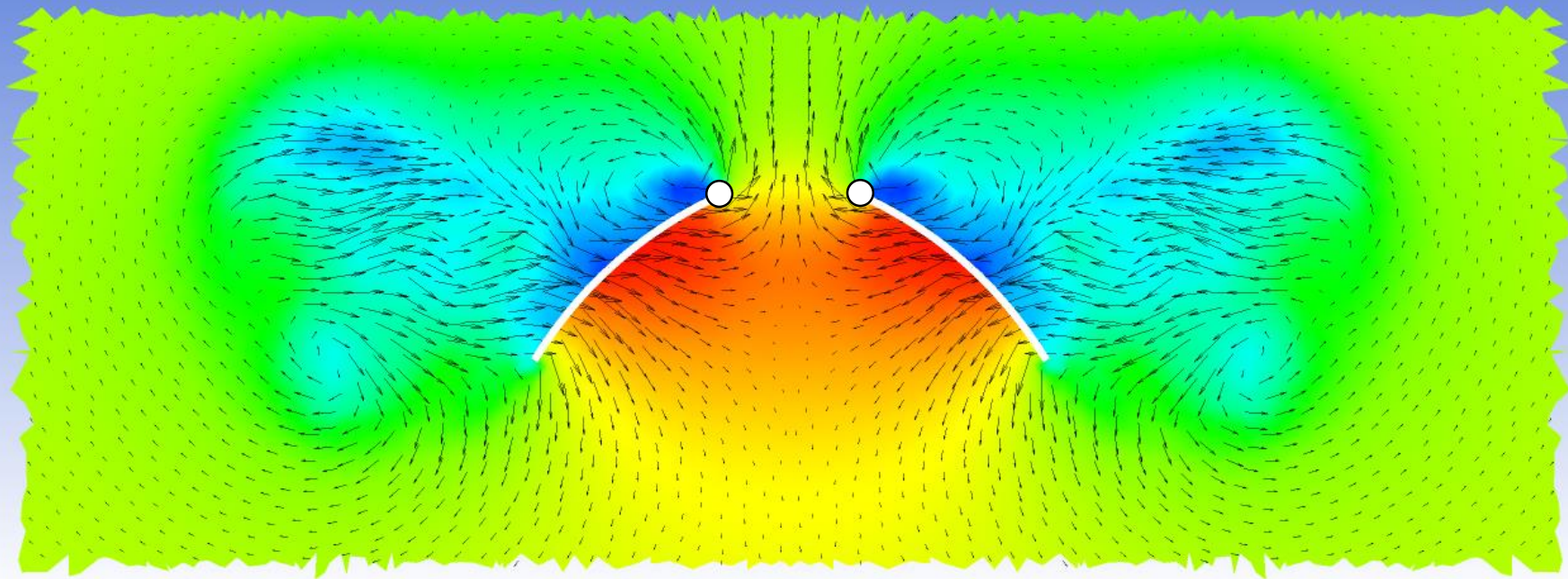
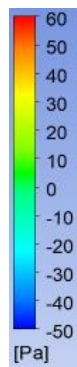
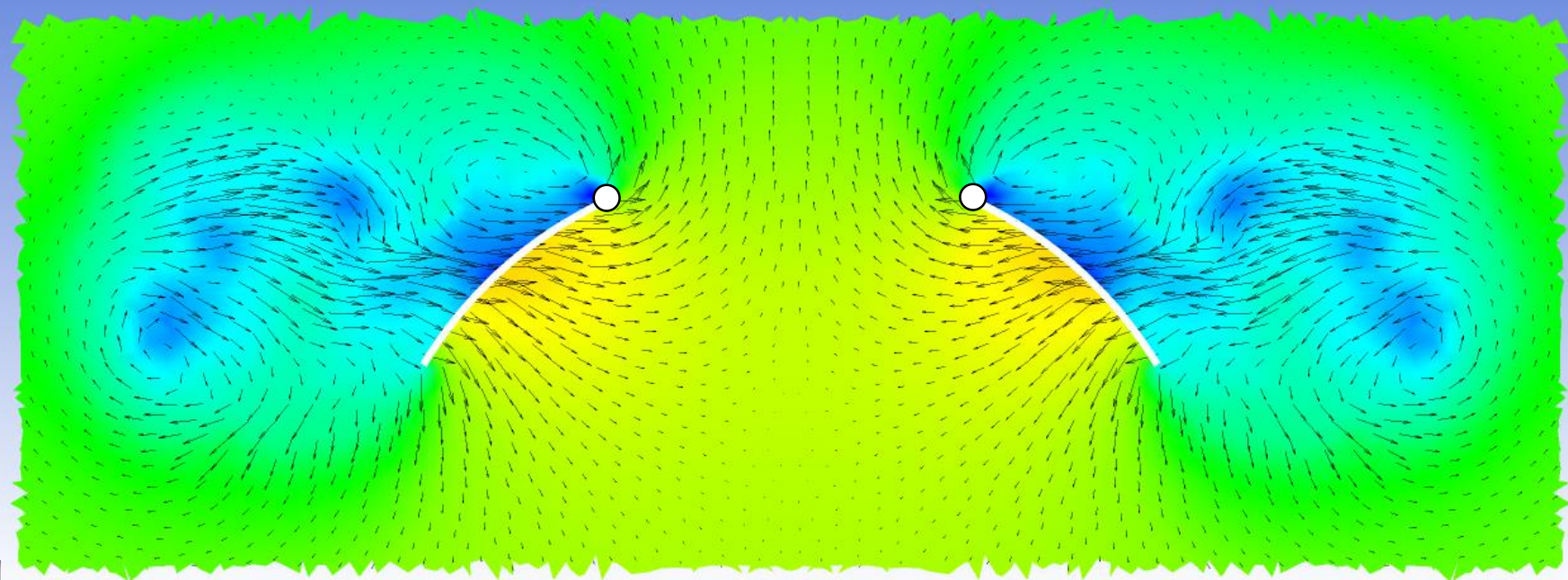
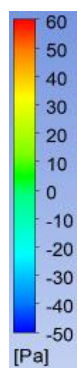


Figure S2: Flow fields in 75% $R$ -plane during down-stroke reversal for  $J = 0.5$ . The white curves are the intersections between the wings and the plane, representing wing sections. The leading edges are marked with white circles.

