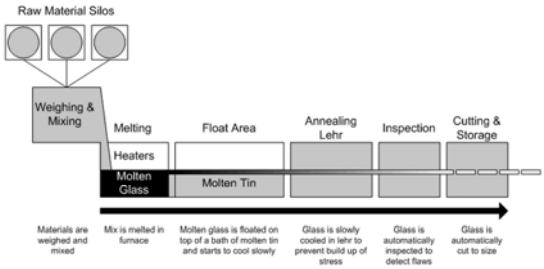
TETRACOM: Technology Transfer in Computing Systems

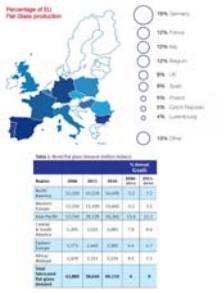
FP7 Coordination and Support Action to fund 50 technology transfer projects (TTP) in computing systems. This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement nº 609491.

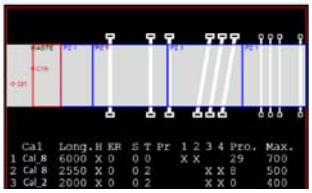
OPTIGLASS: Application of Artificial Intelligence-based techniques for optimizing the continuous Glass Cutting Problem

Miguel A. Salido, Federico Barber, Manuel Peinado, Adriana Giret,
Universidad Politécnica de Valencia, Spain

TTP Problem

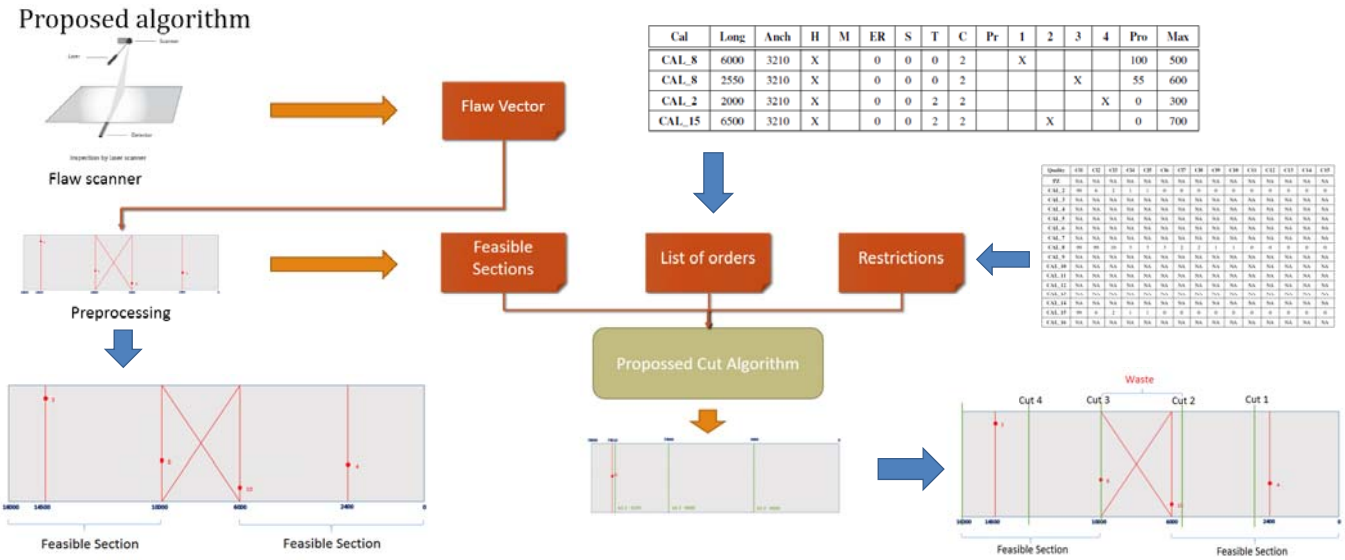






- Greddy Algorithms are not efficient techniques.
- A look-forward search technique is developed to optimize the continuous glass cutting problem.

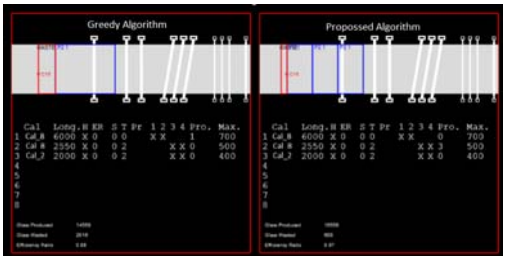
TTP Solution



Cal	Long	Anch	H	M	ER	S	T	C	Pr	1	2	3	4	Pro	Max
CAL_8	6000	3210	X		0	0	0	2		X				100	500
CAL_8	2550	3210	X		0	0	0	2				X		55	600
CAL_2	2000	3210	X		0	0	2	2					X	0	300
CAL_15	6500	3210	X		0	0	2	2			X			0	700

TTP Impact

Simulation Tool



	Order Set 1			Order Set 2			Order Set 3		
	Propossed	Greedy	Improvement	Propossed	Greedy	Improvement	Propossed	Greedy	Improvement
dataset 1	100	122	18,03	63	80	21,25	28	54	48,15
dataset 2	77	103	25,24	54	85	36,47	38	58	34,48
dataset 3	72	87	17,24	44	53	16,98	22	35	37,14
dataset 4	98	113	13,27	45	76	40,79	31	49	36,73
dataset 5	81	117	30,77	52	78	33,33	30	58	48,28
	Improvement Average		21%	Improvement Average		30%	Improvement Average		41%

TTP Facts

Contact: Miguel A. Salido
E-mail: msalido@dsic.upv.es
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AGC GLASS UNLIMITED

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