Goodwin fancy color example

Goodwin type cuts along with the linked extended appraisers allow controlling:

- Crown slope
- Pavilion 1 and 2 slopes
- For rectangular cuts these slopes along width and length

These slopes cannot be controlled with the standard ASCII cuts:

ASCII		Goodwin						
Basic		1C1P	1C2P		2C3P			
Parameter		Parameter	1	Parameter		Parameter		
GirdleRatio	0	GirdleRatio	0	GirdleRatio	0	GirdleRatio	0	
Table	0	Table	0	Table	0	Table	0	
CrownHeight	0	CrownHeight	0	CrownHeight	0	CrownHeight	0	
GirdleBezel	0	GirdleBezel	0	GirdleBezel	0	GirdleBezel	0	
PavilionHeight	0	PavilionHeight	0	PavilionHeight	0	PavilionHeight	0	
TotalHeight	0	TotalHeight	0	TotalHeight	0	TotalHeight	0	
		CrownSlope	0	CrownSlope	0	CrownWidthSlope		
		Pavil1Slope		Pavil1Slope		CrownLengthSlope		
				Pavil2Slope		Pavil1WidthSlope		
						Pavil1LengthSlope		
						Pavil2Slope		
SweetLine	0	SweetLine	0	SweetLine	0	SweetLine	0	

Below is an example of the benefits a Goodwin cut provides in the specific case of *fancy color* diamonds.



Provide CrownSlope within defined range

In the example project, here are the recut solutions:

```
      □
      1
      ■
      • Oval_FC_EX_Oct2021G (107)
      1168$
      • 0.5895
      61.89% VS1 H +4.65 EX
      EX
      EX
      EX
      Standard

      □
      2
      ■
      • Oval_FC_EX_Feb2021 (100a)
      1168$
      • 0.5895
      61.89% VS1 H +4.50 EX
      EX
      EX
      EX
      Performance

      Red flag (here and hereafter) - Goodwin, yellow flag- ASCII
```

Goodwin had the following control over the CrownSlope and the resulting value::

Appraiser Editor ×											
	Oval_FC_EX_Oct2021G Show Profile: Standard										how esets
Absolute Proport	ions	Ab	solute Syn	nmetry	Relative	Proportion	ns Rela	ative Symm	etry		
Parameter		Grade	Value	[FR	[GD	[VG	[EX	EX]	VG]	GD]	FR]
GirdleRatio	0	EX	1.270	1,25	1,25	1,25	1,27	1,57	1,6	1,65	1,65
Table	0	EX	56.336	52	52	52	5 4	66	68	70	70
CrownHeight	0	EX	17.450	11	11	12	13	17,5	19	20	20
GirdleBezel	0	EX	9.441	3	3	4	5	1	12	13	13
PavilionHeight	0	EX	45.626	40	40	42	43	49	50	51	51
TotalHeight	0	EX	73.169	60	60	63	65	75	76	78	78
CrownSlope	0	EX	38.566	32	32	32	32	39,6	40,5	41	42
Pavil1Slope		EX	63.975	53	53	53	53	64,5	65	66	67
Pavil2Slope		EX	30.557	28	28,5	28,7	29,6	33,5	34,5	35	37
SweetLine	0	EX	-1.274	-100	-100	-100	-100	100	100	100	100

In the case of ASCII cut, there was no control of CrownSlope:

Appraiser Editor ×											
Oval_FC_EX_Feb2021 Profile: Performance										Show Presets	
Absolute Proportion	nmetry	Relative Proportions Rela			ative Symmetry						
Parameter	Grad	le Value	[FR	[GD	[VG	[EX	EX]	VG]	GD]	FR]	
GirdleRatio	EX	1.273	1,25	1,25	1,25	1,27	1,57	1,6	1,65	1,65	
Table 👩	EX	58.282	52	52	52	54	66	68	70	70	
CrownHeight	EX	17.103	11	11	12	13	17,5	19	20	20	
GirdleBezel	EX	10.885	3	3	4	5	11	11,5	13	13	
PavilionHeight 🔞	EX	43.920	40	40	42	43	49	50	51	51	
TotalHeight 🛛 🕄	EX	71.919	55	56	63	65	75	76	78	78	
SweetLine 🛛	EX	-2.720	-100	-100	-100	-100	100	100	100	100	

