

# DEPRAG

# Efficient and intelligent feeding

# eacy feed

Vibratory bowl feeder of the next generation





- » approx. 80 % energy savings
- » smart factory/Industry 4.0-capable
- » top system reliability
- » for manual applications
- » for stationary applications

# e for efficiency

eacy feed – new generation vibratory bowl feeder with approx. 80 % reduction in power consumption due to efficient "low energy technology"!

Sustainable design!

# a for assembly

eacy feed – new generation vibratory bowl feeder with ergonomic handling by means of an optimised module.

User-friendly operation!

# eacy

# c for communication

eacy feed – new generation vibratory bowl feeder with intelligent communication capabilities for application in a smart factory/ Industry 4.0 environment.

Intelligent automation!

# y for yield

eacy feed – new generation vibratory bowl feeder with optimised, technical efficiency due to robust design and tried and tested modular components.

Reliable assembly!

# Energy efficient and smart technology

DEPRAG combines over 40 years of experience in the fields of feeding technology with sophisticated cutting-edge technology and is proud to present: eacy feed, the vibratory bowl feeder of the next generation.

The innovative feeder **eacy feed** provides ideal specifications for the sustainable production of tomorrow: With its approx. 80 % power saving accomplishment the eacy feed is extremely energy efficient. In addition, the smart eacy feed is particularly suitable for the challenges of smart factory/Industry 4.0.



#### Approx. 80 % energy savings

- » the revolutionary controller and the new drive allow for the extraordinary energy efficiency of eacy feed
- » a significant reduction in power consumption is attained due to the 24 V oscillating magnets, thereby realising energy savings of around 80 %

#### **Smart technology**

- » the revolutionary controller enables remote control and communication
- » the eacy feed can be accessed from anywhere in the world via TCP/IP
- » all settings can be displayed and adjusted at any time
- » eacy feed is particularly suitable for smart factory/Industry 4.0-systems

# Efficiency and worldwide application

We have developed an innovative feeder in **eacy feed** which is distinguished by its energy efficiency and countless application possibilities. The 24 V technology of the drive enables worldwide application. All you need is a universal power supply. Country specific variations are a thing of the past. Thanks to the 24 V technology, eacy feed ensures reliable running even in areas with poor network availability.

# Low consumption and top flexibility

- revolutionary controller enables around80 % less power consumption
- » new controller and vibratory drive based on 24 V/DC voltage
- » universal power unit (115 V 230 V)
- » independent from the local alternating current frequency
- » one design for all markets

#### **Perfect vibration intensity**

For monitoring and regulation of the vibration intensity an acceleration sensor is mounted on the vibratory drive.

- » ensures stable output, independent from fill-level
- » no need for readjustments
- » supports ideal vibration behaviour and minimises material wear
- » simplified reloading procedure
- » accommodates all bowl sizes



#### For all applications

- eacy feed is available in three volumes:
  0.15 I, 0.75 I and 2.5 I as well as single or double spiral bowls
- eacy feed can be used to feed diverse components: screws, nuts, threaded pins, o-rings, parts for cleanrooms and many more
- » alterations of standard devices to your specific installation conditions enabling customised integration in individual assembly systems





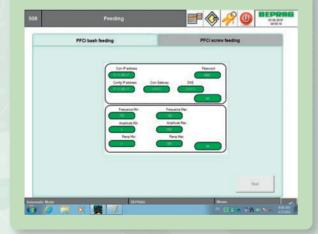


# Intelligent control for smart factory/Industry 4.0

Smart factory/Industry 4.0 can be found in all branches of industrial production. Intelligent, integrated smart components are in demand throughout the entire value chain. With the development of the innovative controller PFCi100 we are realising smart factory/Industry 4.0, the fourth industrial revolution. PFCi100 enables remote control, documentation and interaction with **eacy feed**, enabling the device to be monitored and controlled from anywhere in the world.

# Integrated functions of the PFCi100

- » external master IPC (e.g. DPU100) operational platform
- » enables remote control and communication
- » bus interface
- » adjustable via IPC (DPU100)
- » communication via TCP/IP
- » programmable via integrated web browser



#### **Operator platform DPU**

The DPU (DEPRAG Processing Unit) provides exceptional user-friendliness. Settings can be simply adjusted via the slide bars on the touch screen.

#### **DPU** setting options

- » frequency
- » amplitude
- » acceleration ramp
- » soft start
- » waveform



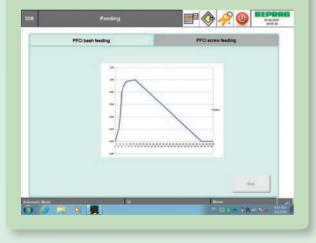


#### **Optimised waveform**

Up to 12 different waveforms allow accurate adjustment to varied part geometries and therefore enable significantly improved feeding behaviour.