16mm

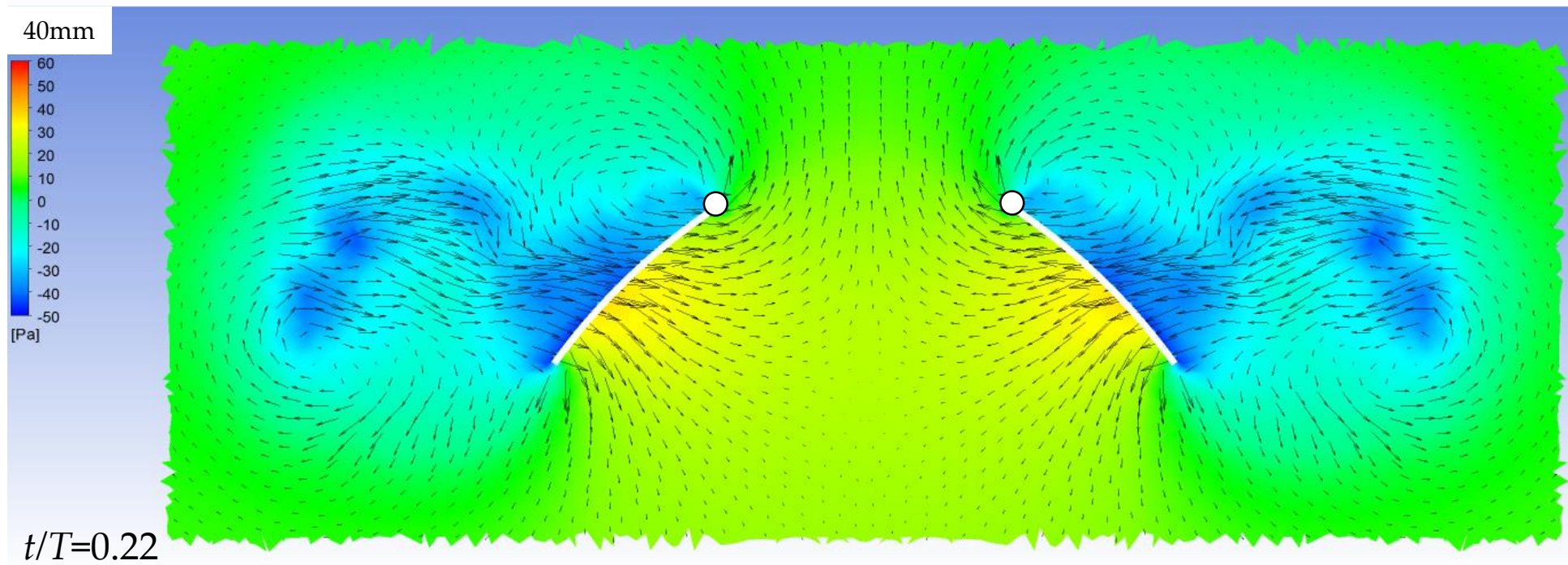
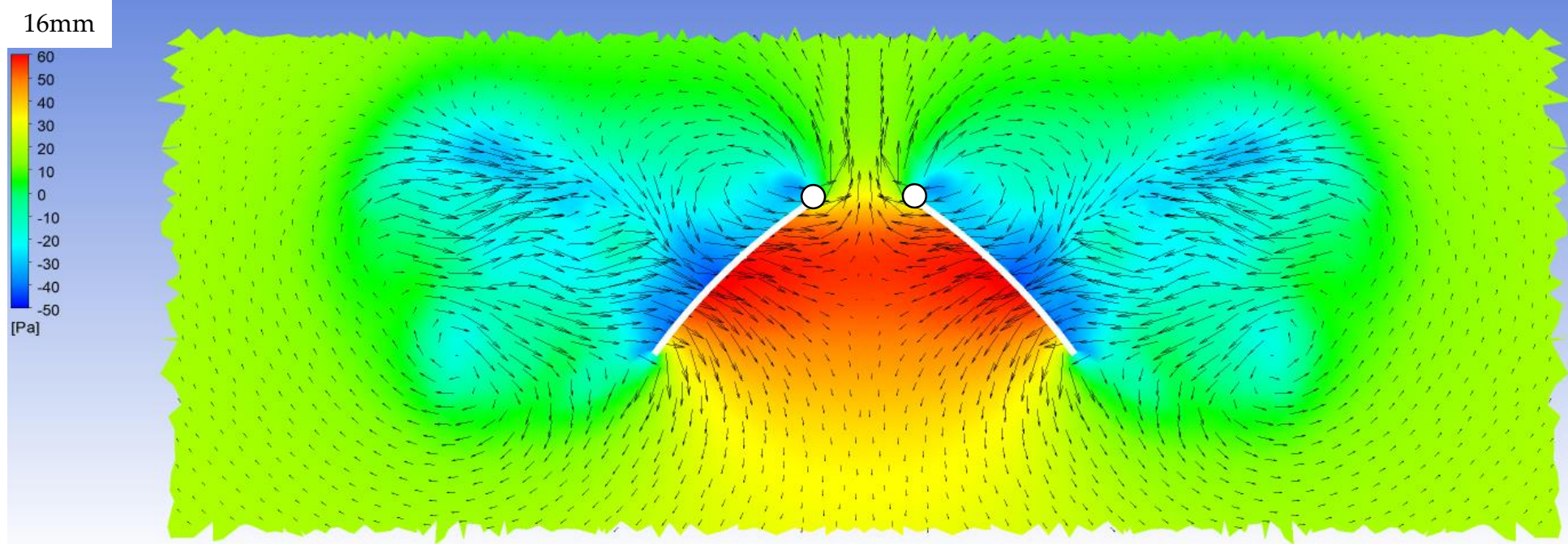


40mm



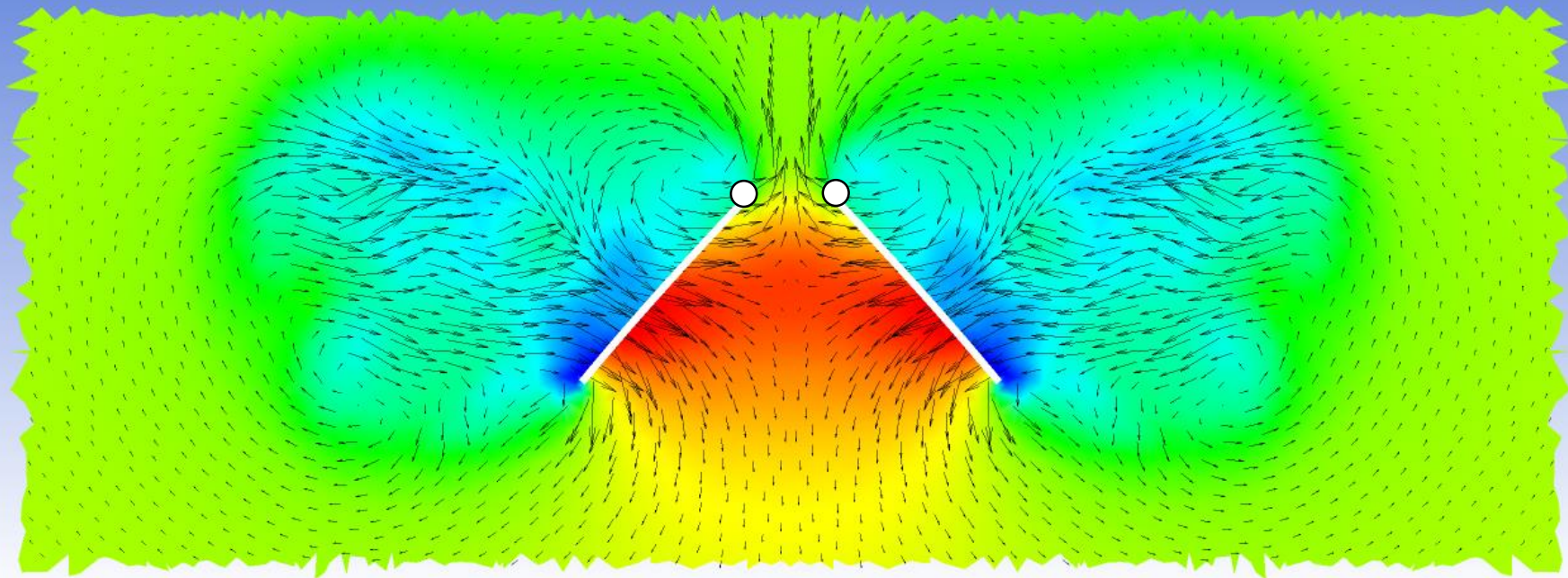
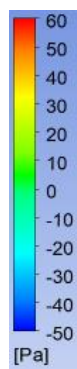
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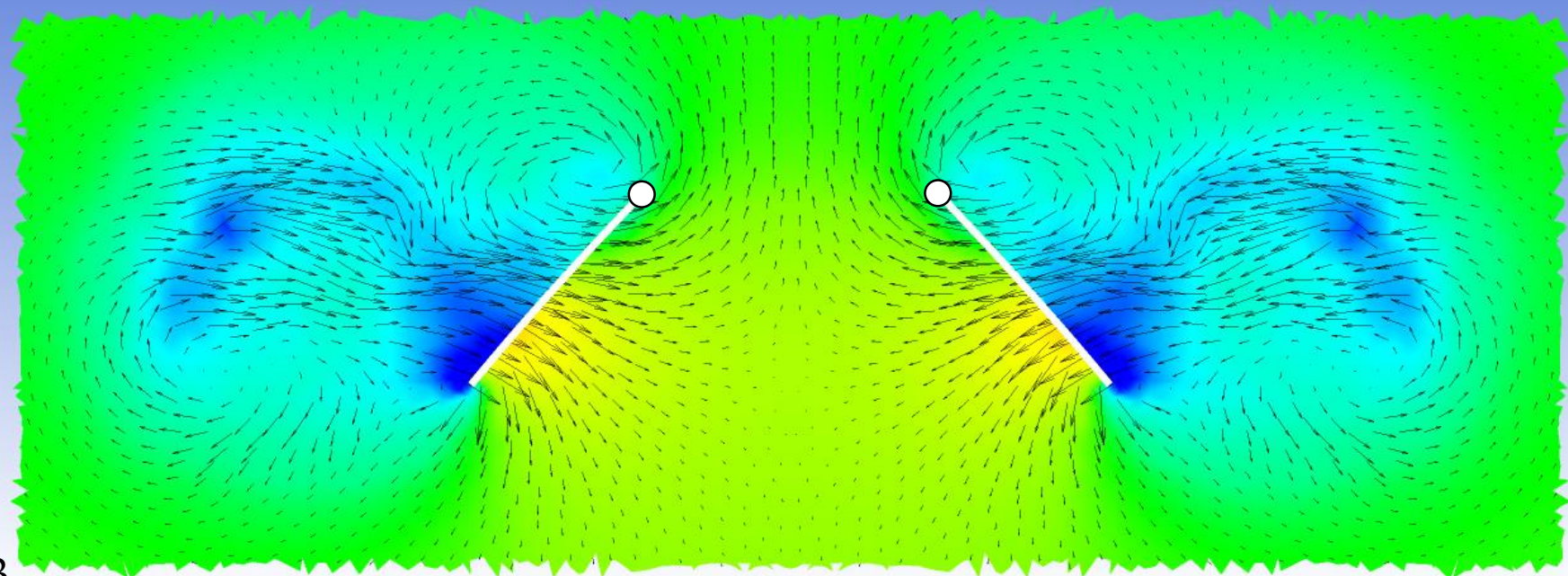
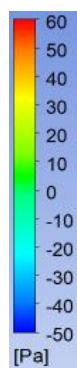




