

# Facade fixings concrete

## In the future with "Lean Duplex"

### M-SYSTEM concrete

Dear customer, dear business friend,  
welcome to M-SYSTEM concrete, a division of the Wilhelm Modersohn GmbH & Co. KG.

We would like to introduce ourselves to you as a reliable and competent partner in all matters relating to stainless steel. And you can take that literally, because high quality is a matter of course for us.

The company was founded in 1970 by Wilhelm Modersohn sen. and currently employs around 150 people. In addition to the product groups presented here, we are also your special solutions in stainless steel.

Telephone +49 5225 87 99-0 • Fax +49 5225 87 99-382

E-Mail: [info@modersohn.de](mailto:info@modersohn.de)

[www.modersohn.eu](http://www.modersohn.eu)

#### Performance profile M-SYSTEM concrete

##### MOSO<sup>®</sup> supporting anchors for concrete facades

- panel hangers
- parapet anchors

##### MOSO<sup>®</sup> Concrete facade retaining anchors

- wind anchor restraint
- dowel connection
- pressure screws

##### MOSO<sup>®</sup> anchor rails

- MBA-CE channels with shear bolts
- ES anchor channels for prefabricated parts

##### Standard components in stainless steel

- metric bolts
- nuts, washers, retaining washer
- threaded bars (up to 3,000mm)
- special threaded parts



▲ phæno in Wolfsburg, photographer: Klemens Ortmeyer



The advantages of stainless Lean Duplex Steel, e.g. material 1.4362, 1.4062, 14162 compared to 1.4571 (A5) or 1.4404 (A4L), can be reduced to the following:

- more planning reliability: Significantly lower percentage of alloy of nickel and molybdenum; thereby less expensive and a higher price stability
- a two times higher basic strength, even in the welded condition
- a better resistance to corrosion, like chloride-induced stress corrosion cracking and pitting corrosion
- lower thermal expansion with the same thermal conductivity
- better endurance strength
- higher elastic modulus, instead of A4 / A5 with 170 kN / mm<sup>2</sup> here with 200 kN / mm<sup>2</sup> results in a 18% higher stiffness for profiles



**The company**

**1970:**  
Company founded by Wilhelm Modersohn senior. We started with the MU anchor for attaching pre-fabricated facade slabs to concrete

**1974:**  
Rental of office and warehouse space

**1979:**  
Rental of an empty factory building

**1984:**  
Own production building on an industrial estate

**End of the 1990s:**  
Expansion of production facilities, production of stainless steel special and series components for other sectors of industry

**2000:**  
Wilhelm Modersohn junior takes over management To date, the two company managers have registered more than 100 innovations in the field of fastening technology and other sectors of industry with the Munich Patent Office. Patent protection has also been granted for numerous applications

**2008/2009:**  
New administrative building for the Sales Service Centre and Work Scheduling. Production expansion: 2,500 sqm shipping hall

**2010-2013:**  
Expansion of glass bead blasting systems with 3 blasting rooms; extension of the production, warehouse and staff rooms; number of welder positions increased to 20

**2014:**  
Dipl.-Ing. Jürgen Matzelle is appointed second managing director. Alongside his work as a structural engineer, he is also a welding engineer.

**2015:**  
Expansion of the administrative building on Industriestraße

**2016:**  
Move to our extended office building

**2017-2018:**  
Purchase of a building in the neighborhood, for the storage of small parts. Expansion of our pre-material stock. Use of a 10 kW fibre laser.

**2019:**  
New construction of a hall for surface treatment.

**2020:**  
Commissioning of the welding robot.

**2021:**  
Investment in two more press brakes and an 8 kW fibre laser. Further investment in machinery and plant.

**Product examples**

**Panel hanger FB-H**

The MOSO<sup>®</sup> panel hanger is an officially approved system. It consists of an upper part, a middle part and a mounting part. There are several models of the upper part available depending on the structural situation. The standard- and twin-version as well as the "Attic Standard" and "Attic Twin" for the fastening on in-situ concrete.



The mounting part FB-HE was developed for slender precast concrete parts. With a low load range and a simultaneously large concrete core, MOSO<sup>®</sup> CE anchor channels are an affordable alternative to the mounting part FB-HE.

**Product information**

- Load range: 6.0 - 70.0 kN
- Material: approved stainless steel
- Certificate: national technical approval



**MOSO<sup>®</sup> CE anchor channel MBA-CE**

Officially approved in Europe, anchor channel MBA-CE is used to mount installation parts in in-situ concrete or as a mounting part in the precast panel. The MBA-CE anchor channel offers a horizontal or a vertical adjustment option depending on the mounting situation. MOSO<sup>®</sup> hammer-head/hook-head bolts MHK are used as fasteners.

**Product information**

- Profile sizes: 28/15, 38/17, 40/25, 50/31 and 52/34
- Material: approved stainless steel
- Certificate: European technical approval

**Clamping anchor FB-E**

The MOSO<sup>®</sup> precast fixing FB-E is an anchor for parapet elements.

In order to achieve a uniform distribution of load, each concrete element is braced with at least two anchors. When using more than two anchors, the design with adjusting screw must be used.

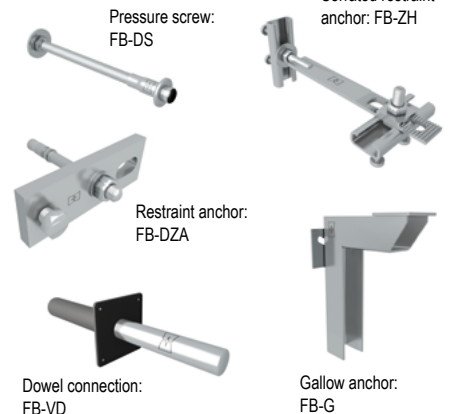
The clamping anchor is fastened to the in-situ concrete with an officially approved dowel or a MOSO<sup>®</sup> CE anchor channel.



**Product information**

- Types: 1 - 8
- Cavity: up to 200 mm (> on request)
- Material: approved stainless steel
- Certification: structural analysis

**Other products**



UPDATE: Calculation software MOSOCOConstructor for panel hanger, clamping anchor and anchor rail

Free software-download:  
<https://www.modersohn.eu/downloads>