

# HPL Tubes: Increase of Surface Protection

## Mannesmann Continuous Galvanizing

### Protection Cr (VI) free – on demand

Minimum resistance against white rust, straight tubes, E235

≥ 300 hours

Minimum resistance against red rust, straight tubes, E235

≥ 400 hours

Outside diameter	6 – 42 mm	0.236" – 1.653"
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Wall thickness	1 – 4 mm	0.039" – 0.157"
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### MW-protect Cr (VI) free – on demand

Minimum resistance against white rust, straight tubes, E235

≥ 600 hours

Minimum resistance against red rust, straight tubes, E235

≥ 1,000 hours

Outside diameter	10 – 20 mm	0.393" – 0.787"
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Wall thickness	1 – 2 mm	0.039" – 0.078"
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Seamless precision steel tubes for hydraulic and pneumatic power systems according to DIN EN 10305-4 and surface protection with test according to DIN EN ISO 9227 in connection with DIN EN ISO 2081.

Mannesmann Precision Tubes GmbH, February 2022

Get in touch! [mwprotect@mannesmann.com](mailto:mwprotect@mannesmann.com)



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