

# Purchasing

**BauerTCO™**  
**Total Cost**  
**of Ownership**  
**Target**  
**orientated**  
**decision**  
**making**

Sales Production Disposal  
Commissioning Maintenance  
Logistics Storage Quality  
Reliability Energy



 **Bauer®**  
Gear Motor

An Altra Industrial Motion Company

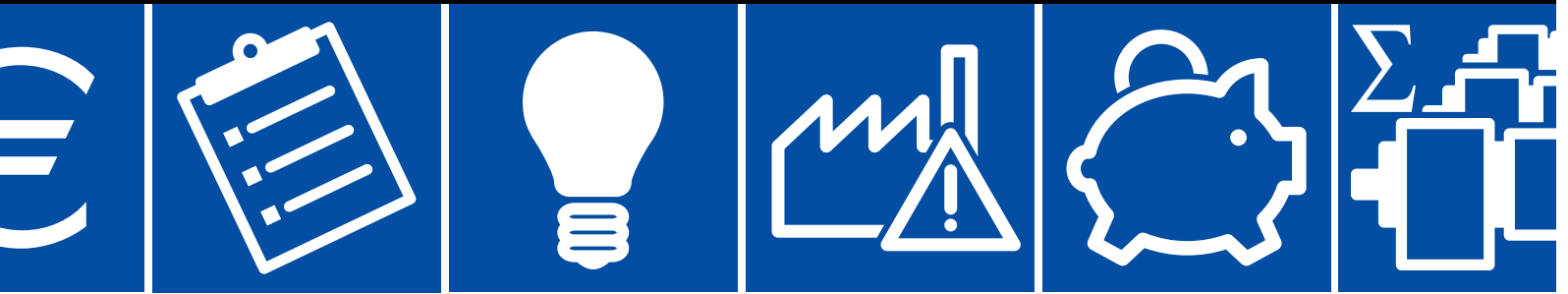


**20 %**

**PURCHASING**

**STORAGE  
QUALITY  
ENERGY  
PRODUCTION  
LOGISTICS  
SALES  
FINANCE  
RELIABILITY  
MAINTENANCE  
SPARE PARTS  
COMMISSIONING  
DISPOSAL**

