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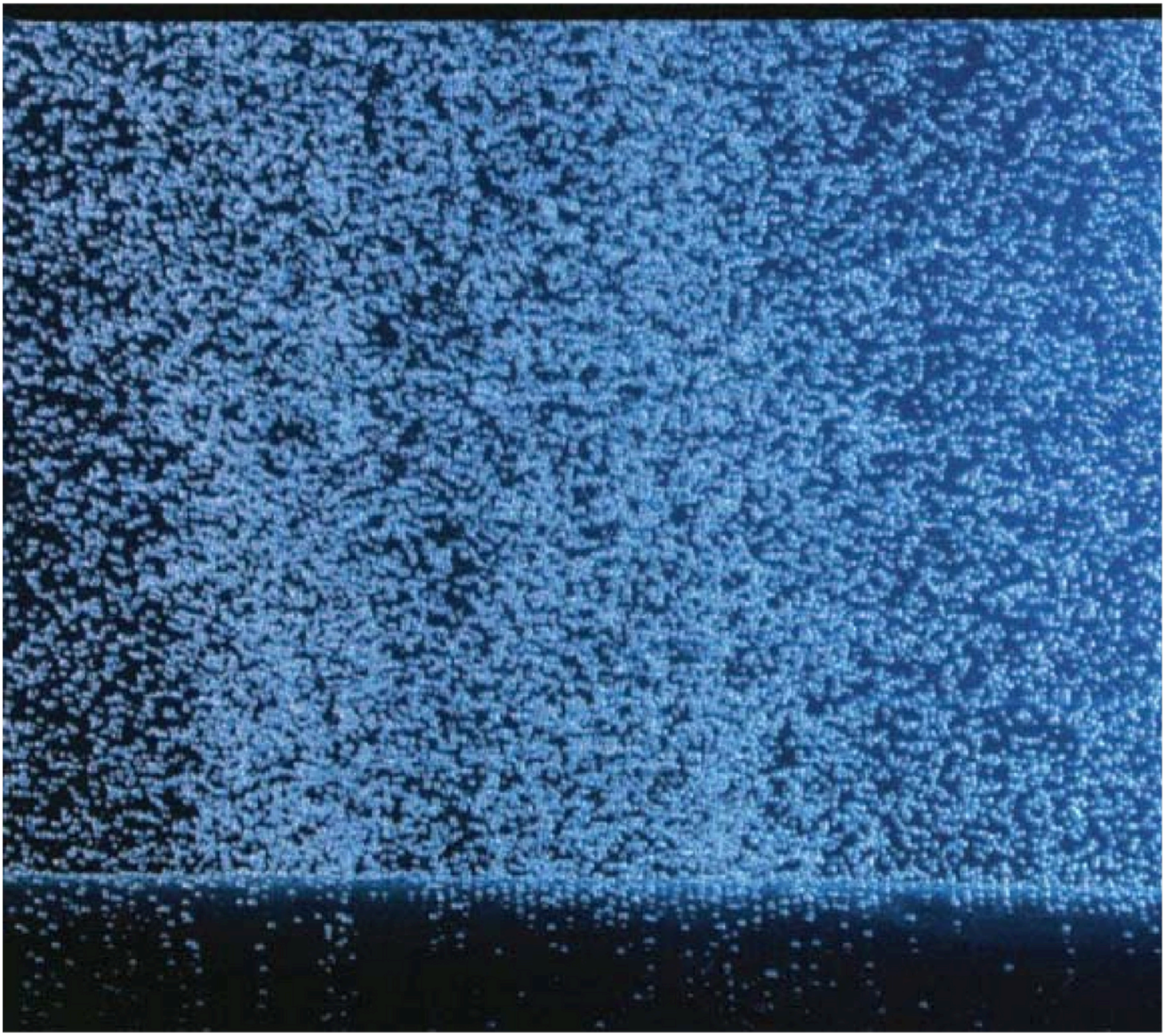

BIOFLEX 管式微孔曝气器

Tube Diffuser Bioflex V HPI

膜式曝气-效率卓越

25 年以来，我们不断改进我们的膜曝气技术，以满足水及污水处理的高要求。我们的膜曝气设备主要用于污水处理厂，是生物处理的主要元件。

应用领域

- 用于市政污水及工业污水处理厂的活性污泥池和曝气沉砂池
- 垃圾滤液和粪肥的曝气处理
- 水质防腐
- 通过脱氧调节 PH 值
- 鱼塘输氧
- 河流湖泊充氧

运行

当输入空气时，曝气开口的细孔就会打开，并释放成千上万个小气泡。当空气中断时，细孔关闭，膜被挤压到支座，封住空气进口。有了这种双密封机械技术，水就无法进入曝气系统。相对于陶瓷曝气机，该曝气系统能进行间歇性操作，具有更高的可靠性。

