Metal Recycling is not just Metal Recycling

It is a well-known fact: metal recycling is not just metal recycling. It is, above all, about enhancing the value of one’s metal residues through optimal metal recycling and the use of the optimum metal recycling technology.

We are experts in this field. Like no other company we have specialised in optimal metal recycling technologies, based on the so-called Arnold-technology, which is well-proven worldwide. More than 80 years of experience in the field of metal processing and with more than 1,000 machines and equipment installed by our company – these facts speak for themselves.

Our solutions are specifically tailored to the particular requirements and tasks of waste management companies, recycling companies or companies in the metal working industry.
**Single Shaft Shredder**

The compact single shaft machine cuts with the proven rotor-stator principle.

**application:**
mainly chips crushing

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**Double Shaft Shredder**

The rotor blades are offset by a blade width that engages the cut surface. With optional transverse blades, the material is comminuted in both the longitudinal and transverse directions.

**application:**
Sheets, wood, plastic, tires, ...

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**Quad Shaft Shredder**

The material to be crushed, would be pre-cut as well as shredded in only one reduction process in the cutting unit. The crushed pieces which do not fall through the screen basket, are conveyed by the rotor back to the top and fed to the crushing process again.

**application:**
large-volume materials, containers, garbage, ...

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**Single Shaft Shredder / Ejection**

ArnoShred SSE, the shredder with automatic tramp metal discharge.

The shredding of the hydraulically powered feed pusher presses the material against the fitted exchange-able with reversible blades rotor.

**application:**
various materials with extraneous parts
Single Shaft Shredder

ArnoShred SS for chip size reduction.

Our single shaft shredders guarantee trouble-free operation through reliable technology. The proven SS-series are high performance machines from single-shaft shredders, which are primarily used for crushing metal chips. Through continuous development, in cooperation with industry and commerce, ArnoShred SS series was created. Our single shaft shredders are modular configurable and can be matched with material-specific optimised cutting discs for your material.
Quick Change System
Quick in - quick out! Our quick-change system reduces enormously the downtime when changing the blade.

Knives
About 80 blade geometries with 12 different diameters and different knife widths are available.

Knife Quality
Our knives are available in different materials and hardness as well as in hard metal.

Wear Plates
Depending on the application, we also deliver wear plates in high compensated quality or food safe quality.

Experience
The technology of our shredder is based on more than 30 years experience with several hundred plants supplied from Industrie Service Drüge.

Additional Equipment
To optimize performance, auxiliary devices such as pressing paddles, feed and discharge conveyor and extraction systems, can be supplied.

Monitoring
Our systems can have monitored technology integrated into production lines via modem / VPN and have a PLC-controlled reversing and automatic shut-off.
Double Shaft Shredder

ArnoShred for shredding various materials.

The powerful and efficient rotary shear - a double shaft shredder - is often used in the pre-crushing of metal, tires, e-waste or plastic. The cutting discs shred the input material in the longitudinal direction. With additional fitted transverse blades, the material is crushed to defined piece sizes. With special granulator blades and screen baskets, the double shaft shredder can also be used for fine crushing. For high throughput rates with chips shredding the ArnoShred DS is also executed with double rotor and both-sided stator blades.

Quick Change System

ArnoShred one, two and four-shaft shredder is equipped with a quick-change system for the blades to optimise your workflow.
Quick Change System
Quick in - quick out! Our quick-change system reduces enormously the downtime when changing the blade.

Knives
About 80 blade geometries with 12 different diameters and different knife widths are available.

Knife Quality
Our knives are available in different materials and hardness as well as in hard metal.

Wear Plates
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Monitoring
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Quad Shaft Shredder

ArnoShred QS series

ArnoShred for shredding various materials.

Due to the solid construction, the high-performance and robust cutting unit the ArnoShred QS four-shaft shredder is suitable for continuous operation. Depending on the material and bulk density, different blade geometries (e.g., rip hook or pelletizing function) are used. In this way precisely defined particle sizes can be crushed and also bulky material can be crushed efficiently. A combination of rotary shear and four-shaft shredding ensures maximum process reliability and economical operation.
Quick Change System
Quick in - quick out! Our quick-change system reduces enormously the downtime when changing the blade.

Knives
About 80 blade geometries with 12 different diameters and different knife widths are available.

Knife Quality
Our knives are available in different materials and hardness as well as in hard metal.

Wear Plates
Depending on the application, we also deliver wear plates in high compensated quality or food safe quality.

