

PFAC – Automotive A/C-Systems with R744 (CO₂)



Schedule – CW xx/20xx

Training leadership: N.N.

Day 1

09:00	N.N.	Welcome, general remarks
subseq.	N.N.	Structure and function of the refrigerant circuit Properties of the refrigerant R744 compared to R134a or R1234yf
10:00	<i>Break</i>	
10:20	N.N.	Properties of the refrigerant R744 compared to R134a or R1234yf Transcritical refrigerant circuit in the p, h-diagram; system analysis
11:40	<i>Lunch break</i>	
12:30	N.N.	Transcritical refrigerant circuit in the p, h-diagram; optimal high pressure
13:50	<i>Break</i>	
14:00	N.N.	Transcritical refrigerant circuit in the p, h-diagram; optimal high pressure
15:05	<i>Break</i>	
15:15	N.N.	Optimal high pressure Safety issues with R744 Laboratory measurement on a transcritical R744 system
16:30	End of first day	

Day 2

08:00	N.N.	Homework, open questions
anschl.	N.N.	Components: expansion device, compressor, gas cooler, evaporator, accumulator, internal heat exchanger (IHx)
10:00	<i>Break</i>	
10:20	N.N.	Components: expansion device, compressor, gas cooler, evaporator, accumulator, internal heat exchanger (IHx) Heat pump operation of the A/C-system
11:40	<i>Lunch break</i>	
12:30	N.N.	<i>Laboratory exercise</i> Measurement on a transcritical R744 system: operating behavior, variation of the refrigerant charge, influence of the IHx
		<i>10 minutes break between 13:45 and 14:20</i>
15:15	N.N.	Open questions, farewell
15:30	End of training	