

Using Girdle Shape Parameters

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Overview

The following parameters are related to controlling a girdle shape when working with SmartRecut:

- `GirdleShape1stDerEveryToleranceModule`
- `GirdleShape2ndDerEveryToleranceModule`

The description of these parameters, information about their calculation and presence in appraisers and reports is presented on the [Girdle Shape Tolerance](#) page.

Parameter Usage

As both girdle shape tolerance parameters limit the difference between girdle shape in the Recut and corresponding SmartRecut solutions, you can use them to additionally limit this difference, which means you may obtain SR solutions that are more alike to the Recut original solution in the sphere of the girdle shape. The lower value you set for the `GirdleShape1stDerEveryToleranceModule` and `GirdleShape2ndDerEveryToleranceModule` parameters, the more similarity of girdle shapes of Recut and SmartRecut solutions you obtain.



Note that decreasing parameters values:

- increases the similarity of girdle shapes of Recut and SmartRecut solutions but
- may have a decrease of mass as a back effect.

Setting new parameter values for both parameters is done via editing the **presets**. The default values for all presets are presented in the figure:

Parameter	Grade	AllNarrow	AnglesNarrow	GirdleNarrow	VerticesNarrow	VerticesWide	GirdleWide	AnglesWide	AllWide
<code>GirdleShape1stDerEveryToleranceModule</code>		-	5	-	10	-	5	-	10
<code>GirdleShape2ndDerEveryToleranceModule</code>		-	5	-	10	-	5	-	10

Example

In this example project ([GS Parameters Example 5-10-20-30 \(v.3\).oxgz](#)) the following SmartRecut solutions were obtained by changing the `GirdleShape1stDerEveryToleranceModule` and `GirdleShape2ndDerEveryToleranceModule` values.

HPO version = 5.4.5

Appraiser = MyAnyCutOpt | MyAnyCutRelative

Profile = Default

GirdleRatio [Ex Ex] = [-0,01 0,01]

Cutting (Client Cuttings) = PearSimple ([PearSimple.zip](#))

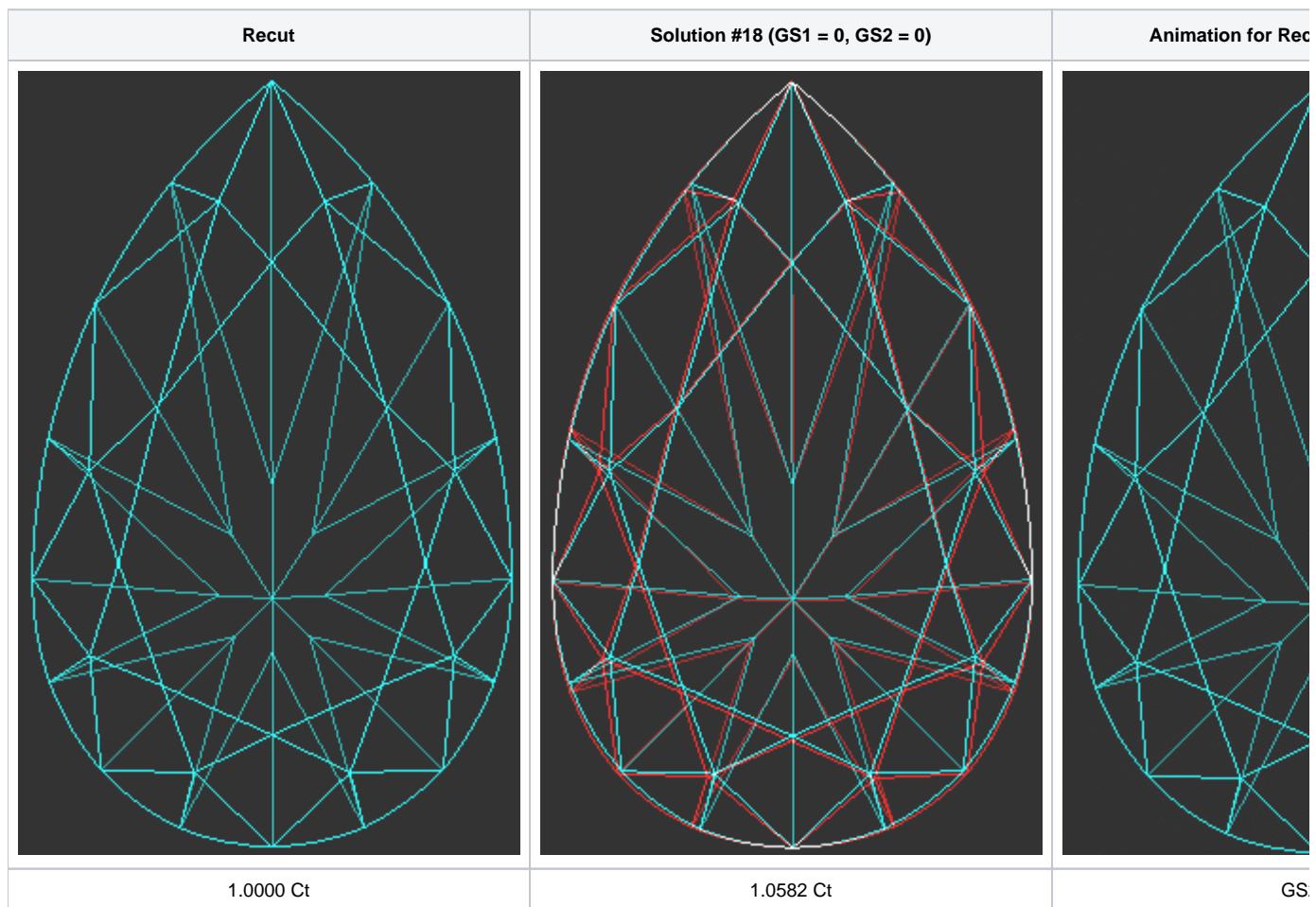
All solutions produced from:

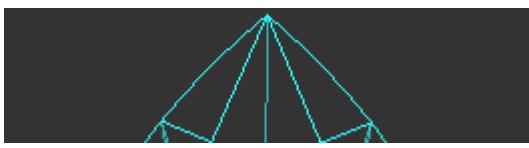
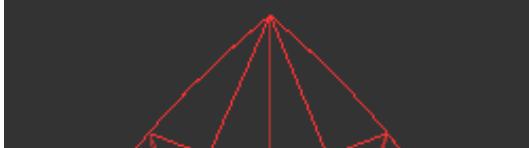
Recut solution (#1) with **Algorithm** = "SmartRecut (Brilliant, Oval, AnyCut)" and **Preset** = [AnyCut_avg_preset.ini](#)

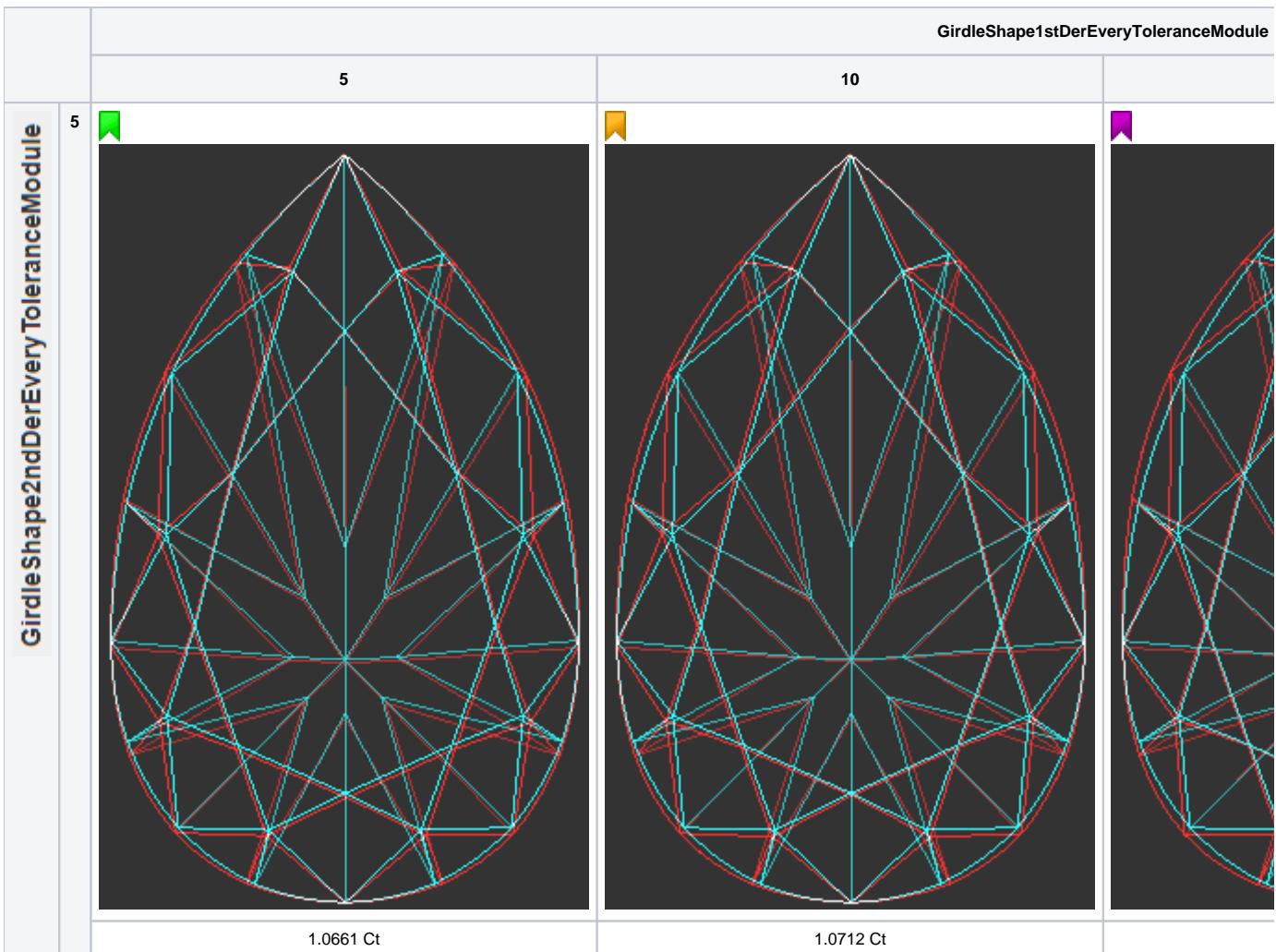
Solution #	GirdleShape1stDerEveryToleranceModule	GirdleShape2ndDerEveryToleranceModule	
2	5	5	
3	10	5	
4	20	5	
5	30	5	
6	5	10	
7	10	10	
8	20	10	
9	30	10	
10	5	20	
11	10	20	
12	20	20	
13	30	20	
14	5	30	
15	10	30	
16	20	30	
17	30	30	
18	0	0	