**80 %**



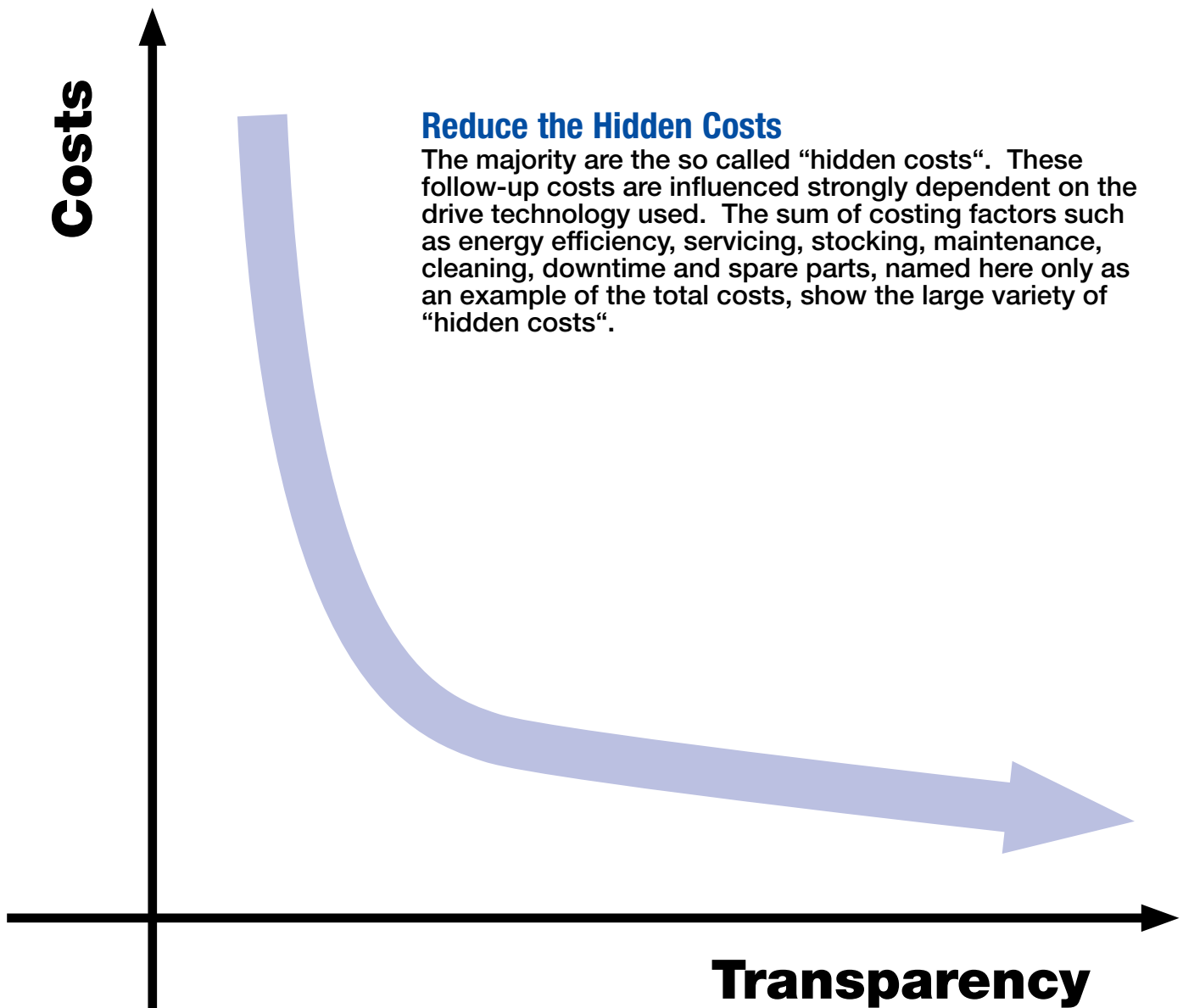
## Control the Visible Costs

When considering total investment costs, the pure purchasing price of components is only a fraction of the total costs. We speak here about the budgeted costs which are, amongst

others, administrative costs, transport and delivery, goods incoming, customs and even up to and including costs for returns.

## Reduce the Hidden Costs

The majority are the so called “hidden costs“. These follow-up costs are influenced strongly dependent on the drive technology used. The sum of costing factors such as energy efficiency, servicing, stocking, maintenance, cleaning, downtime and spare parts, named here only as an example of the total costs, show the large variety of “hidden costs“.





## Safety in Decision Making

When considering TCO - Total Cost of Ownership - the assurance that decisions have been made with a clear cost transparency is drastically

improved. The result of the TCO analysis is a solution which is cost effective over its complete life cycle but not necessarily the cheapest initial purchase.

Modern companies  
decide more often  
according to TCO  
guidelines

Transparency  
of the  
direct and indirect  
costs

Energy and  
plant cost saving

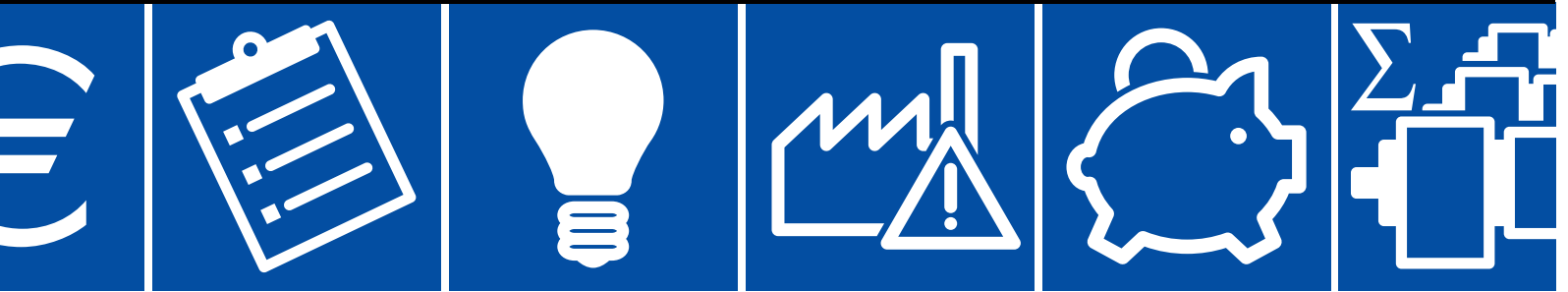
**Total  
cost saving**

Proactive contribution  
to protecting the  
environment

Sustainable Co2  
reduction

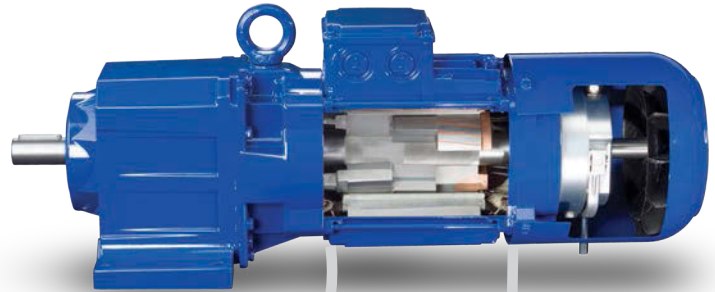
Transparency of all  
relevant and  
influential costs