And the resulting output for the CrownSlope average became > 40 (visible in the reports):



Avoid unacceptable windowed solutions

For the example project, masses of Smart Recut solutions for Goodwin and ASCII are close, but SR with ASCII has bigger windows (see the illustration below), which *makes them actually unacceptable*. Goodwin models do not contain such windows.

22.1		0.59 ct	VS1	Spectrum 1 (W_1)	Intense	\$1980	\$1168	\$1168	Chroma 74.2 Intense 62.9% Fancy 37.1%
	Goodwin								
12.1	ASCII	0.59 ct	VS1	Spectrum 1 (W_1)	Fancy	\$1980	\$1168	\$1168	Chroma 70.6 Intense 46.6% Fancy 53.4%
20.1	Goodwin	0.59 ct	VS1	Spectrum 1 (W_1)	Intense	\$1980	\$1168	\$1168	Chroma 72.6 Intense 57.2% Fancy 42.8%
14.1	ASCII	0.59 ct	VS1	Spectrum 1 (W_1)	Fancy	\$1980	\$1168	\$1168	Chroma 70.3 Intense 44.0% Fancy 56.0%
21.1	Goodwin	0.59 ct	VS1	Spectrum 1 (W_1)	Intense	\$1980	\$1168	\$1168	Chroma 73.3 Intense 59.8% Fancy 40.2%
13.1	ASCII	0.59 ct	VS1	Spectrum 1 (W_1)	Fancy	\$1980	\$1168	\$1168	Chroma 70.5 Intense 45.8% Fancy 54.2%

This is achieved by controlling the **Pavil2Slope** parameter, which is only available in Goodwin (limitation for is set to **Pavil2Slope** 29.6 which prevents the appearance of windows. In the ASCII case, the **Pavil2Slope** becomes smaller (about 29-29.5) which causes windows.

See these solutions in the Cutwise project: oval_84570400_05_demo								
	See these s	See these solutions in the	See these solutions in the Cutwise p	See these solutions in the Cutwise project: oval_	See these solutions in the Cutwise project: oval_84570400_0	See these solutions in the Cutwise project: oval_84570400_05_demo	See these solutions in the Cutwise project: oval_84570400_05_demo	See these solutions in the Cutwise project: oval_84570400_05_demo

	ASCII	Goodwin
	19 30 0.60ct \$1,188	24 30 0.60ct \$1,188
Product SKU	19-oval_84570400	24-oval_84570400
Office		
Table Color UV Free		
Pavilion Color UV Free		
ASET		
Chroma	69.9	74.1
Histogram	Intense 43.1% Fancy 56.9%	Intense 63.1% Fancy 36.9%
Color	Fancy	Fancy Intense
Price	\$1,188	\$1,188
Price Per Carat	\$1,980/ct	\$1,980/ct
Carat Weight	0.60ct	0.60ct
Optical	3.20	4.15

	Symmetry	P 🖥 G VG EX OU	P F G VG EX OU
•	Spread	-0.20ct	-0.19ct
–		-48.5%	-45.5%
Diam	neter Ratio	1.274	1.271
0	Clarity	VS1	VS1
•	Cut Quality	Excellent	Excellent
•	Symmetry	Excellent	Excellent
	L×W	5.40x4.24 mm	5.39x4.25 mm
	Depth	72.06% (3.054 mm)	73.5% (3.121 mm)
	Table	57.58% (2.441 mm)	56.28% (2.39 mm)
Cro	own Angle	39.63°	38.57°