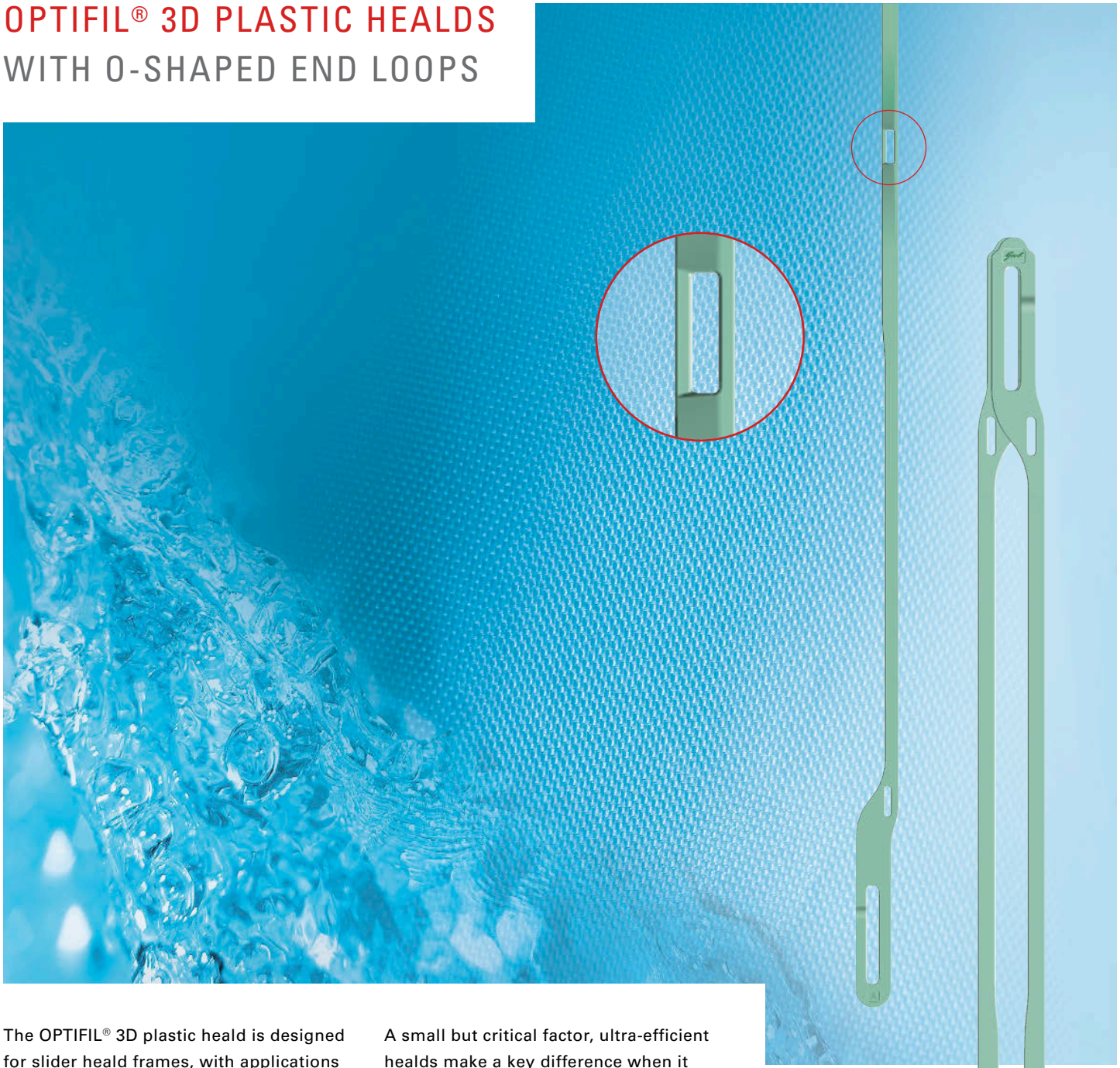
GROZ-BECKERT®

Grob®

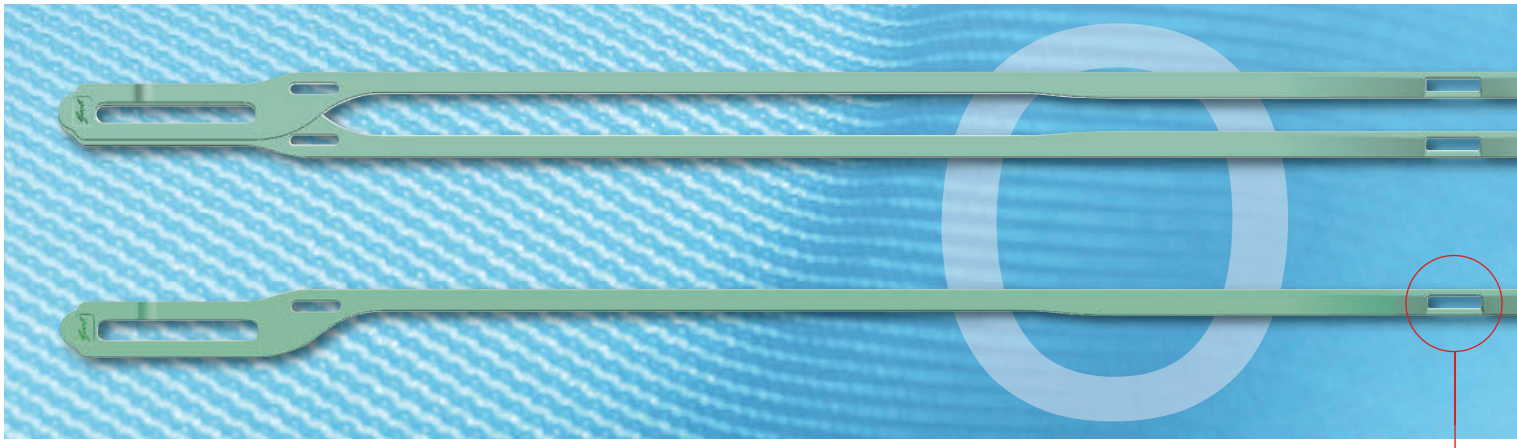
OPTIFIL® 3D PLASTIC HEALDS
WITH O-SHAPED END LOOPS



The OPTIFIL® 3D plastic heald is designed for slider heald frames, with applications including water jet weaving machines. It is suitable for use with fine monofilament and multifilament yarns, PES, PA and other synthetic fibres in the 10 – 100 den range.

A small but critical factor, ultra-efficient healds make a key difference when it comes to improved weaving machine efficiency and productivity with the critical requirements of fast warp preparation, high machine operating speeds, and flawless fabric quality: Groz-Beckert healds fulfill all these requirements in daily weaving operations.

