

Downhole Applications

Corrosion Resistant Alloy Mechanically Lined Tubulars (CRA-MLT)

Our Mechanically Lined Tubulars (OCTG) combines the strength of carbon steel outer pipe with a Corrosion Resistant Alloy (CRA) lining and Premium Connections with metal to metal gas tight sealing.



Applications

Mechanically Lined Tubulars (MLT) are primarily used in downhole applications across various industries, including geothermal, CCUS and water injection/bore wells.



Geothermal

The CRA liner provides corrosion protection at temperatures far beyond the range of non-metallic liners.



Carbon Capture Utilisation & Storage (CCUS) and Carbon Capture & Storage (CCS)

For CCUS/CCS applications, capturing CO₂ often relies on 25Cr solid CRA tubulars. Cladtek's MLT offers comparable performance at a comparable or even superior corrosion performance of 25Cr while preserving the ease of handling, superior toughness and strength of the carbon steel backing pipe.

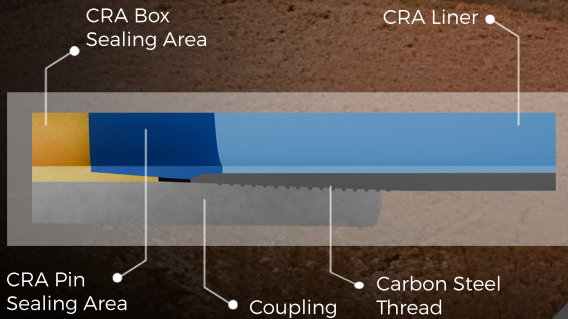


Large Bore Gas Wells / Water Injection

MLT technology offers scalable cost benefits as diameter increases, making it more cost-efficient than solid CRA. Unlike non-metallic alternatives such as GRE, MLT allows for cleaning and inspection interventions with lower risk of damage. CRA-MLT can be used in combination with solid CRA for example in a perforated zone.

Seal Details

Premium connection with CRA metal to metal sealing, while the outside surface and threads of the tubular remain carbon steel, reducing handling risks, special tooling needs, and galling.



Size
4" - 20"



Host Tubular
API 5CT
Grade Selection
K55, L80, T95 and P110
*13Cr/22Cr Hybrids



CRA Selection
316L, 317LMN, 6 Mo,
22 Cr Duplex, 25 Cr
Super Duplex, 904L,
Alloy 825, Alloy 625,
and Titanium Alloys.

Novel solution utilising a combination of proven technologies



High Internal
Corrosion
Resistance



Suitable with
High Pressure
and High
Temperatures
Up to 370°C



Recyclable by
Reversing
Manufacturing
Process



Cost-Effective
with Availability
in Large
Diameters



Increased
Local
Content

Material Comparison	Cost	Corrosion Resistance (ID)	Corrosion Resistance (OD)	Temperature	Handling	Intervention & Mechanical Damage
Solid CRA	✗	✓✓	✓✓	✓✓	✗	✓✓
GRE Lined	✓	✓	✗	✗	✓	✗
Polymer Lined	✓	✗	✗	✗✗	✓	✗
Carbon Steel	✓✓	✗✗	✗	✓✓	✓	✓✓
Cladtek MLT	✓	✓✓	✗	✓✓	✓	✓