

PRESS RELEASE

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M&A in liquid filtration

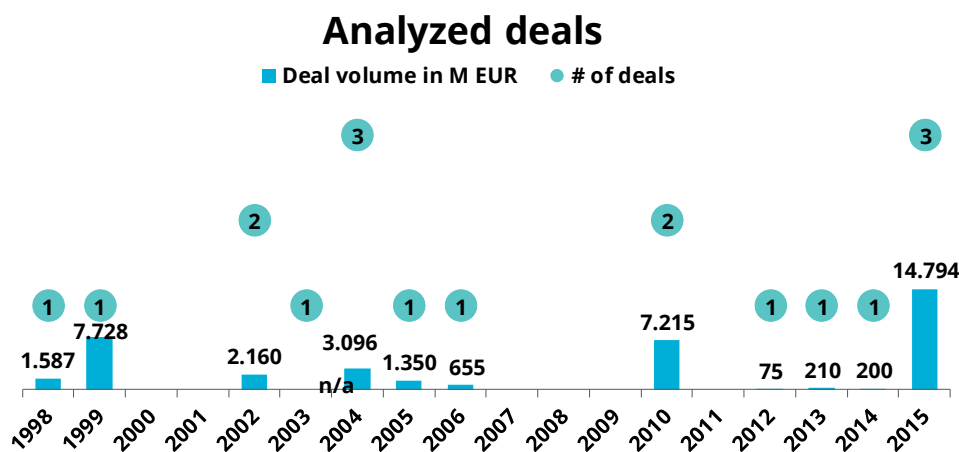
How to make profitable deals

The rise of biotechnology and statements such as “water as the new oil” have driven investments in liquid filtration technologies in past years. Schlegel und Partner has analyzed acquisitions in liquid filtration from 1998 until now. Identified potential success factors are the product offering of the acquisition target, the set-up of the acquirer and the average price paid.



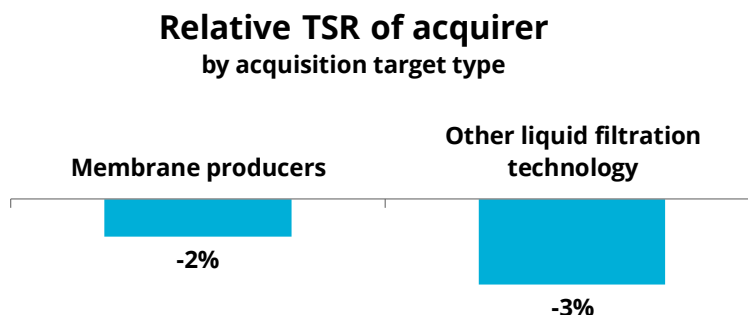
“Biotechnology is the future of humanity” or “Clean water is the new gold” are powerful statements made by leaders from the areas of politics, business and science. One process which is becoming increasingly important for both biotechnology and clean water is liquid filtration, including traditional filtration and membrane filtration. The liquid filtration market is forecasted to grow at a CAGR of about 8% in the next five years, and leading companies like Merck Millipore, Pall and Sartorius have generated EBITDA margins of 20–30% and increased their EV by a factor of up to 10 in the past 3 years. Accordingly, liquid filtration technologies have developed into a major interest area of investment activities from the beginning of the new millennium until now.

Since 1998 stock listed companies alone have conducted 18 transactions worth more than USD 40 bn in liquid filtration technology. The valuation ranged from 10x to 23x EV/EBITDA with a median at 15x.



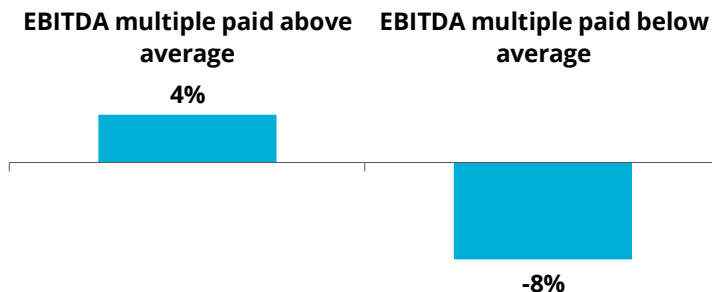
Schlegel und Partner analyzed these deals regarding their success and reasons for success and failure, and compared them with the business developments of their peer groups (by comparison of the TSR=Total Shareholder Return*). Across all these transactions, the acquiring companies generated 3% lower annual returns compared to the others – so generally they have not been successful. However, it is worth looking a little closer to identify the types of deals that had a different outcome.

From 1998 to 2004, deals showed a focus on water purification technologies, where diversified companies like GE, Siemens or Veolia bought companies that offered a range of products and services in liquid filtration, e.g. filters, filter equipment and project services. Between 2004 and the present, most deals have focused on membrane producers. Major deals were acquisition of Cuno and Polypore by 3M, Zenon by GE, Millipore by Merck and most recently Pall by Danaher. This could raise the question whether acquisitions of general water purification technology or of membrane technology were more successful. Still, both generated annual returns of 2 to 3% lower than their peer group. This means both were equally bad.



