
REAL COST OF SWIVEL REPLACEMENT

When evaluating the cost of a swivel replacement, most will only take into consideration the cost of the parts being replaced. This is far from accurate, due to many other costs which have to be taken into consideration and integrated into the overall cost picture.

The different costs that need to be considered when replacing a swivel are:

- **COMPONENT REPLACEMENT**
- **REPLACEMENT OF HYDRAULIC FLUID**
- **POSSIBLE CONTAMINANT INGRESS**
- **NON-PRODUCTIVE DOWNTIME**
- **CLEAN-UP AND ENVIRONMENTAL ISSUES**
- **DISPOSAL**
- **SAFETY**

Of course, each case is particular, but each time a swivel is replaced, these areas have to be covered and evaluated.

To have an overall picture, let's elaborate on each area:

- **COMPONENT REPLACEMENT**

A crucial criterion to evaluate the actual costs related to the replacement of components is the frequency at which the parts need to be replaced.

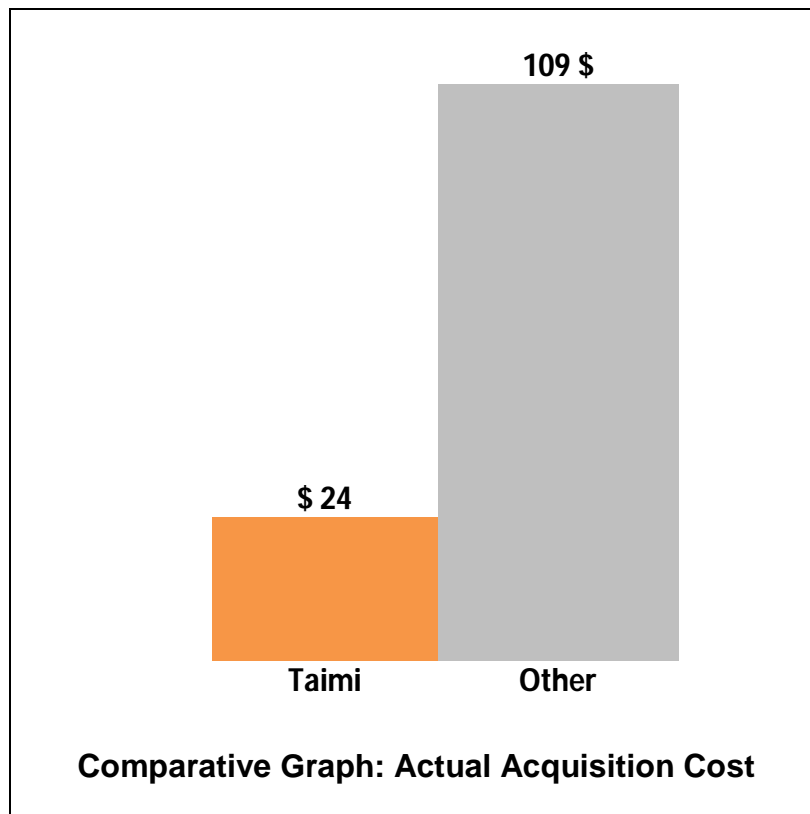
Initial acquisition cost alone doesn't offer an overall view of the situation. A comparison between component lifetimes is essential to obtain a true picture.

The following reflects an actual case study:

- Taimi Swiwell exclusive design lifetime = 12,000 Working Hours
- Ordinary ball bearing swivel design lifetime = 1,500 Working Hours
- Ratio factor (durability) between Taimi Swiwell & ordinary product is: 1:8

Acquisition costs have to take this ratio into account for a comparison base, since a Taimi product will in this case last 8 times longer than the other product, the actual cost related to acquisition will be:

- Taimi's Swiwell pricing: US \$193.00 (12,000 working hours)
- Ordinary swivel pricing: US \$109.00 (1,500 working hours)
- Ratio factor applied in this case: $8 \times \$109.00 = \872.00
- **Taimi's actual acquisition cost is then: $\$193.00 / \$872.00 = 0.22$ times the other**



In addition to the acquisition cost being one quarter (1/4) of the ordinary swivel cost, Taimi's product will allow end users to save on hose replacement.

Often when you replace an ordinary ball bearing swivel, you have to replace the hose connected to it because worn out ordinary swivels will become hard to rotate and could lockup due to excessive wear, causing hose torsion, reducing its lifetime.

These costs have to be added in your overall numbers.

▪ **REPLACEMENT & MAKE-UP OF HYDRAULIC FLUID**

Each time hydraulic fluid leaks, fluid has to be added to the system. Most of the time it is partial, but at times, almost all has to be added as in the case of dismantling of an ordinary swivel on a line of a pressurized fluid tank.

Taimi's products, compared to other swivels, are designed in such a way that there is no possibility for the Swiwell to be dismantled, eliminating the risk of a major fluid spill that sometimes reaches 40 gallons. They also have superior sealing capabilities. Hydraulics lines stay dry and clean.

In addition to the component and fluid replacement, the following areas are not negligible in the overall picture. It is difficult to put accurate numbers on these, but each time a hydraulic leak is present, they will need to be addressed with the associated costs:

- **POSSIBLE CONTAMINANT INGRESS** EACH TIME YOU DISMANTLE A HOSE
- **NON-PRODUCTIVE DOWNTIME**
- **CLEAN-UP** OF LEAKS AND SPILLS AND ENVIRONMENTAL ISSUES
- **DISPOSAL** OF CONTAMINATED MATERIAL, DAMAGED HOSES AND WORN OUT SWIVELS
- **SAFETY** OF HAVING TO WORK ON YOUR HYDRAULIC SYSTEMS

Actual cost of swivel replacement is then:

Component replacement \$\$\$ + Hydraulic fluid replacement \$\$\$ + Possible contaminant ingress \$\$\$ + Non-productive downtime \$\$\$ + Clean-up and environmental issues \$\$\$ + Disposal \$\$\$ + Safety \$\$\$

CONCLUSION

When we have the global picture of a situation, we can then make a better evaluation of the overall costs.

Using Taimi's high efficiency products will allow end users to save thousands of dollars, work with peace of mind and reduce their operation costs. This money can be reinvested into more productive sectors of their operations rather than throwing it away.