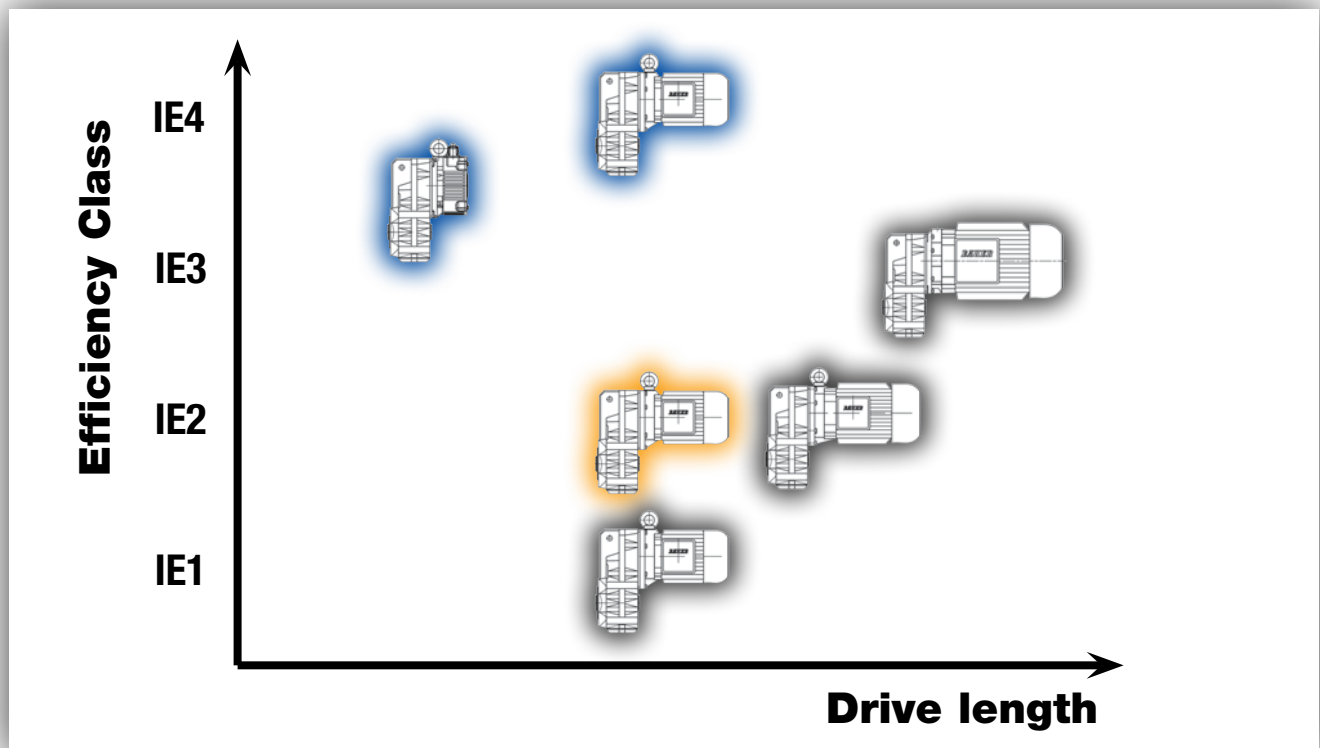
## Energy Saving

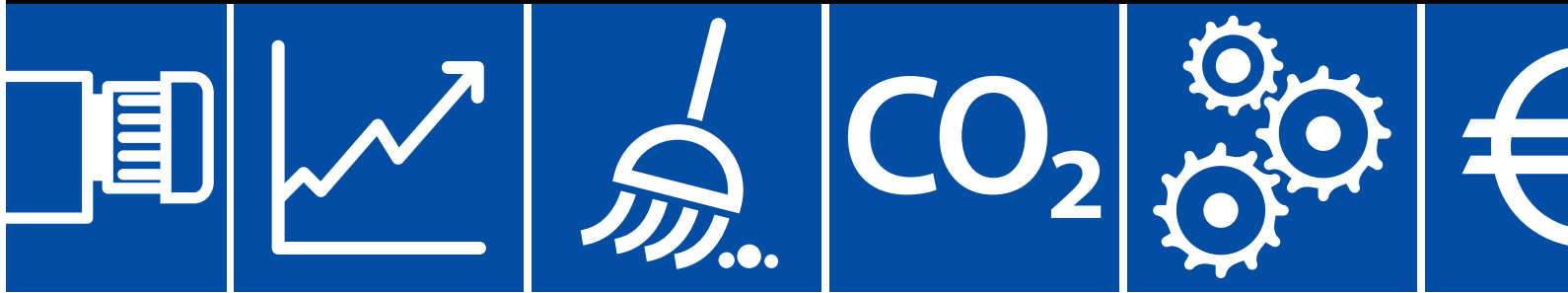
Energy efficiency is one important facet of the complex TCO structure. Trend-setting technologies from Bauer for energy efficient drive technology guarantee highly efficient drive solutions without space problems.



|      | ALU | COPPER | PSM |
|------|-----|--------|-----|
| IE4  |     |        | ✗   |
| IE3  | ✗   | ✗      |     |
| IE2  | ✗   | ✗      |     |
| IE1* | ✗   |        |     |

\* for special applications





## Target orientated costing made easy for you

| Start <span>BAUER</span>                   |                     |                             |  |
|--|---------------------|-----------------------------|--|
| Period under consideration (month)         |                     | Total amount of used drives |  |
| 60   |                     | 40                          |  |
| Purchase (total)                           | Stock (per year)    | Cover (total)               |  |
| 0.00                                       | 0.00                | 0.00                        |  |
