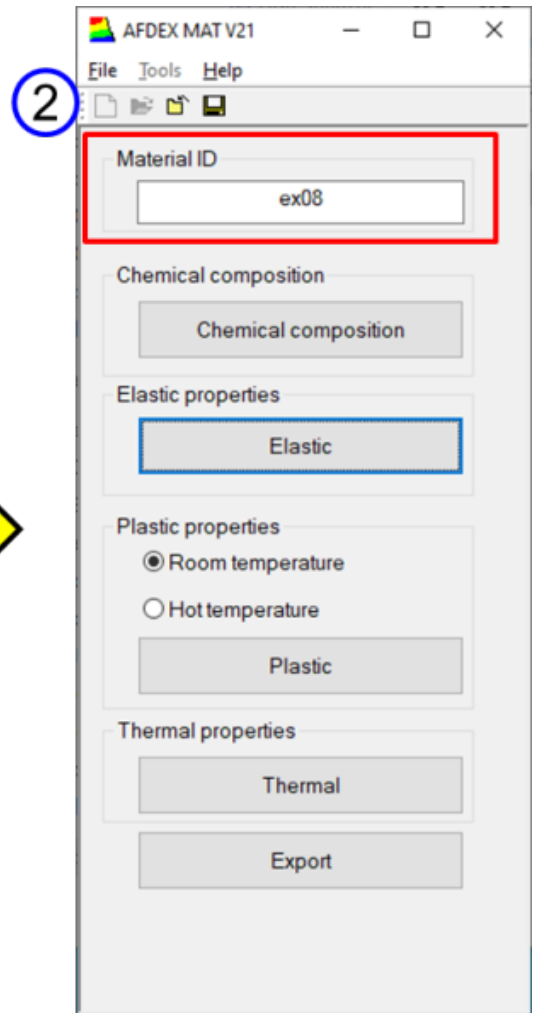
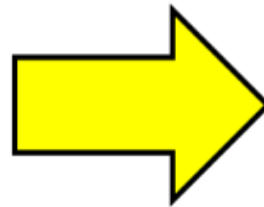
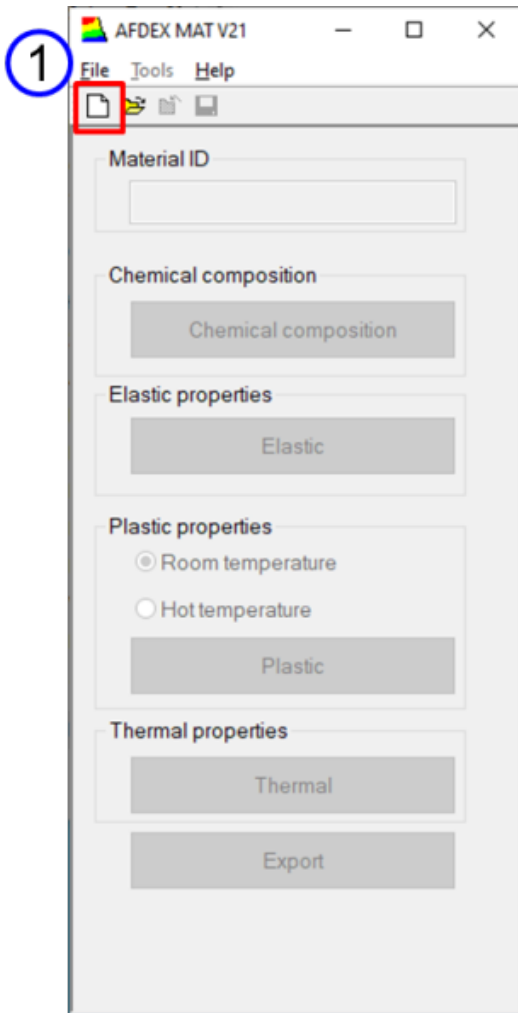


