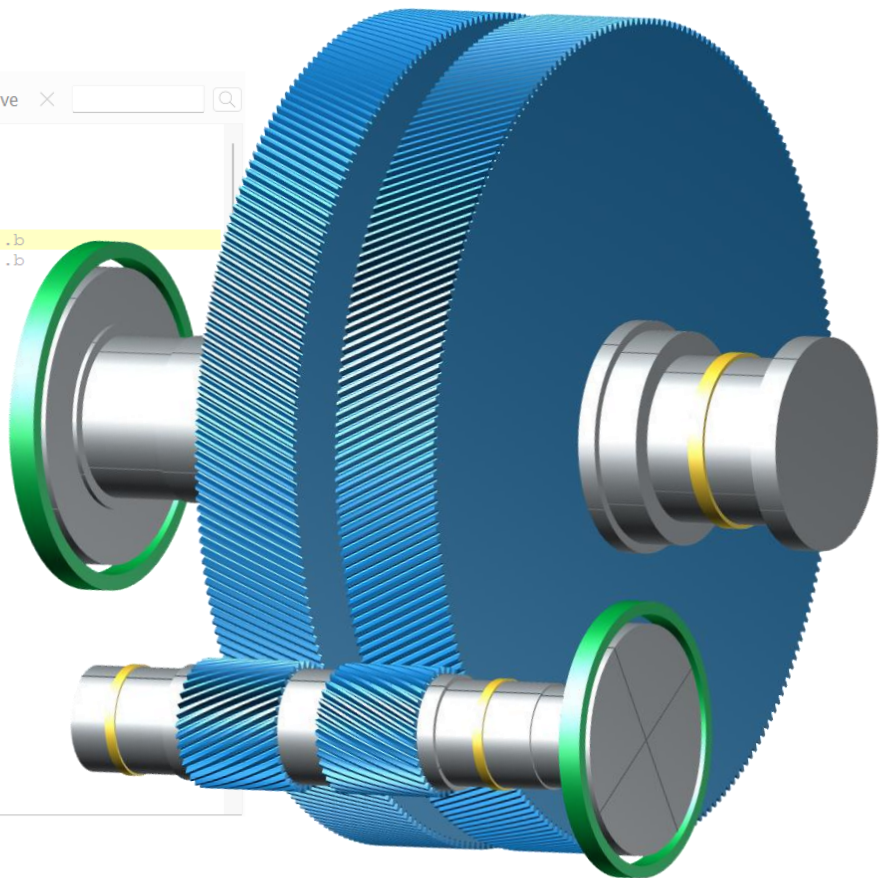


Special Training

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 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
  
```

Sketcher		3D Viewer		Boundary		System data		Strength		Script Editor	
Gear			z1	z2	z3	z4					
Calculation			z1z2	z1z2	z3z4	z3z4					
Shaft			s1	s2	s2						
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 _f		1.0917	1.0917	1.1143	1.1496					