



Coil lines

Cut-to-length and slitting lines
Press feeding lines
Coil preparation lines for roll formers

ARKU



▀ We want to be your partner

For a partner in the engineering business one feature is indispensable: trust. Many top companies and hidden champions rely on ARKU. This is also shown by a lot of positive references. Customers with various demands on coil feeding appreciate the unmatched reliability of our lines and the ARKU staff. Our customers made us what we are today: the

market leader in leveling and coil line technology. We achieved this by constant optimization of the individual components together with the users. Continuous development brings our customers and ourselves forward. Therefore you can be sure that we know all the requirements in the market. From the beginning, for over 85 years.

1967

ARKU builds the first precision leveler. Entry into mechanical engineering industry.



1987

Modern press feeding lines in short form design with pilot release leveler make ARKU one of the leading protagonists of the short form design.



1994

With the feeder straightener CompactFeed® and the roller feeder ServoMaster® ARKU sets standards.



1998

The ARKU customer service is available around the clock.



ARKU delivers availability – worldwide

We do not only deliver you the machine, but an accordingly high availability. Extensive measures before, during and after the job back up your production. For example, our roller feeder series ServoMaster® achieves a technical availability of 95-98% in multi-shift continuous operation. The feedback from our

customers confirm time and again: For over 80 years ARKU represents reliability in sheet metal processing.

2000

With the patented EcoPlan® drive concept levelers now deliver up to 30 % higher performance.



2003

ARKU builds the 300th short form design and becomes the top address for press shops.

ARKU Coil Systems Inc. is established in Detroit, USA.



2008

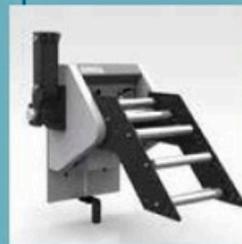
Development of the HiCap® PLUS high-performance leveler.



2012

Introduction of the ServoMaster® HiSpeed feeder at the EuroBLECH in Hannover.

ARKU Leveling Systems is established in Kunshan, China.



2013

Official opening of the new production hall in Baden-Baden. ARKU celebrates its 85th anniversary.





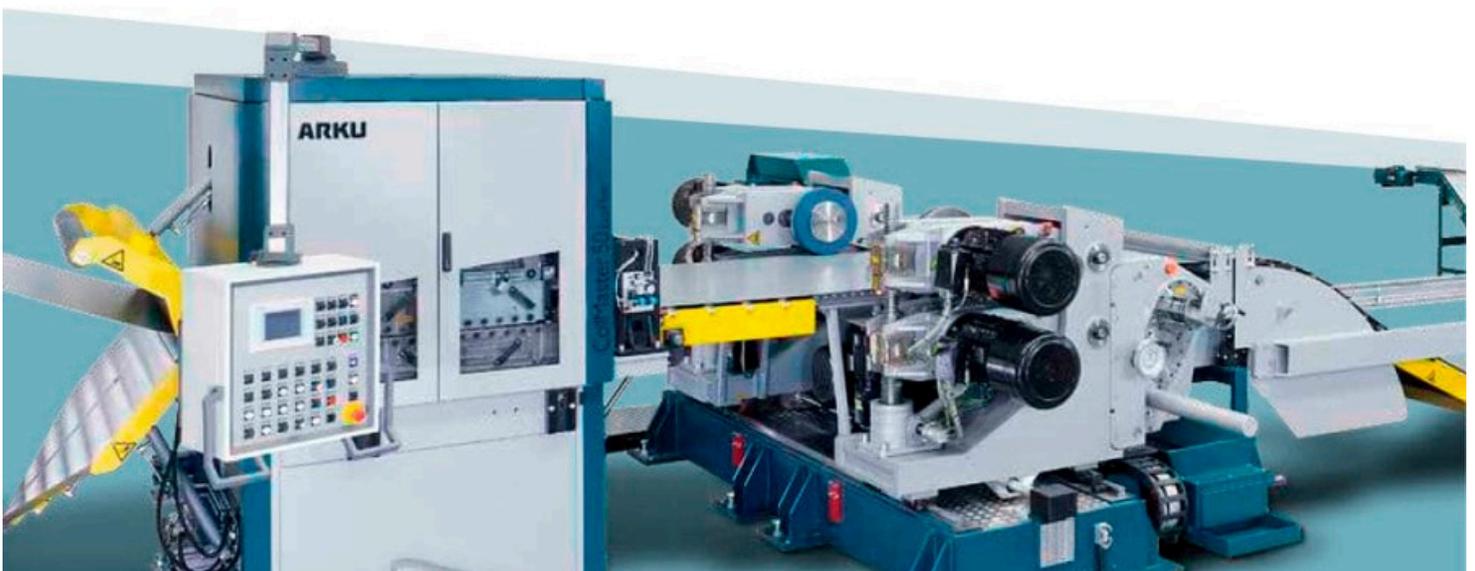
▲ Rotating shears

▶ Cut-to-length and slitting lines

ARKU designs and continuously builds cut-to-length lines with rotating shears or start-stop systems with stationary shears. Other line components such as cropping shears, trimming shears, punching table or stacking system complete the cut-to-length line for flexible sheet metal processing. Our high capacity leveler HiCap[®] is often used in cut-to-length lines. It is designed as a strip leveler

for processing wide and thin sheet metal strips. The HiCap[®] can influence all kinds of coil defects.

