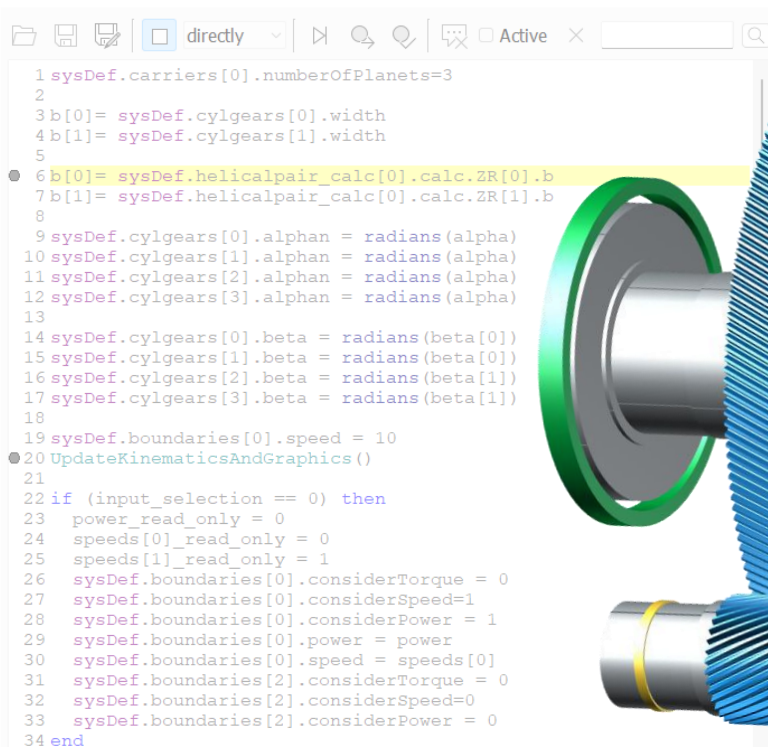


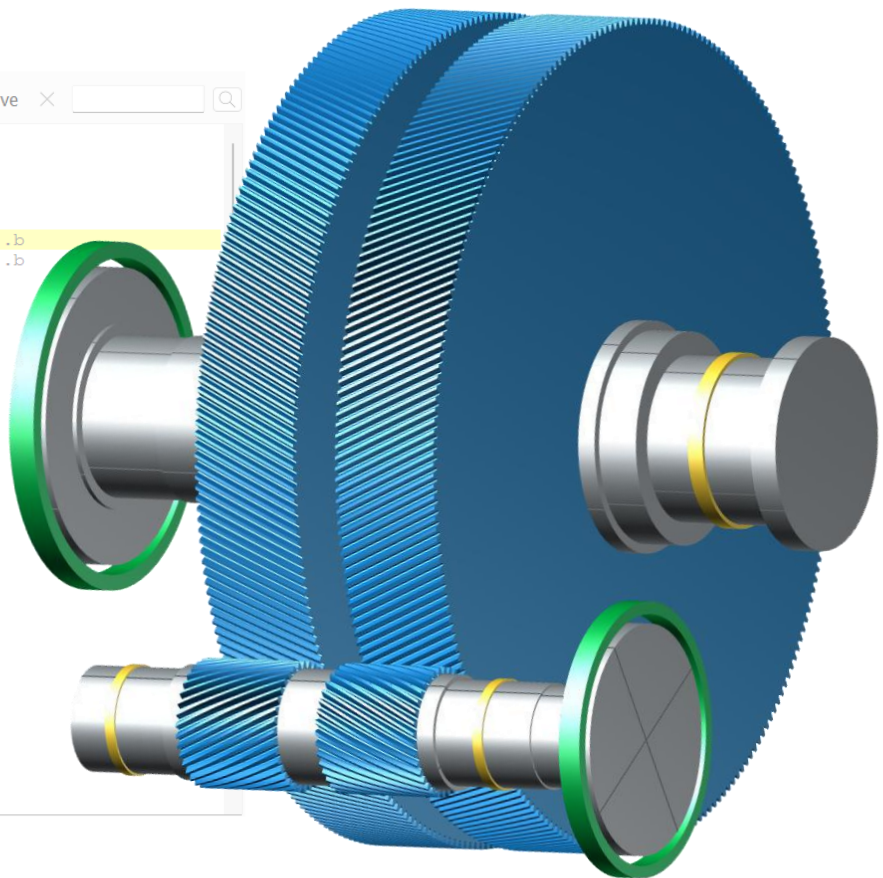
Special Training

KISSsoft System Module: System Scripts

1 Live Stream Session



```
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
```



KISSsoft System Module – System Scripts

- 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 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 2 setAllCalculationsInconsistent()
6 3
7 4 if (input_selection == 0) then
8 5   operatingModes.currentOperatingMode=0
9 6   BCMatrix.currentBCPosition=0
10 7   sysDef.boundaries[0].considerTorque=true
11 8   sysDef.boundaries[0].considerSpeed=true
12 9   sysDef.boundaries[1].considerTorque=false
13 10  sysDef.boundaries[1].considerSpeed=false
14 11  power_read_only = 1
15 12  speed[1]_read_only = 1
16 13  torque[1]_read_only = 1
17 14  sysDef.boundaries[0].torque = torque[0]
18 15  sysDef.boundaries[0].speed = speed[0]
19 16  Calculate()
20 17  power[0]=sysDef.boundaries[0].power
21 18  torque[1]=sysDef.boundaries[1].torque
22 19  speed[1]=sysDef.boundaries[1].speed
23 20  power[1]=sysDef.boundaries[1].power
24 21 end
```

Sketcher		3D Viewer		Boundary		System data		Strength		Script Editor	
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 _n	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 _s	°C	65.0000		65.0000		65.0000		65.0000	
Root safety		S _r		2.0045		1.7938		1.8654		1.7156	
Flank safety		S _H		1.0917		1.0917		1.1143		1.1496	