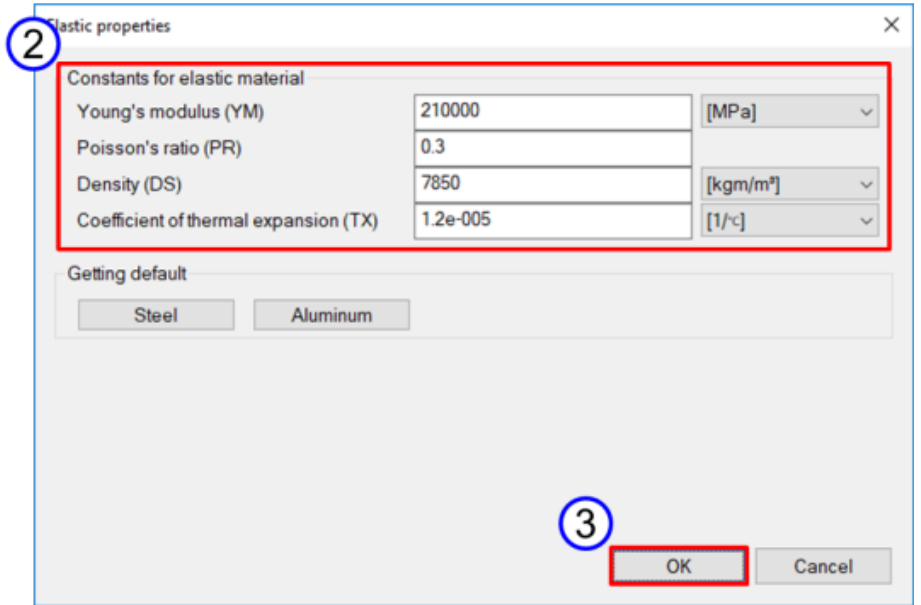
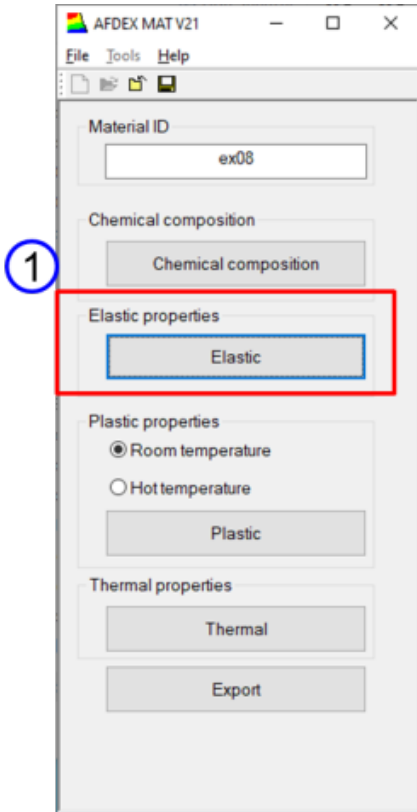
Ex09-3.

