

## Special Motor Spindle Request for Environmental Industries

SAJO has delivered a special machine some years back and the spindle application/solution has not been performing the way the customer wants. This machine is the only machine the customer can use to produce the big cast pump house. That means they are depended on the machine and are now in a situation where they need to decide what to do. The customer Xylem ([www.xyleminc.com](http://www.xyleminc.com)) is the world leader in this field.

The machine is a Swedish SAJO 16000 and has original a none IBAG spindle and a motor that are assembled together with two sizes of houses and a coupling. The whole unit is used as a piston and moves back and forth ("pinol feed").



The problem they had: bearing and coupling that have to short life time, sometimes less than a year. They had one motor failure in 13 years.

IBAG Scandinavia was contacted and was informed about the problem they have and asked the question if we could build a motor spindle that could meet the requirements. I discussed with the customer and find out that we probably should be able to present a solution for them.

The customer had now two solutions to work on. Our way with a one piece motor spindle and a modified version of the solution they have today from SKF.

We could see IBAG was in a good position and if we can show a good solution, they will like our idea with a motor spindle.

After some conversation with the customer and IBAG Switzerland we did present a solution.

The customer decided to go for our solution and the whole project started.

The customer did act as the project manager and we where three different companies involved as supplier and installer.

IBAG Scandinavia did supply a system including spindle, lubrication system, electronics for ATC, cooler and all cables and tubing's. The installation of all IBAG products was also performed by IBAG Scandinavia.

Other suppliers as CNC Factory replaced the whole Siemens control system including all cables and servo motors.



Maskin Plus did deliver a complete new cast dock where the IBAG spindle was installed into. This was done prior to the final installation and tested before of us.





*Motor Spindle Specification:*

**Type:** **HF 475 A 4**

Power S1:	36 kW
Power S6-40%:	46 kW
Torque S1:	904 Nm
Torque S6-40%:	1.156 Nm
Max. speed:	4.000 min <sup>-1</sup>

Tooling: SK50

Weight:	1.077 kg
Length:	1.835 mm

