





# Malmsten Gold PRO Racing Lane Line - Ø 150 mm

This is the new championship lane rope and the result of many years of R & D.

Gold PRO with the latest PRO-discs and PRO-floats with superior wave reduction.

The improved functionality is based on the proven Malmsten flow-through design by allowing wave energy to be dispersed along the length of the lane line. Gold PRO-discs and PRO-floats are with a new pattern, optimizing even more wave reduction capacity.

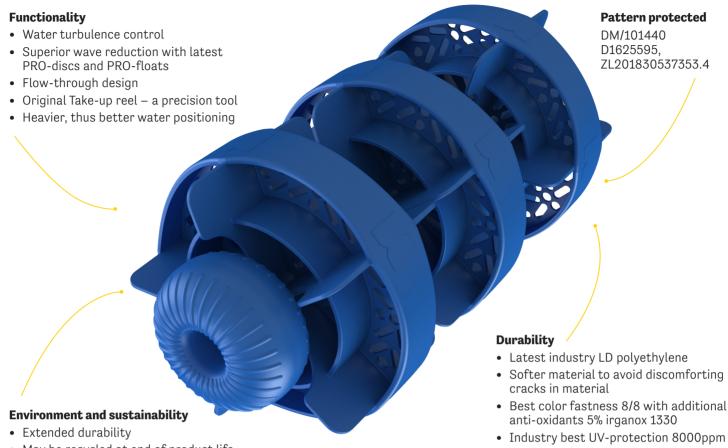
Malmsten Gold PRO is the best wave breaker and turbulence control on the market.

Pattern protected DM/101440, D1625595, ZL201830537353.4

## Unique disc design stands out from all other lane lines on the market.

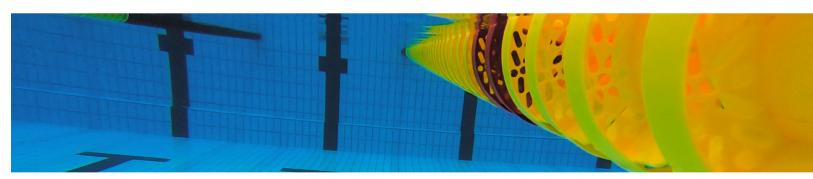
- Gold PRO discs are wider and heavier for absorbing energy better, which means more strength to handle tough waves.
  More mass on each disc affects the water position in a positive way thus more wave reduction.
- The new floats have a unique design with special ridges that work together with the discs to increase wave reduction. The ridge design helps to break down the wave.
- Gold PRO disc pattern, with dual function have larger holes for smoother water flow-through as well as wave energy absorption.
- The outer ring on the disc has been slimmed down in the middle between the blades for increased water flow-through.
- The rotor blades on the disc are longer for catching the wave.
- The inner ring has increased in size for catching the wave and increasing the weight of the disc.
- We are always in accordance to existing FINA and LEN regulations.
- As the leader of lane lines we are proud to be the first with this new lane line design.

## The new design of Malmsten Gold PRO is a result based on studies done on wave-energy dampening at KTH, Sweden.



- May be recycled at end of product life
- Harmless material with no traces of heavy metals
- · Assembly process with zero carbon footprint

- Strong, safe and flexible wire; ss316, 4mm, 7x7



## More material thus better functionality

Gold	Discs	Competition line	W.E. dampening*	Weight	Volume	Incl. take up reel and tension spring
50 m	150 mm	Yes	90,50 %	96 kg	1,44 m³	Yes
25 m	150 mm	Yes	90,50 %	49 kg	0,77 m <sup>3</sup>	Yes



## Better material for durability





# WHEN A SPLIT OF A SECOND COUNTS







1992 Racing Lane Line Gold Ø 150 mm



2019 Racing Lane Line Gold PRO Ø 150 mm

Malmsten Racing Lane Lines have an impressive resumé, chosen for 9 Olympic Games starting with Montreal 1976 and now preparing for the 10th in Tokyo 2020.

#### 1976

Our 100 mm racing lane line was the standard for international events until the Olympic Games in Barcelona.

### 1992

When our Gold 150 mm lane line was presented to FINA and approved as the new official standard.

At Malmsten we strive to be at the forefront when it comes to utilizing technology and development. Five years ago we began working with KTH (Royal Technical Institution) and professor Kuttenkeuler to study the effects of wave energy

reduction and absorption. The studies were designed to test the wave reduction effect on our lane lines compared to others on the market. Professor Kuttenkeuler's studies\* have shown that the Official Racing Lane Line Gold by Malmsten reduces water turbulence and wave energy by up to 90 percent. It also concluded that these lane lines are superior to any other lane lines on the market.

### 2019

With these results proving our lane lines are the best on the market, we have continued to develop our product. Now we proudly present Malmsten Gold PRO, our latest innovation. Our focus is to improve excellent wave reduction and wave energy control and give swimmers optimal conditions to break new worlds records.

# **Production and sustainability**

Most of our production is located in Sweden. Racing lane lines, water slides, gratings, movable floors, pool toys and much more are made locally to minimize transportation and to optimize control and flexibility of the manufacturing process.

- Through the recycling and reuse of materials natural resources are better preserved.
- Solar panels on our buildings help us reach our environmental goals.
- In all activities we strive to reduce and prevent pollution, as well as conduct internal efforts that leads to continuous improvements.



Automated assembly of racing lane line

Our goal is 100% customer satisfaction Malmsten – swimming hall specialists with over 40 years experience in the development of swimming pool equipment. Explore the full product range at www.malmsten.com

