

RENEWABLE ENERGY

Coating Solutions for Hydropower Plants



TEKNOS COATING SOLUTIONS FOR HYDRO POWER PLANTS

Challenge

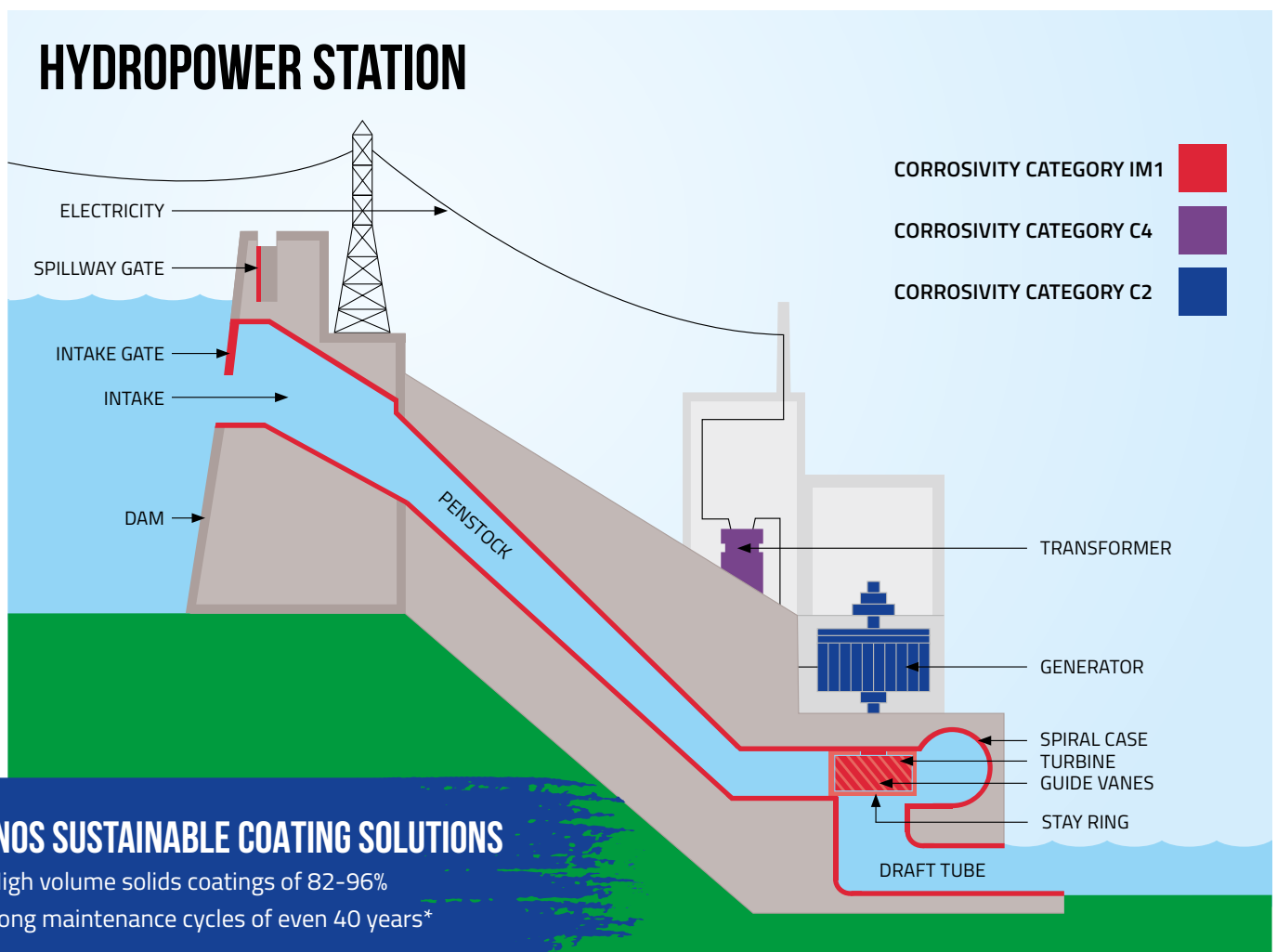
Hydropower plant structures, penstocks, gates as well as sluices have to withstand use even for decades. The structures are immersed or located in the splash zone and have to withstand mechanical and abrasive stress, such as flowing water itself as well as ice blocks and particles that come with the water flow. These factors make hydropower plants one of the toughest environments for coatings to serve.

The structures are also complex to repaint; functions on the plant have to be stopped during maintenance and the structures are physically difficult to reach, handle, pretreat and paint. To make the maintenance cycle as long as possible, the paints need to be super durable and of high quality.

Teknos solution

Teknos' full range of advanced, high-performance protective coatings protect the structures of your entire hydropower plant – both immersed and dry parts – from corrosion. TEKNOMASTIC 80 Primer and INERTA 160 and 165 are all examples of products with long-term track record in immersed use, for both steel and concrete constructions. The products have gone through rigorous laboratory testing.

Teknos' technical service professionals have vast experience in industrial painting and are happy to help you. For further information, please contact your local Teknos representative.



WHEN COATING HYDROPOWER PLANT STRUCTURES:

- Thorough pretreatment with a rough blasting profile
- Surface cleanliness tests after pretreatment
- Protection of surroundings
- Harsh painting conditions with low temperatures and high/varying humidity
- Challenging reachability of structures

NEED FOR HIGHLY PROFESSIONAL CONTRACTORS

PRODUCT DETAILS

Product	VOC g/l	Vol. Solids %	DFT range (µm)	Pot life (min)	Equipment requirements	Approvals*
INERTA 160 The highest resistance against mechanical loads, including the effects of ice	abt. 40	96	500	20	2K airless	Im 1, 2, 3 acc. ISO 12944-5 Abrasion resistance test
INERTA 165 Very good resistance against mechanical loads, including the effects of ice	abt. 100	92	200-300	30	1K airless	Im 1, 2, 3 acc. ISO 12944-5 Abrasion resistance test
INERTA 165 TIX High film build version of INERTA 165	abt. 100	92	250-600	30	1K airless	Im 1, 2, 3 acc. ISO 12944-5 Abrasion resistance test
TEKNOMASTIC 80 PRIMER Several NORSOK M-501 approvals, including systems 1, 3, 7A, 7B and 8A	abt. 200	82	80-230	120	1K airless	Im 1, 2, 3 acc. ISO 12944-5 Im 4 acc. ISO 12944-9 Abrasion resistance test

* In addition to the above-mentioned approvals, there are several approvals by country-specific requirements and standards, such as SILKO, ELFORSK, NS 5417 (Norwegian Hydropower std.), NORSOK M-501 etc.



WE MAKE THE WORLD LAST LONGER

Teknos is a global coatings company with operations in more than 20 countries in Europe, Asia, and the USA. It employs approximately 1,800 people and makes annual net sales of approximately EUR 400 million. Teknos is one of the leading suppliers of industrial coatings with a strong position in retail and architectural coatings.

Teknos wants to make the world last longer by providing smart, technically advanced paint and coating solutions to protect and prolong. Teknos always works in close cooperation with its customers. It was established in 1948, and is one of Finland's largest family-owned businesses. For further information, visit www.teknos.com