性能

通过全球范围众多的安装实例，已证明了我们产品的耐久性。认证机构的多个测试已证明了他们的高输氧率。

尽管如此，曝气机的质量也是一个重要的因素，输氧率取决于多个因素，如池形、曝气密度、浸没深度或特定空气流通。得益于我们多年的微孔及表曝机制造经验和技术，我们可以为您提供最有效

的技术解决方案。

帕萨旺新技术研究所作为强有力的技术合作伙伴，能提供成套的曝气系统。

Membrane Diffusers – Sparkling Efficiency

Since 25 years we have been constantly improving our membrane diffuser to meet the high demands of water and wastewater treatment. Our membrane diffusers are mainly used in wastewater treatment plants as a main element for biological treatment.

Field of application

- activated sludge tanks and aerated detritus tanks of municipal and industrial wastewater treatment plants
- aerobic treatment of landfill leachate and manure
- anti-staling of water
- adjustment of pH-value by CO_2 stripping
- oxygen transfer in fish farming ponds
- oxygenation of rivers and lakes

Function

When air is supplied, fine slits in the flexible membrane open and release thousands of fine air bubbles. When the air is interrupted, the slits close as the membrane is pressed to the support, sealing the air inlet opening. Due to this double sealing mechanism, no water can enter the aeration system. As opposed to ceramic diffusers an intermittent operation of the aeration is possible which assures higher reliability.

Performance

In numerous worldwide installations our membrane diffusers, the tube diffuser Bioflex and the disc diffuser Roeflex, have shown their durability. Several test from accredited institutes have proven their high oxygen transfer efficiency.

Even though the quality of the diffuser is an important factor, oxygen transfer depends on several factors e.g. tank shape, diffuser density, immersion depth or specific air flow. Thanks to our profound knowledge gathered over many years in building fine bubble and surface aeration systems,we can offer you the most efficient solution for your application.

With Passavant you have a reliable and competent partner,who can deliver you a complete aeration system.

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管式曝气器

包括两个部件：通过双向螺纹短管来连接。每一个部件都包括内螺纹支撑管，一个长切口套筒膜，两个将膜紧固到支撑管上的管夹，以及一个用于密封方形布气管和曝气器之间的 O 型密封圈。为了避免浮力，支撑管有一个开孔用于灌入液体。当供应空气时，它直接通过双向螺纹短管和支撑管进入到支撑管和膜之间的空间，然后通过长切口吹入污水中。

为了给不同类型的污水提供匹配的曝气系统，帕萨旺生产的曝气膜由适应各种污水的人造橡胶制成。最普通的材质是 EPDM，长期成功地应用于市政污水处理中。硅树脂制成的膜特别适用在工业废水处理中。硅树脂膜表面非常光滑，对污水中的油脂、石油和芳香族化合物有很好的抵抗能力。

Bioflex

A complete tube diffuser Bioflex V consists of two diffuser elements connected through thread adapters with a double nipple. Each element consists of a support tube with inside thread, a slitted sleeve membrane, two clamps to fasten the membrane onto the support tube, and an O-seal for sealing between the rectangular distribution pipe and the diffuser element. To avoid buoyancy the support tube has an opening for liquids. When air is supplied, it is directed via the double nipple and support tube into the intermediate space between the support tube and the membrane and then blown into the wastewater through the slits.

In order to supply a matching diffuser for every type of wastewater, Passavant produces membranes made of different elastomers for the special requirements of various wastewater. The most common material is EPDM, which has been successfully deployed for long time in municipal wastewater treatment. Particularly in industrial treatment Silicone is used as membrane material. Silicone membranes have a very smooth surface and a high resistance against wastewater that contains grease, oil and aromatic compounds.