RELIABLE QUALITY FOR WATER JET WEAVING MACHINES



Plastic healds from Groz-Beckert

The plastic heald from Groz-Beckert offers an array of impressive benefits: adherence to extremely close production tolerances; the use of selected materials; optimized heald geometry; the special "OPTIFIL® 3D" thread eye; end loops sections with “spacers” for improved separation of healds when using drawing-in machines.

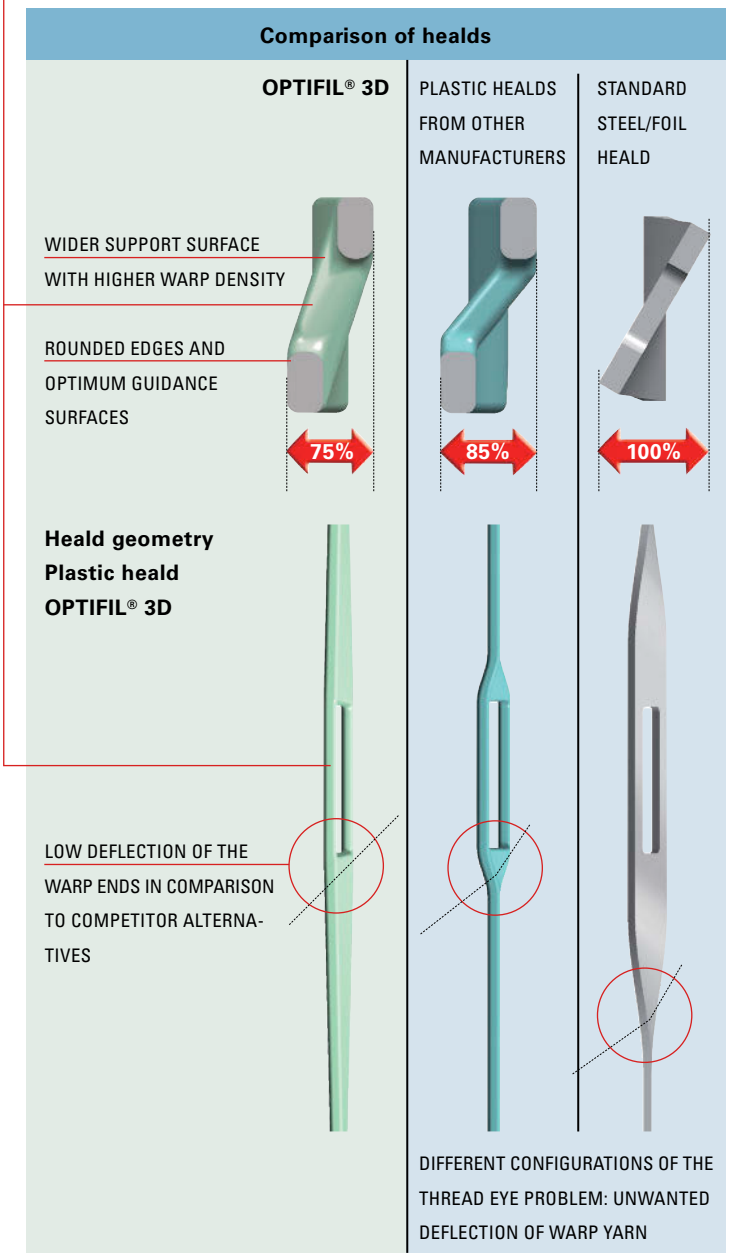
All these characteristics combine to enhance the customer benefit – whether through efficient preparation or during the fabric manufacturing process.