Swift

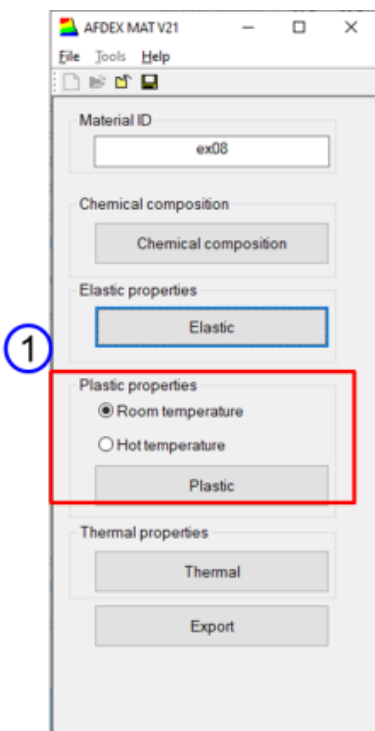
AFDEX_MAT



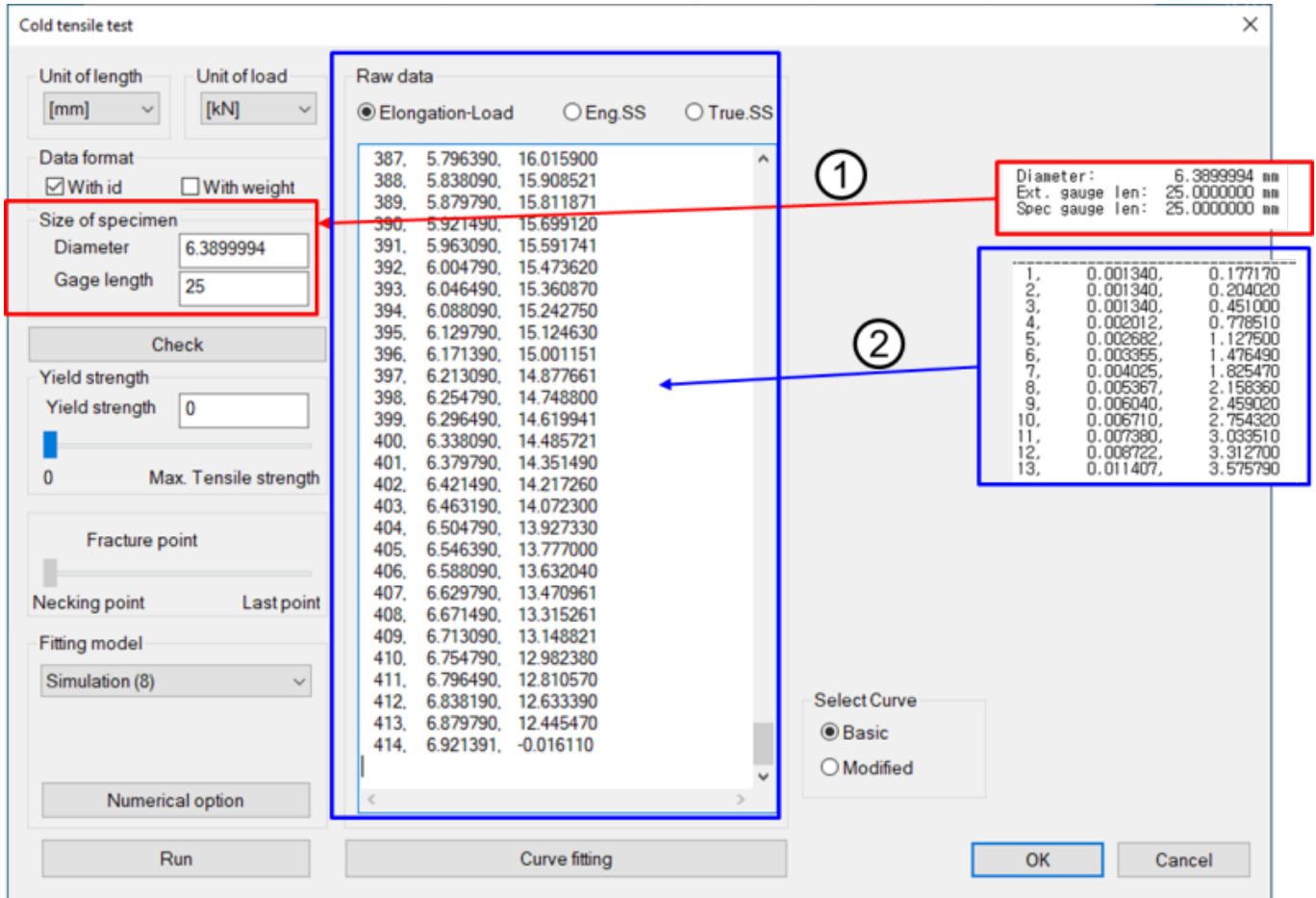
1. 'New'
2. Material ID ex08()



1. "ELASTIC"
- 2.
3. "OK"



1. Plastic properties “Room temperature” , “Plastic”
2. “ ex08.txt



- 1.
2. “Raw data”

Cold tensile test

1. Unit of length: [mm] Unit of load: [kN]
Data format: With id With weight
Size of specimen: Diameter: 6.3899994 Gage length: 25

2. Check

3. Yield strength: 554.661549219

4. Fracture point: Fracture: 0.0220153

Fitting model: Simulation (8)

