

SMART AQUA BOX PRODUCT INFORMATION

The “Smart Aqua Box” is the result of intense research and development by MGG Service AG, whose team of entrepreneurs has extensive experience in plant construction, plant maintenance and process engineering. With Swiss precision, we have set ourselves the goal of optimising the feed shafts of incinerators to meet the increased demands on service life and changes in waste quality. By increasing availability and safety, systems operators gain a considerable economic advantage.

Decoupling the cooling system from the wear protection can not only reduce maintenance costs but also minimise system downtimes. The “Smart Aqua Box” features a long life guarantee and simple, targeted replacement of wear parts. With a wear plate composition

that matches the prevailing waste quality, the “Smart Aqua Box” can be customised to meet specific requirements. The “Smart Aqua Box” is suitable for use in all common shaft types. The modular design enables quick, flexible manufacturing and assembly.

Carefree plant operation thanks to:

- Increased availability
- Improved operational reliability
- Long service life
- Reduced maintenance costs



Common problems with conventional feed shafts:

- Leakage during operation (loss of water)
- Failure of the cooling system (dry running)
- Delay of construction due to thermal expansion/deformation
- False air in the shaft increases the risk of fire
- Increase in mechanical wear and even structural damage
- Severe damage due to backfiring

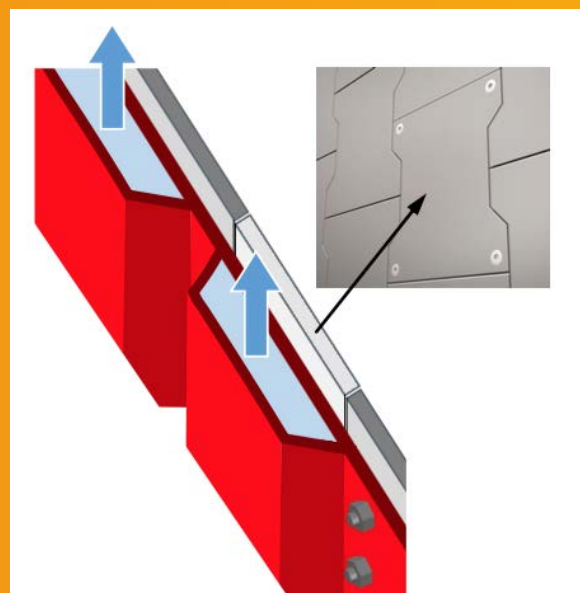
MGG “Smart Aqua Box”:

- Mechanical wear with no impact on the cooling system
- No water leaks to the inside
- Wide choice of materials for wear protection and therefore a customised design is possible according to requirements
- Guaranteed water tightness from the manufacturing plant
- No change of the cooling circuit/system or adjustment from the existing water cycle is necessary
- Modification in the normal revision period thanks to modular construction



Advantages of the “Smart Aqua Box”:

- Decoupling the wear protection from the cooling system
- All welds in contact with water are on the outside
- No sleeves through water-carrying parts
- Easily exchangeable wear plates
- Modular construction for quick assembly
- Investment costs comparable with replacement of the status quo
- Can be implemented in all common shaft types
- Long service life of the plant section





MGG – Innovation und Know-how

MGG Service AG stands for sustainable maintenance with expertise in firing, ash removal and flue gas cleaning of thermal plants. In the field of inspection and repairs we consistently strive for best performance and develop critical systems and spare parts to reduce wear and costs. Our team of entrepreneurs also develops customer-specific solutions. With a total of more than 100 years of experience in plant construction and process engineering, we have designed innovative products such as the „Smart Aqua Box“. Thanks to detailed planning and consistent cost optimisation, we offer you a clear advantage – also in terms of cost.

Our goals:

- + Increase transparency
 - + Optimise workflows and processes
 - + Reduce costs
 - + Increase profitability
 - + Improve operational reliability
 - + Increase availability
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- = **Competitive advantages for our customers**

“MGG Quality benefit” stands for:

- Sustainability and economically sensible solutions
- Everything from one source (maintenance, replacement parts, engineering)
- SCC** and ISO 9001 certified operation
- Short downtimes
- References





REFERENCES

location	type	scope of service	line	year
Twence (NL)	MVA	New-built feed chute by MGG Smart Aqua Box, watercooled	L1	2013
		New-built feed chute by MGG Smart Aqua Box, watercooled	L2, L3	2014
RABA Thüringen (DE)	MVA	New-built feed chute by MGG Smart Aqua Box, watercooled	L1	2015
EGM Mainz (DE)	MVA	New-built feed chute by MGG Smart Aqua Box, watercooled	L3	2016
	MVA	New-built feed chute by MGG Smart Aqua Box, watercooled	L2	2020
	MVA	New-built feed chute by MGG Smart Aqua Box, watercooled	L1	2021
ERZ Zürich (CH)	MVA	New-built feed chute by MGG Smart Aqua Box, watercooled	2K1	2016
		New-built feed chute by MGG Smart Aqua Box, watercooled	2K3	2018
MVA Bonn (DE)	MVA	New-built feed chute by MGG Smart Aqua Box, watercooled	L2, L3	2019
		New-built feed chute by MGG Smart Aqua Box, watercooled	L1	2020

Further references on request

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