



Yarn manufacturing / Spinning Example

MATERIAL FLOW COST

ACCOUNTING

Yarn Production (aka Spinning)

Example Material Flow Chart



Spinning,
Twisting

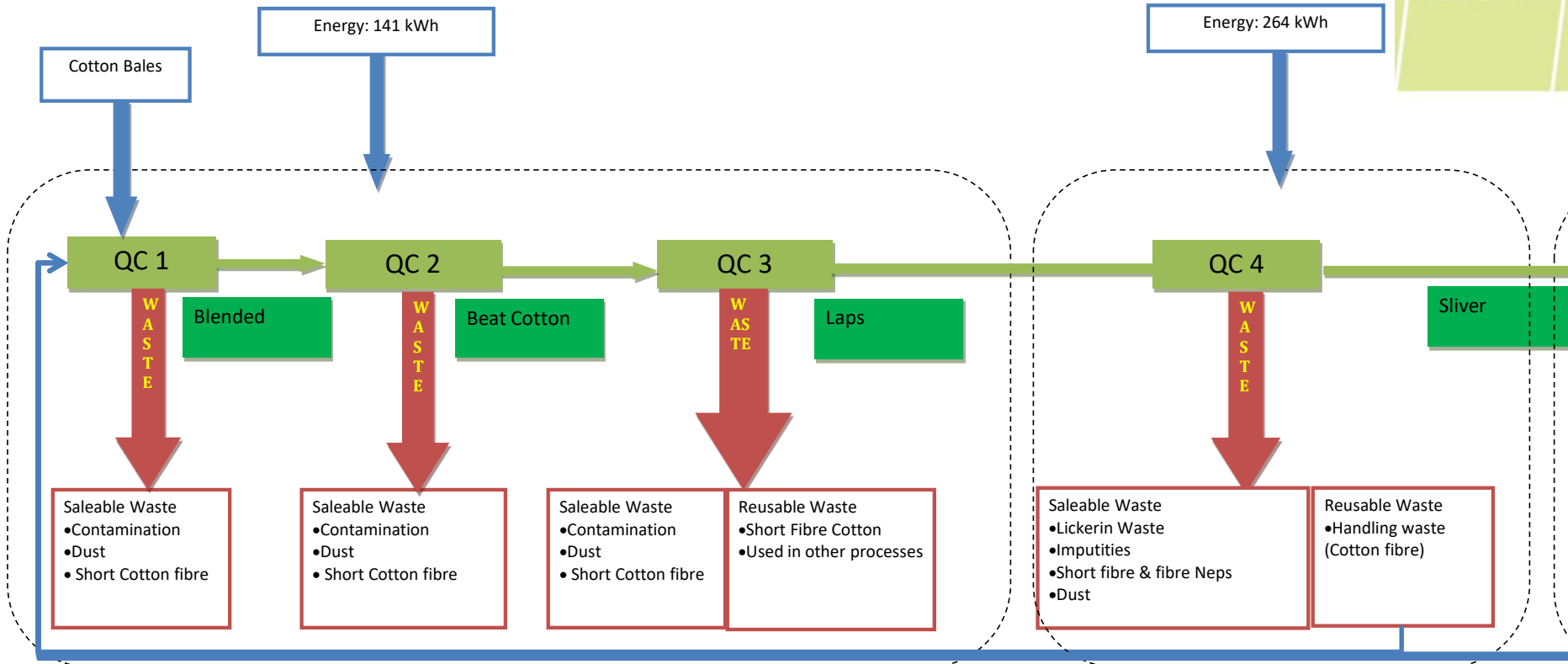
Textile auxiliaries
and chemicals
use,
Fibre waste,
Noise pollution,
Dust emissions

- QC 1 Mixing, Plucking, Blending
- QC 2 Multimix, Beating
- QC 3 Sorting, Beating, Scutcher
- QC 4 Carding
- QC 5 Breaker Drawing
- QC 6 Finisher Drawing
- QC 7 Simplex
- QC 8 Ring
- QC 9 Auto Cone

