# Docol Tube R8



Docol Tube R8 are certified tubes that are engineered to provide a stronger, safer, more consistent alternative to 4130 CD seamless tube. This will allow you to build a faster, more consistent, longer lasting racecar that allows better utilization of tuning components.

### **Typical Mechanical Properties Comparison**

Material	Tensile Strength min.	Yield Strength min.	Elongation min. % in 2"	Diameter Tolerance	Wall Thickness Tolerance
Docol	116,000 psi	100,000 psi	13%	+/006"	+/005"
4130 Chrome Moly	95,000 psi	75,000 psi	12%	+/005"	+/- 10%
1020 Dom	80,000 psi	70,000 psi	15%	+/005"	+/- 10%

Docol Tube R8 is produced in "random lengths" that can range between 19 to 21 feet long.

> AED stocks Docol Tube R8 from .625" to 1.75" in a variety of wall thickness.

# Key Advantages of Docol

- Stronger than 4130 by 10 to 15 percent.
- Heat Affected Zone (HAZ) is Docol is much smaller in area, less brittle and retains better elongation than 4130 typically does.
- Docol is much more tolerant to heavy fabrication. It does not warp and distort like 4130 and stays more relaxed in tooling and fixtures during fabrication.
- Greater resistance to fatigue.
- Docol absorbs energy and presents a more consistent and controlled failure mode.
- Clean mill finish product minimal, if any, surface prep required. Docol does not have an oxide or decarb layer and looks like a high quality electric welded tube.
- Accurate and consistent dimensional and mechanical properties because this material is a rolled and welded strip.
- Compatible with welding to 4130 and mild steel components.
- Suitable for TIG and MIG welding.
- Clean "no scrap" based material.

## **Technical Information**

- As a seam-welded product, for best forming results, it is recommended to orient the seam in the neutral position.
- Welding recommendations: ER80SD2 filler material for both TIG and MIG welding.
- Docol as a finished tube is NOT heat treatable material. Any attempt to heat treat Docol may result in what is known as a "dead soft" material with minimal strength value.

#### Learn more about Docol Tube R8 at

https://www.aedmotorsport.com/ne ws/what-is-docol-tube-r8



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