Run

Raw data

Elongation-Load Eng.SS True.SS

1.	0.001340.	0.177170
2.	0.001340.	0.204020
3.	0.001340.	0.451000
4.	0.002012.	0.778510
5.	0.002682.	1.127500
6.	0.003355.	1.476490
7.	0.004025.	1.825470
8.	0.005367.	2.158360
9.	0.006040.	2.459020
10.	0.006710.	2.754320
11.	0.007380.	3.033510
12.	0.008722.	3.312700
13.	0.011407.	3.575790
14.	0.010738.	3.833500
15.	0.011407.	4.085850
16.	0.012750.	4.322090
17.	0.014093.	4.552960
18.	0.014093.	4.762350
19.	0.015435.	4.977110
20.	0.017447.	5.186510
21.	0.018120.	5.395900
22.	0.018120.	5.594550
23.	0.018120.	5.787840
24.	0.018120.	5.975760
25.	0.019462.	6.152940
26.	0.020132.	6.319380
27.	0.020805.	6.475080
28.	0.022145.	6.614680
29.	0.021475.	6.748900
30.	0.022145.	6.863800

Curve fitting

Engineering

Stress [MPa]

Strain

Select Curve: Basic Modified

OK Cancel

- 1.
2. "CHECK"
- 3.
- 4.

The screenshot shows the 'Cold tensile test' software interface. It includes a 'Raw data' table, a 'MAT' dialog box with fitting parameters, and a 'True' stress-strain graph. Numbered callouts 1-5 highlight specific UI elements:

- 1. Fitting model "Swift model (1)"
- 2. "Run" button
- 3. "OK" button in the MAT dialog
- 4. "Curve fitting" button
- 5. "OK" button at the bottom right

Point	Strain	Stress [MPa]
1.	0.001340	0.177170
2.	0.001340	0.204020
3.	0.001340	0.451000
4.	0.002012	0.778510
5.	0.002682	1.127500
20.	0.017447	5.186510
21.	0.018120	5.395900
22.	0.018120	5.594550
23.	0.018120	5.787840
24.	0.018120	5.975760
25.	0.019462	6.152940
26.	0.020132	6.319380
27.	0.020805	6.475080
28.	0.022145	6.614680
29.	0.021475	6.748900
30.	0.021475	6.857000

MAT dialog box parameters:

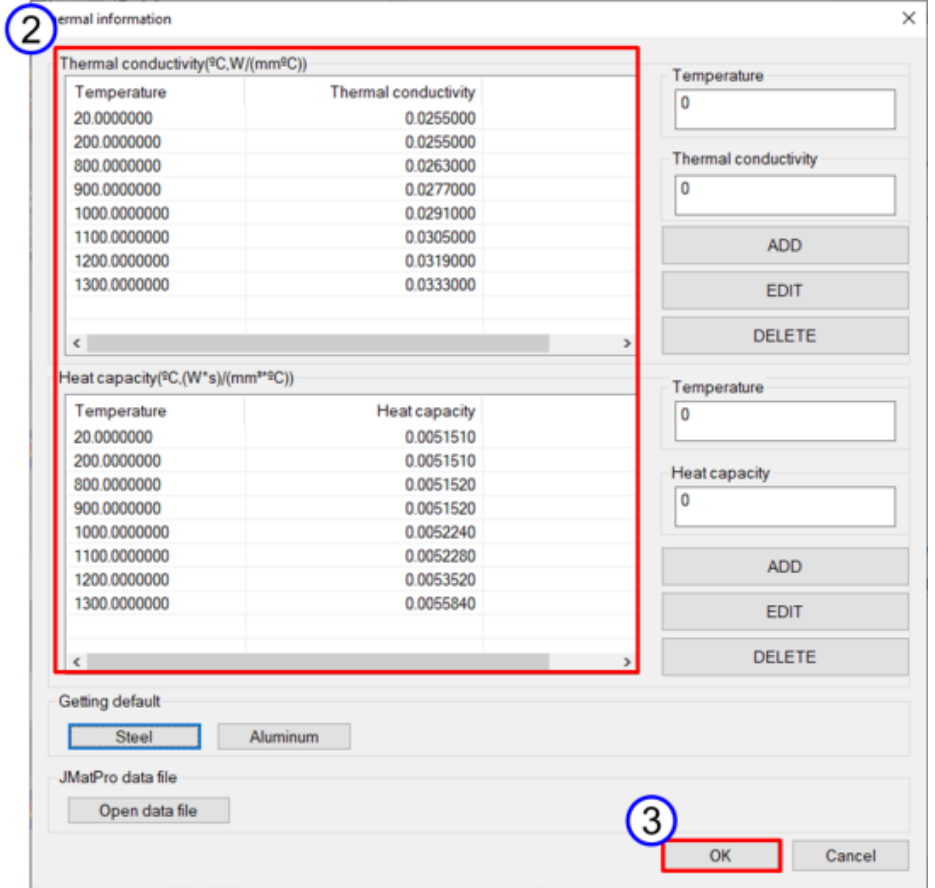
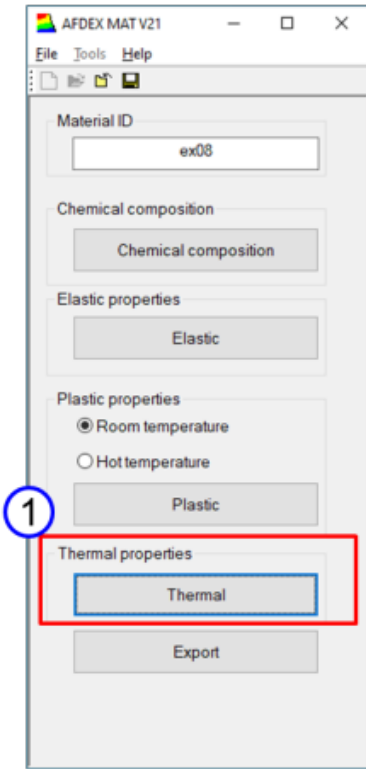
- Y0 = 5.66635896E+02
- s0 = 5.06251739E-02
- n = 1.44295969E-01
- Error = 1.62474119E+00 MPa
- Slope at necking point = 7.19941941E+02