| Energy (per year)                          | Cleaning (per year) | Downtime (per year)         |  |
| 0.00                                       | 0.00                | 0.00                        |  |
| Cost savings in period under consideration | 0.00                |                             |  |

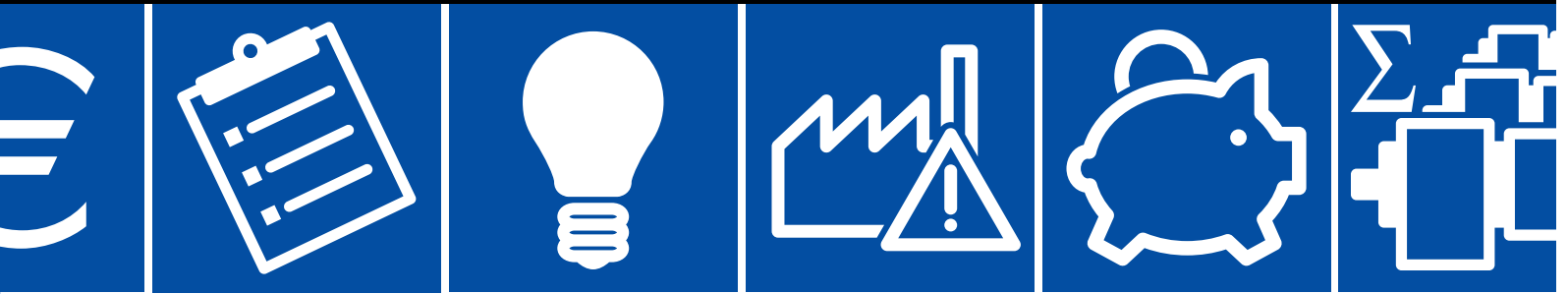
| The Gear Motor Specialist                          |  | Pu  |
|--|--|-----|
|  |  | Cur |
| Total amount of used drives                        |  |     |
| Necessary amount of drives in stock                |  |     |
| Ø price of drive                                   |  | \$  |
| Period under consideration (month)                 |  |     |
| Lifetime of drives (month)                         |  |     |
| Changing time per drive (minutes)                  |  |     |
| Operational costs for one hour changing work       |  |     |
| Frequency of changing                              |  |     |
| Costs for changing the drives                      |  | \$1 |
| Purchasing costs total                             |  | \$1 |
| Cost savings on the basis of BAUER drives in total |  |     |

