

Basic divertor design studies

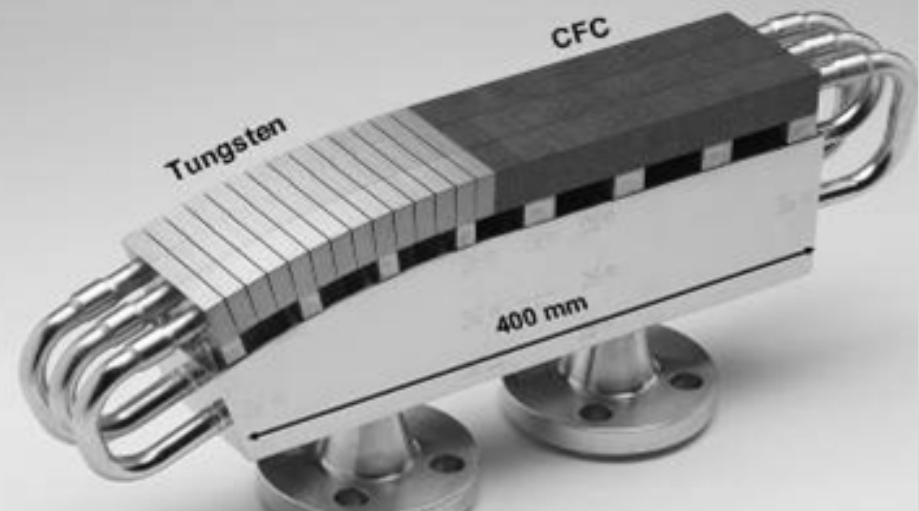
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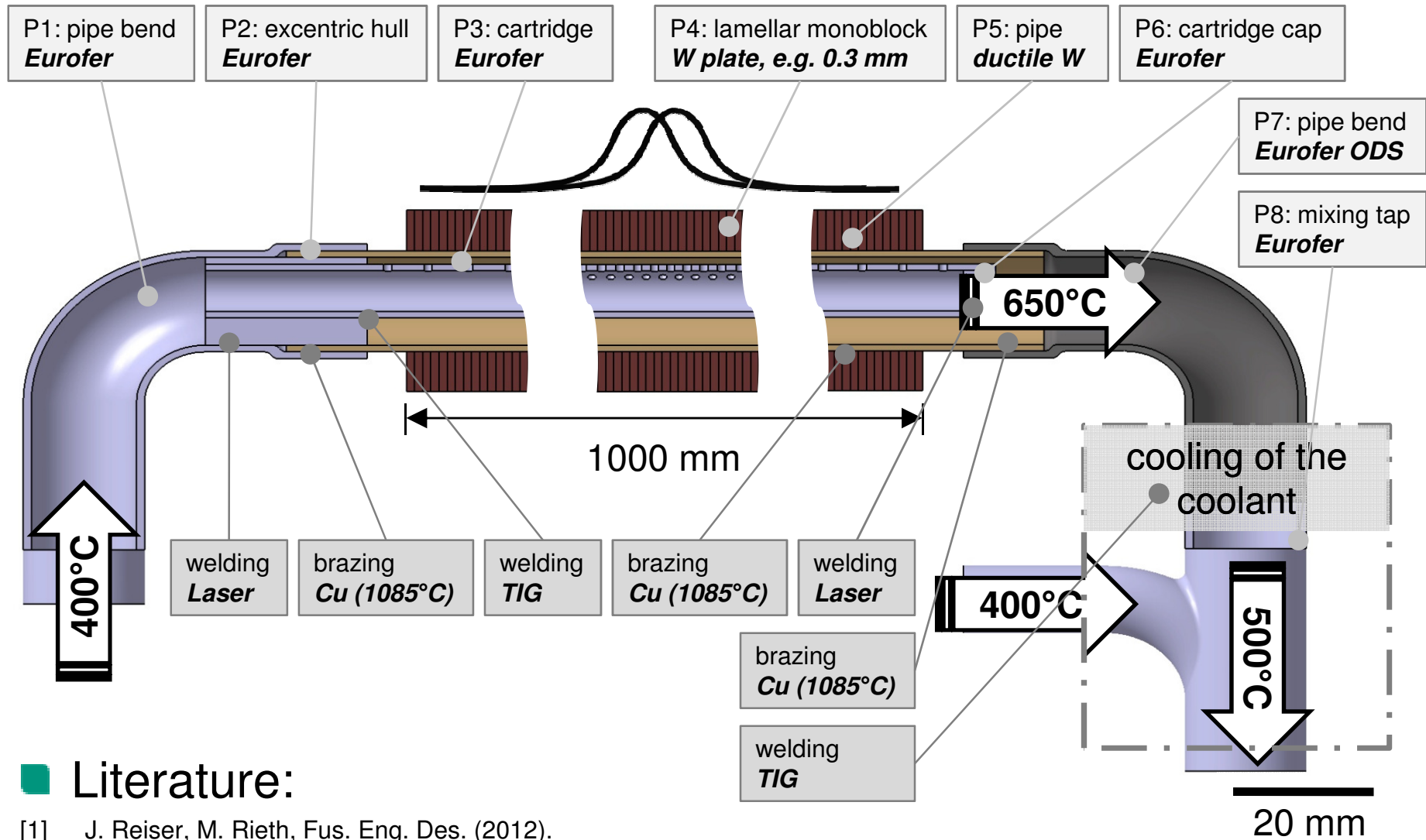


Divertor matrix: coolant and material

water	water	helium
100 °C – 120 °C, 40 bar	275 °C – 325 °C, 160 bar (PWR)	400 °C – 600 °C, 100 bar

Cu up to 250 °C	20 MW/m² see ITER	×	×
austenitic steel up to 550 °C	5 MW/m²	(< 5 MW/m²)	(1 MW/m²)
RAFM steel 350 °C – 550 °C/ 650 °C	×	(5 MW/m²)	1 MW/m²
W-laminate Cu: 400 °C – 800 °C	×	×	10 MW/m²

He-cooled divertor



Literature:

[1] J. Reiser, M. Rieth, Fus. Eng. Des. (2012).

Thank you for your attention

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