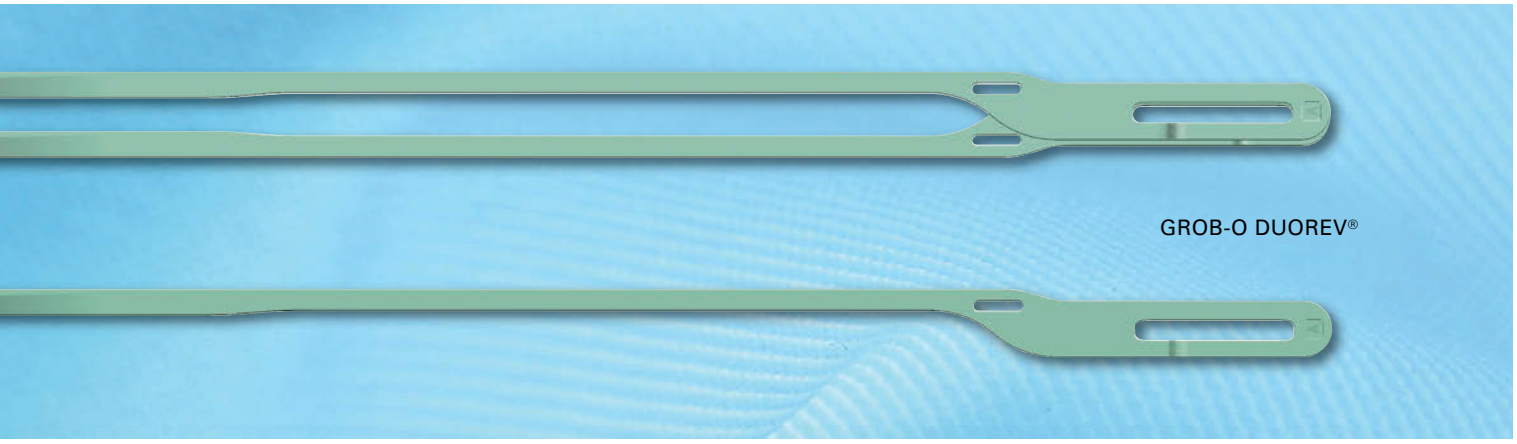
The material: lightweight but still sturdy and durable

Selected materials significantly improve the service life of these healds, providing an extremely smooth surface finish with optimum yarn gliding properties. Their low weight makes for easier handling in day-to-day application and also reduces energy costs. The colour used for the healds is designed to be easy on the eye and assists personnel during manual draw-in.

Special heald geometry

The specialized geometry of the OPTIFIL® 3D plastic heald ensures optimum guidance of the adjacent warp yarns: guaranteeing a well-formed shed; preventing unwanted warp yarn deflection; and reducing filament damage.





The new OPTIFIL® 3D thread eye
(patent registered)

The new OPTIFIL® 3D thread eye combines proven and patented OPTIFIL® thread eye technology with the possibilities offered by modern plastics technology.

The critical factor in the effectiveness of the OPTIFIL® 3D thread eye is its special shape that is optimized for guidance of the warp yarn both through the thread eye and beside neighbouring healds.

In filament yarns applications that may or may not include the use of sizing materials or other warp-additive agents, conventional plastic healds quickly succumb to wear in the area of the thread eye. The reinforced support surface of the OPTIFIL® 3D thread eye delivers a longer service life for the heald with the additional benefit of the potential for higher warp densities.