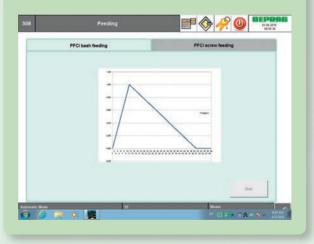
#### **Example waveform 1**

- » extremely "soft" vibrations through self-induction
- » up to 50 % increased output
- » low noise level



#### **Example waveform 2**

- » strong "ramp-up-characteristics"
- » significant increase in output for parts with complex geometry



# For stationary applications

**eacy feed** provides ideal specifications for fully automatic assembly and production systems. The smart controller enables application in intelligent smart factory/Industry 4.0-systems. eacy feed facilitates the integration of customised designs into your assembly equipment.



#### **Powerful controller**

The controller PFCi100 and the operating unit DPU are the core of the eacy feed.

- » control via external master controller
- » adjustments can be made at any time and from anywhere in the world
- » no need for mechanical alterations
- » slide bars on the touch screen make it extremely user-friendly



# For manual applications

For manual assembly applications, **eacy feed** offers flexible and efficient solutions along with top quality DEPRAG screwdrivers.



#### **User-friendly**

eacy feed guarantees optimal assembly conditions with ergonomic and comfortable operation. The controller PFC100 enables customised settings without mechanical alterations.

- » clear and easy operation via controller
- » option of frequency and amplitude regulation via controller
- » works to the individual working rhythm of the operator, with storage of up to 10 separate data sets



# **DEPRAG** quality

# Guarantees outstanding system reliability

Reliable feeders are a vital prerequisite for high system efficiency and economic production. With over 40 years of experience in the field of feeding technology and the advantage of superior quality standards in our own manufacturing facilities we are able to guarantee the exceptional reliability and precision of our products. In this spirit, **eacy feed** is continuing the renowned first-class product quality of all previous DEPRAG vibratory bowl feeder series.

#### Immediately ready for use

A continuous test in series production conditions is carried out before delivery of the feeder. Any potential production errors can therefore be determined and prevented in advance. The comprehensive documentation clearly explains the straightforward commissioning and operation.



# Exceptional reliability and efficiency

Our feeders ensure consistently outstanding efficiency:

- » feed rate of over 100 parts per minute
- » even complex components are sorted in the correct position
- » two screwdrivers or several screwdriving spindles can be connected to one device
- » supply systems such as hoppers increase the time between reloading intervals

# **Integrated fill-level dependent self-regulation**

Our vibratory bowl feeders are equipped with an integrated fill-level dependent self-regulator ensuring that they are always working to a constant speed. The feed elements are always fed with precision irrespective of the fill-level of the feed bowl.

# RAG

#### **Special solutions**

If standard feeding via a hose system is not an option, we offer special solutions such as the pick-and-place procedure.

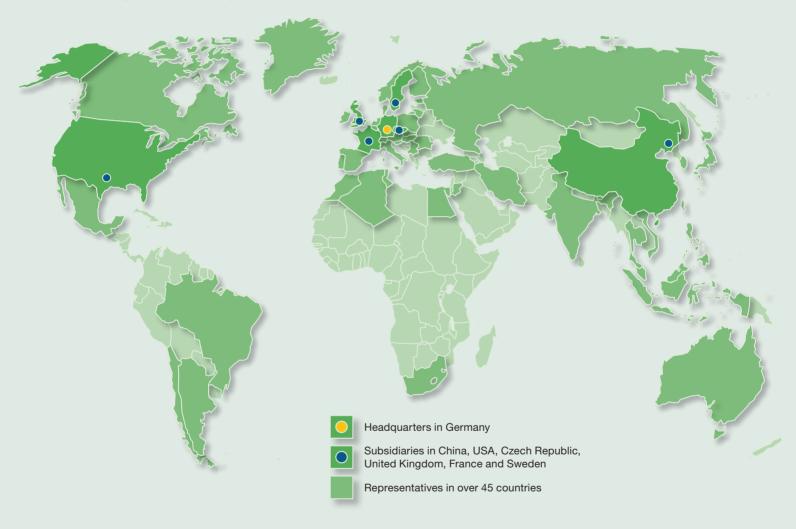
#### **One-Stop-Shop**

We are specialists in screwdriving technology, assembly tasks and automation. All fundamental components of screwdriving automation such as screwdrivers, feeders, controllers and process monitoring have therefore been perfectly coordinated with one another and tried and tested over many years. In the event of any servicing needs, DEPRAG's service experts are reliable and quick to respond. All replacement wear parts can be delivered in a very short time.

### **DEPRAG**

# Represented in over 50 countries

DEPRAG SCHULZ GMBH u. CO. based in Amberg, Germany, was founded in 1931 and is present in over 50 countries. Thanks to their innovations, cutting-edge technology and outstanding reliability, DEPRAG is an exceptional partner for screwdriving and assembly technology as well as automation. Renowned international companies have therefore been relying on the experts at DEPRAG for many years. From standard devices up to customised special solutions, DEPRAG provides products for the entire application spectrum of sophisticated assembly and production systems – always with their world-class standards of quality and sustainability.





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