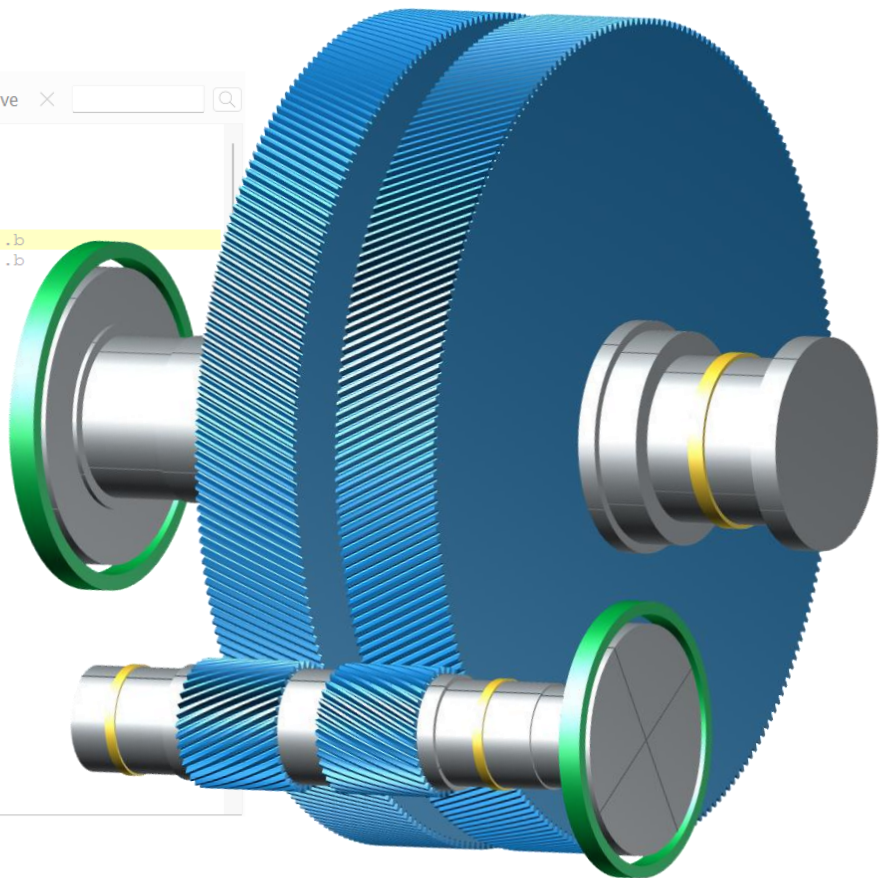


# KISSsoft Training

## KISSdesign – Using Script

1 Day

```
1 sysDef.carriers[0].numberOfPlanets=3
2
3 b[0]= sysDef.cylgears[0].width
4 b[1]= sysDef.cylgears[1].width
5
6 b[0]= sysDef.helicalpair_calc[0].calc.ZR[0].b
7 b[1]= sysDef.helicalpair_calc[0].calc.ZR[1].b
8
9 sysDef.cylgears[0].alphan = radians(alpha)
10 sysDef.cylgears[1].alphan = radians(alpha)
11 sysDef.cylgears[2].alphan = radians(alpha)
12 sysDef.cylgears[3].alphan = radians(alpha)
13
14 sysDef.cylgears[0].beta = radians(beta[0])
15 sysDef.cylgears[1].beta = radians(beta[0])
16 sysDef.cylgears[2].beta = radians(beta[1])
17 sysDef.cylgears[3].beta = radians(beta[1])
18
19 sysDef.boundaries[0].speed = 10
20 UpdateKinematicsAndGraphics()
21
22 if (input_selection == 0) then
23   power_read_only = 0
24   speeds[0]_read_only = 0
25   speeds[1]_read_only = 1
26   sysDef.boundaries[0].considerTorque = 0
27   sysDef.boundaries[0].considerSpeed=1
28   sysDef.boundaries[0].considerPower = 1
29   sysDef.boundaries[0].power = power
30   sysDef.boundaries[0].speed = speeds[0]
31   sysDef.boundaries[2].considerTorque = 0
32   sysDef.boundaries[2].considerSpeed=0
33   sysDef.boundaries[2].considerPower = 0
34 end
```



# KISSdesign – Using Script

- Introduction to scripting
- Explanation of different events
- Using available variables
- Overview of existing functions

## Useful script examples

- Controlling settings and inputs in the model
- Importing data from an external file
- Exporting data in a user defined format
- Generating a new user tab with input and output fields
- Calling callFunc functions over script for calculation modules in the model
- Extending data representation tables
- Running KISSdesign in batch mode

MyTab

Boundary

Select operating mode: Mode 1

Torque	T1,T2	100.0000	-1244.5714	Nm
Speed	n1,n2	15000.0000	1205.2342	1/min
Power	P1,P2	157.0796	-157.0796	kW

Outputs

z1	SF,SH	2.1770	1.1111
z2	SF,SH	1.9979	1.1549
z3	SF,SH	2.1397	1.1764
z4	SF,SH	1.9776	1.2229

```

1 ///! WARNING: This is a generated comment to declare for
2 which module and version this was generated.
3 SKRIPTMODULE=S020; SKRIPTNAME=; SKRIPTVERSION=24.0;
4 SKRIPTDESCRIPTION=;
5 setAllCalculationsInconsistent()
6
7 if (input_selection == 0) then
8   operatingModes.currentOperatingMode=0
9   BCMatrix.currentBCPosition=0
10  sysDef.boundaries[0].considerTorque=true
11  sysDef.boundaries[0].considerSpeed=true
12  sysDef.boundaries[1].considerTorque=false
13  sysDef.boundaries[1].considerSpeed=false
14  power_read_only = 1
15  speed[1]_read_only = 1
16  torque[1]_read_only = 1
17  sysDef.boundaries[0].torque = torque[0]
18  sysDef.boundaries[0].speed = speed[0]
19  Calculate()
20  power[0]=sysDef.boundaries[0].power
21  torque[1]=sysDef.boundaries[1].torque
22  speed[1]=sysDef.boundaries[1].speed
23  power[1]=sysDef.boundaries[1].power
24 end
  
```

Gear			z1	z2	z3	z4
Calculation			z1z2	z1z2	z3z4	z3z4
Shaft			s1	s2	s2	sc
Drawing number			z1(z1z2)	z2(z1z2)	z3(z3z4)	z4(z3z4)
Number of teeth	z		25.0000	88.0000	28.0000	99.0000
Normal module	m <sub>n</sub>	mm	1.7000	1.7000	2.2000	2.2000
Speed	n	1/min	150000.0000	42613.6364	42613.6364	12052.3416
Torque	T	Nm	100.0000	352.0000	352.0000	1244.5714
Power	P	kW	1570.7963	1570.7963	1570.7963	1570.7963
Number of gears	p		1	1	1	1
Lubrication type			Oil bath lubrication	Oil bath lubrication	Oil bath lubrication	Oil bath lubrication
Lubricant			ISO-VG 46	ISO-VG 46	ISO-VG 46	ISO-VG 46
Lubricant temperature	T <sub>s</sub>	°C	65.0000	65.0000	65.0000	65.0000
Root safety	S <sub>r</sub>		2.0045	1.7938	1.8654	1.7156
Flank safety	S <sub>H</sub>		1.0917	1.0917	1.1143	1.1496