ARKU offers slitting lines for cold or hot rolled coils for processing of various materials.





▲ Cut-to-length line with high capacity leveler HiCap®



▲ Cut-to-length line for flexible sheet metal processing

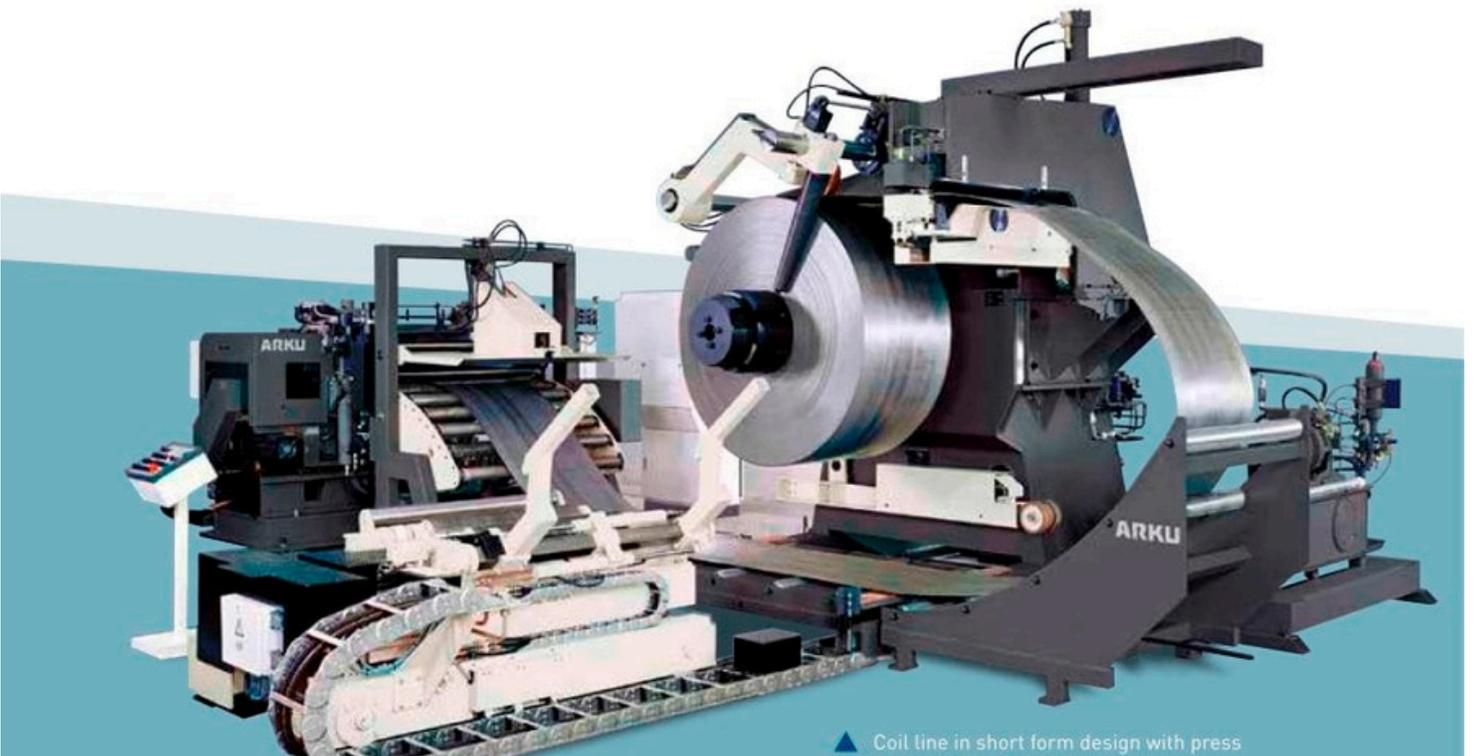


▲ Press feeding line in short form design in front of a 800 t servo-transfer press

Press feeding lines

A powerful coil feeding is essential in order to exploit the full potential of your press line. ARKU coil lines have been used by our satisfied customers for over 40 years. The long service life and economic efficiency of our lines is valued by all business branches. We integrate ARKU press feeders in press lines from all manufacturers. Our project teams prove their exper-

tise in interface management time and again. Therefore, it is now taken for granted that ARKU is on board as a credible project partner when it comes to investments or modifications in the press section.



