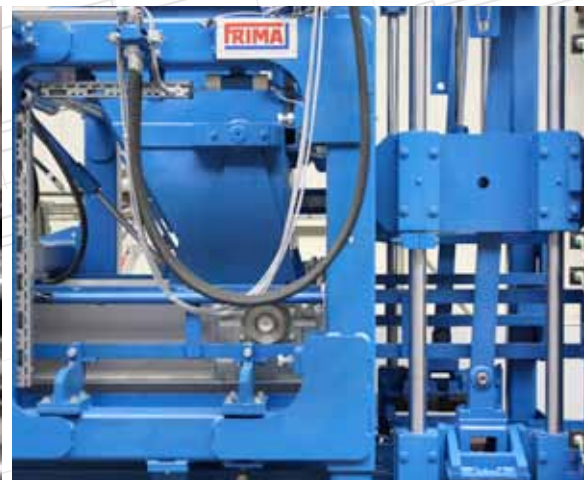


# SERVICE & MAINTENANCE



EFFICIENT · LOW-MAINTENANCE · USER-FRIENDLY

**FRIMA**

# FRIMA



**FRIMA** stands for the continuous monitoring of the complete machine and plant life.  
**FRIMA** offers all the services you need to achieve the highest possible system availability.

**FRIMA** can not just its customers. Not even if the machine or system is installed and the production runs. We support you in all aspects and requirements for the operation of the installed machines and equipment for

spare parts, inspection, maintenance, consulting, and modernization.  
Talk to us - we look forward to working with you.

## SPARE PARTS



A quick and reliable supply with spare parts and service are the pre-condition for the successful operation of a plant. Therefore, at FRIMA high availability of spare parts and short reaction times for spare parts and service requirements are top priorities.

**In Emden we keep a spare part depot of about 900 square metres with about 500 articles. In Sharja, in the U.A.E., we operate a spare part depot of 80 square metres with FRIMA Middle East.**

**In Los Angeles, USA, and in Volgograd, Russia, FRIMA maintains consignment warehouses** which enable us to supply our customers with spare parts in the respective areas quickly and effectively.



# MAINTENANCE CONTRACTS

A concrete block plant is only as good as it is reliable and efficient and enables the operator to produce the largest quantity with minimal waste and the best quality at the lowest costs. For a concrete block plant to function reliably and efficiently, it has to be maintained regularly, systematically and carefully. Preventative maintenance costs money, however, it saves it from unplanned plant stops and makes it possible to minimize downtimes and to extend its service life and to increase the quality of the products. Wear and tear are recognized early and fixed.

A concrete block plant is only as efficient as it is operated and controlled. At a modern concrete block plant about 600 parameters have to be set on the wet side alone. With our range of services we want to support your operating personnel in the knowledge of the correct operation of the plant. Topics during training are, amongst others, besides parameter setting, the formula- and product data analysis as well as maintenance planning and effective and quick error search. With a service contract you will contribute to a more reliable and more efficient production of your plant. Finally, operational reliability is increased. We offer three service packages. Choose from the maintenance contracts Basic, Comfort and Premium the one which is best for you. All contracts bind you for only one year. Our service sales would be glad to advise you.

## Maintenance contract Basic:

The **service package Basic** is the entrance into a systematic, regular, preventative maintenance of the plant. The focus lies on the recording of critical components such as wear and tear and spare parts. An on-site visit is done twice a year. During the visits the focus is on a comprehensive inspection of the plant with a needs assessment for the area of wear and tear as well as proposals for measures of improvement of critical components of the plant. The results of the visits are recorded in an inspection protocol. Offers are made for the recommended wear and tear parts as well as modifications. In addition, the settings

of the plant are checked and the plant is optimized. Besides these visits, within the scope of this service package, the customer receives updates of the controls per tele-service. Finally, the customer receives special conditions for wear and tear parts. Not included in the package is troubleshooting per tele-service. For assistance via tele-maintenance of more than 15 minutes there continues to be a charge. Also not contained in this contract is the systematic maintenance according to a maintenance plan with a catalogue of measures as well as trainings and the analysis of production data.

