

Movement by Perfection



The Royal League in ventilation, control and drive technology



## **Cpro ZAmid<sup>®</sup>**

High-performance centrifugal impeller

## Cpro ZAMid® Technology

Extremely light, extremely stable, extremely durable, extremely quiet and extremely efficient

The new high-performance centrifugal impeller, the **Cpro ZAMid®**, stands up to all challenges – be they high operational temperatures, or special requirements in cleanroom or other air-conditioning applications.

The high-performance composite material **ZAMid®**, developed using the latest insights, makes the impeller significantly lighter than those made of steel - and offers superior mechanical properties. **ZAMid®** provides new opportunities for system runtimes, enables lower power consumption and leads to a drastic reduction in noise.

### Flow engineering marvel with three-dimensional blade geometry

Another effective technical feature of the **Cpro ZAMid®** is the three-dimensional blade geometry which produces ideal flow characteristics with exceptional results. **Cpro ZAMid®** is manufactured using a one-shot injection-moulding process in a highly complex injection-moulding machine, resulting in no welded joints. This highly technical process ensures the highest system reliability.

The new high-performance composite material **ZAMid®** is extremely stable, non-corroding, colour-stable, and is 100% recyclable.



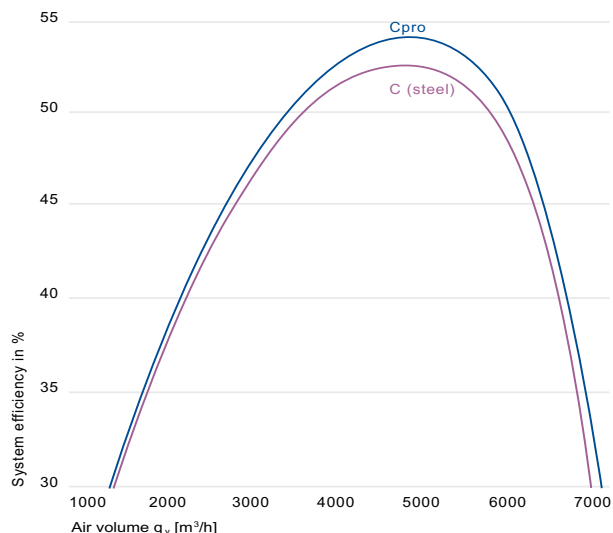
Profit from

## Cpro ZAMid® Technology

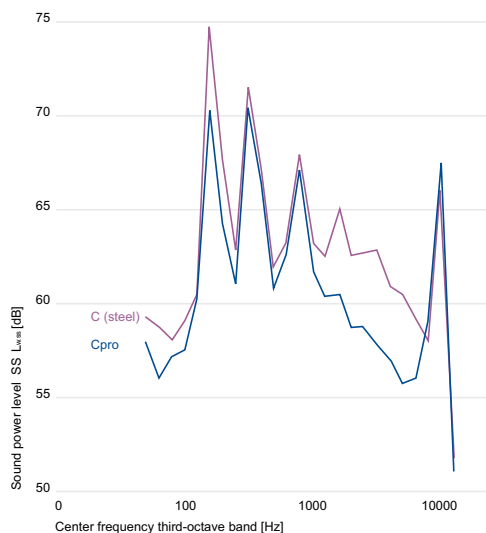
### Innovation at a glance

- Significant weight reduction, which reduces motor bearing loads and increases the system service life
- Drastic reduction in noise generation
- Significant increase of the impeller efficiency, which reduces the absorbed power
- Reduced power consumption
- Up to 15% energy savings during operation
- Significant CO<sup>2</sup> reduction
- Improved mechanical properties, comparable with steel

## Extreme advantages – ZAMid versus steel



Cpro vs. C (steel), frame size 450,  $P = 1,2 \text{ kg/m}^3$ , 4-pole

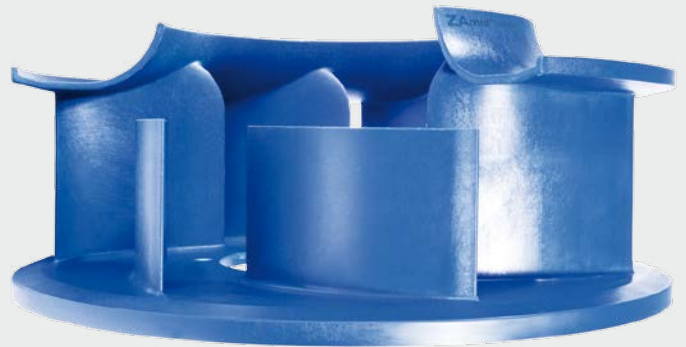


Cpro vs. C (steel), frame size 450, Spektrum SS,  $P_{af} = 450 \text{ Pa}$





- No weld seams
- High peripheral velocities up to 70 m/s
- Can be combined with various types of motors
- Tonal noise reduction up to 5 dB
- Suitable for operational temperatures from -35°C to +80°C, comparable with steel impellers
- Corrosion-free
- No toxic gas emissions
- Colour-stable



The strengths of **Cpro ZAMid**<sup>®</sup> lie in the details - e.g. the exceptional blade geometry



## Pure innovation

**Cpro ZAMid**<sup>®</sup> Technology with the latest ZIEHL-ABEGG motor technology

The combination of the innovative ECblue and PMblue motor control technology with the **Cpro ZAMid**<sup>®</sup> Technology high-performance centrifugal impeller promises unbeatable performance. Starting with the impressive efficiencies of over 90%, the modern motors, in combination with the **Cpro ZAMid**<sup>®</sup>, attain unsurpassed aerodynamics. In synergy with the newly developed **Cpro ZAMid**<sup>®</sup> impeller, that results in maximum efficiency and minimum energy consumption during use. ECblue, PMblue and **Cpro ZAMid**<sup>®</sup> are trademarks of ZIEHL-ABEGG SE, and stand for Premium Efficiency, putting them in the most environmentally friendly class with the greatest energy-savings potential. The innovative technologies exceed the existing minimum efficiency requirements of ErP 2015.

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