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技术参数—管式曝气 V HPI

	管式曝气 V HPI EPDM	管式曝气 V HPI 硅
总长	2 x 550 / 2 x 800 / 2 x 1050 mm	2 x 550 / 2 x 800 / 2 x 1050 mm
直径	63 mm	63 mm
膜长	2 x 500 / 2 x 750 / 2 x 1000 mm	2 x 500 / 2 x 750 / 2 x 1000 mm
膜的有效面积	2 x 0,082 / 2 x 0,123 / 2 x 0,164 m^2	2 x 0,082 / 2 x 0,123 / 2 x 0,164 m^2
重量	2 x 700 / 2 x 1000 / 2 x 1300 g	2 x 700 / 2 x 1000 / 2 x 1300 g
空气连接管	60 / 80 / 100 / 120 / 150 mm	60 / 80 / 100 / 120 / 150 mm
连接孔	3/4	3/4
膜材质	EPDM	硅
支撑管材质	ABS	ABS
连接件材质	ABS/不锈钢	ABS/不锈钢
空气流量	可选择范围：2-10m_N^3/(hxm曝气器) 最大范围：0-12m_N^3/(hxm曝气器)	可选择范围：2-8 mN^3/(hxm曝气器) 最大范围：0-10 mN^3/(hxm曝气器)
特点	适用于间歇性操作，可浸水，略微隆起	适用于间歇性操作，可浸水，略微隆起

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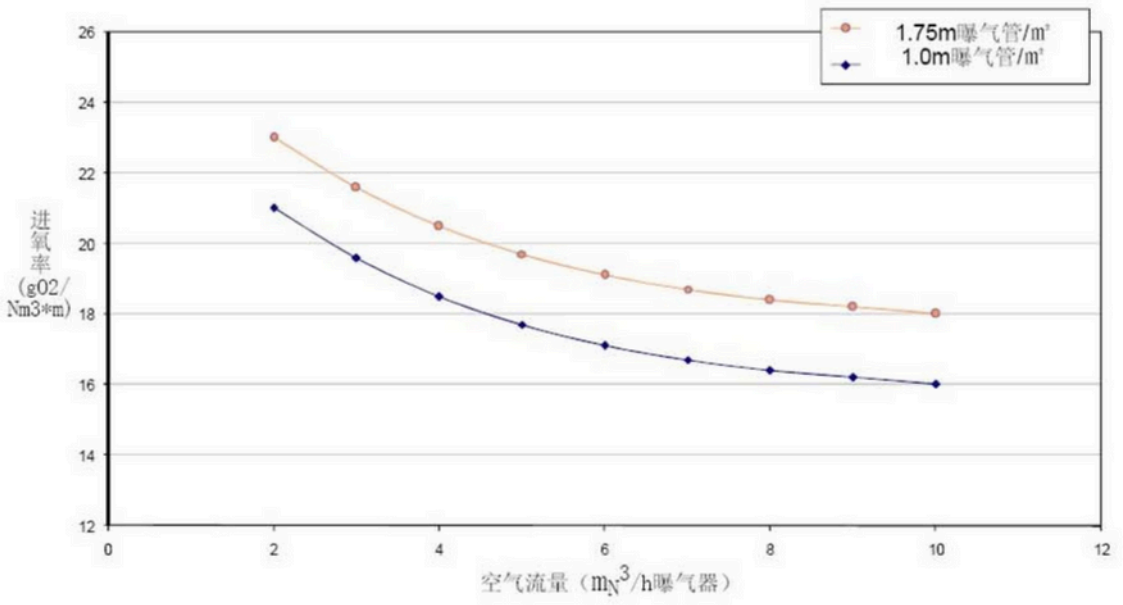
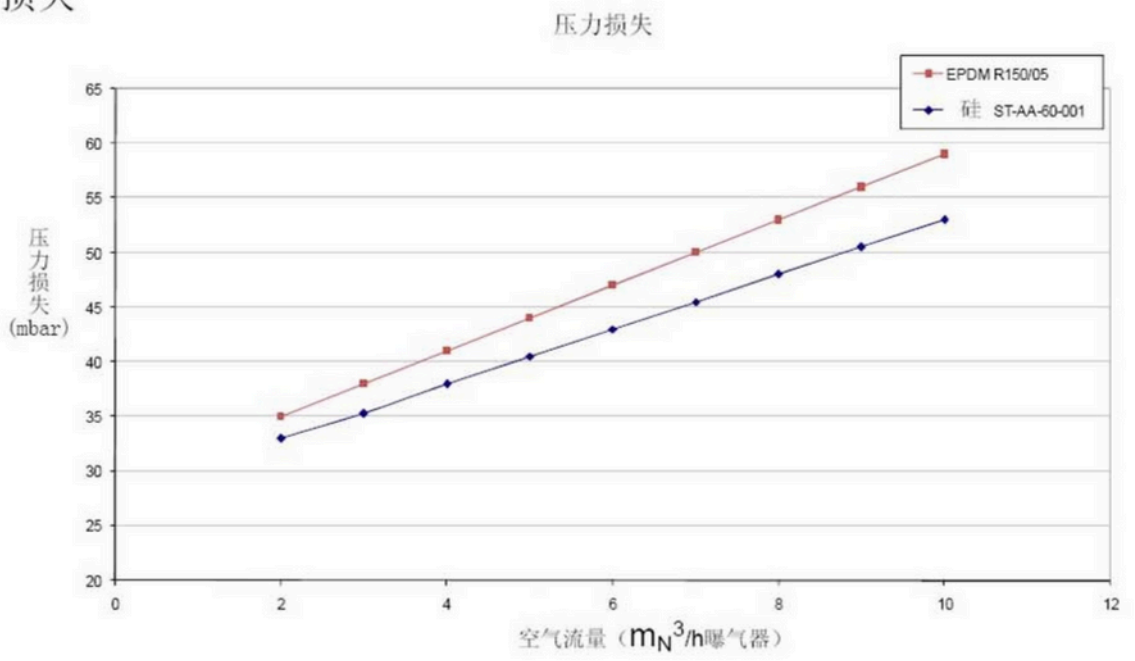
Technische Daten - Rohrbelüfter Bioflex® V HPI
Technical Data - Tube Diffuser Bioflex® V HPI