▲ Coil line in short form design with press

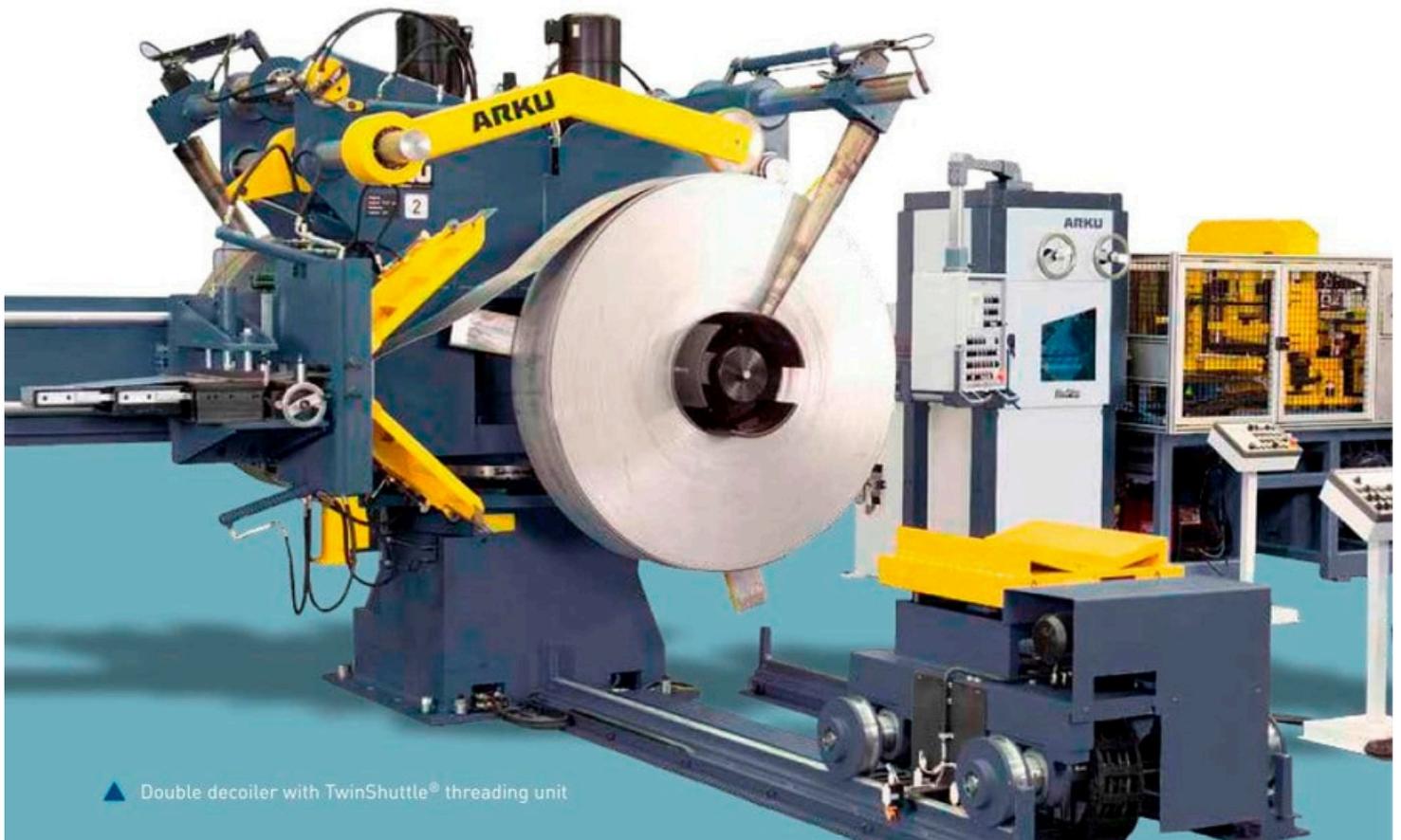


▲ Press feeding line in long form design in front of 630 t Servo-press

▶ Coil preparation lines for roll formers

For the quality of a powerful profiling system's final product the coil preparation line is essential. It must meet high requirements in order to allow economic profile production and not to become the bottleneck of the production. High availability and short set-up times of ARKU lines made us the market leader in coil preparation lines for roll formers.

The strategic partnership with the company Dreistern, the market leader for roll forming lines, makes us a powerful team for all roll forming applications.



▲ Double decoiler with TwinShuttle® threading unit



▲ Double decoiler for fast coil changes





AR KU customer service – the insurance for your production

We make sure that your production runs with our coil lines. Our service team is there for you at all times - 24 hours a day - 7 days a week - 365 days a year - worldwide. The constant contact with the operators and maintenance staff ensures that ARKU knows

what is going well and what needs to be improved. This is confirmed by our customers in form of very positive reviews in the customer satisfaction analysis. These are available on our website www.arku.com.

Higher added value through coil line modernization

Benefit from our comprehensive know-how of the leveling technology and the up- and downstream processes in sheet metal forming. Whether replacement of individual components or the rearrangement of a coil line with individual components - our service technicians modernize your coil line, regardless of the manufacturer. Rethink this alternative to investing in a new plant.



