## CASE STUDY

## TAIPEI WATER DEPARTMENT TA TUNG Pumping Station (TAIWAN)



A total of 10 low suction submersible pump motor sets manufactured by Indar are installed and operating at TaTung pumping station. This installation is managed by Taipei Water Department (TWD) who is responsible for supplying some 2.5 million cubic meters of high-quality potable water a day to over 3.8 million users in the Taipei metropolis.

Ing	<b>NC</b> geteo	<b>10</b> am G	roup			
	p:	UGP-I	M-4410-01			
<b>Hm:</b> 40m <b>Q:</b> 437				5m³/h		
Motor: ML-70-8/1	40-N	Λ				
<b>P:</b> 746 / 1000 ( <b>kW/HP</b> )			<b>V:</b> 3300V			
<b>n:</b> 885 (rpm)	I:	184	(A)	<b>f:</b> 60	(Hz)	
<b>N:</b> 103010		max.	submergence	200		
				201	0	
www.indar.net				ſ	6	



Inder Ingeteam Group The existing pumping station, located in a populated area of Taipei City, included vertical turbine shaft pumps with surface dry motors. The inhabitants surrounding the installation were suffering from a great acoustic contamination; this obliged TWD to find an alternative to the existing equipment. All was solved with Indar submersible solution.



Indar proposed environmentally friendly sets, lighter in weight, compact design ready to be installed (no alignment required), less wear and easier maintenance, less space required, less costly installation (geometry and reduced diameters), IP68 (no risk of electrical short circuit), self-lubricated and cooled, etc. mum hydraulic efficiency had to be guaranteed and other technical requirements were mandatory.

In less than 6 months, Indar designed, manufactured and delivered 7 low suction units that were supplied in 2004. 3 more were installed in TaTung pumping station in 2010.



TWD proved energy saving of 5% in total efficiency of Indar sets compared with the vertical shaft turbines and also significant operation cost and maintenance saving.



However, the operator looked for the minimum impact possible in the installation, establishing very strict requirements for the replacing equipment.

The new pump motor sets had to be suitable for the existing electrical installation, they had to have a maximum total length, the sets had to run problem free for low water levels, three duty points with a mini-







www.indar.net water@ingeteam.com