



GOLD MINING

CARBOTECH
AURUM-GRADES FOR
GOLD RECOVERY



CarboTech AC
GmbH
Your Adsorption Company

GOLD MINING

The adsorption of gold complexes onto activated carbons is the basis of modern techniques for gold recovery. CarboTech provides a range of activated carbons, which are well proven and established in gold mines all over the world.

The CarboTech Aurum grades are produced from selected qualities of coconut char coal by steam activation in rotary kilns. Our special production process is strictly quality controlled. It leads to adsorbents having pore structures which are perfectly adapted to gold mining requirements. That results in optimized properties in respect to adsorption, particle size distribution and hardness. By use of latest sieving technologies, the content of platelets and fines is precisely controlled. Effective gold extraction and reliable reactivation can be granted.

ADSORPTION FEATURES

- › High gold yield
- › Rapid adsorption kinetics
- › Excellent attrition hardness
- › Effective extraction
- › Low platelets content (< 5 %)

REGENERATION FEATURES

- › High durability
- › Low make-up demand content (< 5 %)

Activated carbon properties define the success of gold extraction – in the view of today's high gold prices compromises in terms of quality are the most unsatisfactory strategy for gold-miners.

CarboTech Aurum grade	Mesh sieving (US standard)	CTC number	Hardness	Attrition	Application
A 6	6 x 12	> 55	> 98	> 1.5	CIP/CIL
A 8	8 x 16	> 55	> 98	> 1.5	CIP/CIL/CIC
C 6	6 x 12	> 50	> 98.5	< 1.25	CIP/CIL
C 8	8 x 16	> 50	> 98.5	< 1.25	CIP/CIL/CIC
C 6	6 x 12	> 50	> 98.5	< 1.25	CIP/CIL
C 8	8 x 16	> 50	> 98.5	< 1.25	CIP/CIL/CIC

DID YOU KNOW?

Hydrometallurgical gold recovery begins with a leaching step during gold is dissolved in an aqueous medium, comprised by complexants like cyanides, oxidants like oxygen, and pH-stabilizers. The dissolution is followed by the adsorption of gold on activated carbons. Depending on the scale and gold concentration, common methods for gold adsorption are the Carbon in Leach (CIL), the Carbon in Pulp (CIP), and the Carbon in Column (CIC) process. After elution from the activated carbon the gold is commonly concentrated by electrochemical deposition.