Training & Consulting

Learn from the experience of our experts, to generate the full benefit of your leveling machine and coil line. We offer trainings with certificates for the following topics:

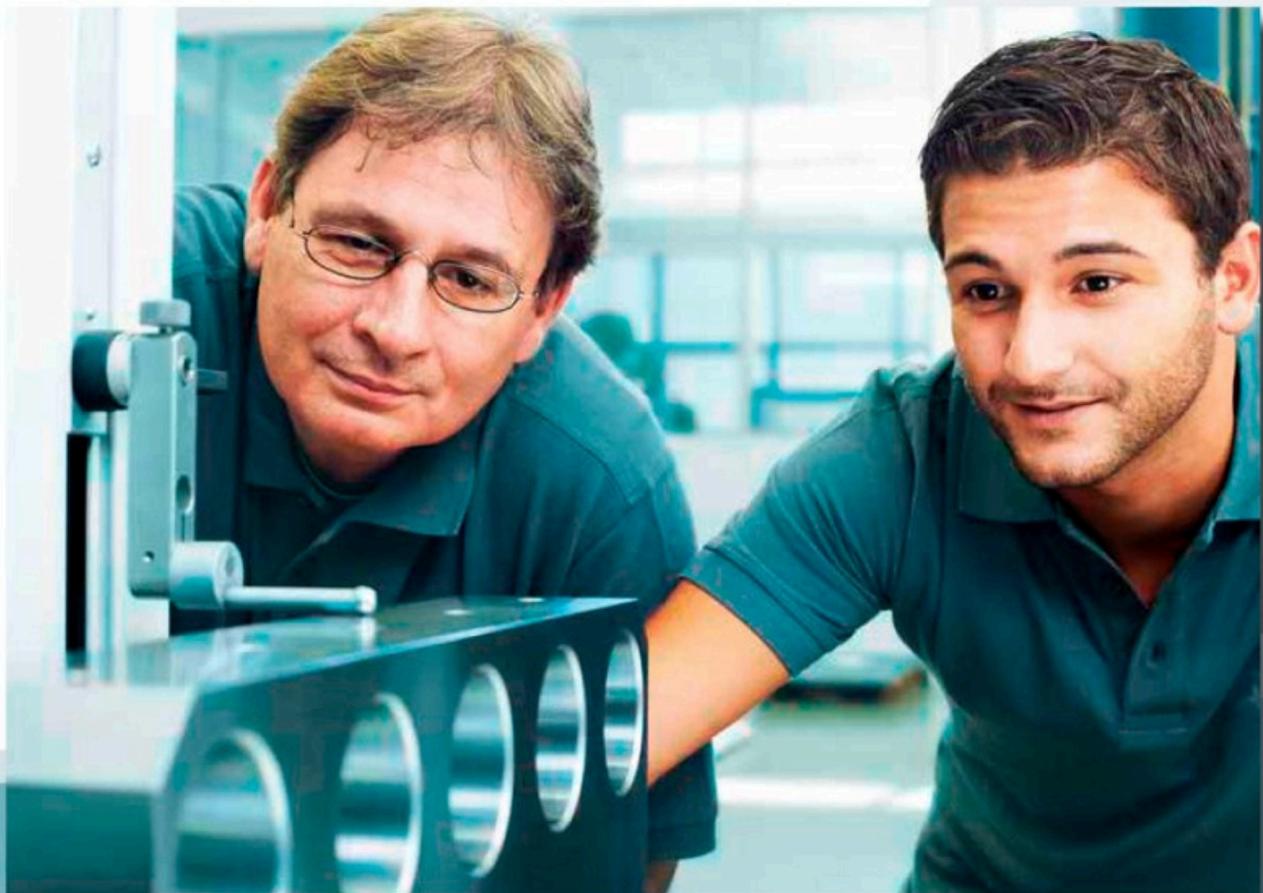
Fundamentals of leveling technology

Plant operation

Construction of a coil line

Control technology

Production support



ARKU – The experts in leveling of sheet metal and coils

ARKU represents more than 40 years of experience in manufacturing levelers and coil lines. As a market and technology leader in leveling technology we offer the broadest range of high-performance and precision levelers in the world. ARKU maintains leveling and service centers on three continents:

- Baden-Baden (Germany)
- Cincinnati (USA)
- Kunshan (China)



ARKU



Precision Levelers

for stamped, laser-cut and flame-cut parts



▀ ARKU precision levelers – what do customers say?

"The subsequent processes such as bending, welding and mechanics require less rework and adjustments due to the FlatMaster® 88. The machine has been leveling 150 tons a month, which is ten times the previous tonnage with the same number of staff."

Josef Spieker, Technical Director Danne Group GmbH, Germany

"The purchase of the FlatMaster® 88 was absolutely the right decision. With the FlatMaster® 88 we obtain a higher accuracy and improved quality in sheet metal processing."