## Increase



| Start <span>BAUER</span>                   |                     |                             |  |
|--|---------------------|-----------------------------|--|
| Period under consideration (month)         |                     | Total amount of used drives |  |
| 60   |                     | 40                          |  |
| Purchase (total)                           | Stock (per year)    | Cover (total)               |  |
| \$5,888.89                                 | \$-570.00           | \$1,200.00                  |  |
| Energy (per year)                          | Cleaning (per year) | Downtime (per year)         |  |
| \$12,082.80                                | \$7,500.00          | \$7,000.00                  |  |
| Cost savings in period under consideration | \$137,152.88        |                             |  |

| The Gear Motor Specialist                          |  | Do |
|--|--|----|
|  |  | Co |
| Total amount of used drives                        |  |    |
| Lifetime of drives (month)                         |  |    |
| Changing time per drive (minutes)                  |  |    |
| Amount of production weeks per year                |  |    |
| Downtime per week (minutes)                        |  |    |
| Production volume of the plant per minute          |  |    |
| Average calculated profit for one piece            |  |    |
| Downtime costs per year                            |  |    |
| Cost savings on the basis of BAUER drives per year |  |    |



| Purchase       |              |
|----------------|--------------|
| Current system | BAUER system |
| 40             | 40           |
| 20             | 20           |
| \$500.00       | \$650.00     |
| 60             | 60           |
| 12             | 18           |
| 50             | 40           |
| \$20.00        | \$20.00      |
| 5.0            | 3.3          |
| \$1,333.33     | \$1,777.78   |
| \$13,333.33    | \$127,444.44 |
| \$5,888.89     |              |




| The Gear Motor Specialist                          |                |              |
|--|----------------|--------------|
| Stock  |                |              |
|  | Current system | BAUER system |
| Price per drive                                    | \$500          | \$650        |
| Amount of drives in stock                          | 20             | 20           |
| Fixed capital in stock                             | \$10,000       | \$13,000     |
| Inventory cost (%)                                 | 15%            | 15%          |
| Costs of holding goods in stock                    | \$1,500        | \$1,950      |
| Percentage of scrapping motors per year (%)        | 4%             | 4%           |
| Stock costs per year                               | \$1,900        | \$2,470      |
| Cost savings on the basis of BAUER drives per year | \$-570.00      |              |

| The Gear Motor Specialist                          |                |              |
|--|----------------|--------------|
| Cover  |                |              |
|  | Current system | BAUER system |
| Total amount of used drives                        | 40             | 40           |
| Amount of drives with cover                        | 10             | 0            |
| Costs for a stainless steel cover                  | \$120.00       | \$120.00     |
| Cover costs total                                  | \$1,200.00     | \$0.00       |
| Cost savings on the basis of BAUER drives in total | \$1,200.00     |              |

your cost visibility



BauerTCO™

| Current system  |   |                                  |  |
|---|---|----------------------------------|---|
| Drive concept   | Efficiency  | Total efficiency<br><b>47.2%</b> |   |
|   | 68%   |                                  |   |
| Motor power [kW]  | Efficiency  |                                  |   |
|   | 77.2%   |                                  |   |
| Gear reduction  | Efficiency  |                                  |   |
|   | 90%   |                                  |   |
| Control   | Efficiency  |                                  |   |
|   | 100%  |                                  |   |
| BAUER system  |   |                                  |  |
| Drive concept   | Efficiency  | Total efficiency<br><b>73.4%</b> |   |
|   | 86%   |                                  |   |
| Motor power [kW]  | Efficiency  |                                  |   |
|   | 85.3%   |                                  |   |
| Gear reduction  | Efficiency  |                                  |   |
|   | 100%  |                                  |   |
| Control   | Efficiency  |                                  |   |
|   | 100%  |                                  |   |
| Energy costs  |   | Evaluation                       |   |
|  | Cost savings on the basis of BAUER drives per year under effective load | <b>\$12,082.80</b>               |   |

| Downtime       |              |
|----------------|--------------|
| Current system | BAUER system |
| 40             | 40           |
| 12             | 18           |
| 50             | 40           |
| 50             | 50           |
| 40.0           | 21.3         |
| 250            | 250          |
| \$0.03         | \$0.03       |
| \$15,000.00    | \$8,000.00   |
| \$7,000.00     |              |

| The Gear Motor Specialist                          |                |              |
|--|----------------|--------------|
| Cleaning   |                |              |
|  | Current system | BAUER system |
| Total amount of used drives                        | 40             | 40           |
| Amount of drives mandatory to clean                | 10             | 10           |
| Amount of production weeks per year                | 50             | 50           |
| Frequency of cleaning (per week)                   | 5              | 5            |
| Needed time for cleaning one drive (minutes)       | 10             | 1            |
| Operational costs for one hour cleaning            | \$20.00        | \$20.00      |
| Cleaning costs per year                            | \$8,333.33     | \$833.33     |
| Cost savings on the basis of BAUER drives per year | \$7,500.00     |              |

For information concerning our  
sales offices in Asia Pacific  
check our website  
[www.altramotion.com.cn](http://www.altramotion.com.cn)