

No.	Name	Specifics
3.2	Stick-slip-effect	<ul style="list-style-type: none"> ○ controllable source (friction force) ○ displacement output of an I-storage used (block mass) ○ activated bond (AB element) used for measurement of v
3.6	Fall test	<ul style="list-style-type: none"> ○ displacement output of an I-storage used (mass) ○ non-linear R consumer (damping: d resp. d_{Fall}) ○ non-linear TF transformer used as a bond switch ○ activated bond (AB element) used for measurement of v
3.7	Dynamic vibration absorber	<ul style="list-style-type: none"> ○ displacements with initial values (x_0 - mass; y_0 – absorber mass) ○ power variable with initial value (spring force) ○ 1-node transformed as a distributor for absorber damping and force
4.4	Roll damping	<ul style="list-style-type: none"> ○ controllable sources (torques) ○ displacement output of an I-storage used (moment of inertia) ○ activated bond (AB element) used for measurement of ω ○ with control
6.2	AC current generator, 1~	<ul style="list-style-type: none"> ○ coupling of two (part) bond graphs via activated bond ○ controllable sources (u_E, u_{ind} and i_L) ○ I-storage (L_E) and initial value for computed power variable (i_E) ○ non-linear R consumer (R_Z) ○ activated bond (AB element) used for measurement of i_E and u_G
6.3	Solenoid	<ul style="list-style-type: none"> ○ I-storage (armature mass) using an initial value for displacement (x_0), displacement limitation (trajectory) and initializing of a power variable (speed) ○ non-linear C-field using an inverted sign for a connection to F2 of BG_KN1 with negative sign – see subsystem “M” ○ node block inserted for measurement (0-node for F_M measurement) ○ activated bond (AB element) used for measurement of v, i and F_M
6.4	Lifted load	<ul style="list-style-type: none"> ○ controllable source (motor torque of an AC machine) ○ total mass of three rigid connected, ideal masses ○ standard 1-node having two inputs and no “consumer” ○ activated bond (AB element) used for measurement of ω
6.5	Motion-less Scales (3 solutions)	<ul style="list-style-type: none"> ○ inverted output of GY ○ activated bond (AB element) used for measurement of i and v ○ possible variants: mass change at $t \neq 0$ (IC-field use) resp. positive sign

- 7.1 DC motor & rigid shaft / Energy efficiency
 - SD Block used as destination for periodical load change
 - activated bond (AB element) used for measurement of ω_M and i
 - use of power outputs $P[W]$
 - computation of the energy efficiency via SIMULINK Blocks
- 7.2 DC motor & elastic shaft
 - SD Block used as destination
 - activated bond (AB element) used for measurement of ω_M, m_F and ω_L
- 7.3 State control regarding 7.2
 - inserting of a node block for measurement tasks
 - activated bond used for measurement of $i, \omega_M, m_F, \omega_L$ and m_L
 - bond graph as a plant model for control
- 8.1 Kelvin-Voigt-element
 - standard 1-node using two inputs
 - 1-node transformed as distributor for damping and spring
 - activated bond (AB element) used for measurement of v_{eig} and F_{ab}
- 8.2 Band conveyor using 8.1 (2 solutions)
 - loop structure avoiding series connection for same node types
 - scalar resp. vectorial (parameters in matrices) bond connections
 - inserting of nodes for measurement tasks (F_{zu} and v_{nach})
 - SD block as destination and transformed 1-node (measurement)
 - activated bond used for measurement of $v_{eig}, F_{zu}, v_{nach}$ and F_{ab}

Summary of examples specifics – BG V.2.0