16mm



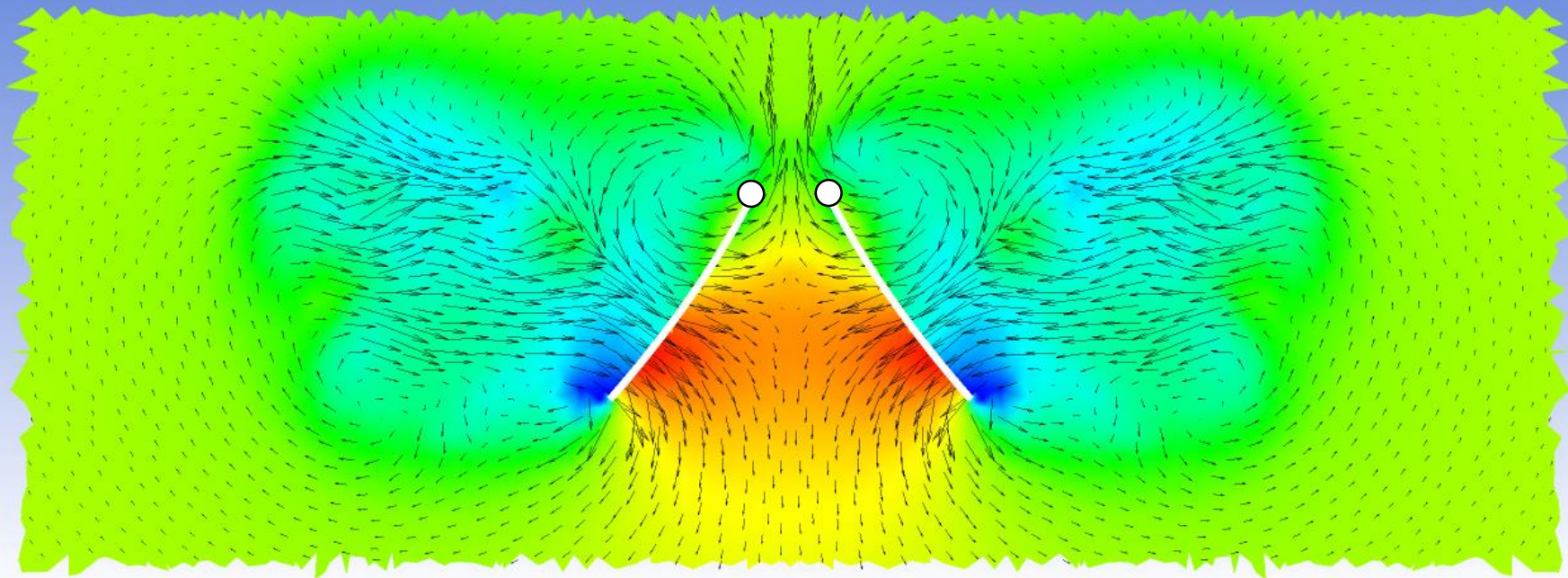
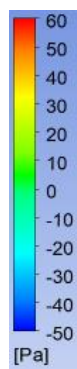
40mm



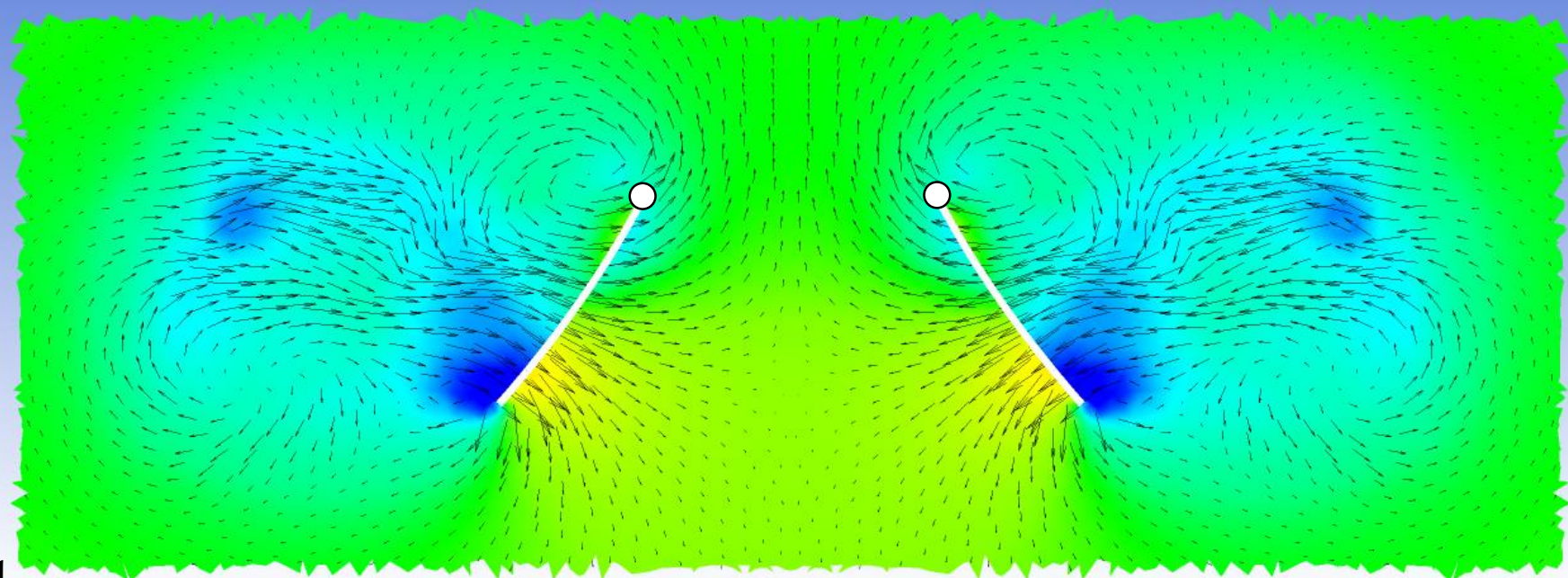
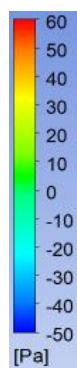
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16mm



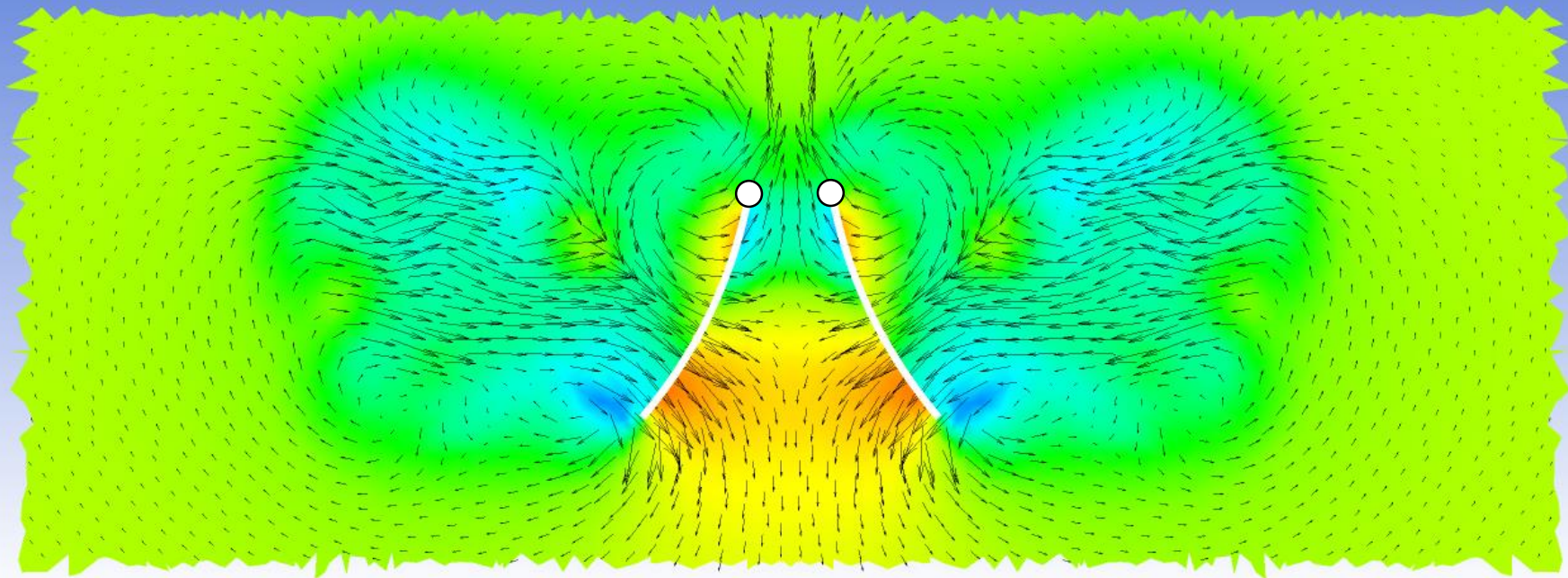
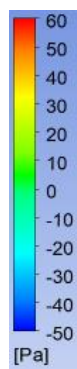
40mm