Plans & Scans

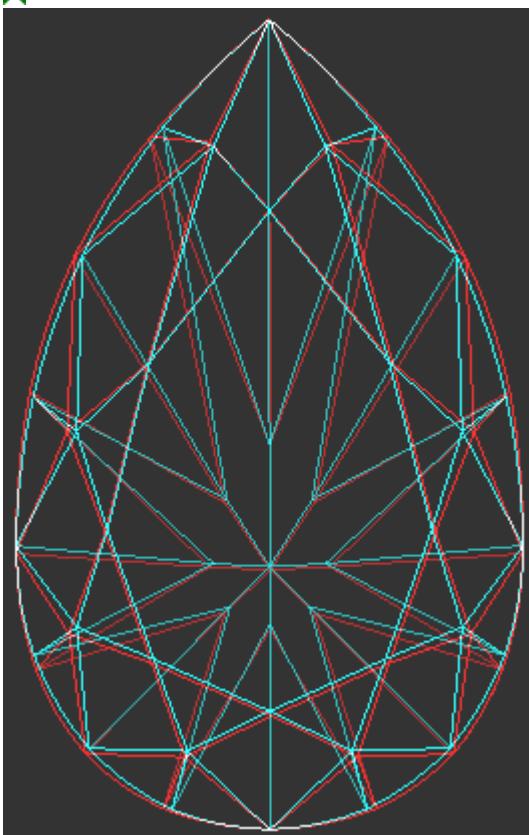
<input type="checkbox"/> Imported model									3.6245
<input checked="" type="checkbox"/>	1		PearSimple	2933\$		1.0000			
<input type="checkbox"/>	2		PearSimple	3109\$		1.0661			
<input type="checkbox"/>	3		PearSimple	3139\$		1.0712			
<input type="checkbox"/>	4		PearSimple	3139\$		1.0764			
<input type="checkbox"/>	5		PearSimple	3139\$		1.0768			
<input type="checkbox"/>	6		PearSimple	3109\$		1.0662			
<input type="checkbox"/>	7		PearSimple	3139\$		1.0716			
<input type="checkbox"/>	8		PearSimple	3168\$		1.0789			
<input type="checkbox"/>	9		PearSimple	3168\$		1.0820			
<input type="checkbox"/>	10		PearSimple	3109\$		1.0662			
<input type="checkbox"/>	11		PearSimple	3139\$		1.0716			
<input type="checkbox"/>	12		PearSimple	3168\$		1.0793			
<input type="checkbox"/>	13		PearSimple	3168\$		1.0835			
<input type="checkbox"/>	14		PearSimple	3109\$		1.0662			
<input type="checkbox"/>	15		PearSimple	3139\$		1.0716			
<input type="checkbox"/>	16		PearSimple	3168\$		1.0793			
<input type="checkbox"/>	17		PearSimple	3168\$		1.0838			
<input type="checkbox"/>	18		PearSimple	3080\$		1.0582			