	Bioflex® V HPI EPDM	Bioflex® V HPI Silikon
Gesamtlänge Total Length	2 x 550 / 2 x 800 / 2 x 1050 mm	2 x 550 / 2 x 800 / 2 x 1050 mm
Durchmesser Diameter	63 mm	63 mm
Membranlänge Membrane Length	2 x 500 / 2 x 750 / 2 x 1000 mm	2 x 500 / 2 x 750 / 2 x 1000 mm
Aktive Membranfläche Active Membrane Area	2 x 0,082 / 2 x 0,123 / 2 x 0,164 m^2	2 x 0,082 / 2 x 0,123 / 2 x 0,164 m^2
Gewicht Weight	2 x 700 / 2 x 1000 / 2 x 1300 g	2 x 700 / 2 x 1000 / 2 x 1300 g
Verteilerrohre Distribution Pipes	60 / 80 / 100 / 120 / 150 mm	60 / 80 / 100 / 120 / 150 mm
Anschlussbohrung Connector Boring	3/4	3/4
Membranmaterial Membrane Material	EPDM	Silikon Silicone
Material Stützkörper Material Support Pipe	ABS	ABS
Verbindermaterial Connector Material	ABS/Edelstahl ABS/stainless steel	ABS/Edelstahl ABS/stainless steel
Luftbeaufschlagung Specific Air Flow	opt. 2-10 m_N^3 / (h x $m_{Belüfter}$) max. 0-12 m_N^3 / (h x $m_{Belüfter}$) opt. 2-10 m_N^3 / (h x $m_{diffuser}$) max. 0-12 m_N^3 / (h x $m_{diffuser}$)	opt. 2-8 m_N^3 / (h x $m_{Belüfter}$) max. 0-10 m_N^3 / (h x $m_{Belüfter}$) opt. 2-8 m_N^3 / (h x $m_{diffuser}$) max. 0-10 m_N^3 / (h x $m_{diffuser}$)
Besondere Merkmale Particular Characteristics	geeignet für den intermittierenden Betrieb, flutbar, auftriebsarm applicable for intermittent operation, floodable, little uplift	geeignet für den intermittierenden Betrieb, flutbar, auftriebsarm applicable for intermittent operation, floodable, little uplift

