

Research of technology ORC with low-volume piston cogeneration units determined for small and waste heat sources					
The planned project involves the research of technology of Rankin cycle for non-continual media flow through a piston engine with objective to increase the efficiency of thermal circuit by utilization of heat residue of primary thermal circuit. Detailed analysis and balance calculations of ORC for piston engine precede its research at a research workplace.					
Code	TA02020716				
State providing funder	Technology Agency of the Czech Republic https://www.tacr.cz/en/homepage/				
Programme	ALFA Programme(2011-2016) https://www.tacr.cz/en/alfa-programme/				
Total eligible costs	14 698 000 CZK				
Total project subsidy	9 222 000 CZK				
Subsidy FME TUL	2 250 000 CZK				
TUL project number	17870				
Contractor	TUL, Faculty of Mechanical Engineering				
Project participant	PolyComp, a.s. http://www.polycomp.cz/en/				
Principal investigator TUL	doc. Ing. Karel Fraňa, Ph.D.				
Department	Department of Power Engineering Equipment http://www.fs.tul.cz/en/construction/energy-equipment/research-and-innovations/				
Period	2011-2014				
CZ https://www.rvvi.cz/cep?s=rozsirene-vyhledavani&ss=detail&n=0&h=TA02020716					
Costs (year) TUL	2011	2012	2013	2014	Total
Non-investment (CZK)	828 000	786 000	756 000	180 000	2 550 000
Investment (CZK)	0	0	0	0	0
Total (CZK) TUL	828 000	786 000	756 000	180 000	2 550 000
Project results EN					
2014	Utility model	RIV/25713051:_____/14:#0000005 - Systém pro využití odpadního tepla k výrobě elektrické energie (2014)			
2014	Article	RIV/46747885:24210/14:#0006319 - A Design of the Organic Rankine Cycle for the Low Temperature Waste Heat (2014)			