

# TOP RELIABLE PUMPS

ARTICLE PRINTED IN J&M/INDUSTRI-TEKNIK. THE ARTICLE IS WRITTEN BY KIM H. SKAARUP.

A minor machine factory in the eastern part of Denmark has great success in the pump manufacturing industry. The foundation for the concept is an old basic model that during the past has been undergoing very few improvements. The technique is still effective, simple and strong, and many of the early models are still operating.

There are other manufacturer available in this part of Denmark besides the giant from Bjerringbro, more specifically situated in Hasselager outside Århus, where B. Christensen Machine Factory is located.

You will not observe any presentation of new high technological products produced on new high technical machines in modern and clean facilities. However, the workshop is more like a smithy and a machine shop installed with manual lathes and ditto staff members. Mills and a big shaper machines combined with store facilities including thousands of spare parts and patterns covering more than 60 different pump types, from where the first pump model was produced in 1927.



However, please do not misunderstand the nostalgic, the owner of the factory, Mr. Erik Tollefsen informs. Behind the dusty windows in the factory in the industry area, 10 staff members are working at Trium pump producing one of the world's most effective and reliable pump. The pumps have a lifting capacity from 15- to 200 meters as a centrifugal pump, which is designed with an impeller installed either in a vertical or a horizontal position. Everything according the requirements from the customer.

Our main costumers are water supply stations, slaughter houses and central cleaning plants that have a demand for moving garbage and sludge etc. away from their production areas. The pumps have since 1994 been manufactured by the owner of Trium pump, Mr. Erik Tollefsen. On the same year, Trium pump took over their previous part-

ner, Iron A/S from Sjælland, inclusive their production program.

## Solid and reliable construction

The reason for the stability is an obviously phenomenon, the smith and owner informs. Mr. Tollefsen is the third generation in charge since he took over the management from his mothers father in 1959 after having finished his apprenticeship on location.

The Trium pump has a high efficiency and its design is based on similar basic principles as our own types. The design of the pump is in fact more solid than similar pumps in the market from our competitors, which means that it is very seldom that bearings and other wearing components must be changes, the owner informs with a wrinkled but a visible satisfied face.

The unique idea by our models is that the pumps can operate by very low speed between 750 to 1400 rpm. The structure is strong and equipped with large bearings with an optimal distance in between, which means an extended lifespan. According to the owner, it is a rule of thumb in the textbooks that a pump with 2400 rpm can run continuously 5 years. If the speed is reduced to 1450 rpm, the lifespan for same pump will be extended to three times this value, and if the speed is reduced to 950 rpm, the pump can run 45 years constantly.

## Pump running for 560.000 working hours

It looks as if the statement in the textbooks are correct. Many Trium pumps have been in operation for decades and are still in service in our small country.



For further information please call us - or visit our website at [www.trium.dk](http://www.trium.dk)

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Danish Quality 

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*The photo shows a centrifugally pump of type CX. It runs between 750- to 2900 rpm. The model is qualified for transfer of liquids covering all industrial pants, i.e. refrigerator plants, cleaning plants, central heating etc.*



Svendborg water plant is a practical example. Since 1934, six pump models HT have been in operation and they run more than 560.000 hours. Only bearings have been changed 3 times as well as one wearing ring once.

This statement can be proved by looking into the old narrow archive of Trium Pump. If you read the text close up in the old books, you will find full details covering all sold models, as well as actual repairs and supply of spare parts.

Full details are printed with a precise handwriting, and as an example you are able to observe that Svendborg water plant has paid DKK 912,25 for each pump and which is less than the cost for one bearing in 2006. Today is the price for similar pump DKK 42.000,-, and the factory produces 80

to 100 different pumps each year in a price level between DKK 12.000,- to more than DKK 1.000.000,-.

Furthermore full details are noted into yellowish-brown books. However, due to security reasons, copies are now stored in a computer. Today It is possible to produce spare parts with a few days notice – even for the first pump model from 1927. Necessary castings are produced at our own foundry, where three staff members in the Northern part of Jutland are able to handle the pallet of 60 different of patterns.

The durability and quality is legendaries, which according to the owner, is the main reason for a good

reputation, which had an influence getting recent orders. Trium pumps delivered 5 pumps to a new water plant in the Danish town Farum, which shall supply water to an area, having 1050 residences in military barracks.

We fought against two competitors in the market, but received the order due to our reputation, the stability of the pumps and the high efficiency which is higher than 75%, These figures are followed by approx. 60% by our competitors, tells the man that does not like to waste away as a pensioner, even if he has the age for that.

I finish my job when it is completed. I love my company by staying here every day. Maybe Mr. Tollefsen is able to get older than the age of his oldest pump?



*Pumps from Trium pump can be installed in a vertical position as shown from a supply in Roskilde. This is also possible onboard ships, where the removal space is limited.*



For yderligere produktinformation kontakt os – eller besøg vores hjemmeside på [www.trium.dk](http://www.trium.dk)

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