Energy: 141 kWh

Energy: 264 kWh

Cotton Bales



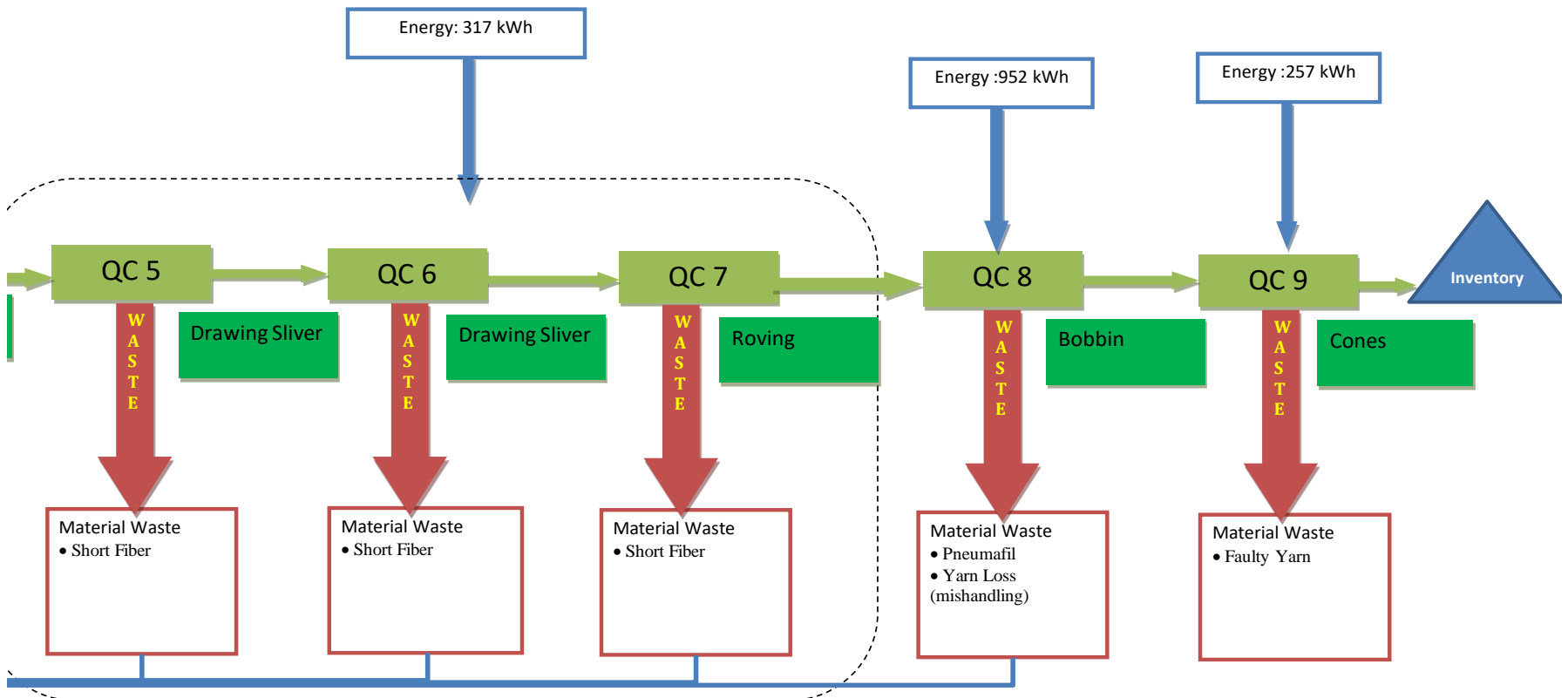
Source: Material Flow Cost Accounting of a Spinning Mill by Espire Consult

Yarn Production (aka Spinning)

Example Material Flow Chart



QC 1	Mixing, Plucking, Blending
QC 2	Multimix, Beating
QC 3	Sorting, Beating, Scutcher
QC 4	Carding
QC 5	Breaker Drawing
QC 6	Finisher Drawing
QC 7	Simplex
QC 8	Ring
QC 9	Auto Cone



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Material Flow Cost Accounting - Spinning

Example Material Flow Cost Accounting



QUANTITY DATA		Input	QC1	QC2	QC3	QC4	QC5	QC6	QC7	QC8	QC9	TOTAL
Material	kg	950	945.5	934.3	915.3	799.6	797.7	795.8	770.6	746.5	739.0	
Energy Input	kWh		141.0			264.0	317.0			952.0	257.0	1,931.0
System	Persons		42.0			37.0	57.0			60.0	38.0	234.0
Material Waste	Kg		4.5	11.2	4.2	79.1	1.1	1.1	15.0	2.8	7.5	126.6
Material Re-use	Kg				7.8	27.4	0.8	0.8	10.2	21.3		68.2
Dust	Kg				7.0	9.2						16.2
Total Material NPO	Kg		4.5	11.2	19.0	115.7	1.9	1.9	25.2	24.1	7.5	211.0
Energy NPO	kWh		29.6			55.4	66.6			199.9	54.0	405.5
System NPO	Persons		8.8			7.8	12.0			12.6	8.0	49.1

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Material Flow Cost Accounting - Spinning

Example Material Flow Cost Accounting



COST DATA		Input	QC1	QC2	QC3	QC4	QC5	QC6	QC7	QC8	QC9	TOTAL
Material	PKR	166,250	167,848	165,859	162,486	141,955	141,616	141,277	136,796	132,519	131,337	
Energy Input	PKR		1,199			2,244	2,695			8,092	2,185	16,414
System	PKR		438			432	563			2,737	1,527	5,695
Material Waste	PKR		791	1,960	735	13,843	200	200	2,625	496	1,306	22,155
Material Re-use	PKR				1,365	4,795	135	134	1,792	3,721		11,942
Waste/dust Sold	PKR		(43)	(213)	(94)	(2,391)	(34)	(34)	(450)	(85)	(224)	(3,536)
Material NPO	PKR		748	1,747	2,006	16,246	300	300	3,967	4,132	1,082	30,529
Energy NPO	PKR		252			471	566			1,699	459	3,447
System NPO	PKR		92			91	118			575	321	1,196

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Material Flow Cost Accounting - Spinning

Example Material Flow Cost Accounting



Cost		Material	Energy	System	Disposal	Total
Product	PKR	131,337	12,967	4,499		148,803
	%	79%	79%	79%		72%
NPOs	PKR	34,097	3,447	1,196	20,331	59,071
	%	21%	21%	21%	100%	28%

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