Florian Weber, Managing Director Weber Stahl-Anarbeitungs-Service GmbH, Germany

"In addition to faster leveling, we have considerably increased the leveling quality. We are now capable of welding our sheet metal parts faster and more precisely. We also save time when assembling the components."

Erik Lorenz, Plant Manager Liebherr-Werk Ehingen GmbH, Germany

"The FlatMaster® provides us with enormous added value when working with sheet metals. After the introduction of the FlatMaster® the full potential of positive effects of flat panels proved to be far greater than previously anticipated."

Klaus Desiderato, Head of Pre-Production Goldhofer AG, Germany

"Since we have started leveling, the process reliability has increased significantly. There are 70 to 80 % fewer angle corrections when bending. Plus we can offer better quality for the same price."

Roland Deeg, Managing Director Roland Deeg GmbH, Germany



Roller leveling with the FlatMaster® – the economical and rapid leveling process for sheet metal parts

The roller leveling process

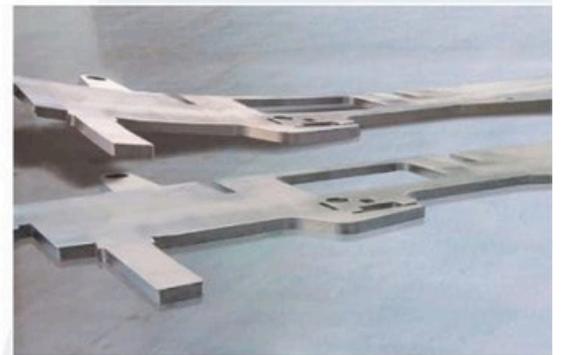
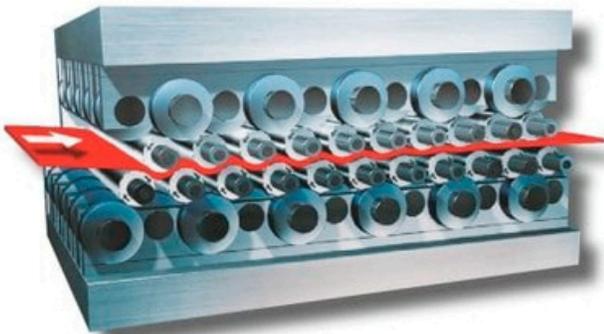
In the roller leveling process a sheet metal part passes through a series of alternating bends. The material is shaped in such a way that the finished result is flat and almost stress-free.

The lower the residual stress in a sheet metal part, the better the results during the subsequent production steps such as welding, bending or creasing.

Leveling with the FlatMaster® is simple and fast in comparison to other leveling processes. Punched, laser-cut or flame-cut parts which require hours of manual straightening are leveled within a few seconds.

Advantages of roller leveling:

- Flat and almost stress-free parts
- Significantly faster and more economical than alternative leveling processes
- Simple processes without extensive training requirements
- Foundation for reliable welding, bending and creasing
- Reduces rework and rejects



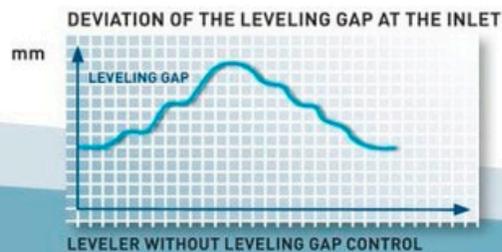


Consistently good leveling results with leveling gap control

Fluctuating forces affect both the parts and the leveler during the leveling process. Especially when working with thick materials with varying cross sections.

As a result, the precision leveler maintains a constant leveling gap despite the fluctuating and varying forces. This delivers consistently good leveling results.

The FlatMaster® is equipped with a servo-hydraulic leveling gap control.



The FlatMaster® series of levelers is equipped with the servo-hydraulic leveling gap control.



Safety due to effective overload protection

During the leveling process both the parts and the machine are exposed to immense forces.

The FlatMaster® utilizes a hydraulic overload protection system to prevent damage to the leveler. Hydraulic systems react fast enough to compensate sudden overloads. As a result, the leveler is optimally protected.

FlatJack®: Flatness control directly onto the leveler

The new, integrated FlatJack® from ARKU serves to check the flatness of punched, laser-cut and flame cut-parts. The flatness values are measured down to tenths of a millimeter and recorded in the FlatMaster® control system, where they can be viewed at any time. The measurement process complies with the requirements of the international standard DIN EN ISO 12781.



▲ The FlatMaster® hydraulic overload protection safeguards both the drive system and the leveler against damage.



▲ FlatJack® - Operator-independent parts flatness control.



▲ FlatMaster® 88 with FlatJack®



Quick change of leveling and back-up rollers

During production, dirt and material residue accumulate inside the leveler. Thoroughly cleaning the leveling and back-up rollers reduces the wear on the leveler.

For this reason ARKU precision levelers are equipped with a unique leveling roller quick-change system. The leveling rollers can be changed, therefore allowing for a thorough cleaning of the leveler in a short period of time.

