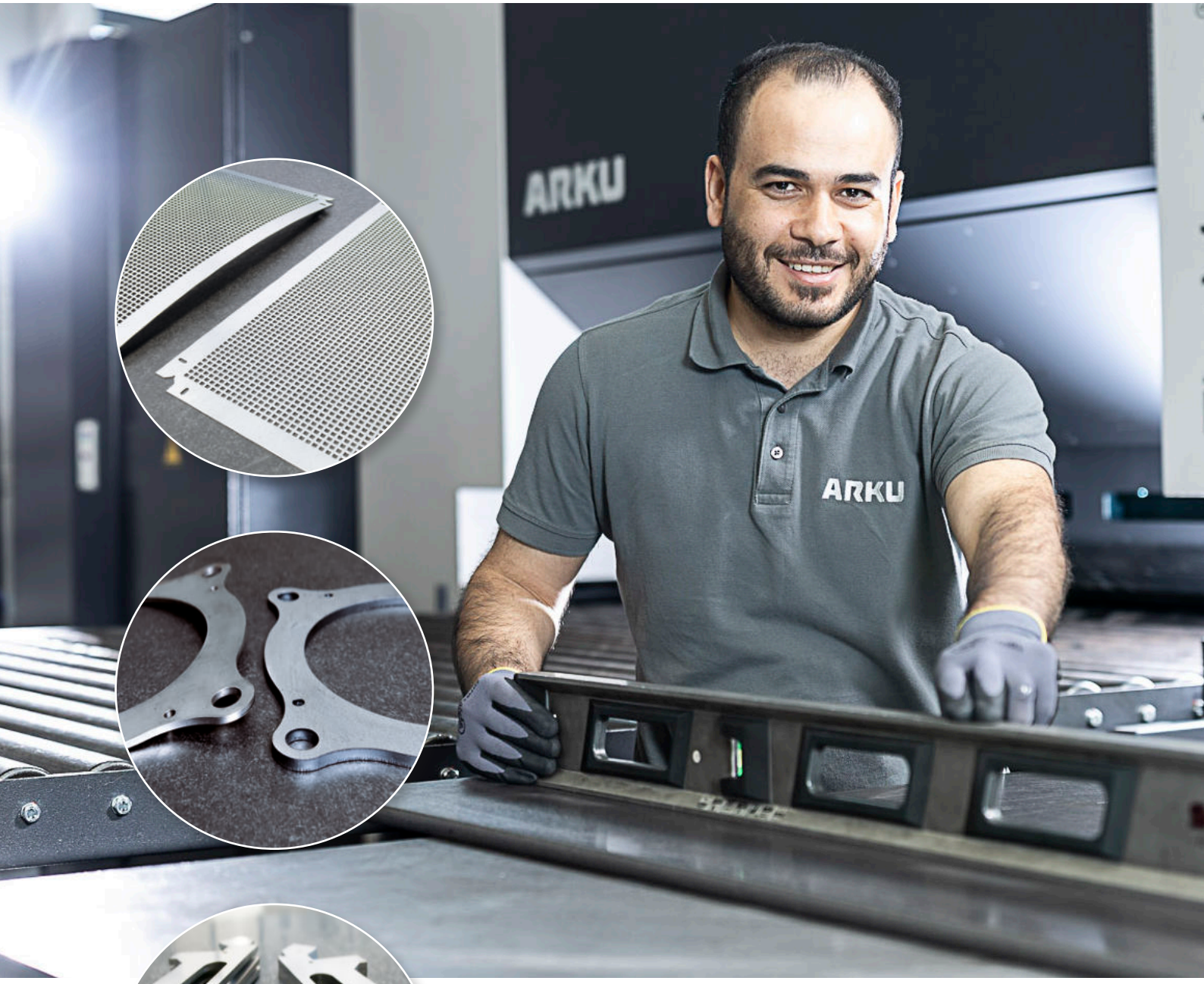
Leveling with precision levelers



ARKU

Technology made with passion

Principle & results

During roller leveling, sheet metal and heavy plate become flat and are stress-relieved through alternating bends.

When sheet metal & heavy plate are turned into perfect parts and assemblies with tight tolerances you have to be able to rely on the material. This cannot be taken for granted: many sheets & heavy plate contain residual stresses and distortions which can interfere with further processing.

