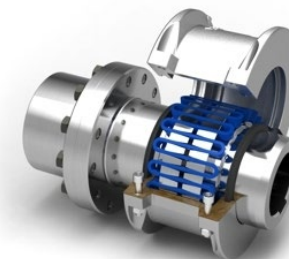
Available Models



Model TM
(standard)



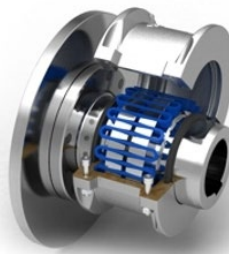
Model TM31
(with spacer)



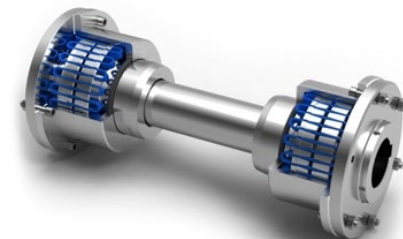
Model TM35
(with semi spacer)



Model TM41
(with torque controller)



Model TM63
(with brake disc)



Model TM50
(with floating shaft)

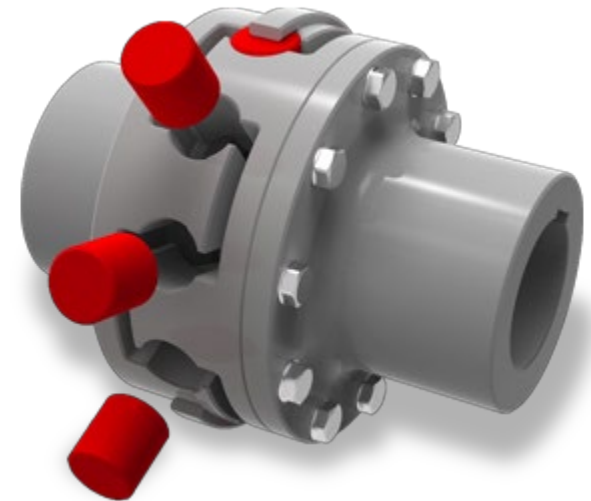


Elastomeric Couplings – METALFLEX BM

METALFLEX® BM elastomeric couplings are torsionally flexible and suitable for industrial applications of medium and high torque applications. Absorb vibration and shock loads between the driving and driven machines, compensate for radial, axial and angular misalignment existing between the connected shafts, and never need lubrication.

Torque is transmitted through the compression of the high strength polyurethane elastic elements giving the assembly a characteristic of a progressive spring attenuating the harmful effects of rotational vibration. The elastic elements are resistant to dust, oil and water and can withstand temperatures of -22°F to 185°F.

Because of its tooth design, METALFLEX® BM elastomeric couplings have a high misalignment capacity and when used in drives operating in only one direction of rotation, the elastic elements lifespan can be doubled, since only half of them are actually required for transmission, the other half of the elements are in reserve.





Available Models



Model BM
(basic)



Model BMF
(with one removable flange)



Model BMFF
(with two removable flanges)



Model BMF32
(with spacer)



Model BMF52
(with floating shaft)



Model BMF62/BMF63
(with brake drive/pulley)



Special Couplings

Custom couplings, domestication and development of special couplings. Engineering solutions that only one company that dominates the manufacturing technology and has extensive application expertise in numerous industrial sectors can offer.

Since 1990, we have built a large portfolio of special designs along with projects for the domestic production of couplings and spare parts. Given urgent and immediate demands, we can offer attractive alternatives to your needs.



Special Elastic Grid

Since 1990 we have developed special elastic grids for imported and/or non-standard couplings. We are the only Brazilian company qualified for these conversions/developments.



Principal Customers:

End Users:

- Grupo Raízen – Corporate Contract, 24 Sugarcane Mills
- Grupo USJ – São João Sugar Mill – Corporate Contract
- Coruripe Sugar Mill
- Grupo LDC – Louis Dreyfus Commodities
- Citrosuco / Citrovita
- Bunge S/A
- ADM do Brasil
- International Paper do Brasil – Corporate Contract
- Celulose Irani – Corporate Contract
- Trombini Embalagens
- Orsa Papel e Celulose





Principal Customers:



End Users:

- Votorantim Siderurgia RJ – Corporate Contract
- Gerdau RJ – Corporate Contract
- CSA – Siderúrgica do Atlântico
- CSN
- Mineração Usiminas
- Mineração Shougang – Peru
- Mirabela Mineração
- Mineração Yamana Gold
- Mineração Micron-Ita
- Cimento Nassau – Corporate Contract
- Votorantim Cimentos
- Maxion Wheels – Corporate Contract
- Termomecânica São Paulo S/A
- Braskem
- BR Distribuidora



Termomecânica São Paulo S.A.





Principal Customers:

Equipment Manufacturers:

- Grupo TGM
- Simisa Simioni
- Texas Turbinas
- Weg Cestari
- Tromink
- Tecnal
- Howden South America
- Haarslev Industries
- Gevisa
- Bardella
- Cope