## Maintenance contract Comfort:

The **service Comfort** builds on the service package Basic. There is a visit on site three times a year. Besides the inspection of the of the plant, a systematic maintenance plan is developed according to which the work is done on site and ordered, available wear and tear parts are changed. Besides inspection and maintenance of the plant, another focus of this service package is on training of personnel. Also taken into account in this package is troubleshooting per tele-service. Up to 10 hours per quarter are included in the

price of the package, so that the customer is attended to regularly by tele-maintenance, without additional charge, even in case of extraordinary problems and downtimes. Auch das Troubleshooting per Teleservice ist in diesem Servicepaket berücksichtigt. Bis zu 10 Stunden pro Quartal sind in dem Paketpreis enthalten, so dass der Kunde regelmäßig auch bei außergewöhnlichen Problemen und Stillständen per Fernwartung ohne Extraberechnung betreut wird.

## Maintenance contract Premium:

The **service package Premium** supplies you with service comprehensively and guarantees systematic and structured maintenance. By systematic training and the analysis of production and performance data the efficiency of the plant is taken to a new optimum.

Four times a year, i.e. once per quarter, there is a visit on site. Up-dates and troubleshooting vial tele-maintenance are unlimited in this service package. In addition, spare parts are supplied to a specified extent.



## Maintenance contracts

### Basic

### Comfort

### Premium

#### Visit at site

two times a year / one day each (8 h)

✓

-

-

three times a year / one day each (8 h)

-

✓

✓

four times a year / one day each (8 h)

-

-

✓

#### Tele-service

Up-Dates

✓

✓

✓

Troubleshooting (max. 10 h per quarter)

-

✓

-

Troubleshooting (unlimited)