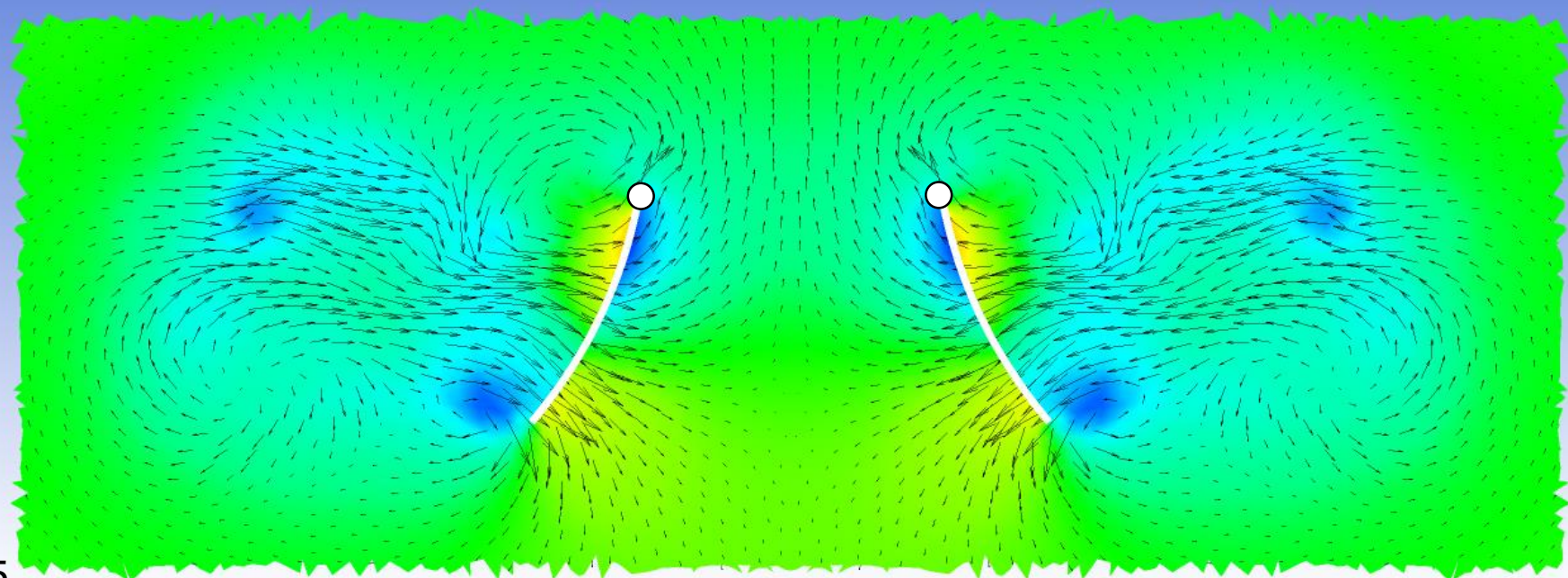
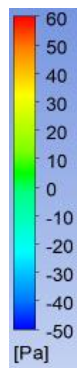
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16mm



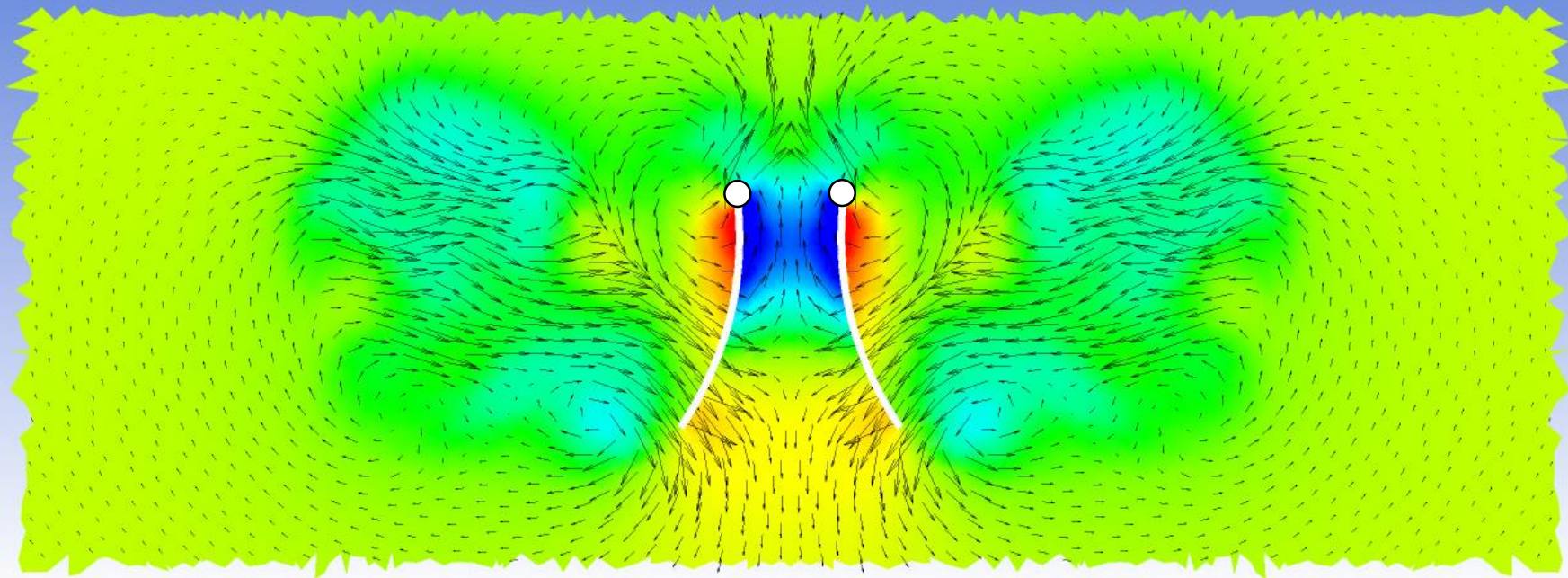
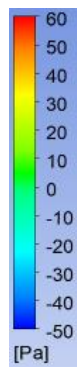
40mm



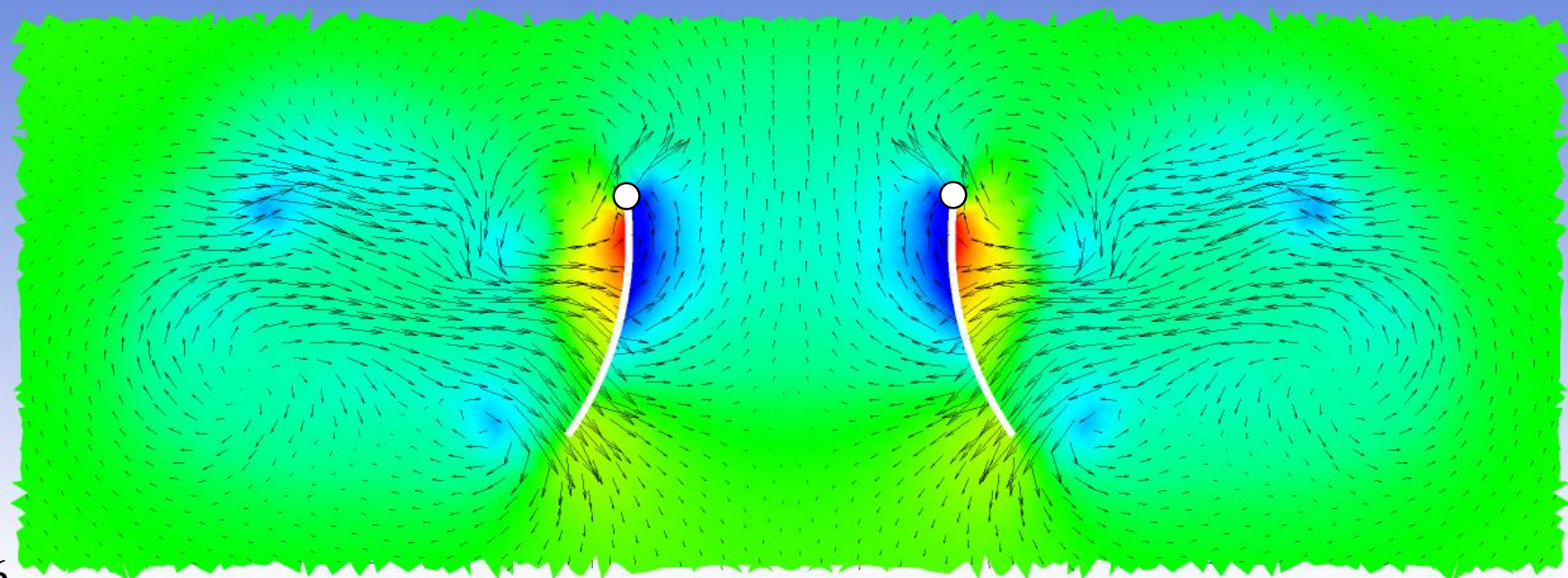
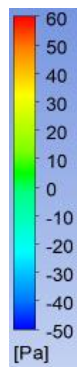
$t/T=0.25$