RollerPickup - faster installation and removal times

Frequent cleaning of the leveling unit maintains consistent quality. The convenient RollerPickup exchange system enables you to save time, especially when the leveling rollers need to be cleaned frequently. The RollerPickup is also ideally suited for inspecting the leveling unit.





▲ Leveling and Deburring Center Baden-Baden, Germany

Leveling demonstrations and contract leveling of sheet metal parts

Visit us and convince yourself of the performance of ARKU's precision levelers - preferably with parts from your own production. Our leveling and deburring centers offer a large range of precision and high-performance levelers and deburring machines. We offer leveling and/or deburring demonstrations and contract leveling and/or deburring. Profit from the results of numerous leveling/deburring demonstrations and our extensive expert knowledge.

ARKU possesses a comprehensive network of customers with ARKU levelers. We would be happy to put you in touch with a customers close to you.



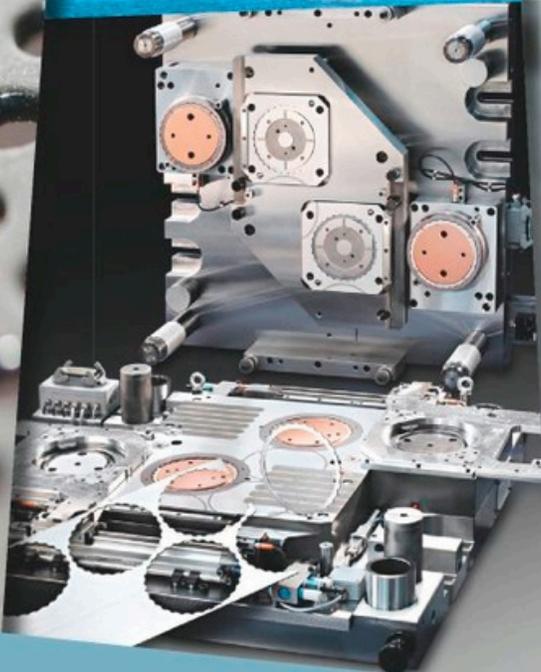
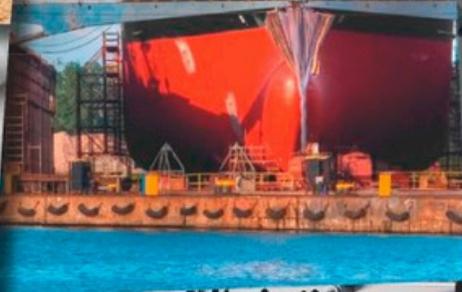
▲ Leveling and Deburring Center Cincinnati, USA



▲ Leveling and Deburring Center Kunshan, China



Our parts levelers are utilized in a wide variety of industries.
The customers' portfolios range from thin sheet metal to thick steel plates.
With ARKU levelers you are making an investment in optimizing your processes.



▶ EcoMaster® – the leveler series for sheet metal parts from 0.1 to 5 mm

	EcoMaster® 12	EcoMaster® 25	EcoMaster® 30
Parts thickness (mm)	0.1 – 1.25	0.2 - 3.0	0.3 - 5.0
Max. passage width (mm)	150	300, 500, 800	300, 500, 800, 1,100, 1,300
Motor settings	-	optional	optional
Digital display	-	standard	standard
CE-certification	standard	standard	standard

We are happy to offer you additional models upon request.

The EcoMaster® series of precision levelers delivers good results when working with thin sheet metal parts. Its easy operation and maintenance-friendly design ensure efficient operation in your production.



- ▲ Measuring calipers option: The clever tool for automatic thickness measurement.



FlatMaster® – the servo-hydraulic parts leveler series for sheet metal parts from 0.6 mm to 60 mm

	FlatMaster® 55	FlatMaster® 88	FlatMaster® 120	FlatMaster® 140	FlatMaster® 180
Parts thickness (mm)	0.6 - 15.0	1.0 - 28.0	1.5 - 40.0	2.0 - 45.0	4.0 - 60.0
Max. passage width (mm)	800, 1,250, 1,650	800, 1,300, 1,600, 2,000	1,300, 1,600, 2,000	1,300, 1,600, 2,000	2,000, 2,500, 3,000
Quick-change system for leveling rollers	optional	optional	standard	standard	standard
Leveling gap control	standard	standard	standard	standard	standard
Overload protection	standard	standard	standard	standard	standard
Visualisation	Multi-touch screen	Multi-touch screen	Multi-touch screen	Multi-touch screen	Multi-touch screen
CE-certification	standard	standard	standard	standard	standard

We are happy to offer you additional models upon request.

The FlatMaster® series delivers the best leveling results for sheet metal parts from 0.6 to 60 mm. The distinctive features include the leveling gap control and the hydraulic overload protection. The FlatMaster® is the result of 50 years of experience in manufacturing precision levelers.