True Stress-Strain Graph:

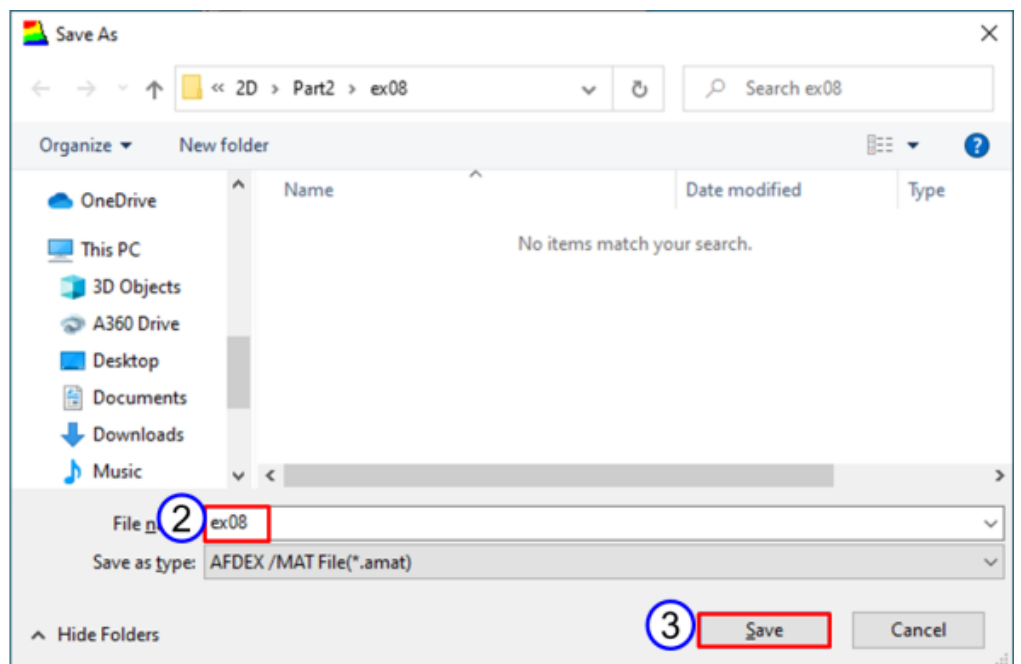
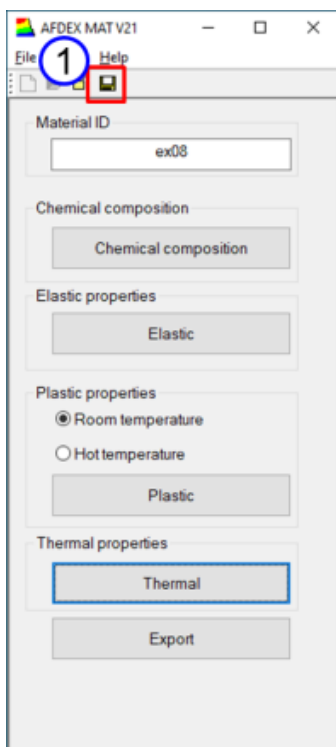
Stress [MPa] vs Strain