16mm



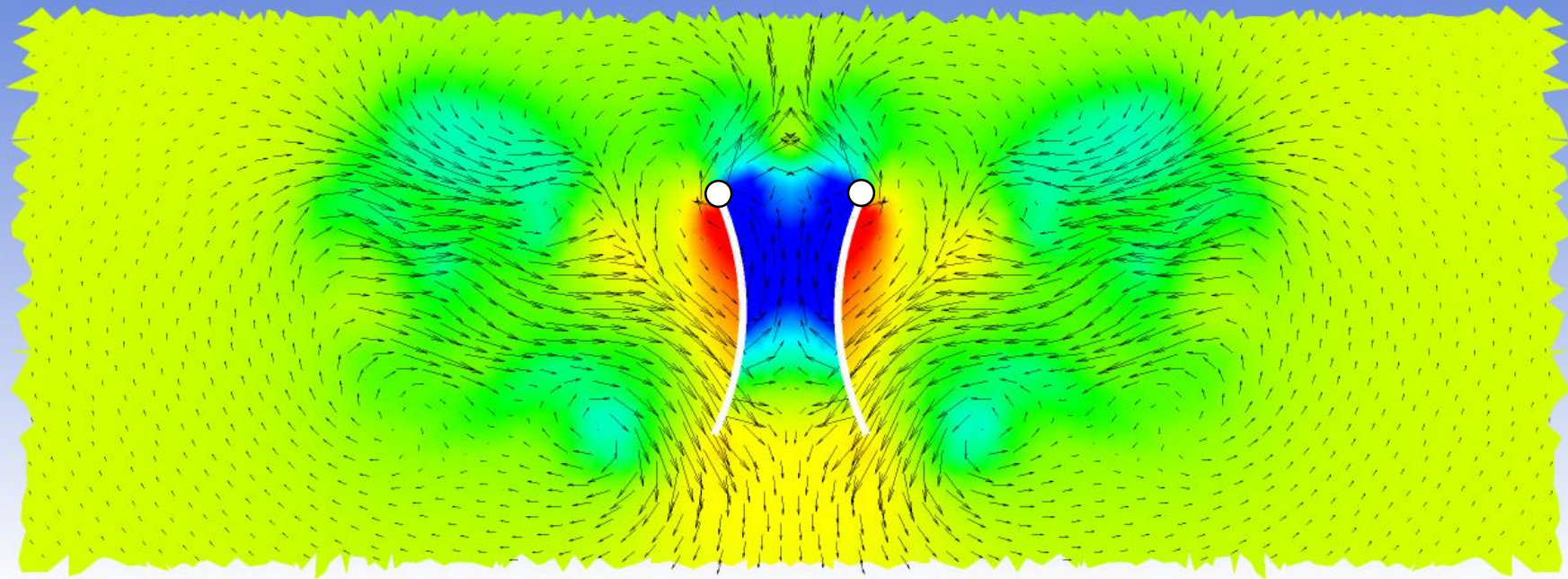
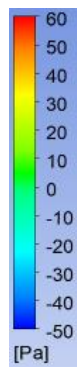
40mm



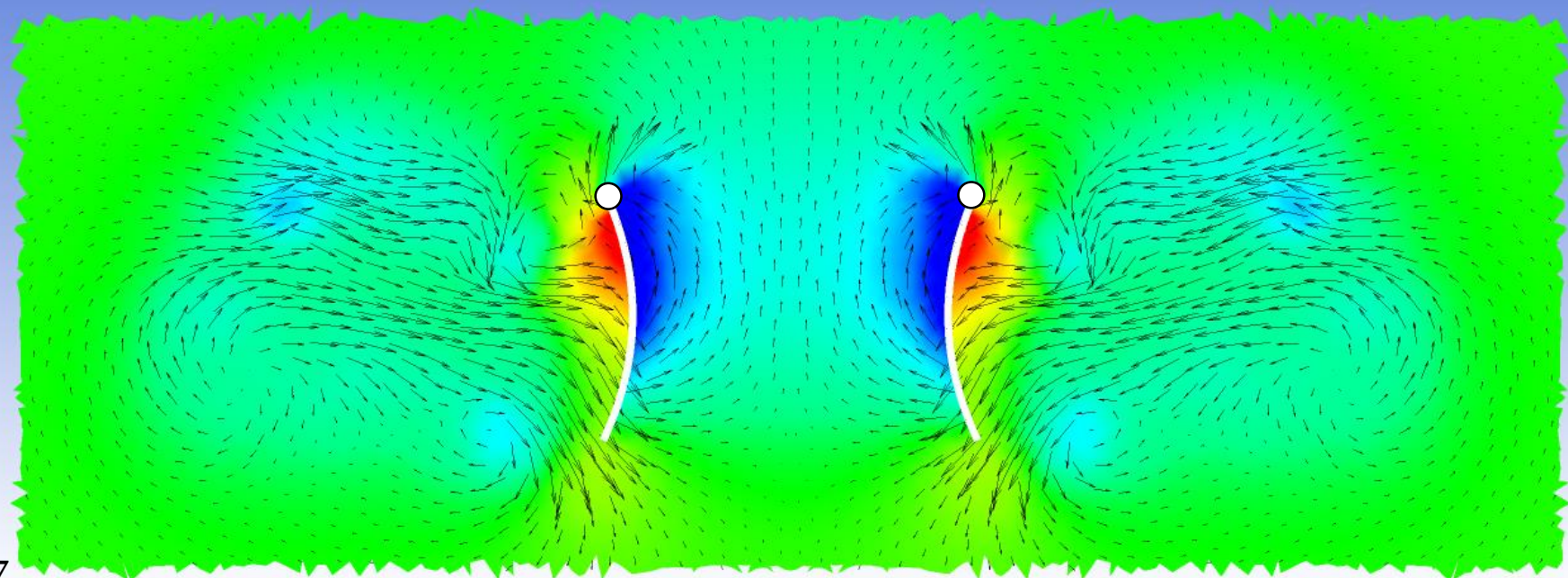
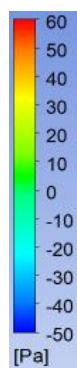
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16mm



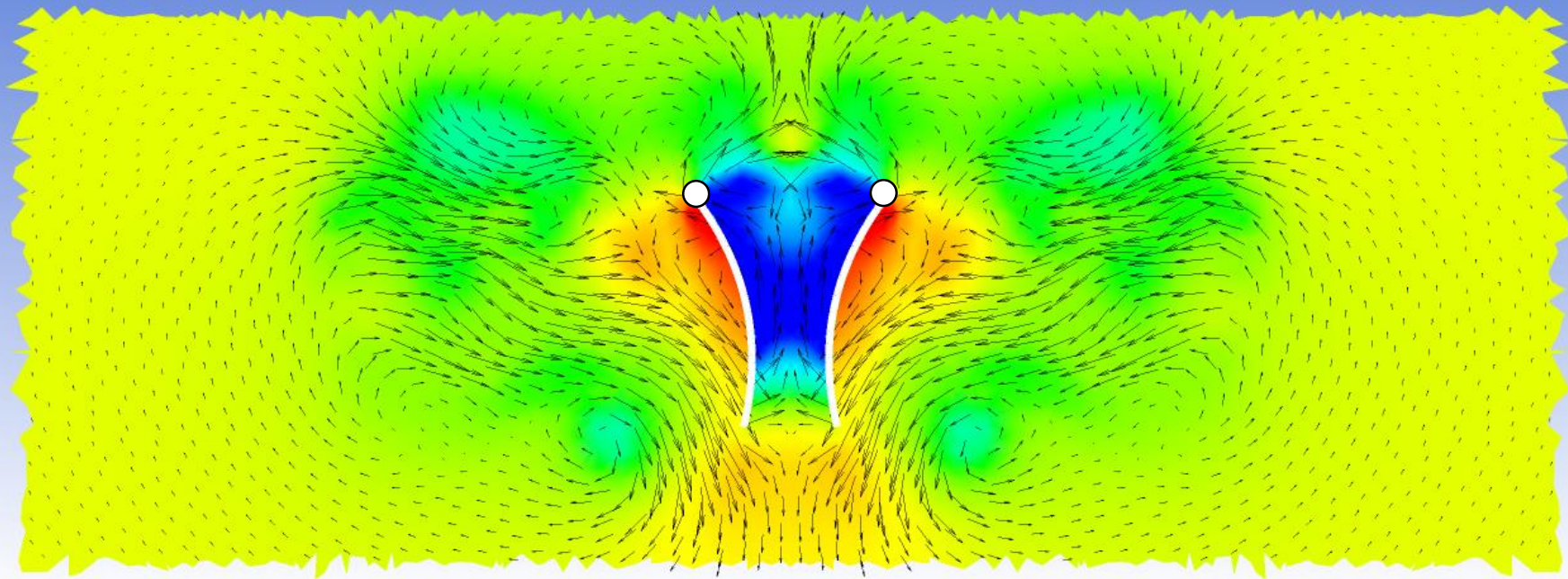
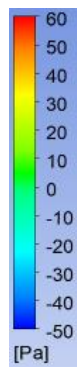
40mm