Residual stresses in the material can arise in different ways: thermal cutting processes, such as lasers or oxyfuel and plasma cutting, introduces a great deal of heat into the material at the cutting beam. This releases stresses or introduces additional stresses into the material due to the heat. As a result, the sheet metal parts become warped after cutting. During roller leveling, a sheet metal part undergoes several alternating bends, making it flat and virtually stress-free. This means that punched, laser or flamecut parts can be flattened in just a few seconds.

What are the benefits of using a precision leveler?

Eliminate residual stresses and distortions

Rolling, mechanical or thermal cutting processes and the effect of heat can cause residual stresses within the material. These stresses can be removed with a precision leveler.

Avoid production errors

Unleveled sheets metal & heavy plate can cause angularity errors during downstream processes such as bending and folding.

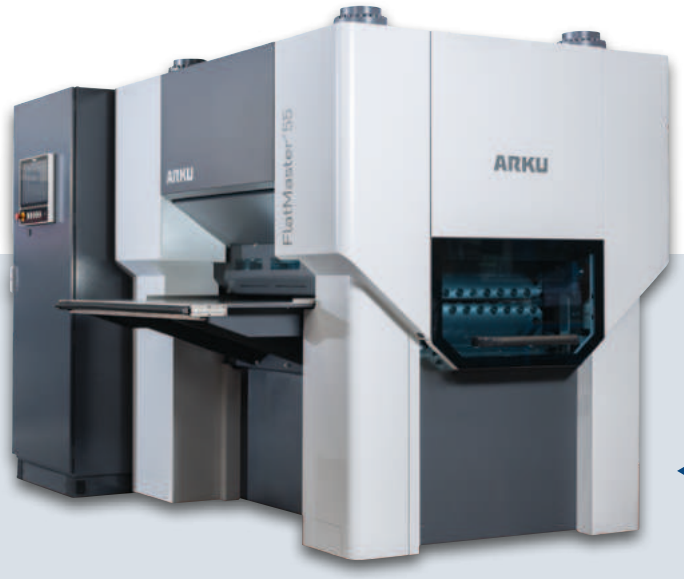
Achieve tight tolerances

Welding robots rely on tight tolerances. If a part deviates too much, it ends up as scrap, which slows down production and increases costs. Leveling before welding allows the robot to achieve its full potential in terms of accuracy.

Simple operation

The leveling process is easy to use and does not require extensive training. It can be quickly integrated into existing production processes.

Function & efficiency



◀ FlatMaster® 55

Scan the code and learn more about ARKU precision levelers

Superior leveling results with servohydraulic gap control

During leveling, fluctuating forces act on the material and the leveling unit, especially with thick material. The FlatMaster® series with servo-hydraulic gap control keeps the leveling gap constant - for consistently precise results.

Gap control

Safety through effective overload protection

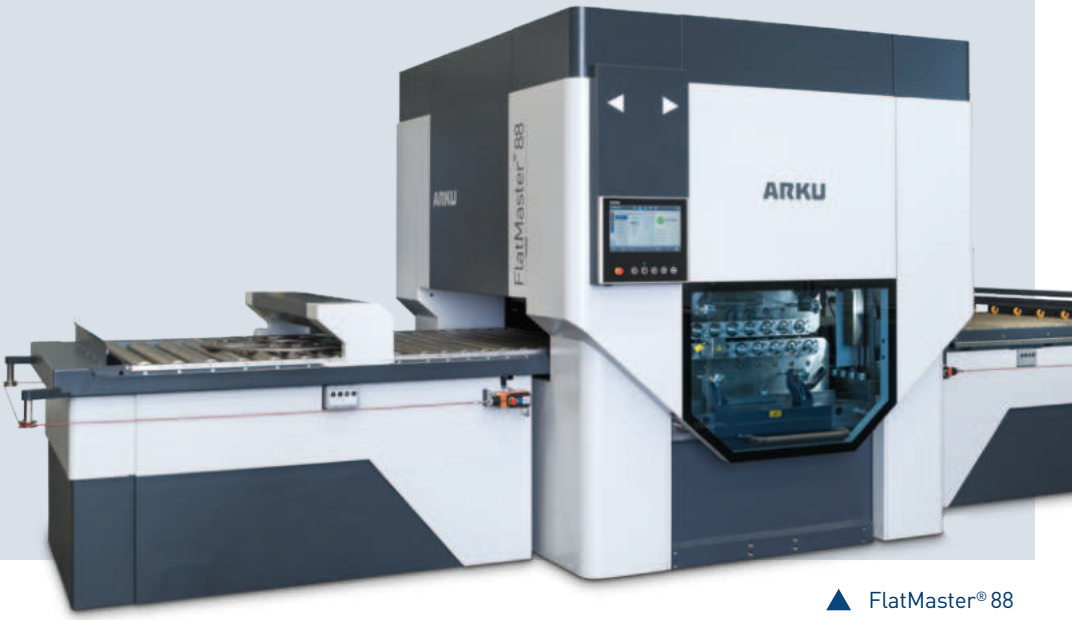
Large forces act on the material and the machine during leveling. To prevent damage to the precision leveler, the FlatMaster® is equipped with hydraulic overload protection. Hydraulic systems react quickly enough to absorb overload peaks.
The precision leveler is therefore protected from damages.