Experience
The technology of our shredder is based on more than 30 years experience with several hundred plants supplied from Industrie Service Drüge.

Additional Equipment
To optimize performance, auxiliary devices such as pressing paddles, feed and discharge conveyor and extraction systems, can be supplied.

Monitoring
Our systems can have monitored technology integrated into production lines via modem / VPN and have a PLC-controlled reversing and automatic shut-off.
Single Shaft Shredder

ArnoShred SSE with automatic tramp metal ejector for crushing various materials.

Our single shaft shredders guarantee trouble-free operation through reliable technology. The proven SSE series are machines of powerful single-shaft shredders with hydraulic material feed, which are used for shredding various materials. In cooperation with the University of Leoben Arno®Shred the SSE series of single-shaft shredders has developed, which meets the highest standards.

Ferrous and non-ferrous metal-swarf, like:
- Steel
- Stainless steel
- Aluminium
- Copper
- etc.

Other waste materials:
- Electronic devices (WEEE)
- Plastics / Foil
- Bulky waste
- Tyre wire, Wire
- etc.
Wear Plates
Depending on the purpose of the shredder we offer wearplates in various material qualities.

Knives
For every material that you have to shred, we deliver the proper knife.

Friction Clutch
Our machines are equipped with a friction clutch to avoid damages with the axle.

Tramp Metal Discharge
If needed, hard metal pieces can be ejected into a separate container, to guarantee clean material for the following processes.

Hydraulic or Pneumatic Drive
All the cylinders (feed and material ejection) can be driven by hydraulic or pneumatic devices.

Drive Mechanism
The drive mechanism depends on the size of the machine. (gearbox or belt-drive)

Patented Feed System
For optimal distribution to the shaft, there are up to 3 feeders.

Energy Saving System
Due to the patented extraneous material ejection and the friction clutch less energy for cutting is needed.
### Technical Data

<table>
<thead>
<tr>
<th>Arno® Shred</th>
<th>SS</th>
<th>DS</th>
<th>QS</th>
<th>SSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baugröße</td>
<td>400, 600</td>
<td>320, 360, 400, 500, 600, 650, 700, 800, 950</td>
<td>320, 360, 500, 600, 800</td>
<td>700, 1400, 2100</td>
</tr>
</tbody>
</table>

#### Dimensions

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>DS</th>
<th>QS</th>
<th>SSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length [mm]</td>
<td>1.100-1.800</td>
<td>1.250-4.800</td>
<td>1.250-2.600</td>
<td>2.450</td>
</tr>
<tr>
<td>Width [mm]</td>
<td>280-500</td>
<td>450-1.000</td>
<td>450-950</td>
<td>1.500-3.200</td>
</tr>
<tr>
<td>Height [mm]</td>
<td>330-500</td>
<td>330-620</td>
<td>600-1.100</td>
<td>2.400-3.100</td>
</tr>
<tr>
<td>Working width [mm]</td>
<td>420</td>
<td>950</td>
<td>900 / 600*</td>
<td>630</td>
</tr>
</tbody>
</table>

#### Rotor

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>DS</th>
<th>QS</th>
<th>SSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotorlength [mm]</td>
<td>380-765</td>
<td>380-1.700</td>
<td>380-1.200</td>
<td>700-2.100</td>
</tr>
<tr>
<td>Rotor- / blade diameter [mm]</td>
<td>115-200</td>
<td>115-480</td>
<td>175-340</td>
<td>450</td>
</tr>
<tr>
<td>Rotorblades up to [pcs]</td>
<td>32</td>
<td>193</td>
<td>96 / 193*</td>
<td>27-87</td>
</tr>
<tr>
<td>perforated screen [holes mm]</td>
<td>5-50</td>
<td>5-50</td>
<td>5-50</td>
<td>20-50</td>
</tr>
</tbody>
</table>

#### Power data

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>DS</th>
<th>QS</th>
<th>SSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive power up to [kW]</td>
<td>11</td>
<td>110 / 2x90</td>
<td>2x55 / 2x45*</td>
<td>30-132</td>
</tr>
<tr>
<td>Rotation speed [rpm]</td>
<td>11-72</td>
<td>11-72</td>
<td>11-72</td>
<td>60-140</td>
</tr>
</tbody>
</table>

#### Options

- Quick in / Quick out System
- Friction drive
- different screens

*All information on production rates are determined on the basis of the material-specific conditions. Other values are only guidelines.*

*) 4 shaft granulator