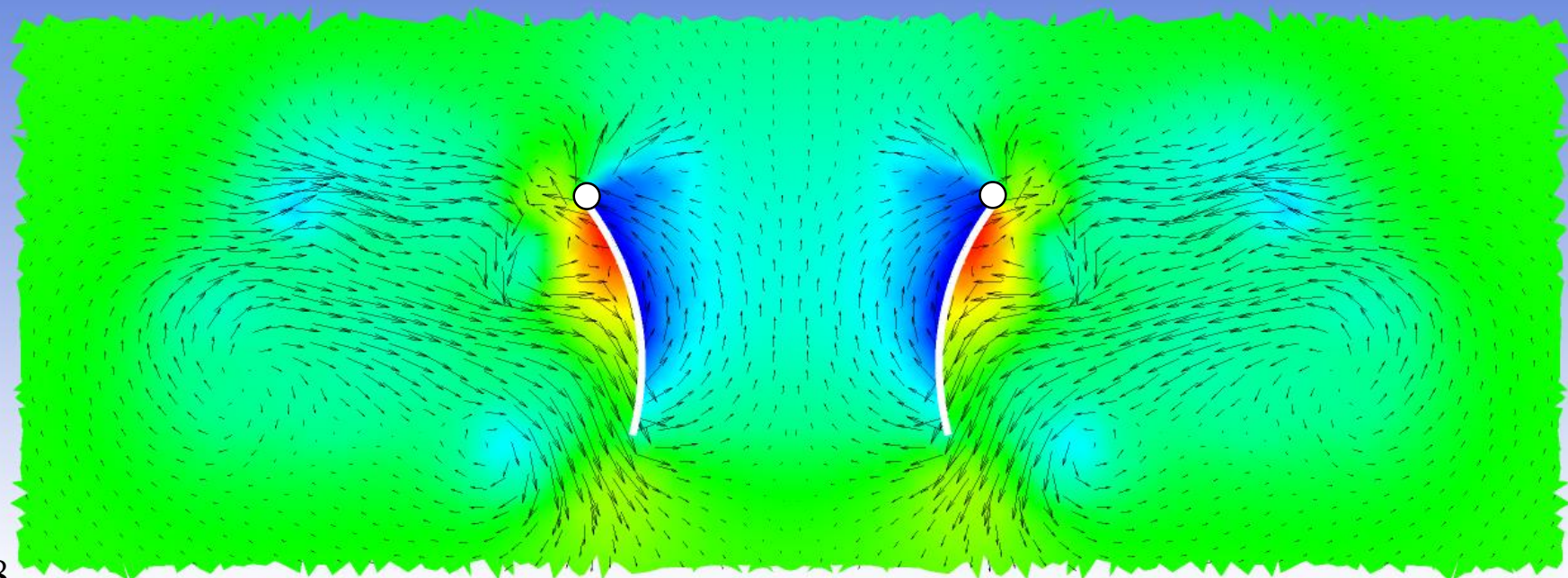
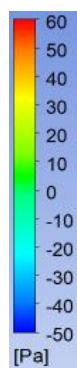
$t/T=0.27$



16mm

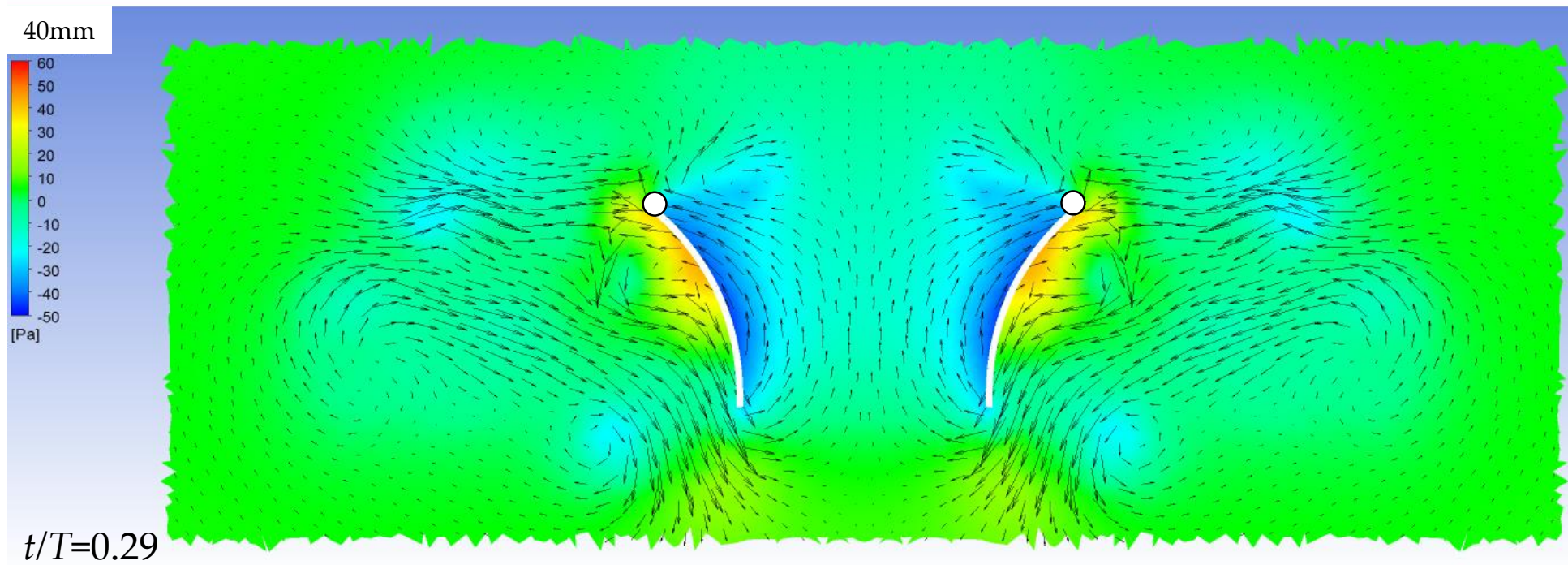
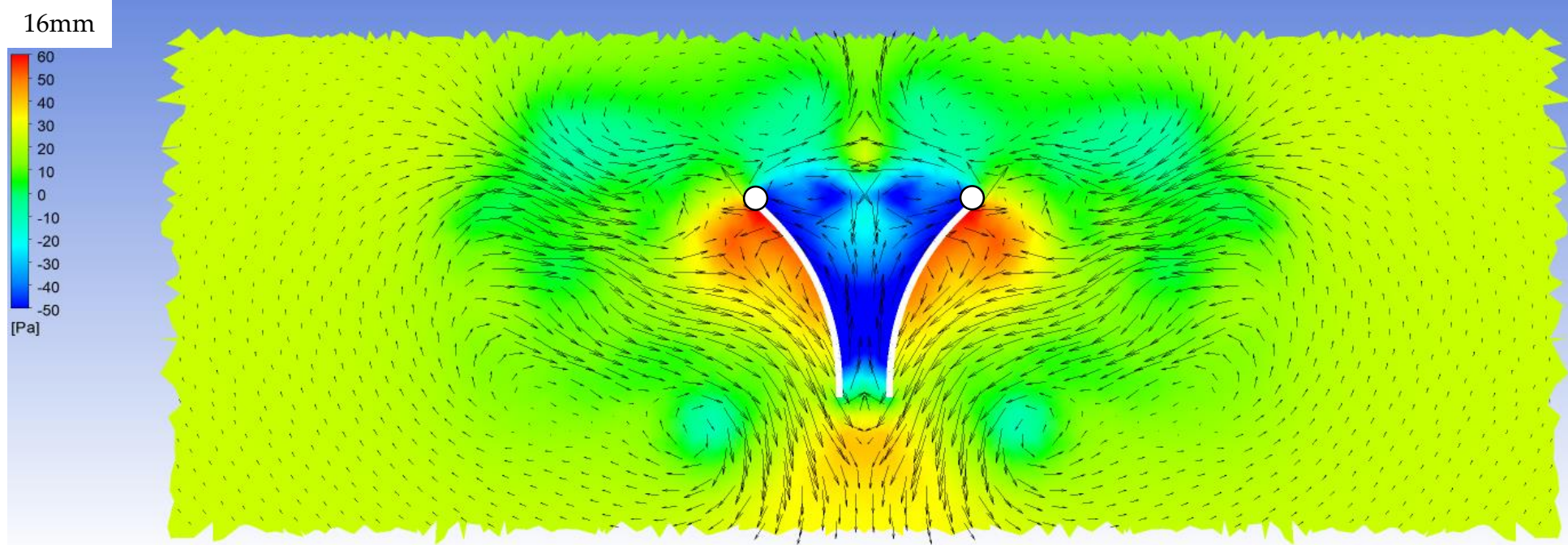


