OKBR – Basics of Refrigeration

Life-Online-Training – Course Schedule – Calendar week xx/20xx

Training leadership: **N.N.**

1. Day

09:00	**N.N.**	Welcome, general remarks
subseq.	**N.N.**	Basics of thermodynamics *(temperature, pressure, enthalpy, vapour pressure curve, steam table, density)*
10:00	Coffee break	
10:10	**N.N.**	Basics of thermodynamics Structure and operational principles of the refrigerant circuit *(evaporation, compression, condensation, expansion, function of the main components, pipes)*
11:00	Coffee break	
11:10	**N.N.**	Structure and operational principles of the refrigerant circuit
12:00	Lunch break	
12:40	**N.N.**	Structure and operational principles of the refrigerant circuit Superheat, subcooling *(Definition, reasons, how to achieve superheat and subcooling, determination in the refrigerant circuit, examples)*
13:40	Coffee break	
13:50	**N.N.**	Superheat, subcooling
14:50	Coffee break	
15:00	**N.N.**	Superheat, subcooling
16:00	End of first day	

2. Day

09:00	**N.N.**	Discussion of homework, open questions
10:00	Coffee break	
10:10	**N.N.**	Expansion device *(capillary tube, thermostatic expansion valve with internal and external pressure compensation, electronic expansion valve)*
11:00	Coffee break	
11:10	**N.N.**	Evaporator *(evaporator capacity, dry and flooded evaporation, evaporator designs, air coolers and liquid coolers)*
12:00	Lunch break	
12:40	**N.N.**	Compressor *(compressor parameters, performance data, compressor application limits, compressor designs, reciprocating, scroll, rolling piston, screw compressors)*
13:40	Coffee break	
13:50	**N.N.**	Compressor Condenser *(condenser sections, desuperheating, condensing, subcooling, condenser designs, air- and water-cooled condensers)*
14:50	Coffee break	
15:00	**N.N.**	Condenser
15:15	**N.N.**	Discussion of open questions
16:00	End of training course	