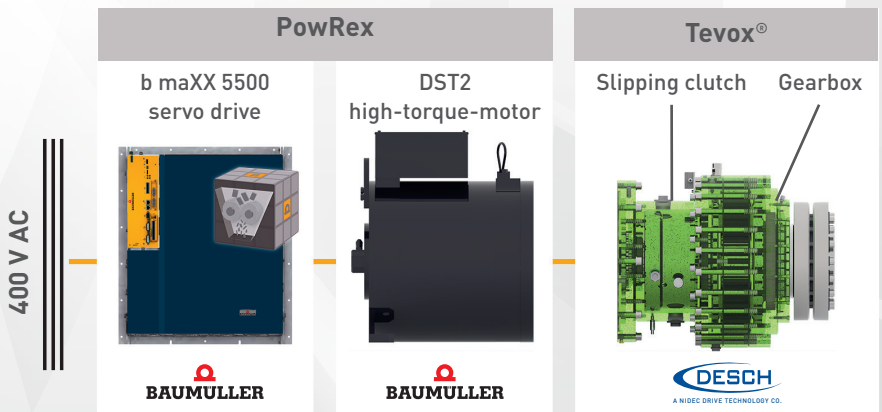


## The drive system for recycling. Designed for your application.

By eliminating the conventional drive system, shredders equipped with the Tevox® and PowRex offer numerous advantages, such as:

- High energy efficiency
- High rated torques
- High peak torques
- Easy maintenance
- Simple integration into existing designs



## Nidec DESCH Tevox® direct drive Baumüller PowRex drive system

In cooperation with Baumüller, Nidec DESCH offers a complete system for fully electric shredders.



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The fully electric system solution exceeds the torque and speed of conventional drives – and also impresses with many other benefits

## High Energy Efficiency

Compared to conventional drive systems (e.g. using hydraulic motors), the very high individual efficiency of the components allows the overall drive system to achieve significantly higher efficiency.

- Higher efficiency
- Lower energy consumption
  - Reduced energy costs
  - Reduced carbon footprint

## Environmental Friendliness

Substituting the hydraulic drive offers you the following advantages:

- No need for significant amounts of oil
- Reduced noise emissions
- Lower energy consumption
- Easy maintenance

## Consistently High Torques

The DST2 high-torque motor enables your machine to achieve high peak and rated torques across the entire speed range due to its motor characteristics.

### Maximum torque from zero speed:

Restart is possible even when the machine is loaded.

### High productivity:

High throughput and maximum machine availability.

### Consistent shredding quality

due to excellent speed constancy.

## Intelligent Drive System

Intelligent functions thanks to innovative sensor technology:

- **Data acquisition**  
Determination of load collectives through torque and speed measurement as well as the number and frequency of slip events
- **Slip monitoring**  
Long service life of the coupling thanks to rapid response to blockages and reduced slip times
- **DESCHtorque**  
Highly dynamic measurement of torque curves and peaks using strain gauges directly on the output shaft
- **Energy monitoring**  
Analysis of energy consumption directly in the drive
- **Temperature sensor**

## Optimised Drive Train

In close cooperation with Baumüller, we offer a coordinated complete system consisting of motor, power electronics, gearbox, clutch and sensor technology for recycling applications, for example – all from a single source.

## Plug & Play

Easy integration: You benefit from a flexible and customer-specific connection of the drive system to the rotor shaft.

## Increased Productivity

The highly dynamic drive system significantly increases productivity by:

- enabling fast start-up and restart
- minimising downtime
- being designed for your machine application

The high dynamics are achieved by:

- low moments of inertia
- powerful drive electronics
- a torsionally rigid drive

## Overload Protection

In the event of a blockage, the wet-running slip clutch protects both the drive components and all components of the shredder that are subject to force or torque flow by decoupling the motor.

- Protection of the drive system in the event of a blockage or malfunction
- No need to restart after a blockage
- Thermal protection through integrated slip monitoring
- No manual readjustment necessary
- Wear-free operation
- Stable and reproducible slip torque

THE DRIVE. OF A NEW AGE.