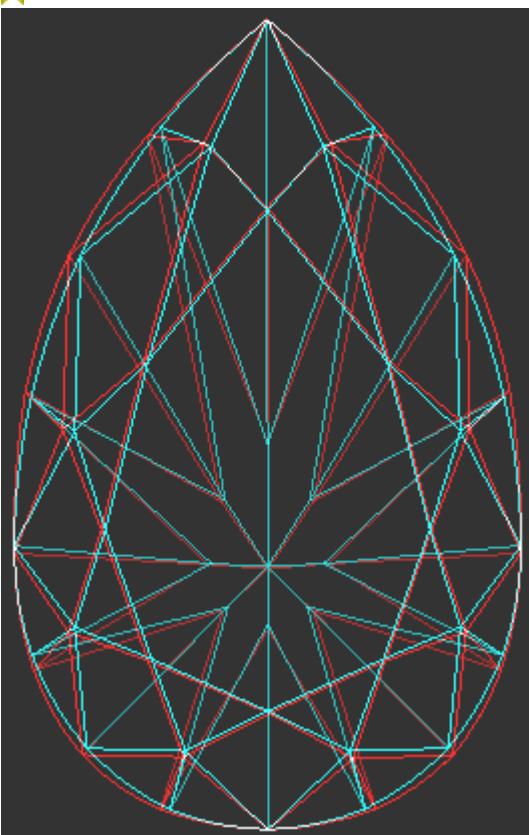
Legend	
Recut	
SmartRecut	



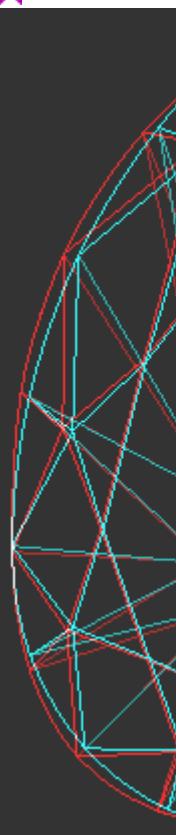
10



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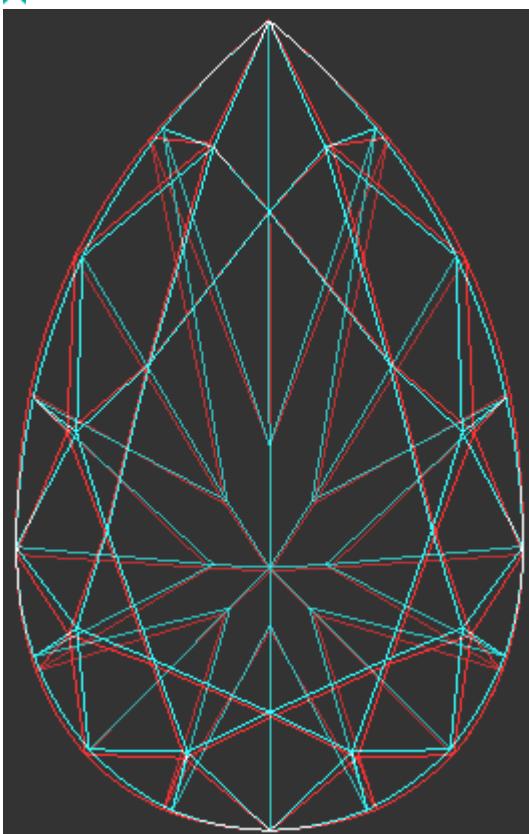


12

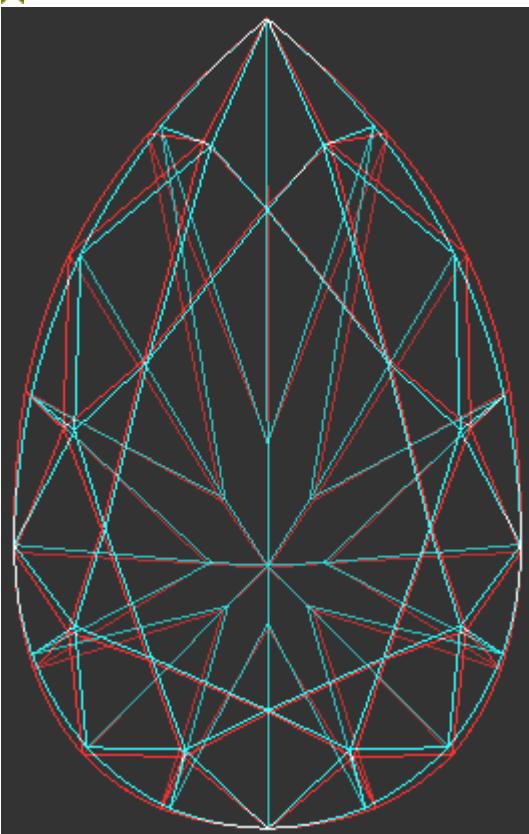


1.0662 Ct

20



1.0716 Ct



21

