Boost the performance of your equipment.

CONSTANTLY IMPROVING

GEA Agitator 2.0

Agitator upgrade for the mashing process – powder grist and adjunct mashes, mash filters

GEA Service offers agitator upgrades for the mashing process to meet the challenges of mashing powder grist and adjunct. The GEA Agitator 2.0 upgrade prevents insufficient mash heating rates during mashing. With this retrofit you can avoid fouling on the heating surfaces due to insufficient heat transfer into the mash and extended filtration times during mash filtration with the mash filter.

Your benefits at a glance

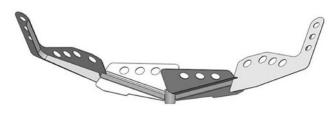
- Elimination/reduction of burnt deposits on the vessel wall/ heating zones
- · Increased heating rate in the mash vessel
- Reduction of mash vessel occupation times higher number of brews
- Positive influence on mash filtration (mash filter) depending on raw material quality
- · Can be retrofitted to all mash vessels/adjunct cookers
- Applicable for hammer mill grist, adjunct (rice, maize, starch, cassava, etc.)



GEA Agitator 2.0 – Improve the mashing process

In many brewing operations standard agitator blades that are not optimized for powder grist are used for mash filter grist. In addition, these blades are frequently operated at incorrect speeds. GEA Service offers an innovative, flow-optimized agitator blade design.

Low agitator speeds with this upgrade mean low shear forces and low oxygen uptake as well as improved control of the enzymatic conversion, due to uniform temperature distribution in the mash. To improve convection, the blades in the inner and outer area are inclined in opposite directions. The agitator blades in the area of the shell heating zone ensure optimized heat transfer.



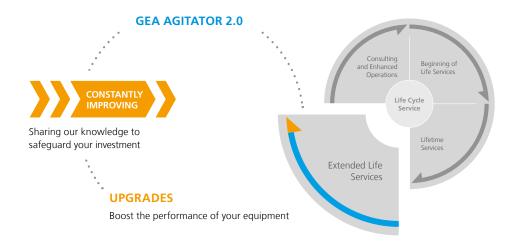
The improved design of this retrofit solution ensures gentle agitation at reduced speed during the rests, reduced peripheral speeds and optimum mixing of the mash.

Results - Example upgrade in a German brewery

- Increase of the heating rate by 0.4 K/min (increase by up to 90%)
- · Shorter occupation time of the mash kettle by up to 10 minutes

	Before conversion – operation with standard blade			After conversion – operation with GEA Agitator 2.0		
	Brew 2045	Brew 2055	Brew 2056	Brew 2057	Brew 2060	Brew 2062
Mash kettle occupation time	122 min	121 min	121 min	109 min	113 min	112 min
Heating rate (K/min)	0.45 K	0.45 K	0.46 K	0.83 K	0.98 K	0.98 K

GEA Service – For your continued success



GEA Service

GEA Brewery Systems GmbH Heinrich-Huppmann-Str. 1 97318 Kitzingen, Germany Tel. +49 9321 303-0

Am Industriepark 2-10 21514 Büchen, Germany Tel. +49 4155 49-0

gea.com/contact gea.com/service