-

-

✓

#### Drawing up

Inspection of machine / plant

✓

✓

✓

Component check

✓

✓

✓

Check of mechanical system

✓

✓

✓

Check of hydraulic and pneumatic system

✓

✓

✓

Check of electric and controls

✓

✓

✓

Drawing up needed spare and wear parts

✓

✓

✓

Drawing up critical components

✓

✓

✓

Discussion of problem

✓

✓

✓

#### Reports

Drawing up of inspection protocol

✓

✓

✓

Drawing up of maintenance protocol incl. action plan

-

✓

✓

#### Maintenance / Optimization / Training

Check the settings of machine / plant

✓

✓

✓

Optimisation of plant

✓

✓

✓

Work according to maintenance plan

-

✓

✓

Training of staff

-

✓

✓

Analysis of the production and performance data from the previous period

-

-

✓

#### Spare parts

Offers for spare and wear parts and modifications

✓

✓

✓

Specialconditions for spare and wear parts

✓

✓

✓

Replacement of existing, ordered spare and wear parts

-

✓

✓

Providing of defined service kits

-

-

✓

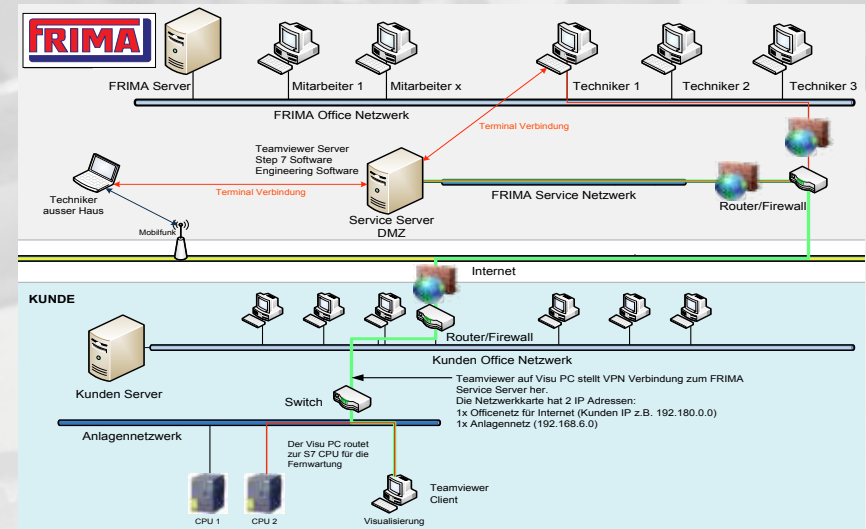


# TELESERVICE-, REMOTE MAINTENANCE CONCEPT



To improve the services **FRIMA** has developed a new remote maintenance concept. With this we can access the system control and all networked system components without installing additional hardware via VPN tunnel on a standard PC. Thus, diagnostics, parameter setting, the Troubleshooting, and program ex-

pansions and upgrades feasible. With this concept, our technicians can access any time and from anywhere in the world on their investment. An on-site technician is no longer necessary. In addition to this new form of remote maintenance, our staff is, of course, any time at your place personally.

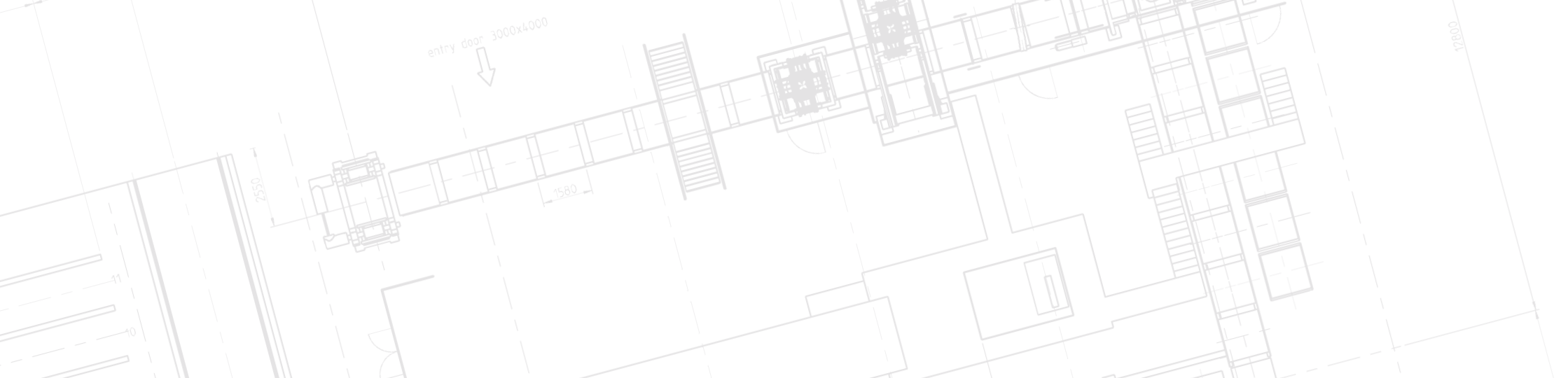


## SERVICE PERSONNEL



Our service personnel are trained specialists in the areas of mechanics, hydraulics, pneumatics, electrics or electronics and control technology. Besides knowledge in particular fields of engineering we emphasize knowledge and experience in the area of repair and maintenance of concrete block machinery as well as process engineering, i.e. concrete block production. For this reason we have employees in our

team who have worked in concrete block plants for years. In addition, our service employees are regularly trained by external experts in concrete technology and concrete production. Finally, we can draw on the services of external experts in the area of processing, consulting and support.



FRIMA GmbH & Co. KG  
Stedinger Straße 12 · D - 26723 Emden  
Telefon (+49) 4921/ 584-0  
Telefax (+49) 4921/ 584 128

[www.frima-emden.de](http://www.frima-emden.de) · [post@frima-emden.de](mailto:post@frima-emden.de)

**Hotline:** We are at your disposal from 7 a.m. until 6 p.m. MEZ: fon: +49 [0]4921 584 0

**Emergency Hotline:** We are at your disposal 7 days a week. In case of emergency we are available for you at phone number +49 [0]4921 584 222