40mm

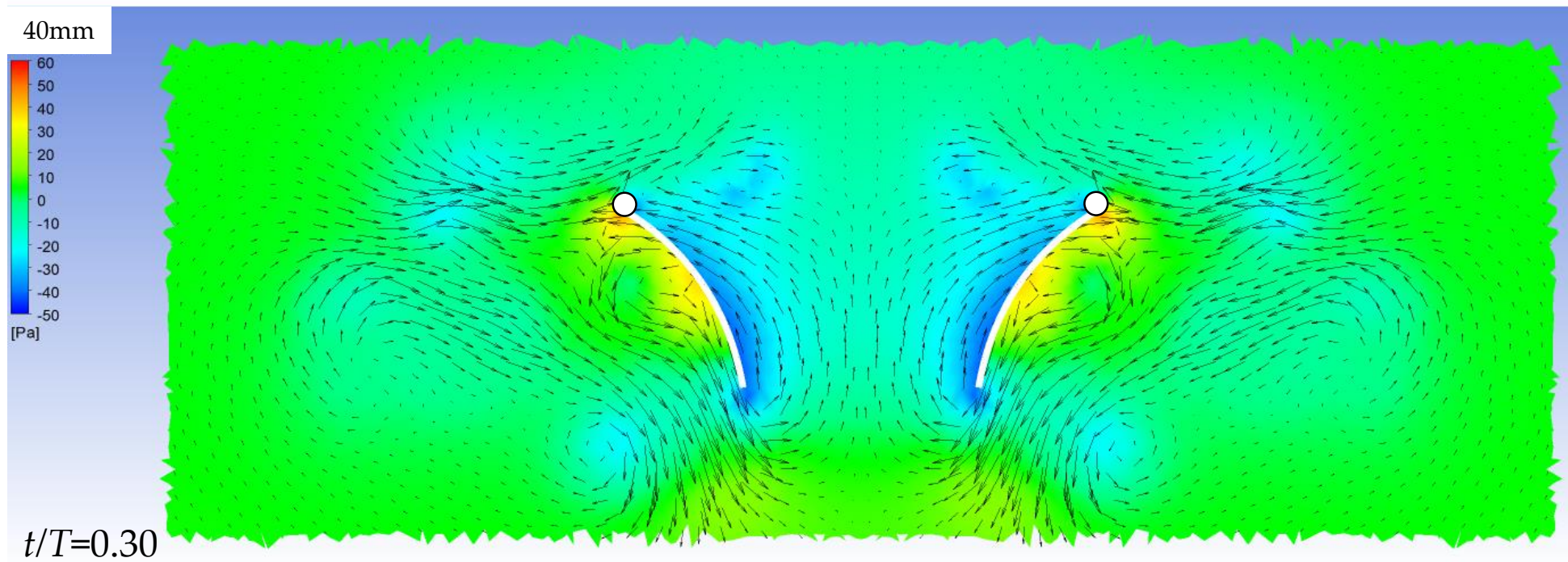
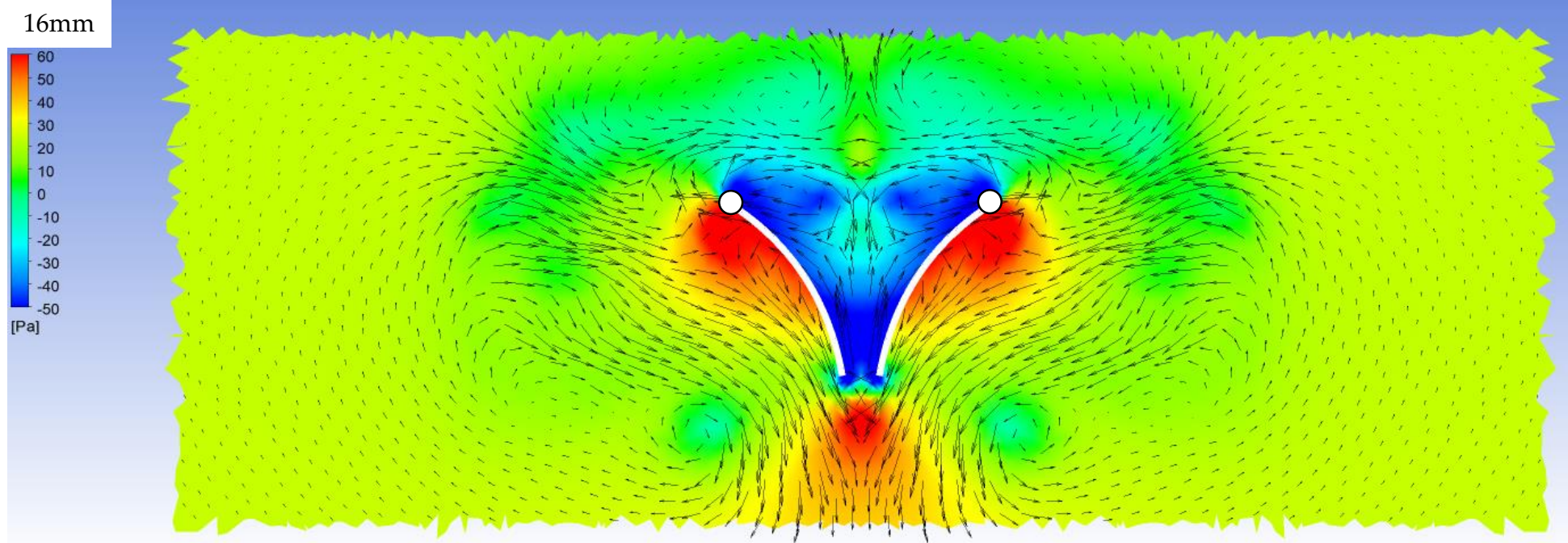


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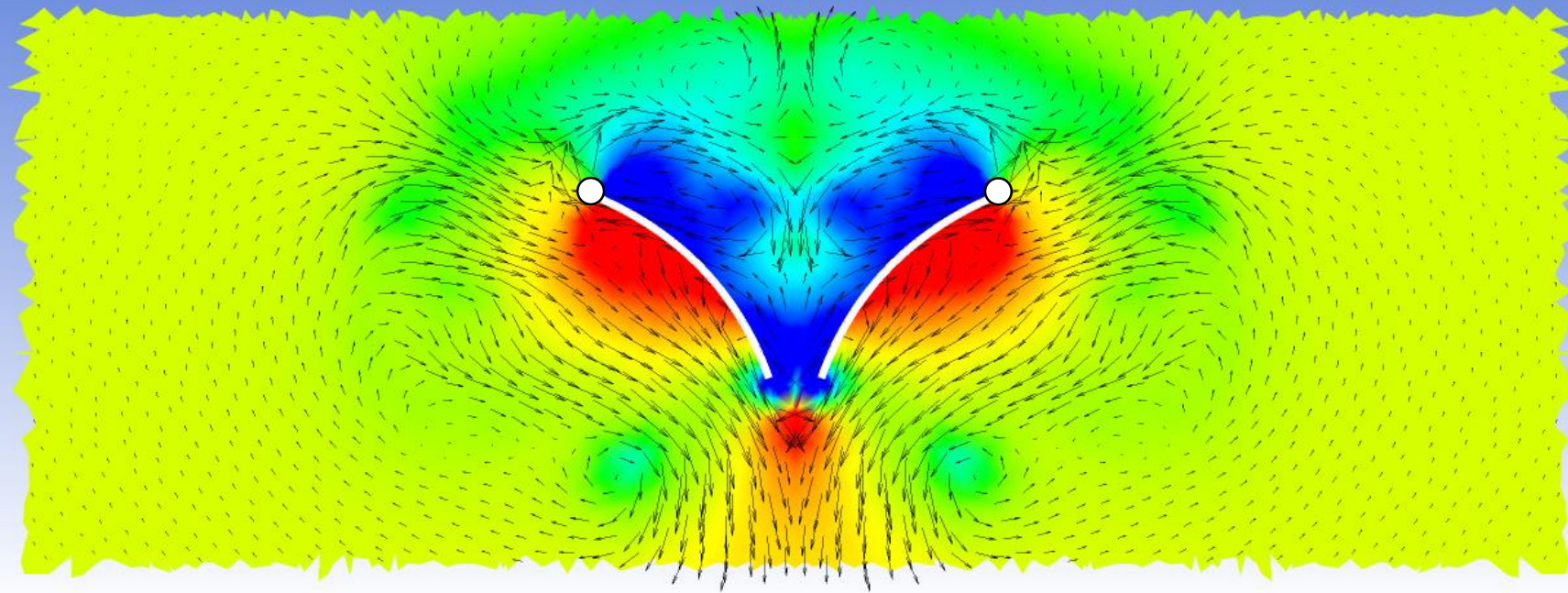
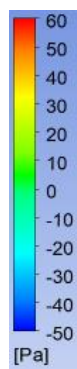