However, a possible driver for a better TSR could be the ability to pick up a bargain by acquiring undervalued targets. If this were the case, deals with a valuation below average EV/EBITDA would lead to better returns. In fact the opposite was the case: Deals with a valuation above average EV/EBITDA led to 12% more annual returns for the acquirer than for those who picked the “cheap” deals with below average EV/EBITDA of less than 16x. Yet, the successful cherry pickers have had to pay an appropriate price. Of course, this does not automatically mean that higher prices are a better deal. Financing risks and effects of goodwill in the balance sheet have to be traded off against the higher returns.

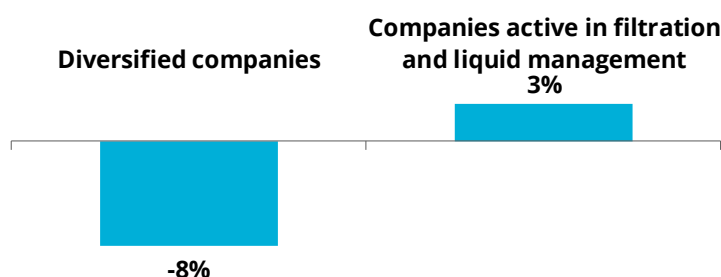
Relative TSR of acquirer by multiples paid



If the type of acquisition target has no influence on the success of the deal, the structure of the acquirer might have a significant influence. Two groups can be distinguished: First there are industrial companies having experience in general process technologies but not so much experience in filtration, liquid processes or life sciences. Most notable are companies like 3M, LG, GE, Siemens or Veolia. These companies tried to diversify their business into liquid filtration technologies, but showed 8% lower returns than their peer group.

The second group of deals were conducted by companies already present in the liquid processing or life science sector. These companies are Alfa Laval, Danaher, Merck, Pall, Pentair and US Filter Corp. They achieved returns of 3% above their peer group.

Relative TSR of acquirer by structure of acquirer



Just who are the winners of the USD 40 bn deals? It could be said that it does not matter what type of liquid filtration technology the acquisition target serves. It matters much more how well the acquirer is already acquainted with the intricacies of liquid filtration and if the company was able to pick out the cherries among the available acquisition targets.

This situation can be clarified by considering two important aspects: First, the operational synergy potential is significantly higher if the company is already involved in activities related to liquid filtration. For example, this could result from combined utilization of production and R&D assets or combination of sales and marketing activities.

The second, and very important, aspect is the market knowledge of the acquirer. Even though the company might not be an expert in the market of the acquisition target, it should have a feel for the market environment. Many companies that have tried to diversify their business have underestimated the difficulty and competitiveness of the market for liquid filtration.

Attracted by the growth opportunities, these companies expected a healthy growing and profitable business. However, they did not anticipate that these growth prospects would also attract new companies from Asia. Moreover, the market for sea water desalination quickly commoditized and is characterized by a high level of price pressure. Hence returns from the acquisitions were far below expectations and generated about 10% lower annual returns than the average deals in liquid filtration technology.

A similar picture can be seen in the life science membranes business. Companies tried to diversify into this highly profitable market and failed to compete against the “big three” (Pall, Millipore, Sartorius), underestimating their strength and the rigidity of the market.



But does that mean that only buyers familiar with the liquid filtration business can be successful? The answer is clearly: No, companies with no or limited relation to liquid filtration can also do successful deals if they invest more in the preparation phase of an M&A transaction as well as in external knowledge and support. Acquisition target screening needs to be done more thoroughly, giving due consideration to synergy potential that may be less obvious than in transactions close to the current business. Also the knowledge gaps in areas such as long-term market developments, growth, profitability, differentiation potential and competition need to be closed to avoid the mistakes mentioned above. Additionally, commercial due diligences gain more importance in setting a clear picture of synergy potential and strategic positioning. The target needs to be revisited more deeply from a market perspective because the acquirer on its own usually lacks the market knowledge needed to evaluate long term potential.

To summarize, the key strategic elements of conducting profitable deals, which are derived from Schlegel und Partner's analysis of deals in liquid filtration, lead to the following recommendations:

1. Know exactly what you are buying. Ask yourself honestly if you really have enough knowledge and capabilities to assess the market environment and the target itself on a detailed level in order to determine the prospects of the company and the synergy potential. If the honest answer is that you don't know enough, get external support prior to the acquisition.

2. Don't buy a company just because the market is shiny or growing. The mere fact that a market is growing vigorously (water purification) does not mean that it is sustainably profitable. Or just because a market is profitable (life science membranes) does not mean that you can participate in the market with your acquisition target.

3. Don't buy a company just because it's a bargain. Pricy deals (above average EV/EBITDA multiple) have given significantly better returns. In the market for liquid filtration, which is growing strongly with very profitable segments, a well-positioned company fulfilling both criteria simply has its price.

***Methodology:**

Since 1998 Schlegel und Partner has been screening global acquisitions of companies active in liquid filtration on the basis of information documented in various sources, such as M&A databases, analyst reports and company publications. To evaluate the success of an acquisition, Schlegel und Partner chose the analysis of the acquirers' relative TSR (=Total Shareholder Return compared to a peer group index). Therefore the stock price development of the acquirer plus dividends has been analyzed from the date of acquisition to two years after the deal or to the current date. This TSR was then benchmarked against the industrial peer group (here the Dow Jones Industrial Average was chosen). As the TSR is only applicable for stock listed companies, the list was filtered by stock listed acquirers. Subsequently, the deals have been analyzed from different aspects, like product portfolio of the acquisition target, strategic set-up of the acquirer, deal rationale and directly deal related data, such as EV and multiples paid.

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