In conjunction with a stable heald frame, the OPTIFIL® 3D thread eye delivers a well-formed shed even with higher densities, facilitating efficient weft insertion.

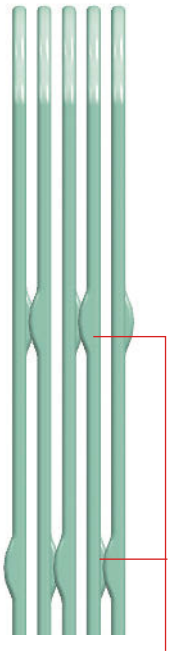
Special heald geometry

The special geometry of the OPTIFIL® 3D plastic heald ensures: optimum guidance of the adjacent warp yarns; minimization of lateral warp yarn deflection; reduction of filament damage; and formation of a proper warp shed.

End loops with spacer

When used on a water jet weaving machine, “spacers” in the area of the end loops prevent the sticking together of healds.

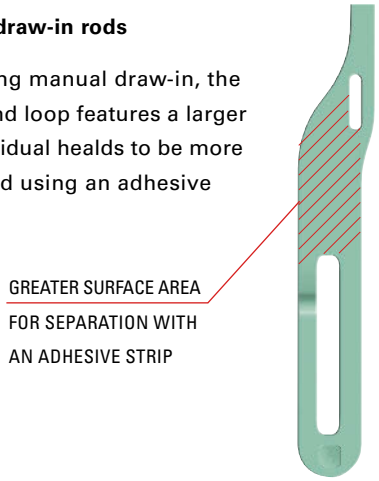
These “spacers” facilitate equidistant positioning of healds during weaving, resulting in improved fabric quality.



PERFECT SPACING FOR
MAXIMUM FABRIC QUALITY

Special end loop shape for draw-in rods

For improved handling during manual draw-in, the heald section at the lower end loop features a larger surface. This allows the individual healds to be more simply and quickly separated using an adhesive strip.



GREATER SURFACE AREA
FOR SEPARATION WITH
AN ADHESIVE STRIP

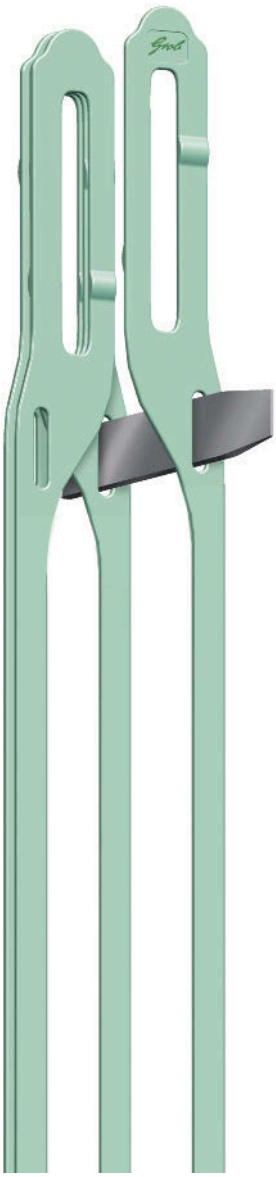
OTHER BENEFITS OF GROZ-BECKERT

Customer benefits at a glance:

- Guarantee of the production of top-quality fabrics
- Cost reduction due to reduced filament damage
- Improvement in wear resistance of healds
- Minimization of set-up time for automatic warp preparation
- Simplification of manual drawing-in procedures
- Optimization of production parameters including machine operating speeds

DIVI dividing slots for separation

Healds with double rows of thread eyes must be separated prior to automatic drawing-in. To minimize the work required for the separation of healds, DIVI slots are integrated into the area of the end loops for DIVI rods.



Groz-Beckert OPTIFIL® plastic heald:

Suitable for warp yarns		maximum density [1]	Plastic healds with closed O-shaped end loops			DUOREV® end loops
Tex system	Denier	DUOREV®	Cross section	Thread eye	End loop spacing	
Tt	Td	Ends per cm	mm	mm	mm	
< 10	< 100	15	7.1 x 0.47	5.5 x 1.2	280	
					330	

1) The densities correspond to average standard applications. Variations depend on the number of heald frames used and warp yarn properties.

EN | 07.2012

GROZ-BECKERT KG
PO Box 10 02 49
72423 Albstadt, Germany
Phone +49 7431 10-0
Fax +49 7431 10-2777
sales-w@groz-beckert.com
www.groz-beckert.com