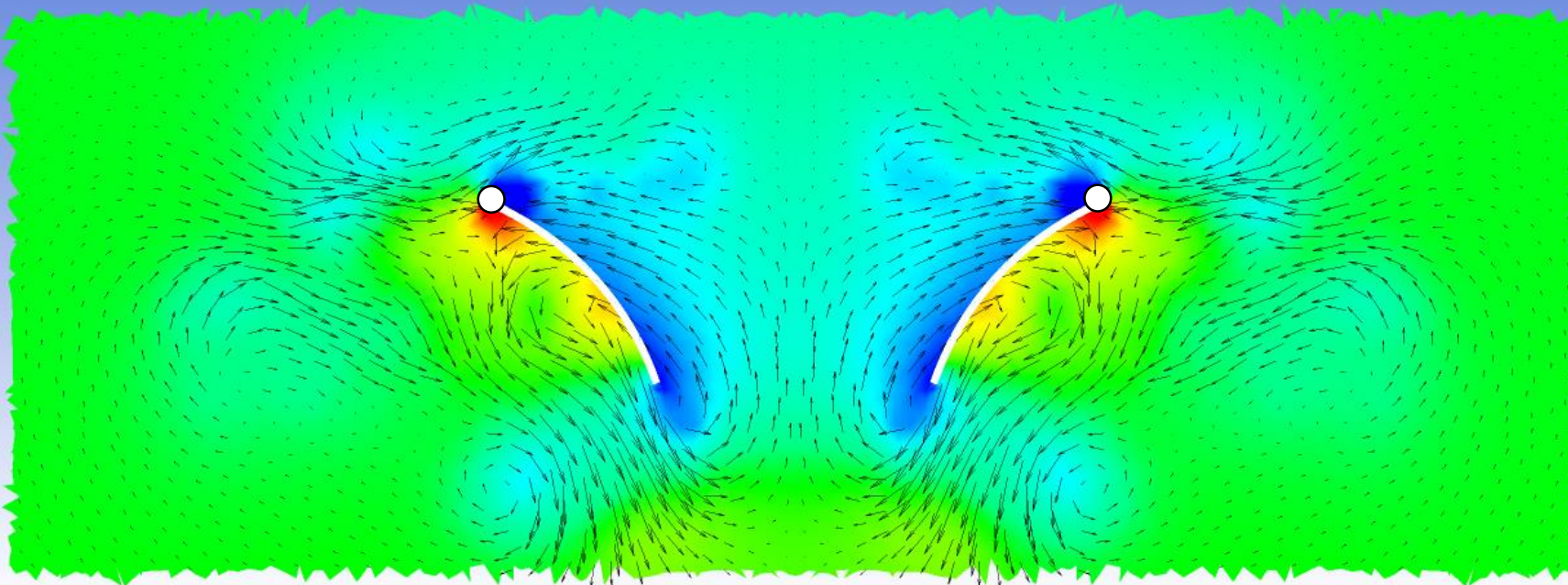
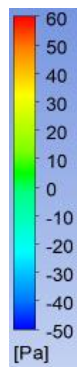




16mm



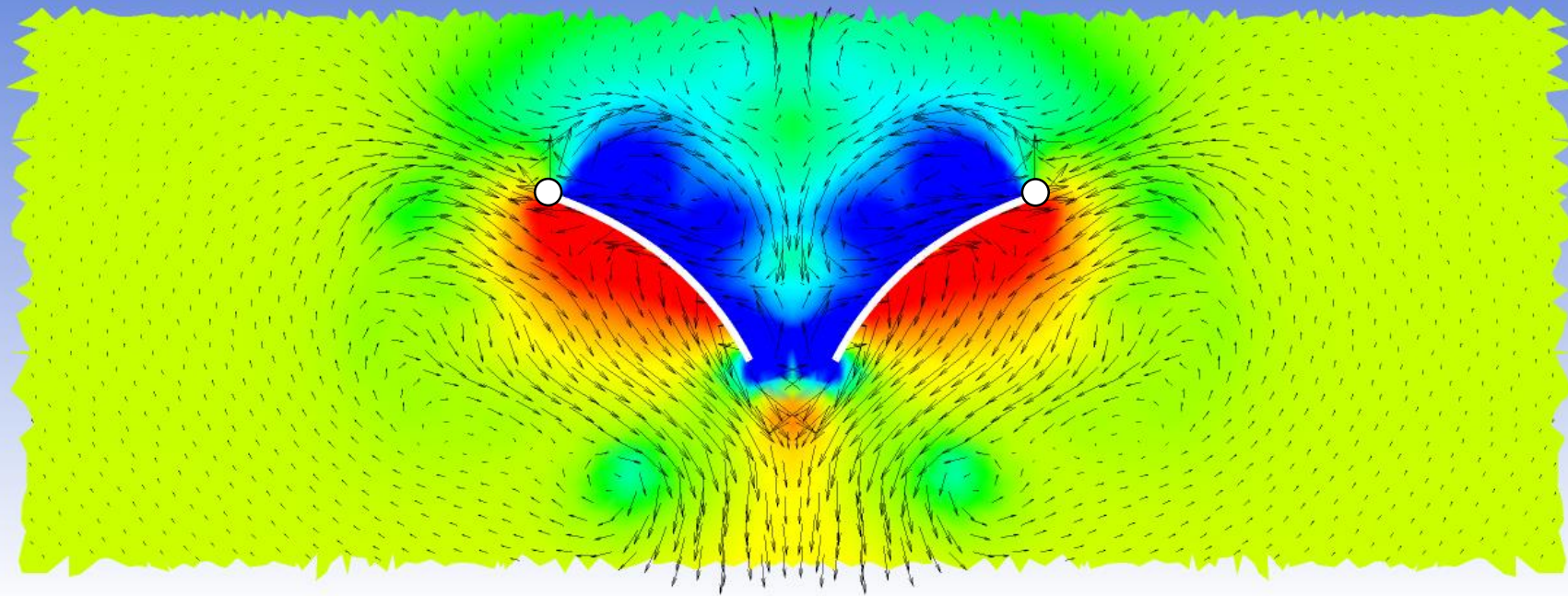
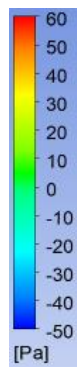
40mm



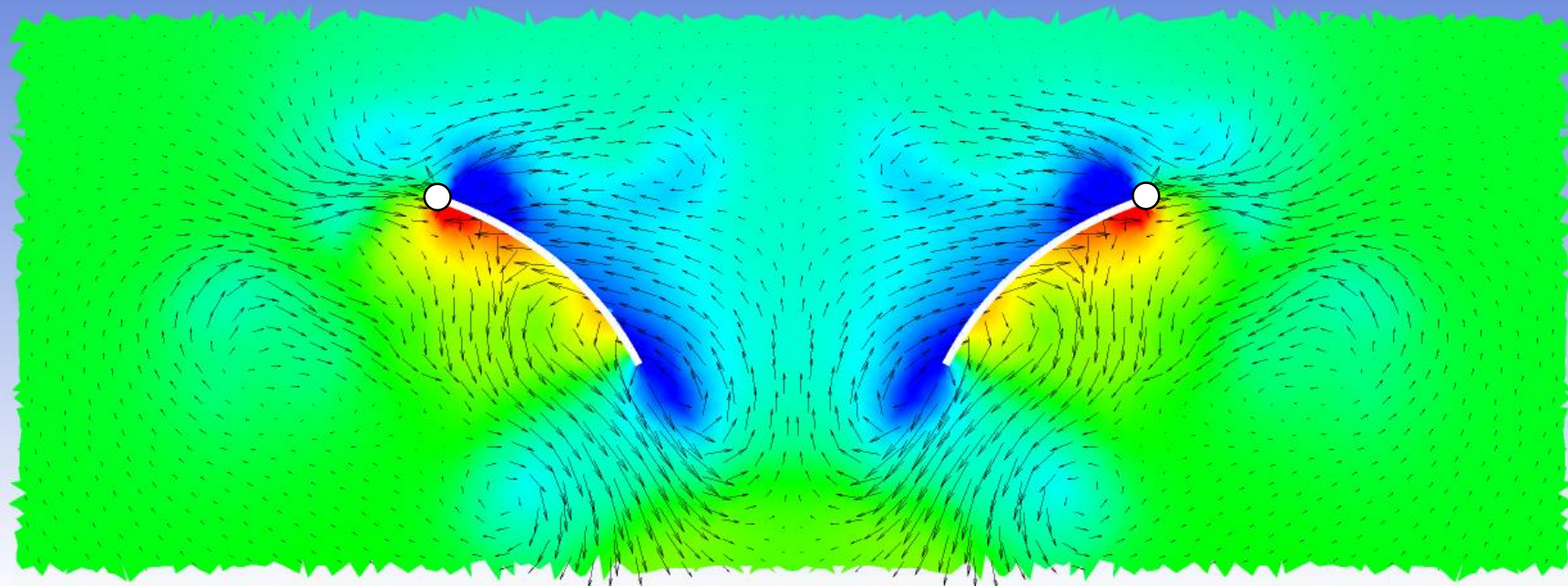
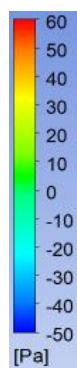
$t/T=0.31$



16mm



40mm



$t/T=0.32$