▲ FlatMaster® 180

ARKU - the leveling and deburring experts

ARKU stands for more than 50 years of experience in the manufacturing of precision levelers. As the worldwide market leader in leveling technology, we offer the broadest spectrum of high-performance and precision levelers. Our new line of deburring and edge rounding machines, the EdgeBreaker®, build upon this expertise and enable our customers to add further value to their parts.

ARKU has locations on three continents with service centers in:

- Baden-Baden, Germany
- Cincinnati, USA
- Kunshan, China



ARKU

Technology made with passion

**Efficient deburring
with ARKU.**



Deburring Machines - For All Applications.

Thin or thick materials, small or large burrs: ARKU offers a suitable deburring machine for punched, laser, plasma and oxyfuel cut parts. When it comes to selecting the ideal machine concept, we concentrate entirely on your parts and your edge requirements. All while consistently pursuing one goal: optimal sheet metal quality - with high process reliability and low unit costs.

Many materials, one result:
optimal sheet metal quality.



Punched and laser cut parts
from 0.5 mm thick

Deburring, edge rounding,
oxide removal, surface finishing



Plasma and oxyfuel cut parts
up to 100 mm thick

Deslagging, deburring, edge rounding

Deburring machines

Machine Model	Processing	Cutting process	Advantages	Capabilities							
				Deslagging	Deburring	Edge rounding	Surface finishing	Oxide removal	Max. passageway width	Min.	
EdgeBreaker® 1000	Single-sided 	Punch and laser cut parts	<ul style="list-style-type: none"> All-in-one machine for small parts Integrated dust extraction system Modular design 		✓	✓	✓		250 mm		
EdgeBreaker® 6000	Single-sided 		<ul style="list-style-type: none"> All-in-one machine for stamped and laser cut parts Uniform rounding results up to 2.0 radius Can also be used for small parts 		✓	✓	✓	✓	1,300 mm		
EdgeBreaker® 2000	Double-sided 		<ul style="list-style-type: none"> Double-sided edge rounding in a single pass Fast changeover of consumables Automatic consumable wear calibration 				✓		1,300 mm	10	
EdgeBreaker® 3000	Double-sided 		<ul style="list-style-type: none"> Double-sided deburring and edge rounding in a single pass Fast changeover of consumables Automatic consumable wear calibration 		✓	✓			1,300 mm	10	
EdgeRacer®	Double-sided 		<ul style="list-style-type: none"> Double-sided edge rounding in a single pass Uniform edge processing Ideal for manufacturers of enclosures, perforated materials and parts with fine inner contours 				✓	✓	1,500 mm	30	
EdgeBreaker® 4000	Double-sided 		<ul style="list-style-type: none"> High-performance grinding drum designed for heavy-duty burrs Double-sided processing in a single pass Automatic consumable wear calibration 		✓	✓			1,300 mm	10	
EdgeBreaker® 5000	Single-sided 		Plasma and oxyfuel cut	<ul style="list-style-type: none"> Reliable deslagging No flipping of the parts necessary Low tool costs for downstream processing 	✓					1,300 mm	10
Tumbler	Double-sided 			<ul style="list-style-type: none"> The solution for deburring small parts (even 3-D parts possible) Rust and scale are also removed Time savings through simultaneous processing 	✓	✓	✓		✓	1,300 mm	10



Deburring

Burrs are created when punching or cutting with laser, plasma or oxyfuel. This complicates efficient downstream processing. The remedy is the appropriate deburring solution.

Oxide removal

When cutting with oxygen, a thin layer of oxide settles on the edge of the material. Special brushes can remove this oxide layer.

Edge rounding

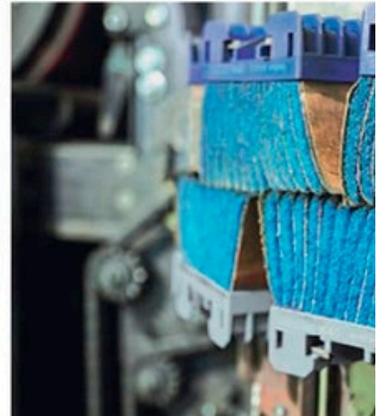
Quality edge rounding removes the sharp edge of either punched, laser, plasma or oxyfuel cut parts. For a lower risk of injury - and better paint adhesion.

Deslagging

During plasma or oxyfuel cutting, slag is created on the outer and inner edges of the material. The slag has to be removed before downstream processing.

Surface finishing

Each deburring tool gives the sheet metal a unique finish. With an additional processing unit, we can achieve a specific surface finish.



**Deburring with ARKU.
Double-sided, rapid,
reliable.**



ARKU



»EVERY
DEVELO
REFLEC
PASSIO
OUR WC

Ewald Hund, Head of Development, ...