FlatJack® - flatness control directly on the precision leveler

Thanks to the integrated FlatJack®, punched, laser and flame-cut parts can be checked quickly and precisely. Flatness is measured both before and after leveling. The FlatMaster® control system records the flatness values within a tenth of a millimeter range and allows them to be retrieved at any time.

FlatJack® flatness control system

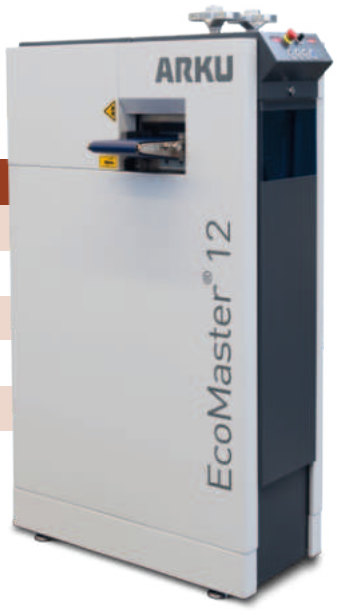
RollerPickup®
for quick cleaning and maintenance.



▲ FlatMaster® 88

Machines & specifications

EcoMaster® – the leveler series for sheet metal from 0,1 up to 5 mm thick



	EcoMaster® 12	EcoMaster® 25	EcoMaster® 30
Part thickness (mm)	0,1 – 1,25	0,2 – 3,0	0,3 – 5,0
Max. part width (mm)	150	300, 500, 800	300, 500, 800, 1.100, 1.300
Automatic setting	-	optional	optional
Digital display	-	Standard	Standard
CE-certification	Standard	Standard	Standard

We are happy to offer you other models upon request.

The EcoMaster® precision leveling machine ensures optimum leveling results for sheet metal parts with a thickness of 0,1 mm up to 5 mm. Thanks to its simple operation and ease of maintenance, the EcoMaster® can be quickly integrated into your production and contribute to an efficient workflow.

FlatMaster® – the servohydraulic leveler for sheet metal & heavy plate from 0,5 up to 60 mm thick

	FlatMaster® 55	FlatMaster® 88	FlatMaster® 120	FlatMaster® 140	FlatMaster® 180
Part thickness (mm)	0,5 – 15,0	1,0 – 28,0	1,5 – 40,0	2,0 – 45,0	4,0 – 60,0
Max. part 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	Standard	Standard	Standard	Standard	Standard
Gap control	Standard	Standard	Standard	Standard	Standard
Overload protection	Standard	Standard	Standard	Standard	Standard
HMI	Touchscreen	Touchscreen	Touchscreen	Touchscreen	Touchscreen
CE-certification	Standard	Standard	Standard	Standard	Standard

We are happy to offer you other models upon request.

The FlatMaster® series ensures the best leveling results for sheet metal parts & heavy plate from 0,5 to 60 mm thick. Key features include the gap control and the hydraulic overload protection.

Scan the QR code and learn more about ARKU precision levelers

ARKU Maschinenbau GmbH
Siemensstr. 11, 76532 Baden-Baden
Tel.: +49 72 21 / 50 09-0
info@arku.com
www.arku.com

ARKU
Technology made with passion