The graph shows a red curve representing the true stress-strain relationship. The y-axis ranges from 0 to 800 MPa, and the x-axis ranges from 0 to 1. The curve starts at approximately (0, 500) and increases to about (1, 800).

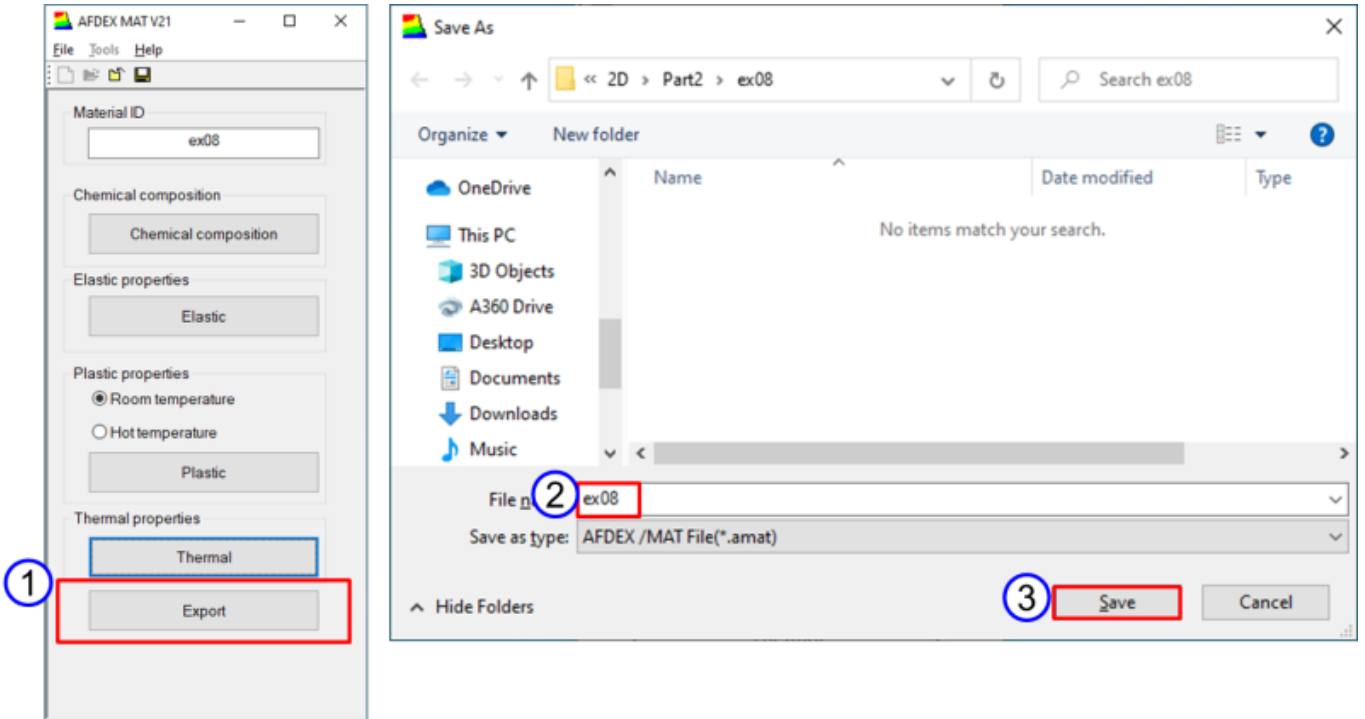
1. Fitting model "Swift model (1)"
2. "Run"
3. "OK"
4. "Curve fitting"
5. "OK"



1. "Thermal"
- 2.
3. "OK"



- 1. "Save" .
- 2. "ex08" .
- 3. "Save" .



- 1. "Export" .
- 2. "ex08" .
- 3. "Save" .

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