S
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→
Deburring, rounding,
oxide removal

Punched and
laser-cut parts
**starting at
0.5 mm (0.02")
thick**



Find our entire
machine portfolio at
arku.com/products-usa

**Many materials,
one result: quality.**

Remove heavy burrs and slag produced by flame (oxyfuel) or plasma cutting heavy plates. Or reliably remove burrs from thin sheets / parts after punching and laser cutting. No matter how diverse your requirements and part quantities are: Deburring and rounding with ARKU increases the productivity of your manufacturing processes. It reduces tool wear while simultaneously ensuring an appealing appearance of your parts – your key advantages in the market.



Plasma and
flame-cut parts
**up to 100 mm (4")
thick**

→
Removing slag, deburring,
edge-rounding

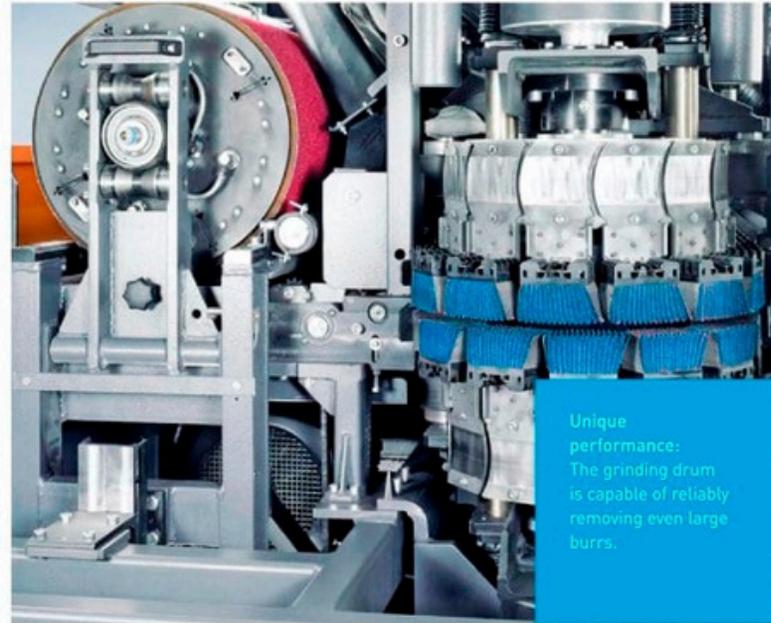


**Toll processing, consulting, service.
The ARKU Leveling and Deburring
Centers.**

- ✓ Contract leveling and contract deburring
- ✓ Tests with your own parts
- ✓ Training courses to increase efficiency
- ✓ In Cincinnati (US), Baden-Baden (GER), Kunshan (CN)

Double-sided deburring and rounding. In a single pass.

Efficient double-sided automated deburring and rounding: The EdgeBreaker® has opened up new dimensions in working with punched, laser-cut and flame-cut parts. The results ensure highly reliable processes even with large quantities combined with significant time, tool and personnel savings.



Unique performance:
The grinding drum is capable of reliably removing even large burrs.

Intuitive: Control via the touchscreen HMI.



Patented: The consumables can be replaced in a matter of moments using the click-system. For example when changing from steel to stainless steel.



Experience the EdgeBreaker® in action:
arku.com/deburring-usa

Intelligent: The material specifications are transferred to the machine via barcode and saved in the tool storage – for adjusting the correct processing parameters automatically.

»WE SAVE 50% OF TIME WHEN PROCESSING DOUBLE-SIDED IN JUST A SINGLE PASS.«

Ulrich van Scharrel, CEO, n-cut24 GmbH, Germany



»WITH ARKU, WE CAN GUARANTEE CONSISTENTLY HIGH PART QUALITY EVEN WITH LARGE QUANTITIES. THIS STRENGTHENS OUR POSITION AMONGST THE COMPETITION.«

Norman Straub (left), Business Administration Director of Sheet Metal Processing, and Simon Straub, Production Manager, Eisen- und Stahlhandel Straub GmbH, Germany

Producing more while protecting your staff.

Productivity that can be measured: automated deburring and edge-rounding with the EdgeBreaker®. This improves our customers' competitiveness, enhances their flexibility and frees up time for additional orders.



A networked approach in a reliable partnership.

Optimizing sheet-metal fabrication processes with an eye on our customers' individual needs: Pursuing this approach, we have become the market and technology leader for precision levelers and a pioneer in innovative deburring technology. Shaping the future and passing on knowledge is an integral part of ARKU's culture. Simply because that is what we believe in.





A robot for automatic parts feeding

EdgeBreaker® for efficient deburring and rounding

FlatMaster® for precise parts leveling

FlatJack® for automatic flatness control

A culture of innovation with a tradition: ARKU repeatedly ranks among the top 15 most innovative mid-size German companies in studies carried out by the German magazine WirtschaftsWoche.

Automate processes and flexibly chain them together.

Efficiently chaining processes together. Especially when it comes to machines which are becoming increasingly independent in perfectly coordinated and automated production lines. Already a reality at ARKU: All of the important material preparation steps can be carried out autonomously. From robot-supported parts handling to reliable deburring and leveling processes, all the way to quality control through flatness testing.