

# **Precision Levelers**

for stamped, laser-cut and plasma-cut parts



#### TOOLING & MACHINERY

COMPLETE METALWORKING SOLUTIONS (800) 991-4225 www.ahbinc.com ISO Certified customerservice@ahbinc.com





## ARKU precision levelers – what do customers say?

"The FlatMaster's first-time-flat capability has saved us from a lot of re-work. We constantly strive to find better ways to improve our quality and customer service, which are the main reasons customers trust us to process their valuable material. We owe it to them to use the best equipment available, and the FlatMaster<sup>®</sup> fits the bill." Andy Sharp, Quality Manager at Niagara Specialty Metals

"We throw everything at the machine, and it usually takes just one pass to get the parts flat. You set the material thickness, put in a distorted part, and it comes out flat. We had it installed and began training on it in one day. We were running parts the next day." Stephen Giumenta, VP & Design Engineer at the Giumenta Corp

"We're very pleased with the ARKU leveler. These machines produce very precise, consistent results. We have reduced our scrap rate significantly and customers are very satisfied with the results." Joe Arceneaux, Asisstent General Manager at O'Neal

"As the size and thickness of the parts increased, and we started using higher strength steels, we needed a leveler that could effectively handle it. We found it with the ARKU FlatMaster® 55." Kevin Smith, Quality/Engineering Manager at MEC

"Before purchasing the FlatMaster<sup>®</sup> 88, Port City Metal Services had to use plate bending rolls to flatten parts, which was time consuming and inefficient as it essentially just moved the twist from one side of the part to the other. The FlatMaster<sup>®</sup> 88 now makes all of these problems an issue of the past." Clint Warren, Business Development Manager at Port City Metal Services



### Roller leveling with the FlatMaster<sup>®</sup> – 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 stress relieved.

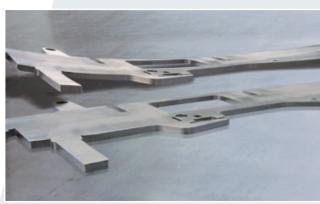
The lower the residual stress in a sheet metal part, the better the results during the subsequent production steps such as welding, bending or folding.

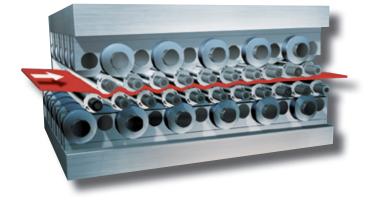
Leveling with the FlatMaster<sup>®</sup> is simple and fast in comparison to other flattening processes. Punched, laser-cut or plasma-cut parts which require hours of manual straightening are leveled within a few seconds.

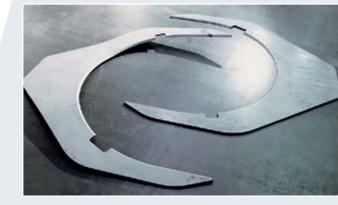
#### Advantages of roller leveling:

- Flat and stress relieved parts/sheets.
- Significantly faster and more economical than alternative flattening processes
- Simple process without extensive training requirements
- Foundation for reliable welding or bending and folding
- Reduces rework and rejects











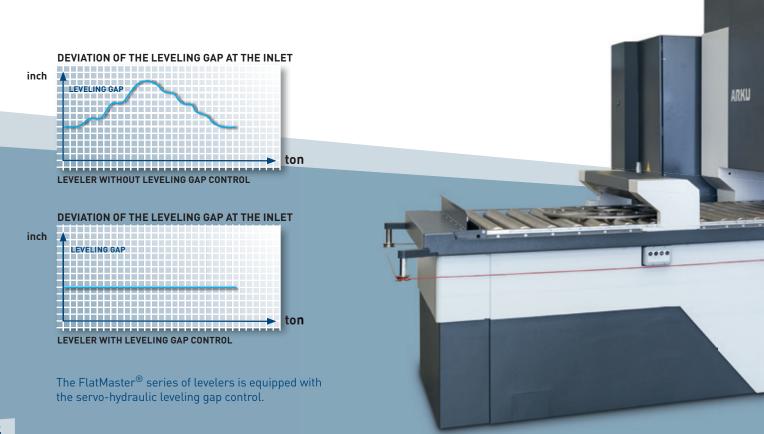


### Consistently good leveling results with leveling gap control

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

The FlatMaster<sup>®</sup> is equipped with a servo-hydraulic leveling gap control.

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



### Safety due to effective overload protection

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

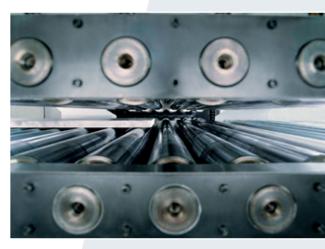
The FlatMaster<sup>®</sup> utilizes a hydraulic overload protection system to prevent damage to the leveler. Hydraulic systems react fast enough to compensate sudden overloads. As a result, the leveler is optimally protected.

## FlatJack<sup>®</sup>: Flatness control directly onto the leveler

The new, integrated FlatJack<sup>®</sup> from ARKU serves to check the flatness of punched, laser- and plasma-cut parts. The flatness values are measured down to tenths of a millimeter and recorded in the FlatMaster<sup>®</sup> 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.

ARKU

FlatMaster<sup>®</sup>88



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



 FlatJack<sup>®</sup> - Operator-independent parts flatness control.

FlatMaster<sup>®</sup> 88 with FlatJack<sup>®</sup>



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#### Quick-change of leveling and back-up rollers

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

For this reason, ARKU precision levelers are equiped 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 be convinced by 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 customers close to you.



Leveling and Deburring Center in Cincinnati, OH, USA.



Leveling and Deburring Center in 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<sup>®</sup> – the leveler series for sheet metal parts from .005" up to .200" thick

	EcoMaster® 12	EcoMaster <sup>®</sup> 25	EcoMaster <sup>®</sup> 30
Parts thickness (inch)	.005"050"	.008"120"	.012"200"
Max. passage width (inch)	6"	12", 20", 32"	12", 20", 32", 43", 51"
Automatic setting	-	optional	optional
Digital display	-	standard	standard

We are happy to offer you additional models upon request.

The EcoMaster<sup>®</sup> series of precision levelers delivers optimal 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<sup>®</sup> – the servo-hydraulic parts leveler series for sheet metal parts from .020" up to 2.40" thick

	FlatMaster <sup>®</sup> 55	FlatMaster® 88	FlatMaster <sup>®</sup> 120	FlatMaster® 140	FlatMaster® 180
Parts thickness (inch)	.020"600"	.040" - 1.10"	.060" - 1.60"	.080" - 1.80"	.160" - 2.40"
Max. passage width (inch)	31", 49", 65"	32", 51", 63", 79"	51", 63", 79"	51", 63", 79"	79", 98", 118"
Quick-change system	optional	optional	standard	standard	standard
Leveling gap control	standard	standard	standard	standard	standard
Overload protection	standard	standard	standard	standard	standard
Control panel / HMI	Multi-touch screen	Multi-touch screen	Multi-touch screen	Multi-touch screen	Multi-touch screen

We are happy to offer you additional models upon request.

The FlatMaster<sup>®</sup> series delivers the best leveling results for sheet metal parts from .020 to 2.40 inches. The distinctive features include the leveling gap control and the hydraulic overload protection. The FlatMaster<sup>®</sup> is the result of 50 years of experience in manufacturing precision levelers.



#### 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<sup>®</sup>, 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





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