进氧率/特殊标准氧气输送率（SSOTR）



压力损失



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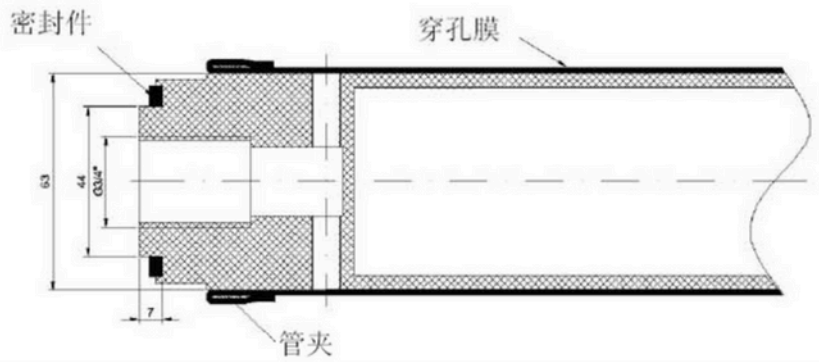
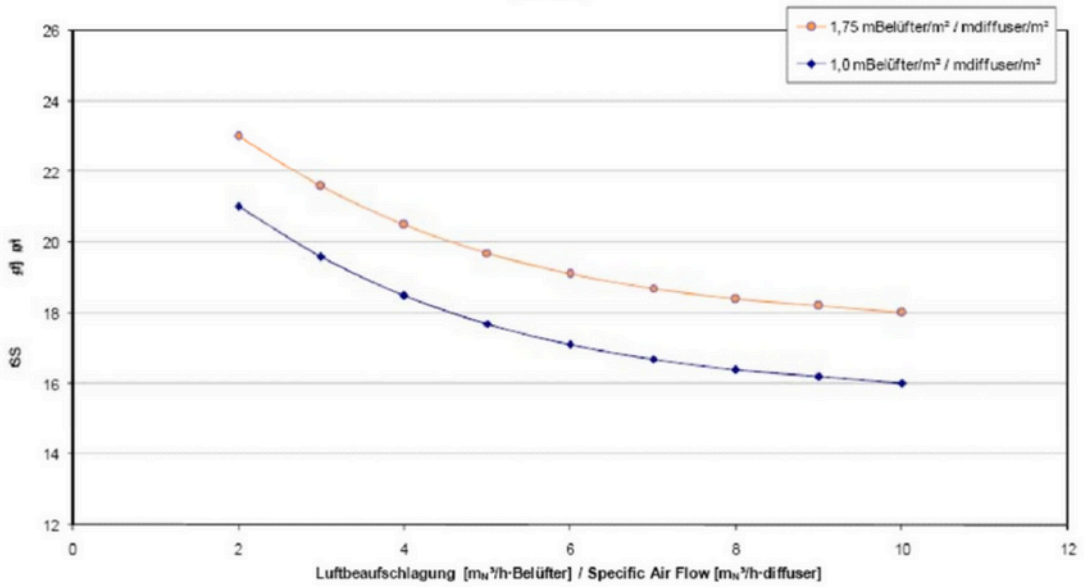
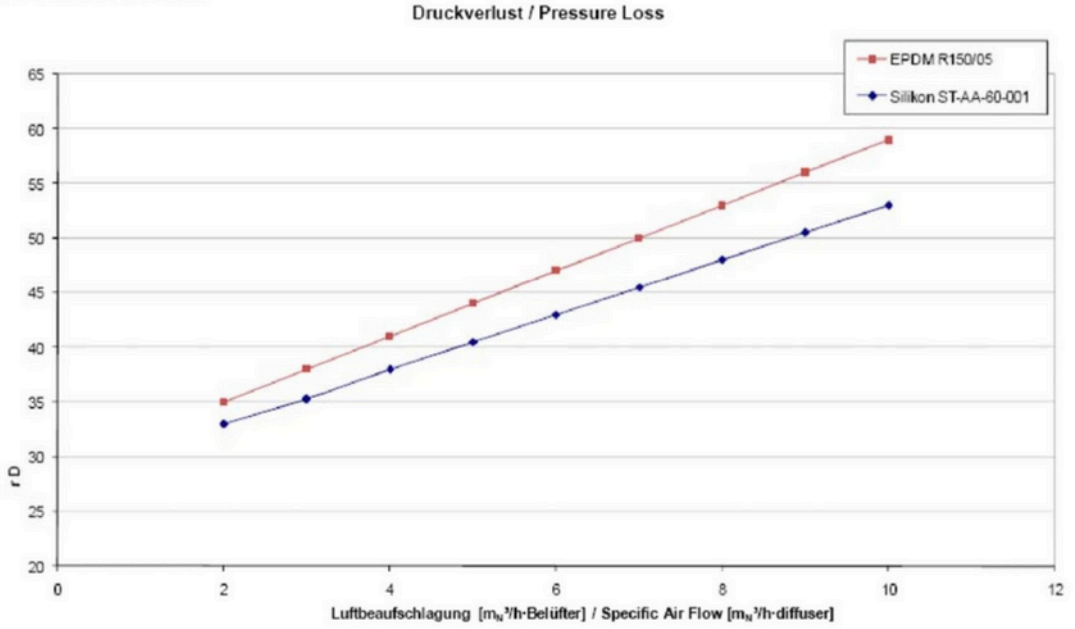


Sauerstoffeintrag / Oxygen Transfer Rate

Spezifische Standard Sauerstoffzufuhr / Specific Standard Oxygen Transfer Rate (SSOTR)



Druckverlust / Pressure Loss



Technische Zeichnung / Drawing